



Directory of Annual Agricultural Research Programme of NARS Institutes 2021-2022



Bangladesh Agricultural Research Council

Farmgate, Dhaka-1215, Bangladesh

www.barc.gov.bd

National Agricultural Research System (NARS)

The National Agricultural Research System (NARS) is composed of BARC and 13 Agricultural Research Institutes (ARIs).

Bangladesh Agricultural Research Council (BARC)

Being the Apex body of NARS, BARC has the responsibility to strengthen national agricultural research capability through research planning, coordination, integration and resource allocation. Establish national research priorities, monitor and review the research program of the institutes, contribute to govt. policy formulation, coordinate with donors and share resources with NARS institutes to conduct research in priority areas are some of the mandate of BARC.

Bangladesh Agricultural Research Institute (BARI)

Conduct research to ensure increased and stable Production of all crops (except rice, jute, sugarcane and tea) through scientific management of land, water, fertilizers, insect and diseases; develop varieties of crops with resistances to biotic and abiotic stresses; improve fanning systems to optimize production; develop tools and machinery to improve labor productivity; train scientists, extension functionaries, farmers, NGO workers, etc.; collaborate with private sector; publish newsletters, bulletins, and journals; test packages of new technologies.

Bangladesh Rice Research Institute (BRRI)

Conduct research on all aspects of rice to develop high yielding varieties for different ecosystems, develop component technologies for improving productivity of rice-based cropping systems, and transfer rice production technologies through training, workshop, seminar, and publication. Diffusion of technology to farmers through extension agencies.

Bangladesh Jute Research Institute (BJRI)

Conduct Agricultural and Technological research on jute and allied fibers. Agricultural Research: develop short duration high yielding varieties of both white and tossa jute varieties with improved fibers; short duration varieties of kenaf and mesta; agronomic analyses of jute production, prices and markets. Technological Research: identify fiber properties to produce quality products; develop processes and equipment for manufacturing new-jute products and improving the quality of conventional jute products; provide technical services to manufacturers with emphasis on establishing new jute industries.

Bangladesh Institute of Nuclear Agriculture (BINA)

To adapt advanced research techniques for the development of a stable and productive agriculture by evolving new crop varieties, technologies to improve management of crops, land and water, as well crop quality, and pest management practices.

Bangladesh Sugarcrop Research Institute (BSRI)

Develop high yielding, high sugar content cane varieties with low fiber contents which are disease and insect resistant for refined sugar and "gur" production; develop early, medium and late maturing varieties to accommodate intensive cropping sequences of major agro-ecological zones; develop improved cultural practices including intercropping and relay cropping patterns; develop varieties and practices to exploit the potential of minor sugar crops.

Bangladesh Wheat and Maize Research Institute (BWMRI)

Development and implementation of wheat and maize improvement as well as conduct basic and applied research

on different issues. Production of breeders and quality seed of wheat and maize and distributed for setting demonstration and dissemination.

Soil Resources Development Institute (SRDI)

Provide soil management advisory services to farmers; assess potentials of land resources through soil survey; assist government and other agencies with planning for agriculture, forestation, soil conservation, land reclamation, settlements, irrigation, drainage, and flood protection by providing basic soil data, and information and technical support.

Bangladesh Fisheries Research Institute (BFRI)

Conduct and coordinate research on freshwater capture and pond fisheries, brackish water fisheries, and marine fisheries; and assist with development of efficient and economic but sustainable methods for fish production, management, processing and marketing.

Bangladesh Livestock Research Institute (BLRI)

Conduct research to solve problems that restrain the growth and development of livestock production at the farm level, and improve the livestock component of farming systems.

Bangladesh Forest Research Institute (BFRI)

Develop management practices to increase productivities of national forests and village groves and to convert wastelands and marginal lands to forestry and agro forestry uses; develop technologies for rational utilization of forest products; generate technologies to conserve or restore environment balances through increased stocking densities of both rural and urban forests; transfer technology through extension services and other agencies to end users.

Bangladesh Tea Research Institute (BTRI)

Mandate to conduct research for increased yields and profits by developing improved production technologies and high yielding, high quality tea clones.

Bangladesh Sericulture Research and Training Institute (BSRTI)

Develop disease, drought and water logging resistant high yielding and nutritionally rich mulberry varieties for rearing of silkworms. Develop appropriate technology for quality silkworm egg and silk production through low cost innovative technologies.

Cotton Development Board (CDB)

Conduct research on different aspects of cotton production; develop hybrid and short duration high yielding cotton varieties with desirable fiber characteristics, generation of agronomic, soil and pest management practices.

**Directory of Annual Agricultural Research
Programme of the NARS institutes
2021-2022**

Compiled and Edited by

Shaikh Mohammad Bokhtiar, PhD

Kabir Uddin Ahmed, PhD

Susmita Das, PhD

Md. Saimum Hasan



Bangladesh Agricultural Research Council

Farmgate, Dhaka 1215, Bangladesh

www.barc.gov.bd

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Foreword

My pleasure goes beyond means to present the Directory of Annual Agricultural Research Programme of the NARS institutes 2021-2022 as the Executive Chairman of Bangladesh Agricultural Research Council (BARC). The National Agricultural Research System (NARS) of Bangladesh has successfully overcome the challenges of the country's food crisis after its independence by releasing new varieties of rice, wheat, vegetables. NARS institutes always play an important role not only in determining food sufficiency to the burgeoning population of the country but also in providing the food and nutrition security for the people and alleviating poverty. It has worked much to opt appropriate agricultural research agenda and cutting-edge technologies with the agricultural policies in the country and the world for the benefits of our farmers and consumers.

I can ensure that NARS institutes will continue with time-winning research on agricultural varieties and substantial outreach of technologies that perform farmer-centric agricultural development in the country. In fact, mentoring quality research and development works of the NARS institutes with subtle decision making is my priority. In agricultural growth the success and the



achievement that NARS institutes have gained would be enhanced in the coming years by exploring new strategies in agricultural research to remain food surplus.

The current annual research programme directory has accumulated new and important research and development programmes of the NARS institutes during 2021-2022. I hope that our diverse stakeholders will find the contents inside more useful and hence provide with the constructive views to bring improvements in agricultural research and human resource development thereby ensuring agriculture as a profitable business.

I must appreciate the support and contribution of the NARS scientists. Without their contribution, this directory would not have been possibly published. Finally, I thank all those who are associated with compiling, editing and printing of this report.

A handwritten signature in black ink, appearing to be 'Dr. Shaikh Mohammad Bokhtiar'.

(Dr. Shaikh Mohammad Bokhtiar)
Executive Chairman
Bangladesh Agricultural Research Council

Executive Summary

Bangladesh Agricultural Research Council (BARC) has initiated to document the annual agricultural research programmes of thirteen NARS institutes (BARI, BRRI, BJRI, BINA, BSRI, BWMRI, SRDI, BTRI, BFRI (Forest), CDB, BSRTI, BFRI (Fishery) and BLRI) with discipline wise number of experiments conducted during 2020-2021. The directory is the testimony of the overall contribution of the National Agricultural Research System (NARS) institutes in the agricultural sector. The performance NARS institutes showed in 2020-2021 in the economy of Bangladesh is significant. The scientists of the National Agricultural Research System (NARS) institutes have been putting their efforts to overcome the continuing challenges evolving due to biotic and abiotic factors in food production of the country. The objective of the directory is to make available of all activities in a single document which would

help to undertake collaborative research programme of the NARS Institutes and avoid duplication of research work in different areas. The annual research programmes are generally prepared in accordance with the 5-years Master Plan of the organizations which is originated from the agricultural research priorities up to the year 2030 and beyond.

The individual Institute documents the information following their own style and mostly in isolated form. Therefore, it is immense necessary to prepare a consolidated documentation following a standard format incorporating the research title, objectives and location. This would also help preserving the valuable information for future reference. BARC is conducting this important activity since 2014 and four volumes for 2014-15, 2015-16, 2016-17, 2017-18, 2018-2019, 2019-2020 and 2020-2021 have been published over the year.

Number of Institute wise Research Programmes in 2021-22:

Name of the Institute	No. of Experiment conducted
Bangladesh Agricultural Research Institute (BARI)	2005
Bangladesh Rice Research Institute (BRRI)	1064
Bangladesh Jute Research Institute (BJRI)	182
Bangladesh Institute of Nuclear Agriculture (BINA)	678
Bangladesh Sugarcrop Research Institute (BSRI)	128
Bangladesh Wheat and Maize Research Institute (BWMRI)	164
Soil Resource Development Institute (SRDI)	15
Bangladesh Tea Research Institute (BTRI)	70
Bangladesh Forest Research Institute (BFRI)	56
Cotton Development Board (CDB)	32
Bangladesh Sericulture Research and Training Institute (BSRTI)	30
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6	Bangladesh Wheat and Maize Research Institute (BWMRI)	
7	Soil Resource Development Institute (SRDI)	
8	Bangladesh Tea Research Institute (BTRI)	
9	Bangladesh Forest Research Institute (BFRI)	
10	Cotton Development Board (CDB)	
11	Bangladesh Sericulture Research and Training Institute (BSRTI)	
12	Bangladesh Fisheries Research Institute (BFRI)	
13	Bangladesh Livestock Research Institute (BLRI)	



BANGLADESH AGRICULTURAL RESEARCH INSTITUTE

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Sl.	Title of experiment	Objectives	Location(s)
HORTICULTURE RESEARCH CENTRE			
OLERICULTURE DIVISION			
1	Advanced yield trial of white coloured eggplant lines	To observe the performance of bacterial wilt tolerant white colored eggplant lines with a view to develop new high yielding white colored eggplant variety.	Gazipur
2	Regional yield trial of eggplant lines resistance to pest and diseases	To observe the performance of advanced green, purple & white colored lines with a view to develop new variety having high yield and tolerance to bacterial wilt and high temperature.	Gazipur
3	Genetic diversity of eggplant germplasm	To assess the extent of genetic diversity of 23 eggplant germplasm.	Gazipur
4	Evaluation of tomato germplasm	- To evaluate the performance and characterization of collected tomato germplasm in relation to yield and yield contributing characters; and - To select promising tomato genotypes for developing OP/hybrid tomato varieties.	Gazipur
5	Advanced yield trial of semi determinate tomato lines	- To study performance and identify suitable semi-determinate tomato lines; and - To develop OP semi-determinate type tomato varieties and inbred lines for developing hybrid tomato lines in future.	Gazipur
6	Regional yield trial of insect and disease resistant tomato lines	- To evaluate adaptability & performance of yield and yield contributing traits and diseases reactions and at different AEZs; and - To develop insects and diseases resistant tomato varieties.	Gazipur, Akbarpur, Burirhat and Jamalpur
7	Evaluation of tomato germplasm	To evaluate the yield and yield related components of tomato germplasm to develop new high yielding tomato variety.	Gazipur
8	Preliminary yield trial of summer tomato lines	To evaluate the yield and yield related components of tomato lines to develop new high yielding summer tomato variety.	Gazipur
9	Advanced yield trial of winter tomato lines	To evaluate the yield and yield related components of tomato lines to develop new high yielding and and pest disease infestation tolerant winter tomato variety.	Gazipur
10	Regional yield trial of bacterial wilt and TYLCV disease tolerant tomato lines	To observe the performance of selected lines at different agro ecological zones of Bangladesh	Gazipur, Burirhat, Ishurdi and Jamalpur
11	Evaluation of sweet papper germplasm	To evaluate the yield and yield related components of sweet pepper germplasm to	Gazipur

Sl.	Title of experiment	Objectives	Location(s)
		develop new high yielding sweet pepper variety.	
12	Advanced yield trial of sweet pepper lines	• to evaluate the selected sweet pepper lines for developing a new variety	Gazipur
13	Regional yield trial of sweet pepper lines	• to evaluate the selected sweet pepper lines for developing a new variety	Gazipur Hathazari, and Jamalpur
14	Regional yield trial of selected broccoli lines	• To study the adaptability of broccoli lines over locations	Gazipur Narsinghdi
15	Advanced yield trial of bottle gourd lines	• To study the performance of advanced bottle gourd lines regarding yield and tolerance to stem blight.	Gazipur
16	Regional yield trial of winter bottle gourd	• To develop bottle gourd OP variety having earliness, higher yield and attractive consumers preferred fruit shape and color.	Gazipur, Akbarpur, Hathazari, Ishwardi, Rahmatpur
17	Evaluation of pumpkin germplasm	• To evaluate the newly collected pumpkin germplasm	Gazipur
18	Regional yield trial of ash gourd lines	• To assess yield potentiality and quality of three ash gourd advance lines under different AEZ	Gazipur, Ishwardi and Jamalpur
19	Advanced yield trial of snake gourd lines	• To select suitable snake gourd lines for higher yield and better quality	Gazipur
20	Advanced yield trial of teasle gourd lines	• To study the performance of less-seeded teasle gourd	Gazipur
21	Regional yield trial of teasle gourd lines	• To assess the yield potentiality of Teasle Gourd lines at different agro-ecological zones of Bangladesh and • To develop promising teasle gourd lines for variety	Gazipur, Jamalpur and Narsinghdi
22	Regional yield trial of selected melon lines	• To assess the regional adaptability and yield potentiality.	Gazipur, Jamalpur and Narsinghdi
23	Evaluation of watermelon lines	• To study the performance of watermelon lines regarding yield and yield contributing traits.	Gazipur
24	Advanced yield trial of selected country bean lines	• To evaluate the performance of selected country bean lines	Gazipur
25	Evaluation of country bean germplasm	• To select superior country bean germplasm	Gazipur
26	Advanced yield trial of yard long bean lines	• To evaluate the yield and yield contributing traits of 4 advance yard long bean lines.	Gazipur
27	Regional yield trial of French bean lines	• To observe the performance of selected lines at different agro ecological zones of Bangladesh	Gazipur, Akbarpur, Burirhat,

Sl.	Title of experiment	Objectives	Location(s)
			Hathazari and Jamalpur
28	Preliminary yield trial of garden pea lines	• To develop a variety having high yield potentiality.	Gazipur
29	Regional yield trial of okra lines	• To observe the performance of horticultural traits and reaction to YVMV.	Gazipur, Ishwardi
30	Evaluation of amaranth genotypes grown in winter		Gazipur,
31	Regional yield trial of stem amaranth lines	• To assess the yield potentiality of Stem Amaranth lines at different agro-ecological zones of Bangladesh • To develop promising Stem Amaranth lines for new variety	Gazipur, Ishwardi, Jamalpur, Narsinghdi
32	Advanced yield trial of selected lettuce lines	• To evaluate the selected lines for yield and quality for salad purpose as well as colored lettuce variety.	Gazipur
33	Evaluation of turnip germplasm	• To find out superior turnip lines to release as variety. • To find out adaptability of different turnip lines	Gazipur
34	Collection, evaluation and conservation of indigenous vegetables	• To find out the superior lines of different indigenous vegetables; and • To conserve the indigenous vegetables	Gazipur
35	Regional yield trial of Pigweed (Bothua)	• To evaluate adaptability, yield potentiality at different AEZs	Gazipur, Jamalpur, Burirhat, Jashore, Ishurdi
36	Heterosis study in green colored eggplant lines	• To develop new high yielding hybrids having tolerance to bacterial wilt and high temperature	Gazipur
37	Performance of purple-coloured eggplant hybrids	• To study the performance of purple-coloured hybrids regarding yield and having tolerance to EFSB and bacterial wilt with attractive size, shape and color	Gazipur
38	Regional yield trial of eggplant hybrids	• To develop green- and purple-coloured hybrids regarding attractive shape, color, earliness, yield and having tolerance to EFSB, bacterial wilt at different locations of Bangladesh	Gazipur, Hathazari, Ishwardi, Jamalpur
39	Evaluation of virus tolerant summer tomato hybrids	• To develop virus tolerant summer hybrids variety of tomato	Gazipur
40	Regional yield trial of semi determinate tomato hybrids	• Assessing the yield potentiality of hybrid tomato lines at different AEZ's of Bangladesh; and selecting suitable lines for releasing as new semi determinate hybrid tomato varieties	Gazipur, Akbarpur, Burirhat, Jamalpur and Rahmatpur
41	Regional yield trial of determinate tomato hybrids	• Assessing the adaptability and yield potentiality of hybrid tomato lines at	Gazipur, Akbarpur,

Sl.	Title of experiment	Objectives	Location(s)
		different AEZs; and selecting suitable lines for releasing as new determinate hybrid tomato varieties.	Burirhat, Jamalpur and Rahmatpur
42	Regional yield trial of saline tolerant tomato hybrids	• Assessing the adaptability and yield potentiality of saline tolerant hybrid tomato lines; and selecting suitable hybrid tomato lines for releasing as new saline tolerant hybrid tomato varieties.	Gazipur, Patuakhali, Shatkhira and Rahmatpur
43	Regional yield trial of winter tomato hybrids (Set-I)	• Assessing adaptability and yield potentiality of hybrid tomato lines at different AEZs; and selecting suitable hybrid tomato lines for releasing as new hybrid tomato varieties.	Gazipur, Akbarpur, Burirhat and Jamalpur
44	Regional yield trial of summer tomato hybrids (Set-I)	• Assessing the yield performance of summer hybrid tomato lines; and selecting suitable lines for releasing as new summer hybrid tomato varieties.	Gazipur
45	Hybridization in tomato for developing hybrid tomato varieties	• To produce F ₁ tomato seeds for evaluating GCA, SCA and heterosis in next season to develop new summer and winter hybrid tomato varieties	Gazipur
46	Heterosis study of tomato hybrids	• To ascertain the nature and extent of heterosis for yield and its component characters in tomato	Gazipur
47	Performance of heat tolerant tomato hybrids	• To see the performances of yield and yield related components of twelve heat tolerant tomato hybrids	Gazipur
48	Evaluation of promising summer tomato hybrids in winter	• To observe yield and quality of summer hybrids during winter for year-round variety development	Gazipur
49	Regional yield trial of summer hybrids of tomato in winter	• To observe yield and quality of promising summer hybrids of tomato in winter to select suitable hybrids of tomato for year-round production	Gazipur, Burirhat, Rahamatpur and Hathazari
50	Regional yield trial of hybrids of tomato in summer	• To observe yield and quality of promising summer hybrids of tomato in summer season at different regions of Bangladesh • To select suitable summer hybrids of tomato for releases	Gazipur Jamalpur
51	Performance of sweet pepper hybrids	• To evaluate the sweet pepper hybrids for developing a new variety	Gazipur
52	Regional yield trial of sweet pepper hybrids	• To evaluate the sweet pepper hybrids for developing a new variety	Gazipur
53	Heterosis study of bottle gourd hybrids	• To study the nature and extent of heterosis for yield and its component characters of bottle gourd	
54	Regional yield trial of winter bottle gourd hybrids	• To develop new high yielding bottle gourd hybrid varieties with attractive color, size and shape	Gazipur, Hathazari, Ishwardi,

Sl.	Title of experiment	Objectives	Location(s)
			Jamalpur, Rahmatpur
55	Heterosis study of watermelon hybrids	• To study the nature and extent of heterosis for yield and its component characters of watermelon to develop new watermelon hybrid variety.	Gazipur
56	Inbred development of pumpkin (S ₃ -S ₄)	• To develop superior inbred lines of pumpkin for hybridization program	Gazipur
57	Regional yield trial of cucumber hybrids	• To select superior cucumber hybrids for country wide cultivation.	Gazipur, Jamalpur, Rahmatpur
58	Regional yield trial of sponge gourd hybrids	• To select superior sponge gourd hybrids for country wide cultivation.	Gazipur, Jamalpur, Akberpur
59	Hybridization in squash	• To produce single cross hybrids of squash	Gazipur
60	Regional yield trial of bitter gourd hybrids	• To observe yield and quality of promising summer hybrids of bitter gourd at different regions of Bangladesh • To select suitable hybrids of bitter gourd for releases	Gazipur, Ishwardi, and Jamalpur
61	Effect of plastic mulch on growth and yield of different sweet pepper varieties	• To investigate the growth and yield of different sweet pepper varieties using plastic mulch	Gazipur
62	Year-round performance of BARI released sweet pepper varieties	• To evaluate the performance of BARI released sweet pepper variety for year-round cultivation.	Gazipur
63	Effects of plastic mulches and poly tunnel on growth and yield of okra during winter season	• To studies growth and yield of BARI Dherosh-2 during winter season under poly tunnel environment.	Gazipur
64	Development of leaves production techniques of drumstick	• To standardize proper techniques for leaves production of drumstick	Gazipur
65	Improving productivity and adoption of BARI developed selected vegetable crops through integrated management approaches at char-areas of Bogura and Rangpur districts (IPVC)	• To identify suitable vegetable crops with integrated management for improving productivity of vegetable production at char areas	Gazipur Bogura & Rangpur
66	Effect of biochar and irrigation level on moisture conservation and yield performance of sweet pepper on rooftop	• To study the different mixture rates of biochar on soil moisture conservation • To evaluate the yield performance of sweet pepper	Gazipur
67	Feasibility study of plastic mulch laying on eggplant cultivation	• To evaluate comparative performance of mechanized plastic mulch laying with manual mulching • To evaluate the yield performance of vegetables using plastic mulch	Gazipur

Sl.	Title of experiment	Objectives	Location(s)
68	Effect of different net house on growth and quality of high value vegetables	• The present study was formulated to select the suitable net house for quality production of tomatoes, sweet peppers in Bangladesh conditions.	Gazipur
69	Effect of different net houses on the incidence of insect on vegetable crops	• To assess the incidence of different insects under different net house conditions.	Gazipur
70	Effect of maturity indices on growth and quality of high value vegetables	• The present study was formulated to select the maturity indices for quality production of tomato, broccoli, sweet pepper, cucumber.	Gazipur
71	Upscaling of protective net house technology at farmers' field	• To see the performance of UV protected net house to cultivate year-round production of high value vegetables at two farmers' fields of Narshingdi and Cumilla.	Gazipur Narshingdi and Cumilla.
72	Standardization of hydroponic nutrient solution for growing vegetables	• To standardize the hydroponic nutrient soln. developed by Olericulture Div.	Gazipur
73	Development of year-round production packages of cherry tomato under protective culture	• To evaluate the performance of the WVC supplied selected potential cherry tomato lines under protective condition to generate year-round production package for cherry tomato in Bangladesh	Gazipur
74	Electrical conductivity and ion selective electrode based nutrient management for growing tomato in recycled hydroponics	• To investigate the performance of EC and ISE based nutrient management in tomato under recycled hydroponics	Gazipur
75	Development of micro-garden model for medium-size urban-family through soilless culture	• To produce fresh and nutrient rich vegetables and herbs throughout the year for individual family level consumption.	Gazipur
76	Production of micronutrient fortified leafy vegetables providing human health benefits through hydroponic cultivation	• To optimize micronutrient concentration in culture solution and to produce mineral enriched vegetables	Gazipur
77	Development of hydroponic nutrient solution based on commercial grade chemical fertilizers available in Bangladesh	• To evaluate the performance of hydroponic nutrient solution based on commercial grade of chemical fertilizers	Gazipur
78	Standardization of growing media of sweet pepper in rooftop	• To assess the performance of vegetables production under different media. • To find out the best media for vegetables production on the roof.	Gazipur
79	Evaluation of magic population of tomato under organic practices	• To develop self-population of MAGIC lines and their evaluation.	Gazipur
80	Effect of trellis on the yield and profitability of vine crops under organic condition	• To find out the suitable trellis considering the yield and profitability	Gazipur

Sl.	Title of experiment	Objectives	Location(s)
81	Effects of mulching and growing conditions on the growth and yield of organic lettuce	• To assess the effect mulching on the growth and yield of different lettuce varieties in the open field and plastic house under organic condition.	Gazipur
82	Standardization of safe production package for pumpkin	• To evaluate the performance of different BARI pumpkin varieties against mulch paper, mustard oil cake and recommended fertilizer doses • To promote the production technologies of safe vegetable cultivation	Gazipur
83	Maintenance of BARI released tomato varieties to resilience genetic purity	• To purify OP and inbred lines (parents) of hybrid varieties to resilience genetic purity	Gazipur
POMOLOGY DIVISION			
84	Evaluation of jackfruit germplasm	• To evaluate the jackfruit germplasm for release as variety.	HRC, BARI, Gazipur.
85	Hybridization in Jackfruit	• To incorporate important characters like colour, off-season, year-round and regular heavy bearing habit in the desired variety or cultivar.	HRC, BARI, Gazipur.
86	<i>In-situ</i> evaluation of some selected profuse bearing jackfruit germplasm	• To evaluate the jackfruit germplasm for release as variety.	HRC, BARI, Gazipur.
87	Evaluation of jackfruit germplasm	• To evaluate the performance of the selected jackfruit germplasm for developing variety.	RHRS, Chapai Nawabganj.
88	Evaluation of off-season jackfruit germplasm	• To evaluate the off-season jackfruit germplasm for developing variety.	RARS, Akborpur, Moulvibazar.
89	Evaluation of year-round (off-season) jackfruit germplasm in Cumilla region	• To evaluate the year-round and off-season jackfruit in Cumilla region.	RARS, Cumilla.
90	Evaluation of jackfruit germplasm in the hill region	• To identify superior small sized jackfruit germplasm with high yield potentiality and edible qualities.	HARS, Khagrachari
91	Comparative performance of BARI released jackfruit varieties in Narsingdi region	• To evaluate the performance of BARI released 3 jackfruit varieties in Narsingdi region. ○	RHRS, Shibpur, Narsingdi
92	Evaluation of exotic jackfruit germplasm	• To evaluate red exotic jackfruit germplasm which are available in the local nursery and develop good variety.	HRC, BARI, Gazipur.
93	Hybridization in mango	• To develop hybrids to meet the local and international demand.	HRC, BARI, Gazipur.
94	Hybridization in mango	• To develop hybrids to meet the local and international demand.	FRS, Binodpur, BARI, Rajshahi.
95	Hybridization in mango	• To develop hybrids to meet the local and international demand.	RARS, Cumilla.

Sl.	Title of experiment	Objectives	Location(s)
96	Inter-varietal hybridization of mango	• To develop hybrids to meet the local and international demand.	RHRS, Chapai Nawabganj.
97	Inter-varietal hybridization of mango	• To develop hybrids to meet the local and international demand.	RARS, Burirhat, Rangpur.
98	Hybridization of mango at Chattogram region	• To develop premium quality mango variety with year-round production.	ARS, Khulshi Chattogram
99	Morphological characterization of mango germplasm	• To characterize the available diversity to a large extent and which will serve as a reference.	RARS, Cumilla
100	Evaluation of mango germplasm at Jamalpur region	• To select suitable mango germplasm.	RARS, Jamalpur
101	Evaluation of Green sweet (kanchamitha) mango germplasm in Chattogram region	• To study the performance of Green sweet (kanchamitha) mango germplasm in Chattogram Hill Tracts and can be released as a superior Green sweet (kanchamitha) mango variety.	ARS, Khulshi, Chattogram
102	Evaluation of early mango germplasm	• To develop early and regular bearing, high yielding and good quality mango variety.	RHRS, Chapai Nawabganj.
103	<i>In-situ</i> evaluation of a late mango germplasm	• To extend mango harvesting period as well as release new variety.	RHRS, Chapai Nawabganj.
104	Characterization and evaluation of late mango germplasm	• To identify the late mango germplasm with good qualitative characters.	FRS, BARI, Binodpur, Rajshahi
105	Characterization and evaluation of mango chance seedlings obtained from MI ChaL-001	• To identify the variability of character and select the late mango germplasm with good qualitative characters.	RHRS, Chapai Nawabganj.
106	Evaluation of local mango cultivars	• To identify local mango cultivars in respect to fruit size and shape, fruit colour, harvesting period etc.	ARS, Benerpota, Satkhira
107	Evaluation of local elite mango germplasm	• To identify the best mango germplasm under controlled field conditions and release the most promising ones for commercial cultivation after assessment.	ARS, Benerpota, Satkhira
108	Evaluation of exotic mango germplasm	• To find out the suitable exotic mango germplasm for releasing as variety.	RARS, Burirhat, Rangpur
109	Performance of some mango hybrids	• To characterize the mango hybrids morphologically, physio-chemically along with growth and yield potentiality and to study the incidence of insect-pests and diseases infestation of mango hybrids grown at Chapai Nawabganj.	RHRS, Chapai Nawabganj.
110	Evaluation of mango germplasm for green consumption at the hill valley in Chattogram hill tracts	• To study the performance of green sweet (kanchamitha) mango germplasm in Chattogram Hill Tracts that can be released as a superior green sweet (kanchamitha) mango variety.	HARS, Raikhali, Rangamati.

Sl.	Title of experiment	Objectives	Location(s)
111	Evaluation of newly collected mango germplasm	• To study the performance of mango germplasm in Chattogram Hill Tracts and which can be released as a superior mango variety for Bangladesh.	Hill ARS, Raikhali, Rangamati.
112	Performance of green unripe mango (kanchamitha) germplasm at hilly region	• To assess the performance of green unripe mango (kanchamitha) mango germplasm in respect to fruit yield and quality for recommendation as variety under the agro-chimatic conditions of Chattogram Hill Tracts.	HARS, Khagrachari.
113	Clonal selection of banana cv. Sabri	• To select superior banana (Sabri kola) germplasm with good shape, size, quality and yield.	RARS, Ishwardi, Pabna
114	Evaluation of banana (Sabri) germplasm	• To observe the performance of newly collected banana (Sabri) germplasm in southern region and this can be released as a superior banana variety for Bangladesh.	RHRS, Lebukhali, Dumki, Patuakhali
115	Clonal selection of banana cv. Amritsagar	• To find out the suitable germplasm/lines for release a new variety.	RHRS, Shibpur, Narsingdi
116	Evaluation of banana cv. Sabri germplasm at Jamalpur region	• To study the yield potential and fruit characters of the local lines of Sabri kola under Jamalpur condition.	HRC, BARI, Jamalpur
117	Advanced yield trial of banana cv. Sabri (Ms Jai-024)	• To study the yield potential and fruit characters of the Sabri kola germplasm for getting best ones as variety	CRS, Jaintapur, Sylhet
118	Hybridization in litchi	• To incorporate the desirable characters in the late and early litchi variety or cultivar for developing new variety.	HRC, BARI, Gazipur.
119	Evaluation of local and exotic litchi germplasm	• To identify high yielding, regular bearer, early and late litchi germplasm with a view to extend harvesting period of litchi	HRC, BARI, Gazipur.
120	<i>In-situ</i> evaluation of litchi germplasm	• To evaluate a promising litchi germplasm with high yielding and regular bearing habit in <i>In-Situ</i> condition.	HRC, BARI, Gazipur.
121	Hybridization of local guava with BARI released and exotic guava varieties	• To transfer desirable traits to BARI Peyara-2 to develop high yielding, good quality, crispy and white/pink flesh with pleasant flavour guava variety.	HRC, BARI, Gazipur.
122	Evaluation of colour fleshed guava germplasm in off season	• To select superior colour fleshed guava genotypes having year-round bearing habit.	HRC, BARI, Gazipur.
123	Evaluation of Kanchan nagor guava germplasm	• To find out best year-round Kanchannagor genotypes to release as variety	ARS, Khulshi, Chattogram
124	Development of population for gynodioecious papaya variety	• To develop high yielding gynodioecious papaya variety(s).	HRC, BARI, Gazipur.
125	Purification of Shahi papaya	• To purify the variety through sib-mating and selection and regain the original characteristics of Shahi Papaya.	HRC, BARI, Gazipur.

Sl.	Title of experiment	Objectives	Location(s)
126	Purification of shahi papaya	• To purify the variety through sib-mating and selection and regain the original characteristics of Shahi Papaya.	FRS, BARI, Binodpur, Rajshahi.
127	Evaluation of ber germplasm	• To develop high yielding varieties with sour sweet taste and release a new sour sweet ber variety.	RARS, Jamalpur.
128	Evaluation of sour type ber germplasm	• To select sour type ber germplasm with a view to release a new variety.	FRS, Binodpur, Rajshahi.
129	Evaluation of local ber germplasm	• To select the promising germplasm for recommending at farmer's level as variety.	FRS, Binodpur, Rajshahi.
130	Evaluation of exotic ber germplasm	• To develop high yielding varieties with desirable attributes (sweet taste) for commercial cultivation.	HRC, Gazipur.
131	Evaluation of indigenous ber germplasm at Khagrachari	• To select superior land races of ber for release as variety for commercial cultivation in the hilly areas.	HARS, Khagrachari.
132	Evaluation of pineapple germplasm	• To identify the best genotype that produce optimum economic fruit yield with desirable quality.	CRS, Jaintapur, Sylhet
133	Evaluation of exotic jamun germplasm	• To study the existing jamun germplasm for release as variety.	HRC, BARI, Gazipur.
134	Survey, collection and evaluation of jamun germplasm	• To identify good Jamun lines for higher yield and quality and release as variety.	FRS, Binodpur, Rajshahi.
135	Evaluation of jamun germplasm	• To evaluate existing jamun germplasm to identify the superior one in respect yield and quality.	RARS, Ishwardi, Pabna
136	<i>In-situ</i> evaluation of jamun germplasm	• To evaluate existing jamun germplasm to identify the superior one in respect yield and quality.	RARS, Jamalpur.
137	Evaluation of dwarf coconut in hilly area of Rangamati	• To identify the superior dwarf coconut varieties at Rangamati	HARS, Raikhali Rangamati.
138	Evaluation of lemon germplasm	• To study the performance in respect of yield and quality of the collected germplasm.	RAR, Cumilla.
139	Morpho-physiological characterization and evaluation of seedless lemon germplasm	• To study detailed characteristics of collected seedless lemon germplasm and which will further facilitate new varietal release.	CRS, Jaintapur, Sylhet
140	Evaluation of exotic lemon germplasm	• To study the performance of yield and quality of the collected germplasm and select suitable exotic lemon germplasm.	FRS, Binodpur, Rajshahi.
141	Evaluation of lime germplasm	• To study the performance in respect of yield and quality of the collected germplasm	RARS, Cumilla
142	Evaluation of local lime germplasm	• To find out superior lime genotypes in southern region to release as a new variety.	RHRS, Lebukhali, Dumki, Patuakhali

Sl.	Title of experiment	Objectives	Location(s)
143	Evaluation of lime (kaghzi) (<i>Citrus aurantifolia</i>)	• To select superior line with a view to release as a variety.	RARS, Rahmatpur, Barisal.
144	Evaluation of sweet orange (Kata malta) line	• To study the performance of sweet orange lines for developing a variety.	RARS, Hathazari, Chattogram
145	Evaluation of sweet orange germplasm in the hilly region	• To identify the superior germplasm for developing variety.	RARS, Khagrachari
146	Performance of exotic sweet orange germplasm	• To select suitable sweet orange line (s) for releasing as variety	CRS, Jaintapur, Sylhet.
147	Hybridization in mandarin	• To incorporate desirable characters i.e., high yielder, very sweet, quick growing habit and resistance to insect pest and diseases through hybridization.	CRS, Jaintapur, Sylhet and RARS, Akbarpur, Moulvibazar.
148	Evaluation of mandarin germplasm under north-eastern hilly area of Bangladesh	• To identify superior genotypes from the characterization and evaluation program and released as variety.	CRS, Jaintapur, Sylhet
149	Evaluation of pummelo germplasm	• To select superior pummelo lines and to conserve genetic resources.	HRC, RARS, Jamalpur.
150	Evaluation of pummelo germplasm	• To find out superior pummelo germplasm for release as new variety (s) and conserve genetic resources.	RARS, Jashore.
151	Evaluation of pummelo germplasm	• To evaluate the performance of pummelo germplasm in respect of yield and quality.	RARS, Cumilla.
152	Evaluation of local pummelo germplasm	• To find out superior pummelo genotypes in southern region to release as a new variety.	RHRS, Lebukhali, Dumki, Patuakhali
153	Evaluation of local pummelo germplasm	• To select promising line(s) to develop as variety.	CRS, Jaintapur, Sylhet
154	Evaluation of pummello germplasm in Chattogram region	• To study the performance of pummello germplasm under the climatic conditions of Chattogram region in order to release as a variety and commercialize the pummelo throughout the country.	ARS, Khulshi, Chattogram
155	Evaluation of pummello germplasm in hilly region of Rangamati	• To find out superior pummelo germplasms in Chattogram Hill Tracts to release as a new variety.	HARS, Raikhali Rangamati
156	<i>In-situ</i> evaluation of year-round pummello germplasm	• To select high yielding good quality, bitterless, coloured germplasm for year-round bearing habit	HARS, Khagrachari
157	Hybridization in satkara	• To develop quick growing, insects' pest resistant satkara variety through inter-specific hybridization.	CRS, Jaintapur, Sylhet
158	Evaluation of bael genotypes	• To find out a suitable bael genotypes for releasing a variety; and to maintain germplasm of bael.	RARS, Burirhat, Rangpur.

Sl.	Title of experiment	Objectives	Location(s)
159	Evaluation of bael germplasm	• To study the performance of the selected bael germplasm for release as a variety and to conserve fruit genetic resources.	CRS, Jaintapur, Sylhet
160	<i>In-situ</i> evaluation of bael germplasm	• To study the performance of the selected bael germplasm for release as a variety and to conserve fruit genetic resources.	RHRS, Chapainawabganj.
161	<i>In-situ</i> evaluation of bael germplasm	• To find out superior germplasm of Bael for the commercial cultivation and to conserve genetic resources of fruits	RARS, Jamalpur.
162	Evaluation of existing bael germplasm	• To find out suitable, high yielding bael germplasm for releasing as a commercial variety	RHRS, Chapai Nawabganj.
163	Evaluation of wood apple germplasm	• To identify suitable wood apple (kadbel) germplasm for developing a variety for Bangladesh.	HRC, BARI, Gazipur
164	Hybridization in golden apple	• To incorporate more desirable traits in variety.	HRC, BARI, Gazipur
165	Evaluation of golden apple germplasm	• To identify high yielding germplasm and conserved gene pool as well as used as breeding purpose and variety development.	CRS, Jaintapur, Sylhet
166	<i>In-situ</i> evaluation of six Burmese grape germplasm	• To find out a suitable line(s) for the development of variety	HRC, BARI, Gazipur
167	<i>In-situ</i> evaluation and collection of superior Burmese grape germplasm	• To find out a suitable line (s) for the development of variety	RHRS, Shibpur, Narsingdi
168	Evaluation of Burmese grape germplasm	• To find out a suitable line(s) for the development of variety	CRS, Jaintapur, Sylhet
169	Evaluation of sapota germplasm	• To select the superior sapota germplasm suitable for commercial cultivation • To evaluate the lines in respect of yield and quality and release as a variety.	RARS, Rahmatpur, Barishal.
170	Evaluation of aonla genotypes in Chattogram region	• To evaluate aonla lines and to identify the best genotype	ARS, Pahartali, Chattogram.
171	Evaluation of bullock's heart genotypes at Jashore	• To find out the promising line of variegated bullock's heart to release as variety	RARS, Jashore.
172	Evaluation of bullock's heart germplasm at Jamalpur	• To select suitable line of Bullock's heart, and to conserve germplasm	RARS, Jamalpur.
173	Evaluation of custard apple germplasm at Rajshahi	• To identify superior lines of custard apple and to conserve germplasm	FRS, BARI, Binodpur, Rajshahi.
174	Evaluation of custard apple genotypes at Chapainawabganj	• To identify superior lines of custard apple and to conserve germplasm	RHRS, Chapai Nawabganj.
175	Evaluation of custard apple germplasm at Raikhali	• To identify superior lines of custard apple and to conserve germplasm	HARS, Raikhali, Rangamati.
176	Evaluation of Indian dillenia germplasm in Jashore	• To study the performance of Indian dillenia germplasm with a view to develop a variety.	HRC, RARS, Jashore.

Sl.	Title of experiment	Objectives	Location(s)
177	Evaluation of some pomegranate germplasm at Chapai Nawabganj	• To study the variability in pomegranate and to develop a variety for commercial cultivation	RHRS, Chapai Nawabganj.
178	Evaluation of cowa germplasm	• To select superior quality cowa germplasm at Southern region	RHRS, Lebukhali, Dumki, Patuakhali.
179	Evaluation of cowa germplasm at Rahmatpur	• To select the superior quality cowa line and to conserve and popularize among the people	RARS, Rahmatpur, Barishal.
180	Evaluation of phalsa germplasm in the hilly area of Rangamati	• To conserve and find out the superior phalsa genotypes in hilly area.	Hill ARS, Raikhali, Rangamati.
181	Evaluation of star gooseberry genotypes in Chattogram region	• To select the superior quality star gooseberry genotypes, to conserve and popularize among the people	ARS, Pahartali, Khulshi, Chattogram.
182	Evaluation of star apple germplasm	• To study the performance of star apple germplasm and conserved the genetic resource	Hill ARS, Raikhali, Rangamati
183	Performance of advance star apple germplasm in hilly region	• To study the performance of star apple germplasm and conserved the genetic resource.	Hill tracts ARS, Ramgarh
184	<i>In-situ</i> evaluation of bilimbi germplasm in Cumilla region	• To study the performance of the selected bilimbi germplasm for release as a variety.	RARS, Cumilla
185	Evaluation of water chestnut germplasm	• To investigate in details of the water chestnut fruits using locally available (green and red).	RARS, Jamalpur.
186	Evaluation of water chestnut germplasm	• To investigate in details of the water chestnut fruits using locally available (green and red).	ARS, Benerpota, Satkhira.
187	Evaluation of eggfruit in hilly area	• To evaluate the eggfruit fruit germplasm and released as a new variety in Bangladesh.	Hill ARS, Raikhali, Rangamati.
188	Evaluation of jaboticaba in hilly area	• To find out the promising line of variegated jaboticaba release as variety.	Hill ARS, Raikhali, Rangamati.
189	Evaluation of minor fruits germplasm at Jaintapur	• To find out superior lines suitable for the acidic soil of Sylhet region	CRS, Jaintapur, Sylhet.
190	Evaluation of dragon fruit germplasm	• To evaluate the white fleshed dragon fruit germplasm and released as variety which can be used for hybridization	CRS, Jaintapur, Sylhet
191	Evaluation of dragon fruit germplasm in Rangamati hilly area	• To find out the suitable germplasm for higher yield and quality	Hill ARS, Raikhali, Rangamati.
192	Evaluation of cashew nut genotypes in north-eastern hilly region of Bangladesh	• To identify the superlative cashew genotypes suitable for commercial cultivation in north-eastern hilly region of Bangladesh.	CRS, Jaintapur, Sylhet

Sl.	Title of experiment	Objectives	Location(s)
193	Evaluation of promising cashew nut germplasm in hill tract	• To select suitable cashew lines in respect of yield and quality as well as strengthen the base of the fruit industry of our country.	Hill Tracts ARS, Ramgarh.
194	Evaluation of cashew germplasm	• To select suitable cashew lines in respect of yield and quality as well as strengthen the base of the fruit industry of our country.	Hill ARS, Raikhali, Rangamati.
195	Evaluation of coffee in north-eastern hilly region of Bangladesh	• To evaluate coffee genotypes in order to identify the best genotype and to conserve and popularize among the people	CRS, BARI, Jaintapur, Sylhet.
196	Evaluation and adaptability of promising coffee germplasm at Ramgarh	• To evaluate coffee genotypes in order to identify the best genotype and to conserve and popularize among the people	Hill Tracts ARS, Ramgarh
197	Evaluation of coffee germplasm	• To select suitable coffee lines in respect of yield and quality	HARS, Raikhali, Rangamati.
198	Evaluation of promising coffee germplasm in the hilly region of Bangladesh	• To identify suitable avocado fruit germplasm for developing a variety for Bangladesh	HARS, Khagrachari
199	Performance of coffee germplasm in young Brahmaputra and Jamuna Floodplain	• To identify superior germplasms for critical evaluation in order to test their potentiality in Young Brahmaputra and Jamuna Floodplain region.	Fruit Research Farm of HRC, BARI, Gazipur
200	Evaluation of fig (<i>Ficus carica</i>) germplasm	• To characterize, evaluate and release a superior variety of fig in Bangladesh.	HRC, BARI, Gazipur
201	Study on floral biology and pollen preservation of avocado	• To know the floral biology of avocado to optimize yield and also perform appropriate crosses in avocado breeding programs for future.	HRC, BARI, Gazipur
202	Evaluation of avocado germplasm	• To identify suitable avocado fruit germplasm for developing a variety for Bangladesh	HARS, Raikhali, Rangamati.
203	Effect of time of grafting on BARI developed jackfruit varieties	• To study the effect of time and variety on grafting success of jackfruit	HRC, Joydebpur, Gazipur.
204	Micro propagation of papaya	• To develop a suitable protocol for <i>in vitro</i> clonal multiplication of papaya and make the plant materials available to the farmers for commercial cultivation.	HRC, Joydebpur, Gazipur.
205	Manipulation through grafting and pruning for dwarf shape of BARI released mango variety	• To identify suitable technique/technology for the development of dwarf tree.	RHRS, Chapai Nawabganj.
206	Split application of fertilizer for young grafted jackfruit plant	• To find out the effect of split application of fertilizer for fruiting in grafted jackfruit plants.	HRC, Joydebpur, Gazipur.
207	Effect of canopy management on growth and yield of mango	• To standardize canopy architecture of mango plants planted at a closer spacing.	HRC, Joydebpur, Gazipur.
208	Effect of cocodust as growing media for mango sapling production	• To develop soilless mango sapling production and to facilitate mango sapling transport/export.	RHRS, Chapai Nawabganj

Sl.	Title of experiment	Objectives	Location(s)
209	Effect of irrigation on mango fruit cracking in Chattogram region	• To find out the critical stage of irrigation to mitigate fruit cracking of mango.	RARS, Hathazari, Chattogram
210	Effect of ultra-high-density plantation of mango at varying spacing on yield and profit	• To find out the optimum spacing for ultra-high-density plantation of mango.	RHRS, Chapai nawabganj
211	Effect of length of heading back in ultra-high-density plantation on growth, stature and yield of mango	• To find out the suitable length of heading back in ultra-high-density planting for short stature, balanced branching to cope with the space and higher yield of mango.	RHRS, Chapai Nawabganj
212	Effect of different doses of Diquat 20% (Weed out SL) for controlling weed in banana field	• To know the herbicide efficacy of weed management in banana orchard	HRC, Gazipur
213	Effect of different doses of Glufosinate-ammonium 20% (Vanish 200SL) for controlling weed in banana field	• To know the herbicide efficacy of weed management in banana orchard	HRC, Gazipur
214	Effect of girdling on flowering, fruiting and yield of litchi	• To develop a technique of getting regular flowering and fruiting in litchi through girdling of primary branches and to overcome the irregular bearing problem of litchi.	Joydebpur, Gazipur
215	Effect of organic and inorganic fertilizers with different spacing on yield and quality attributes of guava	• To maximize the use of land • To increase the yield and quality of guava	HRC, Joydebpur, Gazipur.
216	Effect of split application of fertilizer on the harvesting time, yield and quality of ber	• To investigate the effect of fertilizer at different stages of plant growth on harvesting time, yield and quality of ber	RARS, Jamalpur.
217	Application of fertilizer in coconut	• To find out the suitable fertilizer for coconut • To increase the number of fruits • To increase the yield of green coconut	HRC, BARI, Joydebpur, Gazipur.
218	Effect of fertilizer on flower and fruit drop in coconut	• To find out the suitable fertilizer for coconut • To increase the number of fruits • To increase the yield of green coconut	RHRS, Rahmatpur, Barishal
219	Effect of organic fertilizers for safe lemon (<i>Citrus limon</i> (L.) Osbeck cv. BARI lebu-5) production	• To find out the best possible organic fertilizers dose, which can be stimulated the lemon production without adversely affecting the quality of soils.	CRS, Jaintapur, Sylhet.
220	Evaluating beneficial microorganisms for safe and quality lemon (<i>Citrus limon</i> (L.) Osbeck cv. BARI Lebu-5) production	• To find out suitable BM for maximizing yield and profitability of lemon cv. BARI Lebu-5.	CRS, Jaintapur, Sylhet
221	Effect of vermicompost on growth, yield and quality of sweet orange	• To investigate the effect of vermicompost on growth and fruit yield of sweet orange	RARS, Rahmatpur.

Sl.	Title of experiment	Objectives	Location(s)
222	Effect of gibberellic acid (GA ₃) on seed lessness of latkan (<i>Baccaurea sapida</i>)	• To calculate Gibberellic acid concentration for reduce seed size and increase edible portion of Burmese grape.	HRC, Joydebpur, Gazipur.
223	Effect of fertilizer dose on growth, yield and quality attributes of wax apple	• To find out the optimum fertilizer dose for growth, yield and fruit quality of wax apple.	HRC, Joydebpur, Gazipur.
224	Effect of stem pruning on the growth and yield of dragon fruit	• To find out the effect of stem pruning on the growth and yield of dragon fruit	RARS, Jamalpur
225	Effect of bud thinning on quality and yield of dragon fruit	• To improve the quality, size and yield of dragon fruit.	ARS, Khulshi, Chattogram
226	Identification of suitable light for enhancing day length for off season dragon fruit production	• To find out the appropriate light arrangement for better production of off-season dragon fruit • To find out the total number of lights needed per unit area	ARS, Pahartali, Khulshi, Chattogram.
227	Development of production package of some selected fruit crops for rooftop gardening	• To develop the production package for selected fruit crops (Dragon fruit, Golden apple and Guava) on the roof for year-round nutrition supply.	HRC, BARI, Joydebpur, Gazipur
228	Standardization of soil media for roof gardening of guava	• To find out the optimum soil media for guava cultivation on roof • To plant and get higher yield from roof gardening as well as ensure family nutrition of the urban people.	RARS, Jamalpur.
229	Effect of different growing media for dragon fruit production on the roof	• To know the performance of Dragon fruit production under different growing media (soil and soilless) on the roof.	HRC, BARI, Joydebpur, Gazipur
230	Standardization of soil media for roof top gardening of dragon fruit	• To formulate soil media for dragon fruit production on the rooftop garden and maximize the yield of a rooftop garden as well as ensure family nutrition of the urban people.	RARS, Jamalpur
231	Evaluation of strawberry production in different growing methods on the roof	• To evaluate different growing methods for strawberry production on the roof.	HRC, Joydebpur, Gazipur
232	Performance of BARI developed jackfruit varieties at Joydebpur	• To evaluate the performance of grafted jackfruit plants in the farmer's field.	HRC, BARI, Gazipur.
233	Performance of BARI developed jackfruit varieties at Narsingdi	• To evaluate the performance of grafted jackfruit plants in the farmer's field.	RHRS, Shibpur, Narsingdi.
234	Performance of BARI developed mango varieties in Chattogram hill tracts	• To observe the performance of some BARI developed mango varieties in Chattogram Hill Tracts.	HARS, Raikhali, Rangamati
235	Adaptive trial of selected crops at farmer's field	• To promote BARI developed fruit variety (s) (dragon fruit and guava) production at new region.	HRC, BARI, Gazipur.
236	Adaptive trial of BARI released lemon varieties	• To observe the adaptability of lemon varieties in Narsingdi region.	RHRS, Shibpur, Narsingdi

Sl.	Title of experiment	Objectives	Location(s)
237	Baseline study on cashew nut production processing and marketing in Bandarban hill district	• To document socio-demographic profile of the respondents; • To know the current status of input use, productivity, profitability, processing and marketing of cashew nut; • To identify the existing problems/constraints for cashew nut production, processing and marketing; and • To derive policy implications and recommendations.	Hill tracts ARS, Ramgarh
238	Maintenance of different germplasm at HRC, Jamalpur	• To retain viability of germplasm of different horticultural crops for period and future use	HRC, RARS, Jamalpur.
239	Mother orchard establishment of BARI released/popular citrus fruit varieties	• For conserving varietal traits from degeneration. • For preparing breeder propagules for extension agencies (DAE, Horticulture centers/BADC/ NGOs/private nurseries etc.)	CRS, Jaintapur, Sylhet.
240	Grafts and seedlings of fruits produced and distributed during 2021-2022	• To disseminate BARI released fruit varieties to the farmers	All Fruit Research Stations of BARI
241	Collection, evaluation and maintenance of water lily	• To collect water lily germplasm from different sources • To evaluate and characterize water lily germplasm • To conserve the collected germplasm for future research	Floriculture Field of HRC, BARI, Gazipur
242	Collection and evaluation of tuberose (<i>polianthes tuberosa</i> l.) Genotypes	• To characterize the tuberose germplasm in respect of their morphological variation, growth, yield and post-harvest life. • To know the genetic variability which can be used in tuberose improvement program • To identify the suitable cultivars for commercial tuberose cultivation in Bangladesh	Floriculture Field of HRC, BARI, Gazipur
243	Collection, evaluation, characterization and maintenance of lilium	• To collect and characterize the different species of <i>lilium</i> available in Bangladesh and also from abroad and • To conserve the collected germplasm for future research.	Floriculture Field of HRC, BARI, Gazipur
244	Collection, evaluation and maintenance of rose	• To do research works on different morphological and floral traits of rose	Floriculture Field of HRC, BARI, Gazipur
245	Collection and evaluation of chrysanthemum genotypes	• To characterize the different genotypes and to find out the superior genotypes of chrysanthemum	Floriculture Field of HRC, BARI, Gazipur
246	Collection and maintenance of cactus and succulents	• To select the superior lines of Cactus and succulents suitable for decorative and commercial purposes.	Floriculture Field of HRC, BARI, Gazipur

Sl.	Title of experiment	Objectives	Location(s)
247	Collection, evaluation and maintenance of gerbera	• To find out the suitable line (s) for cut flower as well as for future breeding program.	Floriculture Field of HRC, BARI, Gazipur
248	Collection, evaluation and maintenance of heliconia	• To find out the best line(s) for cut flower.	Floriculture Field of HRC, BARI, Gazipur
249	Collection, evaluation and maintenance of dendrobium orchids	• To collected and evaluated promising <i>Dendrobium</i> orchid at Gazipur for commercial production.	Floriculture Field of HRC, BARI, Gazipur
250	Collection and evaluation of foliage and ornamental plants	• for collection and conservation of house plants by Floriculture Division of HRC, BARI.	Floriculture Field of HRC, BARI, Gazipur
251	Collection, evaluation and maintenance of climbers and creepers	• To collect new dimension, color and fragrance to garden space with easy-to-grow and long-lived vines.	Floriculture Field of HRC, BARI, Gazipur
252	Collection and evaluation of gladiolus germplasm	• To evaluate the performance of different genotypes of gladiolus in order to select promising genotypes in respect of flower production	Floriculture Field of HRC, BARI, Gazipur
253	Performance of commercial cultivars of gerbera collected from various sources under protected condition	• To evaluate cultivars for their vegetative, yield and quality characters for the agro-climatic conditions of Bangladesh	Floriculture Field of HRC, BARI, Gazipur
254	Influence of foliar application of BA, GA ₃ and NAA on vegetative growth and flowering of chrysanthemum (<i>chrysanthemum morifolium</i>)	• To find out the optimum concentration of GA ₃ , BA and NAA to improve vegetative growth and flowering traits of chrysanthemum	Floriculture Field of HRC, BARI, Gazipur
255	Effect of potting media on growth and quality in aglaonema	• To find out the most suitable media for successful culture of indoor foliage plants Aglaonema CV. Silver Queen under local climatic condition	Floriculture Field of HRC, BARI, Gazipur
256	Effect of substrates on growth, yield and quality of anthurium in soilless culture	• To study the performance of different substrates on growth, flowering and economics of anthurium.	Floriculture Field of HRC, BARI, Gazipur
257	Effect of different potting media on plant growth and yield of ground orchid	• To investigate the effect of potting media on growth and yield of ground orchid	Floriculture Field of HRC, BARI, Gazipur
258	Response of <i>sansevieria</i> spp. to rooting hormone in propagating substrates	• To evaluate the influence of rooting hormone on leaf cuttings of <i>Sansevieria</i> spp. and also to find out the appropriate substrate for the propagation	Floriculture Field of HRC, BARI, Gazipur
259	Effect of coco coir-based soil less media on yield and flower quality of gerbera	• To compare available and low-cost growing media in soilless culture along with traditional gerbera cultivation	Floriculture Field of HRC, BARI, Gazipur
260	Combination effect of different growing media on the yield and	• To determine the effect of different substrates on growth and yield of gerbera under an open soil-less production system	Floriculture Field of HRC, BARI, Gazipur

Sl.	Title of experiment	Objectives	Location(s)
	flower quality of gerbera in soil less culture		
261	Hybridization in gladiolus flower	• To develop new hybrid varieties	Floriculture Field of HRC, BARI, Gazipur
262	Bulb and bulblet production of lilium influenced by planting materials and growing condition	• To standardize the suitable planting materials under optimum growing condition for quality bulb production	Floriculture Field of HRC, BARI, Gazipur
263	Influence of planting dates on the production of Asiatic lilium under protective condition	• To find out the optimum planting time for better flower production • To extend the flowering duration of lilium	Floriculture Field of HRC, BARI, Gazipur
264	Adaptive trial of gladiolus varieties at farmers field	• To evaluate the performances of gladiolus varieties at farmer's field	Gazipur, Rajshahi, Bogura, Rangpur, Khagrachori and Jamalpur
265	Adaptive trial of tuberose varieties at farmers field	• To evaluate the performance of tuberose varieties at farmer's field	Gazipur, Bogura, Rajshahi, Khagrachori, Rangpur and Jamalpur
266	Adaptive trial of marigold variety at farmers field	• To evaluate the performance of marigold variety at farmer's field	Gazipur, Bogura, Rangpur, Rajshahi, Khagrachori and Jamalpur
267	Adaptive trial of lilium variety at farmers field	• To evaluate the performance of lilium varieties at farmer's field	Gazipur, Savar, Jashore and Rangpur
268	Adaptive trial of gypsophila variety at farmers field	• To evaluate the performance of Gypsophila variety at farmer's field	Gazipur, Jamalpur, Rajshahi, Khagrachori, Bogura and Rangpur
269	On-farm validation and of bio-rational integrated pest and disease management packages for quality and safe country bean production	• To avoid indiscriminate use of pesticides for controlling major pest and diseases of country bean and • To find out best bio-rational based IPM and IDM package against major pest and diseases of country bean.	Mymensingh (Sadar, Nandail), Netrakona (Durgapur, Kalmakanda) and Sherpur (Nalitabari, Nakla)
270	Field screening of different BARI released brinjal varieties against major insect pests	• To identify the resistant or tolerant BARI released brinjal variety (ies) against major insect pests.	Gazipur
271	Survey and monitoring of insect pests of roof top garden	• To know the insect pest's status and its severity at roof garden	Gazipur

Sl.	Title of experiment	Objectives	Location(s)
272	Screening of bitter gourd genotypes against salinity at germination and early seedling growth stages	To identify salt tolerant bitter gourd genotypes at seed germination and early seedling growth stages	HRC, Joydebpur
273	Response of germination and seedling growth of sweet pepper (<i>Capsicum annum</i> L.) to seed priming by gibberellic acid and potassium nitrate	To find out the suitable concentration of GA₃ and KNO₃ for better seed germination of bitter gourd seeds	HRC, Joydebpur
274	Effect of foliar spray of boron on flower retention and pod yield of summer country bean	- To identify the suitable doze of boron for controlling flower drop of summer country bean - To investigate the influence of boron on pod yield of summer country bean	HRC, Joydebpur
275	Effect of gibberellic acid on growth, flowering and yield of lady's finger genotypes during off season	- To evaluate the influence of GA₃ on physio-morphological characters of lady's finger in off-season. - To find out the suitable GA₃ concentration for higher yield of off-season lady's finger. - To identify suitable okra genotypes for off-season production	HRC, Joydebpur
276	Germination and growth of brinjal seedling as influenced by seed priming agents	- To improve germination percentage of brinjal. - To investigate the influence of seed priming agents on early seedling growth.	HRC, Joydebpur
277	Response of tomato to gibberellic acid application under salinity stress at lab condition	- To improve germination percentage of tomato seeds under salinity stress - To select suitable GA₃ concentrations under salinity stress for better germination of tomato seeds	HRC, Joydebpur
278	Screening of bottle gourd genotypes against salinity at germination and early seedling growth stages	To identify the suitable bottle gourd genotypes tolerant to salt stress at seed germination and early seedling growth stages	HRC, Joydebpur
279	Evaluation of hyacinth bean varieties for drought tolerance through yield-based selection indices	- To study the changes in various physiological and morphological parameters of hyacinth bean plant under drought stress condition. - To find out the suitable variety tolerant to drought stress	HRC, Joydebpur
280	Effect of plant growth regulators on the performance of lady's finger	- To evaluate the influence of plant growth regulators (PGRs) on physio-morphological characters of lady's finger. - To find out the suitable PGRs on higher yield of lady's finger.	HRC, Joydebpur
281	Maturity determination of broccoli (<i>Brassica oleracea</i> var. <i>italica</i>)	- To study the maturity indices of broccoli - To study the quality of broccoli	Joydebpur, Gazipur

Sl.	Title of experiment	Objectives	Location(s)
282	Standardization of blanching time of broccoli using boiling water and microwave techniques and quality studies during frozen storage	• To standardize blanching time of fresh broccoli in boiling water and microwave technique. • To study quality in both techniques during blanching and frozen storage.	Joydebpur, Gazipur
283	Impact of sodium lauryl sulfate and saponins (triterpene glycosides) as safe sanitizing agent on postharvest quality of tomato	• To identify suitable sanitizing agent for washing of vegetables • To evaluate postharvest impacts on microbial load • To evaluate postharvest impacts on shelf life	Joydebpur, Gazipur
284	Postharvest storage and value addition of mango through semi solid mesocarp	• To identify the suitable food additive / preservative for semi solid mango mesocarp preservation • To identify the suitable drying percentage for prepared mango • To identify the storage time of prepared mango	Joydebpur, Gazipur
285	Standardization of ethylene dose for uniform and safe bulk ripening of banana using developed low-cost ethylene generator	• To standardize the treatment doses of ethephon • Uniform ripening of mature fruits	Joydebpur, Gazipur
286	Selection of suitable cutting size and cultivar for semi solid dry mango	• To identify the suitable cutting size for semi solid dry mango • To identify the suitable drying percentage for prepared mango • To identify the storage time of prepared mango	Joydebpur, Gazipur
287	Determining optimum storage temperature and duration for preservation of lilium flower	• To find out the optimum temperature and duration for preservation of lilium flower	Joydebpur, Gazipur
288	Effect of organic manures on growth, yield and quality of tomato	• To find out the suitable organic manure and appropriate dose for yield maximization and quality improvement of tomato	Gazipur
289	Effect of boron and magnesium on growth, yield and quality of cauliflower	• To evaluate the effective dose of boron and magnesium application on growth, yield and quality of cauliflower.	Gazipur
290	Response of sponge gourd to zinc, boron and magnesium application	• To determine the effective doses of zinc (Zn), boron (B) and magnesium (Mg) for yield maximization of sponge gourd (<i>Luffa cylindrica</i> L.).	Gazipur
291	Impact of organic and inorganic fertilizers on growth, yield and quality of bitter gourd	• To determine the effective combination of organic and inorganic fertilizer dose for yield maximization of bitter gourd (<i>Momordica charantia</i> L.).	Gazipur
292	Evaluation of alternate furrow irrigation and irrigation interval	• To evaluate the effects of alternate furrow irrigation (AFI) with 10- and 15-days irrigation interval with supplemental one	Gazipur

Sl.	Title of experiment	Objectives	Location(s)
	with supplemental every-furrow irrigation for eggplant	every furrow irrigation (EFI) on eggplant yield, water saving, water productivity and benefit cost ratio of the AFI compared with traditional EFI method.	
293	Growth and yield performance of summer tomato as influenced by planting time and plastic mulch under agro-climatic condition of Bangladesh	To identify the best planting time for better flowering, fruit setting and yield of summer tomato under plastic mulch condition and to develop an off-season low-cost production technology under the prevailing agro-climatic conditions in Bangladesh.	Gazipur
294	Response of bush bean varieties to boron fertilization	To evaluate the effects of B on seed and pod yield of different bush bean variety and to develop a boron fertilizer recommendation for BARI bush bean varieties.	Gazipur
295	Yield and quality of netted melon influenced by organic and inorganic fertilizer	To response of yield and fruit quality of netted melon (<i>Cucumis melo</i> L.) to different nutrients and to develop an organomineral fertilizer recommendation for netted melon under prevailing agro-climatic condition	Gazipur
296	Growth and yield of tomato varieties influenced by soil properties under different plastic mulch	To select the best plastic mulch and tomato variety that results better flowering, fruit setting and yield of tomato under plastic mulch condition and to develop plastic mulch based low-cost production technology under the prevailing agro-climatic conditions in Bangladesh	Gazipur
297	Integrated nutrient management to improve productivity of sweet pepper (<i>Capsicum annum</i> L.)	To examine the roles of organic and inorganic (NPK) fertilization on sweet pepper (<i>Capsicum annum</i> L.) growth, yield and quality. To determinate the suitable fertilization package for maximizing the yield of sweet pepper.	Gazipur
298	Screening eggplant germplasm against bacterial wilt caused by <i>Ralstonia solanacearum</i>	To find out resistant germplasm of Eggplant against bacterial wilt caused by <i>Ralstonia solanacearum</i>	HRC, BARI, Gazipur
299	Screening tomato germplasm against bacterial wilt caused by <i>Ralstonia solanacearum</i> .	To find out resistant germplasm of Tomato against bacterial wilt caused by <i>Ralstonia solanacearum</i>	HRC, BARI, Gazipur
300	Screening eggplant germplasm against root-knot nematode caused by <i>Meloidogyne</i> sp.	To identify the resistant sources against root knot nematode in eggplant	HRC, BARI, Gazipur
301	Screening tomato germplasm against root-knot nematode caused by <i>Meloidogyne</i> spp.	To identify the resistant sources against root knot nematode in tomato	HRC, BARI, Gazipur
302	Screening okra germplasm resistance to okra yellow vein mosaic virus	To identify the resistant sources against okra yellow vein mosaic virus	HRC, BARI, Gazipur

Sl.	Title of experiment	Objectives	Location(s)
303	Screening tomato germplasm for resistance to tomato yellow leaf curl virus	• To find out the resistant source to Tomato Leaf Curl Virus disease	HRC, BARI, Gazipur
304	Screening country bean germplasm against Bean yellow mosaic virus	• To find out resistant germplasm against yellow mosaic virus disease	HRC, BARI, Gazipur
305	Survey on occurrence and severity of bacterial wilt of solanaceous vegetable crops especially eggplant and tomato	• To collect the isolates of <i>Ralstonia solanacearum</i> for further study and • To examine the wilt incidence of tomato and eggplant grown in different region of Bangladesh.	Thakurgaon Bogura and Gazipur were surveyed.
306	Development of IPM package for gummy stem blight disease management of bottle gourd	• To find out suitable control measures of Gummy stem blight disease of bottle gourd under epiphytotic natural condition for stem and foliage	HRC, BARI, Gazipur
307	Management of tomato yellow leaf curl virus of tomato through chemical and cultural means	• To select suitable management practice against TLCV	HRC, BARI, Gazipur
308	Management of bacterial wilt of tomato through biological agents	• To find out effective control measures against bacterial wilt of tomato.	HRC, BARI, Gazipur
309	Management of bacterial wilt of eggplant through chemicals	• To find out effective control measures against bacterial wilt of eggplant.	TCRC, Seujgari, Bogura
310	Management of bacterial wilt of eggplant through cultural practices	• To find out effective control measures against bacterial wilt of eggplant.	TCRC, Seujgari, Bogura
311	Management of bacterial wilt of eggplant through biological agents	• To find out effective control measures against bacterial wilt of eggplant.	TCRC, Seujgari, Bogura
312	Management of bacterial wilt of eggplant through chemicals in the farmer's field	• To find out effective control measures against bacterial wilt of eggplant.	Choto Fulbari, Sherpur, Bogura
313	Management of bacterial wilt of eggplant through cultural practices in the farmer's field	• To find out effective control measures against bacterial wilt of eggplant.	TCRC, Seujgari, Bogura
314	Management of bacterial wilt of tomato through biological agents	• To find out effective control measures against bacterial wilt of tomato.	TCRC, Seujgari, Bogura
315	Management of bacterial wilt of tomato through chemicals	• To find out effective control measures against bacterial wilt of tomato.	TCRC, Seujgari, Bogura
316	Management of bacterial wilt of tomato through cultural practices	• To find out effective control measures against bacterial wilt of tomato.	TCRC, Seujgari, Bogura
317	Monitoring of post-harvest diseases in common horticultural fruits and vegetables	• To identify the post-harvest diseases of fruits and vegetables	HRC, BARI, Gazipur
318	Screening of botrytis blight disease of liliium	• To identify resistance source against botrytis blight disease of liliium	HRC, BARI, Gazipur

Sl.	Title of experiment	Objectives	Location(s)
TUBER CROPS RESEARCH CENTRE			
319	Hybridization in Potato (Set-I, II, III, IV, V and VI)	• To create variants for subsequent variety selection • To improve the genetic base of the parent population	Joydebpur and BSPC, Debigonj
320	Production of Seedling Tubers of the Potato Hybrid Populations (F ₁ C ₀)	• Production of F ₁ seedling tubers for selection and variety development	BSPC, Debigonj
321	Field Evaluation of F ₁ seedling tubers (F ₁ C ₁)	• Selection of superior plants for variety development.	BSPC, Debigonj
322	Preliminary Observation Trial with Clonal Potato Hybrids (F ₁ C ₂)	• Selection of superior plant-rows for variety development.	BSPC, Debigonj
323	Secondary Observation Trial with Clonal Potato Hybrids (F ₁ C ₃)	• Selection of superior genotypes (one clone per one plot) for variety development	BSPC, Debigonj
324	Seed Multiplication with Clonal Potato Hybrids (F ₁ C ₄ & F ₁ C ₅)	• To increase seed, and ii) evaluation of clones by crop cutting in net house.	BSPC, Debigonj
325	Preliminary Yield Trial with Clonal Potato Hybrids (F ₁ C ₅)	• To select the superior genotype (s) for secondary yield trial of variety development process	Joydebpur and BSPC, Debigonj
326	Secondary Yield Trial with Clonal Potato Hybrids (F ₁ C ₅)	• Selection of superior genotypes for advanced yield trial	BSPC, Gazipur and Jamalpur
327	Advanced Yield Trial with Clonal Potato Hybrids (F ₁ C ₆)	• To select stable clones and finalized the clone(s) for RYT	Bogura, Gazipur, and Jamalpur
328	Participatory Variety Selection of AYT materials (F ₁ C ₆)	• To select suitable clones in collaboration with farmers and other stakeholders for releasing varieties	Bogura, Gazipur, and Jamalpur
329	Regional Yield Trial with Clonal Potato Hybrids (F ₁ C ₇)	• Selection of suitable varieties for release	Bogura, Gazipur, and Jamalpur
330	Participatory Variety Selection of Regional Clonal Potato Hybrids (F ₁ C ₇)	• To select suitable varieties in collaboration with farmers and other stakeholders for releasing varieties	Bogura, Gazipur, and Jamalpur
331	Preliminary Observation Trial and Seed Increase of Exotic Potato Varieties (1st Generation)	• To increase seed and to observe physio-morphological characters in order to develop varieties	Joydebpur and BSPC, Debigonj
332	Secondary Yield Trial of Exotic Potato Varieties	• To select superior exotic varieties in contest of Bangladeshi environment	Gazipur
333	Regional Yield Trial of Exotic Potato Varieties	• Selection of suitable varieties for release	Bogura, Gazipur and Jamalpur
334	Participatory Variety Selection of Exotic Potato Varieties for Table, Export and Processing Purposes	• To select suitable varieties in collaboration with farmers and other stakeholders for releasing varieties	Bogura, Gazipur and Jamalpur
335	Regional Yield Trial of Late Blight Tolerant Exotic Potato Varieties	• To select suitable late blight tolerant variety for release	Bogura, Gazipur, Jamalpur, and Rangpur

Sl.	Title of experiment	Objectives	Location(s)
336	Participatory Variety Selection for Late Blight Tolerant Exotic Potato Variety	To select suitable late blight tolerant variety for release in collaboration with farmers and other stakeholders	Bogura, Gazipur, and Jamalpur
337	Evaluation exotic varieties and advanced hybrid clones for Early Heat Tolerance	To identify varieties suitable for early planting	BSPC, Debigonj
338	Screening of the Potato Variety for Export Potential and processing qualities	To identify potato varieties suitable for Export and Processing	Bogura, Jashore, Munshiganj, Gazipur, Patuakhali, Faridpur, Thakurgaon and Rangpu
339	Secondary Yield Trial of CIP Biofortified Potato Clones	- To identify high yielding and nutritious clones - To enrich the germplasm which can be used in breeding program	BSPC, Debigonj
340	Secondary Yield Trial of CIP Late Blight Tolerant Potato Germplasm	To find out desirable late blight resistant/tolerant variety	BSPC, Debigonj and Rangpur
341	Preliminary Yield Trial of CIP Heat Tolerant Potato Germplasm	To find out suitable heat tolerant variety(s)	BSPC, Debigonj and Gazipur
342	Secondary Yield Trial of Colored Flesh Potato Varieties	To develop color flesh nutrient rich potato varieties	Bogura, Gazipur and Jamalpur
343	Regional Yield Trial of Anthocyanin Rich Potato Germplasm	- To develop anthocyanin rich potato in Bangladesh - To help for ensuring the nutrient security for the country	Bogura, Gazipur, Jamalpur, Jamalpur and Cumilla
344	Participatory Variety Selection of RYT Anthocyanin Rich Potato Germplasm	- To know the farmers reaction and opinion - To know the degree of acceptance about the new potato varieties of anthocyanin rich potato	Bogura, Gazipur, Jamalpur, Jamalpur and Cumilla
345	Morphological Characterization of Advanced Breeding Lines of Potato	- To fulfill the DUS test requirement - To characterize the advanced breeding lines and released varieties - To develop photographic monograph with descriptors	Joydebpur
346	Screening of Parental Lines for TPS Production under Extended Photoperiod	To identify the genotypes capable of producing flowers and berries under extended photoperiod	Joydebpur
347	Selfing in Diploid Potato germplasm	- To develop an inbred line of potato - To develop hybrid potato at the diploid level	Joydebpur and BSPC, Debigonj
348	Production of Seedling Tubers of the Selfed Populations (F_1S_0)	Production of seedling tubers for evaluation and inbred line selection	Joydebpur and BSPC, Debigonj
349	Maintenance of Released Potato Varieties, Germplasm, Lines and TPS Parents	To maintain the released potato varieties, germplasm and lines for future breeding programme	BSPC, Debigonj

Sl.	Title of experiment	Objectives	Location(s)
350	Seed Multiplication of Potato Breeding Materials	To increase seed for fulfillment the requirement of research	BSPC, Debigonj
351	Multiplication, Purification and Maintenance of Indigenous Potato Varieties	To improve the quality as well as maintain the indigenous potato varieties for future breeding programme	Burirhat, Rangpur
352	Adaptive Trial with Newly Released Potato Varieties	- To popularize the newly released improved potato varieties. - To collect the feedback of the newly released varieties	Bogura, Dinajpur, Faridpur, Gibandha, Gazipur, Jamalpur, Jashore, Joypurhat, Kishoregonj, Kushtia, Moulvibazar, Manikgonj, Munsiganj, Noakhali, Panchagarh, Rangpur, Satkhira and Tangail
353	Promotion and Dissemination of Newly Released Climate SMART (Heat and Salt tolerant) Potato Variety	- To popularize the newly released improved potato varieties. - To collect the feedback of the newly released varieties.	Patuakhali, Barguna, Satkhira, Noakhali, and Jashore
354	Promotion and Dissemination of Newly Released Late Blight Resistant Potato Variety	- To popularize the newly released improved potato varieties - To collect the feedback of the newly released varieties	Bogura, Gaibandha, Joypurhat, Niphamary, Panchagarh, Kurigram, Lalmonirhat and Rangpur
355	Hybridization of Sweet Potato using Polycross Method	- To create variability and diversity over the existing genotypes of sweet potato - To develop high yielding, dry matter and carotene containing, early bulker, weevil tolerant sweet potato varieties.	Gazipur
356	Collection and Maintenance of Sweet Potato Germplasm	- To find out the diversity of collected germplasms - To select high yielding, dry matter and carotene containing, early bulker, weevil tolerant sweet potato varieties.	Gazipur
357	Observation Trial of Orange Fleshed CIP Sweet Potato Germplasm	- To find out promising genotypes of CIP germplasms - To develop early bulker and high yielding sweet potato genotypes.	Jamalpur and Bogura
358	Observation Trial of Purple Fleshed CIP Sweet Potato Germplasm	- To find out promising genotypes purple fleshed CIP sweet potato germplasms - To develop high yielding, high dry matter and anthocyanin containing sweet potato varieties genotypes.	BSPC, Debigonj and Gazipur
359	Preliminary Yield Trial of Hybrid Clones of Sweet Potato	To find out promising genotypes of hybrid clones	Gazipur

Sl.	Title of experiment	Objectives	Location(s)
		To develop high yielding, high dry matter, carotene rich and anthocyanin containing sweet potato varieties genotypes.	
360	Regional Yield Trial of CIP Clones of Sweet Potato	- To select high yielding sweet potato clones - To select high dry matter and carotene containing sweet potato clones.	Gazipur, Bogura, Jamalpur and Jashore
361	Regional Yield Trial of Hybrid Clones of Sweet Potato	- To select high yielding sweet potato clones - To select high dry matter and carotene containing sweet potato clones.	Gazipur, Jamalpur, Pahartali, Bogura, Jashore
362	Participatory Variety Selection Trial of Hybrid Clones of Sweet Potato	- Selection of suitable varieties obtained from RYT in collaboration with farmers and other organizations - To know the farmers choice and opinion	Gazipur, Jamalpur and Bogura
363	Participatory Variety Selection Trial of CIP Clones of Sweet Potato	- Selection of suitable varieties obtained from RYT in collaboration with farmers and other organizations - To know the farmers choice and opinion	Gazipur, Bogura and Jamalpur
364	Adaptive Trials with Sweet Potato Varieties	- To popularize the newly released improved sweet potato varieties. - To collect the feedback of the newly released varieties.	Gazipur, Bogura, Jamalpur, Kishoregong, Sylhet and Moulavibazar
365	Secondary Yield Trial of Mukhikachu Lines	- To evaluate the Mukhikachu lines - To select high yielding Mukhikachu line(s) for utilization in next year	Gazipur
366	Regional Yield Trial of Mukhikachu Lines	To select high yielding Mukhikachu line(s) for releasing variety	Gazipur, Jamalpur, Jashore and Bogura,
367	Regional Yield Trial of Rhizome Producing Panikachu Lines	- To evaluate the selected lines - To select high yielding rhizome producing Panikachu line(s) for utilization in next year as a better one(s) for release.	Gazipur, Jamalpur, Jashore and Bogura
368	Regional Yield Trial of Stolon Producing Panikachu Lines	- To evaluate the selected lines - To select high yielding stolon producing Panikachu line(s) for utilization in next year as a better one for release.	Gazipur, Jamalpur, Jashore and Bogura
369	Preliminary Yield Trial of Ghataman Kachu in Relation to Spacing	- To evaluate the line - To select high yield performance of Ghataman Kachu with optimum spacing.	Gazipur
370	Preliminary Yield Trial of Panchamukhi Kachu in Relation to Spacing	- To evaluate the line - To select high yield performance of Panchamukhi Kachu with optimum spacing.	Gazipur
371	Regional Yield Trial of Yam (<i>Dioscorea</i> spp.)	- To identify high yielding and commercially important genotype - To enrich the germplasm which can be used in breeding program	Gazipur, Bogura and Jashore

Sl.	Title of experiment	Objectives	Location(s)
372	Preliminary Yield Trial (PYT) of Yam (<i>Dioscorea</i> spp.)	- To identify high yielding and commercially important genotype - To enrich the germplasm which can be used in breeding program	Jashore
373	Regional Yield Trial of Some Exotic Cassava (<i>Manihot esculenta</i>) Lines	- To identify high yielding and commercially important genotype - To enrich the germplasm which can be used in breeding program	Gazipur, Cumilla
374	Rigional Yield Trial of Some Local Cassava (<i>Manihot esculenta</i>) Lines	- To identify high yielding and commercially important genotype - To enrich the germplasm which can be used in breeding program	Gazipur, Cumilla
375	Preliminary Yield Trial (PYT) of Jicama (<i>Pachyrhizus tuberosus</i>)	- To identify high yielding and commercially important genotype - To enrich the germplasm which can be used in breeding program	Gazipur
376	Effect of Biochar with Compost and Fertilizer on Growth and Yield of Potato	- To evaluate the combine effect of biochar (produced at low pyrolytic temperature) with compost and fertilizers to improve nutrient acquisition, growth, physiology and tuber yield of potato. - To explore the effect of biochar and compost on soil properties and nutrients status.	Gazipur,
377	Effect of legume intercrop and conventional methods of weed suppression on tuber yield of potato	To select suitable weed control method for quality potato production as well as improvement of soil health.	Munshiganj
378	Effect of spacing and mulching on weed infestation and yield of potato	To identify suitable mulch materials for potato production and	Munshiganj
379	Dry matter partitioning and yield of processing of potato varieties	To find out growth, dry matter partitioning and yield performance of processing potato varieties	Munshiganj
380	Productivity and profitability study of farmers managed and research managed potato production system	To find out profitable potato production system	Munshiganj
381	Effect of tuber size and spacing on yield of BARI alu-90	To find out optimum seed size for higher yield of potato	Bogura
382	Performance of late blight resistant potato varieties in Joypurhat area	To evaluate the performance of LB resistance varieties in late blight prone areas	Joupurhat
383	Validation trial of newly developed red skin potato varieties in the farmers field	- To evaluate the performance of the varieties under farmer's field condition - To popularize them among the farmers	Bogura
384	Performance of newly developed high yielding early potato	To evaluate the performance of the varieties under farmer's field condition and	Bogura

Sl.	Title of experiment	Objectives	Location(s)
	varieties in the banana-potato intercropping system	popularize them among the farmers to promote their adoption in this area	
385	Effects of seed tuber size on yield and quality performance of processing potato varieties under field condition	• To find out optimum seed size for higher yield and processing quality of potato	BSPC, Debigonj
386	Effects of seed tuber size and spacing on yield and processing quality of potato	• To find out optimum spacing for higher yield and processing quality of potato	BSPC, Debigonj
387	Effect of biochar with compost and fertilizer on growth and yield of potato	• To evaluate the combine effect of biochar with Compost and Fertilizers to improve nutrient acquisition, growth, physiology and tuber yield of potato and	Gazipur
388	Effect of different types of mulching and plant spacing on weed control and yield of sweet potato at Munshiganj region	• To determine the effectiveness of different types of mulching and plant spacing on weed control and yield of sweet potato in Munshiganj region	Munshiganj
389	Effect of planting time and fertilizer levels on yield of beta-carotene content sweet potato	• To determine optimum planting time and fertilizer doze for higher yield.	Bogura
390	Sensory evaluation of sweet potato shoots as leafy vegetables	• To evaluate the selected, improve germplasm suitable for leafy vegetables.	Gazipur
391	Effect of spacing on the yield of Mukhikachu	• To find out optimum spacing for higher yield	Bogura
392	Effect of planting time and varieties on yield of Mukhikachu in level barind tract (AEZ-25)	• To determine optimum planting time for higher yield.	Bogura
393	Effect of spacing on the yield of Mukhikachu	• To determine optimum planting time and fertilizer doze for higher yield.	Gazipur
394	Effect of integrated fertilizer management on productivity and profitability of organic potato production	• To select safe and profitable potato production system through application of bio-fertilizers	Gazipur
395	Efficacy of botanicals to control virus diseases transmitted by aphids in organic potato production.	• To find out the superior botanicals to control virus diseases transmitted by aphids in organic potato	Gazipur
396	Effect of different botanical pesticides to control potato tuber moth (PTM) under storage conditions	• To find out the superior botanical pesticides to control potato tuber moth (PTM) under storage conditions	Gazipur
397	Effect of botanicals to control late blight disease in organic potato production	• To find out the superior botanicals to control late blight disease in organic potato production	Gazipur
398	Efficacy of botanicals to control soft rot disease of organic potato under storage condition	• To find out the superior botanicals to control soft rot disease of organic potato under storage condition	Gazipur

Sl.	Title of experiment	Objectives	Location(s)
399	Evaluation of sweet potato varieties under organic farming system.	• To find out the superior sweet potato varieties under organic cultivation system.	Gazipur
400	Effect of organic herbicides on major weeds species and yield of organic potato	• To find out suitable organic herbicide against weeds in organic potato cultivation	Gazipur
401	Assessment of Atmospheric Carbon Absorption Through Potato	• To find out suitable potato variety in respect of carbon absorption, to assess the total carbon absorption through potato cultivation in Bangladesh in climate change aspect and to estimate the organic carbon adding in soil through potato residues.	Joydebpur, BSPC, Debigonj
402	Integrated Nutrient Management for Potato-Groundnut-T. Aman Rice Cropping Pattern	• To develop a suitable fertilizer package for the cropping pattern and to increase crop productivity and sustain soil health.	Joydebpur, BSPC, Debigonj
403	Response of Potato to Phosphorus in Old Himalayan Piedmont Plain Soil	• To determine the optimum dose of phosphorus for maximizing the yield and quality of potato • To evaluate the effect of P fertilizer on P uptake, fertilizer P recovery (FPR) and applied P use efficiency (APUE) of potato.	BSPC, Debigonj
404	Effect of Thiovit on The Yield and Quality of Potato Through Controlling Scab Disease	• To evaluate the effect of potassium sulphate as a source of sulphur in controlling <i>Streptomyces scabies</i> in potato and to find out the suitable dose and source of sulphur for maximizing the yield of potato.	Joydebpur
405	Assessment of Heavy Metal Uptake and Translocation in Wild Taro (<i>Colocasia Esculenta</i>) for Phytoremediation of Metal Contaminated Soil	• To evaluate the heavy metal accumulation and translocation in taro (<i>Colocasia esculenta</i>) plant parts. • To study the growth performance of <i>C. esculenta</i> in contaminated soils and to estimate the heavy metal concentration in the growth medium.	Joydebpur
406	Effects of Organic Manure and Inorganic Fertilizer on Anthocyanin Rich Bari Mishtialu-17	• To develop a fertilizer package in combination of organic manure and chemical fertilizers for sustainable production of BARI MistiAlu-17 • To study the quality components and storage ability of BARI MistiAlu-17 under integrated nutrient management.	Joydebpur
407	Survey on major potato diseases of Bangladesh	• To determine disease incidence and severity and to determine the causal agent of potato	BSPC, Debigonj
408	Evaluation of potato varieties/lines against late blight disease by detached leaf methods	• To late blight pathogen and provided very few tolerant levels top. <i>Infestans</i> .	Gazipur
409	Screening of potato varieties and germplasms against late blight	• To find out desirable late blight resistance/tolerance variety(s).	BSPC, Debigonj

Sl.	Title of experiment	Objectives	Location(s)
410	Effect of different organic matter for managing soil-borne diseases (common scab) of potato	• To select effective organic matter to minimize these diseases for potato production.	BSPC, Debigonj
411	Monitoring of disease status of BARI released potato varieties against common scab	• To find out the effective tolerant varieties against scab diseases of potato.	Gazipur
412	Screening of early potatoes (<i>solanum tuberosum</i> L.) Varieties/germplasm against bacterial wilt disease	• To find out the resistance or tolerant varieties against the disease.	BSPC, Debigonj
413	Evaluation of potato lines for PLRV and PVY resistance under the infection pressure	• To evaluate some lines for resistance to PLRV and PVY under the field pressure conditions.	Gazipur
414	Evaluation of potato lines for PLRV and PVY resistance under the infection pressure	• To select resistant source(s).	Gazipur
415	Evaluation of potato hybrid clones and exotic lines for PLRV and PVY resistance under the infection pressure	• To select resistant source(s).	Gazipur
416	Observational trial of sweet potato varieties/germplasm against virus diseases	• To viruses to screen the virus resistant varieties.	Gazipur
417	Detection of potato viruses (PLRV, PVY, PVX, PVM and PVS) in the supplied samples of different companies through das-elisa	• To produce disease free quality seeds nationwide.	Gazipur
418	Monitoring of different released potato varieties against post-harvest diseases	• To evaluate the performance of different potato varieties against post-harvest disease under natural storage condition at Joydebpur.	Gazipur
419	Research report on GBPP project	• To evaluate of some selected lines by the artificial inoculation of <i>p. Infestans</i> against late blight pathogen.	Gazipur
420	Development of Biorational based management approach against root aphid (<i>pemphigus</i> sp.) attacking potato	• To find out the most effective management approach against the pest.	Bogura
421	Evaluation of advanced materials of potato against potato cutworm (<i>Agrotis ipsilon</i>) in field condition	• To find out the tolerant and susceptible potato varieties and advanced materials against cutworm.	Bogura
422	Development of management package against sweet potato weevil in field condition	• To develop an effective integrated management approach for sweet potato weevil in field condition.	Bogura
423	Integrated management of cutworm (<i>Agrotis ipsilon</i>) in potato	• To find out the most effective integrated management approach against the pest.	Bogura

Sl.	Title of experiment	Objectives	Location(s)
424	Management of potato tuber moth (PTM) in storage condition	To estimate the extent of damage by PTM.	Bogura
425	Field efficacy of attract and kill method against potato tuber moth in field condition	To observe the performance of the method in field condition.	Bogura
426	Survey and monitoring of new pest arthropods infesting tuber crops	The present study was be undertaken observe these pests in different tuber crops growing areas of Bangladesh	Bogura
427	Screening of different sweet potato varieties/lines against sweet potato weevil (<i>Cylas formicarius</i> fab.)	To screen some genotypes against sweet potato weevil in field condition.	Bogura
428	Survey, monitoring and documentation of major insect pests of Mukhikachu	To identify the pests, their nature of damage and farmers opinion about their management.	Bogura
429	Studies on succession of insect-mite pests on yam	To observe the succession of the insect-mite pests of yam and their damage severity.	Bogura
430	Studies on succession of insect-mite pests on cassava	To observe the succession of the insect-mite pests of yam and their damage severity.	Bogura
431	In Vitro Production and Maintenance of Potato Varieties/Germplasm	- To maintain the genetic purity of the varieties - To increase the number of propagules - To conserve the genetic materials for future program.	Tissue Culture Lab, TCRC, Gazipur
432	Improvement of Indigenous Promising Potato Cultivars Through Meristem Culture and Their Yield Performance Study with Traditional Cultivars	- To produce virus free plantlets through meristem culture - To see yield performance between the virus free cultivars and conventional cultivars	Tissue Culture Lab, TCRC, Gazipur
433	Tissue Culture of Cassava (<i>Manihot Esculenta</i> Crantz) Germplasm	- To establish an efficient in vitro regeneration protocol - To enrich high quality planting materials of cassava - To see the regeneration efficiency	Tissue Culture Lab, TCRC, Gazipur
434	In Vitro Propagation of Stress Tolerant Potato Varieties and Standardization of Nutrient Film Technique Protocol for Quality Seed Production	- To develop a new breeder seed production system at TCRC - To produce quality seed potato seeds round the year - To get clean and disease-free potato seed	Greenhouse, TCRC, Gazipur
435	In Vitro Propagation Protocol Development in Mukhikachu, Panchamukhi Kachu and Olkachu	To develop a protocol for in vitro production of Mukhi Kachu and Olkachu	Tissue Culture Lab, TCRC, Gazipur
436	Molecular Characterization of Bari Released Sweet Potato Varieties Using SSR Marker	- To characterize and identify the genetic variation of sweet potato varieties using SSR marker - To examine the level of genetic diversity within the released varieties	Molecular Biology Lab, TCRC, Gazipur

Sl.	Title of experiment	Objectives	Location(s)
437	Fingerprinting of Bari Released Cloned Potato Varieties Using SSR Marker	- To study the genetic variation and diversity of cloned Potato varieties - DNA fingerprinting and documentation - Phylogenetic tree establishment among the varieties	Molecular Biology Lab, TCRC, Gazipur
438	Chloroplast Genome Sequencing and QTL Analysis of Heat Tolerant and Late Blight Resistant Potato Varieties	- To sequence the chloroplast genome of heat tolerant and late blight resistant potato varieties - To know the genetic variation and phylogenetic relationship among the varieties - To identify the stress tolerant gene and develop genetic linkage map	Molecular Biology Lab. Gazipur, Rangpur, BSPC, Debiganj
439	Secondary Yield Trial of Combined PVY and PLRV Resistance Germplasm	- To select superior genotype (s) for subsequent program of PVY and PLRV resistance variety development - To improve germplasm of potato	TCRC, Gazipur and BSPC, Debiganj
440	Molecular Detection of Different Strain of PVY and PLRV Diseases in Bangladesh	- To identify strain of PVY and PLRV diseases in Bangladesh - To know the incidence of PVY and PLRV through-out the country - To develop platform of developing PVY and PLRV resistance variety development using PVY and PLRV strains in the breeding program	TCRC, Joydebpur and Burirhat, Rangpur
441	Screening Of Wild Diploid Potato Genetic Resources for Combined Resistance to Late Blight, Scab and Virus Diseases	- To improve the potato germplasms for development of disease resistance potato variety - To identify late blight resistance potato germplasms - To identify scab disease resistance potato germplasms - To identify virus diseases resistance potato germplasms - To characterize germplasms of potato	TCRC, Joydebpur, BSPC, Debiganj and Burirhat, Rangpur
442	Introgression of Disease Resistance R-Genes in Tetraploid Potato for Late Blight	- To develop resistance variety of potato against late blight disease - Varieties with R-genes will be used in the breeding program - To pyramid R-genes for durable resistance of late blight	TCRC research field Molecular Biology Lab, Joydebpur, Gazipur, and Rangpur
443	Morpho-Molecular Characterization of Bari Released Varieties and Developed Advanced Panikachu Lines	- To study the genetic variation and diversity of popular BARI released aroid varieties - DNA fingerprinting and documentation - Phylogenetic tree establishment among the varieties - To know the genetic linkage mapping among the varieties	TCRC research field Molecular Biology Lab, Joydebpur, Gazipur

Sl.	Title of experiment	Objectives	Location(s)
444	Determination of Diversity and Molecular Characterization of Advanced Breeding Lines of Potato Using SSR Markers	- To study the genetic variation and diversity of advanced Potato lines - DNA fingerprinting and documentation	Molecular Biology Lab. TCRC, Gazipur,
445	Identification and Characterization of R-Genes for Late Blight Disease of Potato in Cip Germplasm	- To identify R-genes from CIP germplasm - Varieties with R-genes will be used in the breeding program - To pyramid R-genes for durable resistance of late blight - To characterize CIP germplasms of potato	TCRC research field Molecular Biology Lab, Joydebpur, Gazipur
446	In Vitro Regeneration of Sweet Potato (Ipomoea Balatas L) for Transgenic Protocol Development	To develop an efficient plant regeneration protocol for genetic transformation of sweet potato in future	Tissue Culture Lab, TCRC, Gazipur
447	Development of Low-Cost Nutrient Solution for Mini-Tuber Production in Aeroponic Technique	Cost effective nutrient solution development for Aeroponic	Green house, TCRC, Gazipur
448	Production Of Nucleus Seed Potato (Mini Tuber, G0) Using In Vitro Plantlet	To increase the number of seeds	BSPC, Debiganj
449	Production Of Breeder and Foundation Potato Seed at BSPC, Debiganj, Panchagarh During 2021-2022	- Ensuring the demand of quality seeds throughout the country - Producing breeder seed for BADC	BSPC, Debiganj
450	Seed Production and Distribution of Sweetpotato and Aroids	Seed production of all the varieties is a regular programme for maintaining varieties purity and distribution to farmers and others.	Gazipur
PULSES RESEARCH CENTRE			
451	Hybridization of blackgram	To develop high yielding, short duration, small seeded and BYMV and Powdery mildew tolerant/resistance variety	Ishurdi,Pabna
452	Confirmation F ₁ generation of blackgram	To obtaining fruitful results from hybridization between two or more parents.	Ishurdi,Pabna
453	Growing and evaluation of F ₂ generation of blackgram	To attain more desirable segregants and to advance towards more homozygosity among the progenies	Ishurdi,Pabna
454	Growing and evaluation F ₃ generation of blackgram	To advance towards more homozygosity among the progenies	Ishurdi,Pabna
455	Growing and evaluation of blackgram F ₄ generation	To advance the generation to attain homozygosity.	Ishurdi,Pabna
456	Growing and evaluation of blackgram F ₅ generation	To advance the generation to attain homozygosity.	Ishurdi,Pabna
457	Observation trial of blackgram	To find high yielding and disease resistant superior genotypes over the existing varieties	Ishurdi,Pabna

Sl.	Title of experiment	Objectives	Location(s)
458	Participatory variety selection of blackgram	• To investigate the performance of Blackgram genotypes under farmers' field condition	Ishurdi, Barind, Madaripur, Gaibandha charland and Jamalpur
459	Hybridization of lentil	• To develop high yielding, short duration, micronutrient enriched and stemphylium blight tolerant/resistance variety	Ishurdi, Pabna
460	Confirmation of F ₁ plants in lentil	• To obtaining fruitful results from hybridization between two or more parents.	Ishurdi, Pabna
461	Growing and evaluation of lentil F ₂ generation	• To advance towards more homozygosity among the progenies	Ishurdi, Pabna
462	Growing and evaluation of lentil F ₄ generation	• To advance towards more homozygosity among the progenies	Ishurdi, Pabna
463	Growing and evaluation of lentil F ₅ generation	• To advance the generation to attain homozygosity.	Ishurdi, Pabna
464	Growing and evaluation of lentil F ₆ generation	• To advance the generation to attain homozygosity.	Ishurdi, Pabna
465	Preliminary yield trial of lentil	• to evaluate them in multiple location(s) to assess their performance across locations	Ishurdi, Madaripur, Jamalpur and Jashore
466	Regional yield trial of lentil	• To evaluate them in the different regions or multiple location(s) to assess their stability of performance over locations	Ishurdi, Jamalpur, Gazipur, Barishal, Madaripur and Jashore
467	Confirmation of grasspea F ₁ generation	• To obtain fruitful results from hybridization between two or more parents, confirmation of the desired traits from the donor parent into the recipient one.	Ishurdi, Pabna
468	Growing and evaluation of F ₂ generation of grasspea	• To attain more desirable segregants and to advance towards more homozygosity among the progenies	Ishurdi, Pabna
469	Growing and evaluation of grasspea F ₃ generation	• To advance the generation to attain homozygosity.	Ishurdi, Pabna
470	Growing and evaluation of grasspea F ₄ generation	• To advance the generation to attain homozygosity.	Ishurdi, Pabna
471	Observation trial of grasspea	• To find high yielding and disease tolerant, superior genotypes over the existing varieties.	Ishurdi, Pabna
472	Preliminary yield trial of grasspea	• To evaluate them in multiple location(s) to assess their performance across locations	Ishurdi, Pabna; Madaripur; Barisal; Jashore and RARS Jamalpur

Sl.	Title of experiment	Objectives	Location(s)
473	Hybridization of chickpea	• To develop high yielding, short duration, erect canopy, medium sized desi type seed and BGM tolerant/resistant chickpea variety	Ishurdi, Pabna
474	Confirmation of chickpea F ₁ generation	• To obtain fruitful results from hybridization between two or more parents, confirmation of the desirable traits from the donor parent into the recipient one	Ishurdi, Pabna
475	Growing and evaluation of F ₂ generation of chickpea	• To attain more desirable segregants and to advance towards more homozygosity among the progenies	Ishurdi, Pabna
476	Growing and evaluation of chickpea F ₄ generation	• To advance the generation to attain homozygosity.	Ishurdi, Pabna
477	Growing and evaluation of chickpea F ₅ generation	• To advance the generation to attain homozygosity.	Ishurdi, Pabna
478	Observation trial of chickpea	• To find high yielding and disease resistant superior genotypes over the existing varieties	Ishurdi, Pabna
479	Preliminary yield trial of chickpea	• To find out high yielding, stable and disease resistant genotypes to develop superior variety over the existing ones	Ishurdi, Pabna
480	Regional yield trial of chickpea	• To find out stable, high yielding and disease resistant genotypes to develop superior variety over the existing ones	Ishurdi; Barind, Rajshahi; Barishal, PRSS, Gazipur and RARS Jashore
481	Confirmation of fieldpea F ₁ generation	• To obtain fruitful results from hybridization between two or more parents, confirmation of the desirable traits from the donor parent into the recipient one	Ishurdi, Pabna
482	Growing and evaluation of fieldpea F ₃ generation	• To advance the generation to attain homozygosity	Ishurdi, Pabna
483	Growing and evaluation of fieldpea F ₅ generation	• To advance the generation to attain homozygosity.	Ishurdi, Pabna
484	Observation trial of fieldpea	• To find high yielding and disease resistant superior genotypes over the existing varieties	Ishurdi, Pabna
485	Preliminary yield trial of fieldpea	• To develop short duration and stable high yielding variety over the existing ones	Ishurdi, Pabna and RARS, Jashore
486	Adaptation of cowpea genotypes for southern region	• To combat late seeded heat stress condition and salinity, cowpea improvement programs should be prioritized and focused	Rahmatpur, Barishal
487	Evaluation of cowpea exotic lines	• To evaluate selected IITA cowpea exotic germplasms to make a suggestion for cowpea varietal improvement in southern agro-climatic conditions	Rahmatpur, Barishal

Sl.	Title of experiment	Objectives	Location(s)
488	Screening of cowpea germplasm for salinity	• To evaluate advance cowpea germplasm at different salinity for cowpea varietal improvement in southern part of Bangladesh	PRSS, Gazipur
489	Hybridization of mungbean	• To develop high yielding, short duration, bold seeded and MYMV and Powdery mildew tolerant/resistance variety	Ishurdi, Pabna
490	Confirmation of mungbean F ₁ generation	• To obtain fruitful results from hybridization between two or more parents, confirmation of the desirable traits from the donor parent into the recipient one	Ishurdi, Pabna
491	Growing and evaluation of mungbean F ₂ generation	• To attain more desirable segregants and to advance towards more homozygosity among the progenies	Ishurdi, Pabna
492	Growing and evaluation of mungbean F ₃ generation	• To advance the generation to attain homozygosity	Ishurdi, Pabna
493	Growing and evaluation of mungbean F ₄ generation	• To advance the generation to attain homozygosity	Ishurdi, Pabna
494	Growing and evaluation of mungbean F ₅ generation	• To advance the generation to attain homozygosity	Ishurdi, Pabna
495	Waterlogging tolerance at germination and vegetative stage of winter pulse crops	• To find out the most tolerant crop varieties to farmers	Ishurdi, Pabna
496	Screening of grasspea germplasm under waterlogging stress at germination and seedling stage	• For selection to improve adaptation to relay sowing in Bangladesh	Ishurdi and Barisal
497	Effect of different mulch material on soil salinity and yield of cowpea	• This experiment was aimed at determining the effect of different mulch on the growing of cowpea cultivation under field situation in the saline area of Bangladesh	Kuakata, Kalapara, Patuakhali
498	Efficacy of <i>rhizobium</i> on nitrogen compensation and yield of lentil	• To find out the gross margin and benefit cost ratio.	Ishurdi and Barisal
499	Effect of seed rate and fertilizer management on growth yield of BARI Masur-8	• To evaluate the optimum plant density and fertilizer management for higher yield of BARI Masur-8.	Ishurdi
500	Effect of bio-fertilizer and phosphorus on yield of chickpea (BARI Chola-10)	• To evaluate the response of <i>Rhizobium</i> inoculant on nodulation and yield of Chickpea	Ishurdi
501	Effect of <i>rhizobium</i> inoculant on nodulation and yield of mungbean	• To find out the gross return and benefit cost ratio.	Ishurdi
502	Effects of pulse-based cropping pattern on crop performance and soil health	• To increase cropping intensity and soil health through pulse crops, and develop the pulse-based cropping pattern	Ishurdi
503	Effect of rice straw height on the yield and better adaptation of grasspea	• To find out the optimum rice straw height for better growth, establishment and yield of grass pea	Ishurdi

Sl.	Title of experiment	Objectives	Location(s)
504	Selection of suitable herbicides for controlling <i>parthenium</i> weed in field pea	• To find out the suitable herbicide to control <i>parthenium</i> weed in field pea.	Ishurdi
505	Competition dynamics of <i>parthenium</i> weed infestation in field pea	• To estimate the impact of <i>Parthenium</i> weed on the performance of field pea at different competition durations	Ishurdi
506	Adaptation of pigeon pea germplasm in different agro-ecological locations in Bangladesh	• To find out the suitable high yielding and short duration germplasm across locations for developing variety	Ishurdi, Rangpur, Jamalpur, Jashore and RPRC, Madaripur
507	Adaptation of BARI newly released grasspea varieties in relay sown condition in Barishal	• To evaluate some recently developed BARI Grasspea varieties <i>in situ</i> relay sown condition	Rahmatpur, Barishal
508	Effect of foliar spray of boron on yield of relay lentil	• To understand and justify low-cost commercial boron application at varying doses	Rahmatpur, Barishal
509	Collection and evaluation of indigenous grasspea germplasm in Barishal	• To collect and evaluate indigenous grasspea cultivars of Barishal to strengthen further breeding programs	Rahmatpur, Barishal
510	Development of integrated weed management practices of lentil in Jashore region	• To reduce the spread and impact of weeds invading lentil fields	RARS, Jashore
511	Performance of field pea under different sowing conditions	• To investigate the suitable sowing condition for better crop establishment and higher yield of green pod and grain	RARS, Jashore
512	Seed germination, vigor and seedling performance of chickpea as influenced by priming with vinegar	• To determine the effect of vinegar as a priming agent on seed germination of chickpea seed and to identify which vinegar concentration is suitable for chickpea seeds germination	RARS, BARI, Madaripur
513	Determination of dose and spray schedule of trifloxystrobin and tebuconazole fungicides for controlling blight disease of lentil	• To achieve sustainable disease management practice, fungicide dose and spray schedule need to be considered	Ishurdi
514	Screening of lentil germplasm against stemphylium blight	• To search stemphylium blight disease resistance	Ishurdi
515	Screening of blackgram lines resistant to yellow mosaic virus	• To select some YMV resistant/tolerant lines of blackgram with a view to develop new variety	Ishurdi
516	Biological controls of root rot disease of lentil and chickpea in field condition	• To find out the effective bio control product on root rot disease of lentil under field conditions	Ishurdi
517	Prevalence of pathogens associated with root rot disease of lentil	• To determine the diversity of soil borne pathogens associated with lentil roots, (ii) identify the major root rot pathogen groups, and (iii) determine the prevalence of these major pathogen groups	Ishurdi

Sl.	Title of experiment	Objectives	Location(s)
518	Incidence of chickpea pod borer, <i>Helicoverpa armigera</i> (Hubner) on the promising varieties of chickpea	To finding out the abundance and infestation status of pod borer and its effect on grain yield of chickpea	Ishurdi, Pabna; Godagari, Rajshahi; Jashore and Faridpur sadar
519	Foliar application of commercially available micro and macro-nutrients for the management of flower thrips and pod borers of mungbean	Therefore, the aim of the study has been taken to evaluate the influence of the application of micro and macro nutrients on flower thrips and pod borers of mungbean with higher yield	BARI, Ishurdi, Pabna
520	Evaluation of some integrated management packages against flower thrips and pod borers of mungbean	To developing and evaluate safe and effective integrated management package using blue sticky trap, bio and synthetic insecticides	BARI, Ishurdi, Pabna
521	Survey and documentation of insect pests of pigeon pea and their natural enemies	There is no survey or documentation of insect pests of pigeon pea in Bangladesh till now. So, the present work was carried out to study the occurrence of insect pests in pigeon pea	Ishurdi and adjacent areas of Pabna district
522	Effect of botanicals and synthetic chemicals on pea aphid, <i>Acyrtosiphon pisum</i> Harris in field pea	to find out the effect of botanicals and synthetic chemicals on green aphid, <i>Acyrtosiphon pisum</i> Harris in fieldpea. BARI Motor-3 was selected for this experiment. Fieldpea twigs were monitored regularly in the experimental plots	BARI, Ishurdi, Pabna
523	Profitability and varietal adoption of chickpea in some selected areas of Bangladesh	- To estimate the area covered by the chickpea varieties; - To know the adoption status of BARI Chola varieties at farm level; - To estimate the profitability of the BARI Chola; - To examine the factors affecting the yield of chickpea; and - To find out the constraints to BARI chickpea cultivation	Rajshahi district
524	Climatic stresses, adaptation strategies and capacity assessment of pulses growing farmers in the coastal areas of Bangladesh	To replant an entire plot again, or some have to do patch replanting, causing late sowing, which might lead to poor performance in crop growth.	Two coastal districts namely Patuakhali and Jhalokathi
525	Financial profitability and constraints in the production, processing & marketing of mungbean seed in some selected areas of Bangladesh	- To determine socioeconomic information of the mungbean farmers and find out financial profitability in the mungbean seed production. - To estimate effect of inputs on the yield of mungbean seed production; - To identify the constraints in the mungbean seed production, Processing and marketing	Jhalokathi and Barishal

Sl.	Title of experiment	Objectives	Location(s)
		as well as to suggest some policy recommendation	
OILSEEDS RESEARCH CENTRE			
526	Collection of rapeseed-mustard germplasm	• To enrich and widen the genetic base of the gene pool of oilseed crops	Different agro-ecological zones of Bangladesh
527	Evaluation of rapeseed-mustard germplasm	• To explore the genetic diversity of <i>Brassica rapa</i> , <i>B. juncea</i> and <i>B. napus</i> germplasm. • To identify the germplasm having useful traits.	Joydebpur
528	Development of short duration inbred lines in <i>Brassica rapa</i> L. Advancing S ₅ to S ₆ generation	• To develop short duration inbred lines having desirable agronomic traits.	Joydebpur
529	Hybridization in <i>B. rapa</i> L.	• To incorporate earliness in <i>B. rapa</i> existing genotypes.	Jamalpur
530	Evaluation of segregating generation of <i>Brassica rapa</i> (F ₅ and F ₆ generation)	• To advance generation • To select short duration plants/families having desirable traits	Joydebpur
531	Growing of F ₅ generation derived from 16 genotypes of <i>B. rapa</i>	• To create genetic variability. • To accumulate favourable genes from 16 parents into a single parent.	Joydebpur
532	Observation Trial of <i>Brassica rapa</i> L. (Set-I, Set-II, Set-III & Set-IV)	• To select short duration genotypes with better agronomic traits.	Joydebpur (Set-I & Set-II) and Jamalpur (Set-III & Set-IV)
533	Preliminary Yield Trial of <i>Brassica rapa</i> L (Set-I, Set-II & Set-III)	• To select short duration genotypes with better agronomic traits.	Set-I: Joydebpur, Ishurdi, Jashore, Rahmathpur and Hathazari Set-II: Joydebpur, Jamalpur, Ishurdi Set-III: Joydebpur, Jamalpur, Jashore
534	Regional Yield Trial of <i>Brassica rapa</i> L. (set-I & set-II)	• To select short duration high yielding lines with better agronomic traits and wider adaptability. • To develop short duration variety to fit in between T. aman and Boro rice.	Joydebpur, Ishurdi, Jamalpur, Jessore, Rahmatpur and Hathazari
535	Hybridization in <i>B. napus</i> L.	• To incorporate earliness in <i>B. napus</i> existing genotypes	Jamalpur
536	Evaluation of segregating generation (F ₁ –F ₆) of <i>B. napus</i> L.	• To advance generation and to select desirable plants	Jamalpur

Sl.	Title of experiment	Objectives	Location(s)
537	Observation Yield trial of <i>B. napus</i> L.	• To select high yield potential lines with early maturity those can be grown in between T. Aman and Boro rice	Jamalpur
538	Preliminary Yield trial of <i>B. napus</i> L.	• To select high yield potential lines with early maturity those can be grown in between T. Aman and Boro rice	Jamalpur, Ishurdi and Jashore
539	Regional Yield trial of <i>B. napus</i> L.	• To select high yield potential lines with early maturity those can be grown in between T. Aman and Boro rice	Jamalpur, Joydebpur, Ishurdi, Hathazari, Rahmatpur and Jashore
540	Evaluation of segregating generation of <i>Brassica juncea</i> L. (F ₄ , F ₆ generation -Set-I & Set-II)	• To select plant families having desirable traits	Joydebpur
541	Observation Trial of <i>Brassica juncea</i> L.	• To select genotypes with high yield potential and better agronomic traits. • To develop high yielding variety of <i>B. juncea</i> .	Joydebpur
542	Preliminary Yield Trial of <i>Brassica juncea</i> L.	• To select genotypes with high yield potential and better agronomic traits. • To develop high yielding variety of <i>B. juncea</i> .	Joydebpur, Ishurdi, Jessore and Rahmatpur
543	Regional Yield Trial of <i>Brassica juncea</i> L.	• To select lines with high yield potential, better agronomic traits and wider adaptability. • To develop high yielding variety of <i>B. juncea</i> .	Joydebpur, Ishurdi, Jamalpur, Jashore, Rahmatpur and Hathazari
544	Observation trial of entries developed from back cross generation of interspecific crosses among <i>B. carinata</i> , <i>B. rapa</i> and <i>B. napus</i>	• Utilization of genetic variability of inter specific cross. • To find out genotypes suitable for cultivation in Bangladesh.	Joydebpur
545	Maintenance of CMS, restorer and maintainer lines of <i>Brassica napus</i> L.	• To maintain the male sterile and maintainer lines. • To use in future breeding programme	Joydebpur
546	Development of hybrid variety in rapeseed I. Development of short duration parental lines II. Development of test cross hybrids III. Evaluation of test cross hybrids	• To develop short duration parental lines. • To develop and evaluate test cross hybrids.	Joydebpur
547	Heterosis study of hybrids developed through selected restorer	• To select commercial hybrid	Joydebpur and Jamalpur

Sl.	Title of experiment	Objectives	Location(s)
548	Maintenance of double low genotypes of <i>Brassica napus</i> L.	To maintain the double low genotypes	Joydebpur
549	Development of double low short duration genotypes through interspecific hybridization I. Evaluation of F ₅ generation	To develop double low short duration genotypes through crossing between <i>Brassica rapa</i> and <i>Brassica napus</i>.	Joydebpur
550	Regional yield trial of double low genotypes of <i>Brassica napus</i> L.	- To observe the performance of double low genotypes in Bangladesh condition. - To determine the amount of erucic acid and glucosinolate of the genotypes.	Joydebpur, Ishurdi and Jashore
551	Marker Assistance Selection (MAS) of double-low rapeseed	To identify double-low rapeseed among the germplasm using functional primers	Molecular Breeding Lab, ORC, Joydebpur
552	Identification of restorer line through Marker Assisted Selection (MAS)	- To identify restorer lines - To select superior restorer lines for hybrid development	Molecular Breeding Lab, ORC, Joydebpur
553	Development of Multi-parent advanced generation inter-cross (MAGIC) populations	- To develop MAGIC population to accumulate all favorable genes from multi-parents into a single parent - To create genetic variability.	Greenhouse of Plant Breeding Division, Joydebpur
554	Development of hexaploidy <i>Brassica spp</i>	- Incorporation of sufficient genetic diversity to form a basis for breeding and improvement of this potential crop species. - Improvement of agronomic traits to the level of “elite” breeding material in the diploid and allotetraploid crop species.	Greenhouse of Plant Breeding Division, Joydebpur
555	Development of nested association mapping (NAM) populations	- To create genetic variability. - To phenotyping of NAM lines under short duration and multiple stresses.	Joydebpur
556	Introgression of heat tolerance gene in rapeseed-mustard from wild relatives	- Introgression of heat tolerance gene - Broadening of genetic diversity	Joydebpur
557	Identification of Climate Smart Rapeseed-Mustard	- To select abiotic stress tolerance line(s) - To explore climate smart Rapeseed-mustard	Joydebpur
558	Development of Mobile Apps for Rapeseed-Mustard Field Book	To develop a mobile application for electronic data collection book that runs on consumer grade Android mobile phone	Gazipur
559	Adaptive trial of advanced lines of <i>Brassica rapa</i> L.	- To evaluate the performance of advanced lines of <i>Brassica rapa</i> in the farmer’s field. - To develop high yielding short duration variety of <i>Brassica rapa</i>	Pabna, Cumilla, Netrakona and Tangail
560	Adaptive trial of advanced lines of <i>B napus</i> L.	To select high yield potential lines with early maturity those can be grown in between T.Aman and Boro rice.	Jamalpur, Sherpur and Cumilla
561	Evaluation of BARI and BAU developed rapeseed-mustard varieties at saline prone areas	- To evaluate the performance of BARI and BAU developed rapeseed-mustard varieties at saline prone areas. - To select the best one (s).	Khulna (Dacope and Koyra), Satkhira and Joydebpur

Sl.	Title of experiment	Objectives	Location(s)
562	Collection of sesame germplasm	To enrich and widen the genetic base of the gene pool of sesame	Khulna, Satkhira, Kushtia, Faridpur, Jamalpur, Hathazari and hilly region.
563	Maintenance of germplasm of sesame	To maintain the collected germplasm	Joydebpur, Jessore and Ishurdi
564	Hybridization in sesame	- To create genetic variation. - To find out desirable genotypes.	Joydebpur
565	Evaluation of segregating generation of sesame (F ₃ , F ₅ and F ₆)	- To advance generation - To select desirable genotypes.	Joydebpur
566	Observation trial of sesame	To select lines with desired characters	Joydebpur
567	Preliminary yield trial of sesame	- To observe the performance of lines. - To select lines with desired characters over locations.	Joydebpur, Ishurdi, Maulovivazar and Jessore
568	Regional yield trial of sesame (Set-I and Set-II)	To select lines with desired agronomic characters and wider adaptability.	Joydebpur, Ishurdi, Jessore, and Maulibazar
569	Seed increase of advanced lines of sesame	- To meet up the seed requirement for RYT of the next year. - To meet up the seed requirement adaptive trial of the next year	Joydebpur, Ishurdi and Jessore
570	Screening of sesame genotypes under water logged condition	- To select water logged tolerant genotypes. - To develop water logged tolerant sesame variety	Joydebpur
571	Adaptive trial of advanced lines of sesame	- To evaluate the performance of advanced lines of sesame in the farmers field at different locations of Bangladesh. - To develop high yielding variety of sesame.	Faridpur, Kustia, Khulna and Sylhet
572	Collection of groundnut germplasm	- Collection of germplasm to enrich the gene pool of groundnut - Evaluation of the collected germplasm to use in the future breeding program	Joydebpur
573	Maintenance and evaluation of groundnut germplasm	- To maintain and evaluate the existing germplasm. - Selection of different accessions for future breeding program.	Joydebpur, Gazipur and Jamalpur
574	Hybridization in groundnut	- To create genetic variability. - To develop short duration and bold seeded variety of Groundnut.	Set-I: Joydebpur and Set-II: Jamalpur
575	Confirmation of F ₁ generation	To confirm the F₁ generation	Joydebpur
576	Evaluation of segregating generations of groundnut	To advance generation.	Joydebpur and Jamalpur

Sl.	Title of experiment	Objectives	Location(s)
	(Growing F ₂ , F ₃ , F ₄ , F ₅ , F ₆ at Joydebpur and F ₄ at Jamalpur)	To select short duration plants having desirable traits.	
577	Observation trial of groundnut (Set-I, Set-II, Set-III and Set-IV)	- To select high yielding and early maturing lines. - To select bold seeded and early maturing lines. - To develop high oleic acid content and high yield potential lines - To select disease resistance lines with desirable agronomic traits.	Set-I, Set-II at Joydebpur and Set-III, Set-IV at Jamalpur
578	Preliminary yield trial of groundnut (Set-I, Set-II and Set-III)	- To develop high oleic acid groundnut line (s) and high yield potential genotypes. - To select the early mature and large kernel genotypes with high yield. - To select disease resistance lines with desirable agronomic traits.	Set-I, Set-II and Set-III (Jamalpur and Burirhat)
579	Regional yield trial of Groundnut (Set-I, Set-II and Set-III)	- To select high yielding and early maturing variety - To select disease resistance lines with desirable agronomic traits.	Set-I and Set-II (Joydebpur, Jamalpur and Burirhat) Set-III (Jamalpur, Hathazari and Burirhat)
580	Seed Increase of Advanced lines of Groundnut and BARI released groundnut varieties	Seeds of different groundnut lines and varieties will be produced	Joydebpur
581	Adaptive Trial of Groundnut (Set-I and Set-II)	To know the performance of advanced lines and their adaptation in farmers' field.	Set-I: Manikgonj, Noakhali, Tangail and Rangpur Set-II: Nowbhangarchar, Jamalpur and Char Belgachha, Islampur
582	Maintenance and Evaluation of soybean germplasm	To maintain and evaluate the germplasm of soybean	Joydebpur
583	Development of recombinant inbred lines (RIL) of Soybean	- To develop RIL population, - To create genetic variability.	Joydebpur
584	Observation Trial of Soybean	To select high yielding genotypes	Joydebpur
585	Preliminary Yield Trial of Soybean	To select high yielding genotypes.	Joydebpur and Noakhali
586	Regional Yield Trial of Soybean	To select high yielding genotypes.	Joydebpur, Burirhat, Bhola, and Cumilla

Sl.	Title of experiment	Objectives	Location(s)
587	Maintenance and evaluation of sunflower germplasms	- To maintain and evaluate the germplasm of sunflower - Selection of different accessions for future breeding program	Joydebpur
588	Development of dwarf inbred lines in sunflower: Family selection from S ₇ generation	Dwarf, early and high yield potential family selection from S₇ generation	Joydebpur
589	Identification of parental lines for development of hybrid sunflower variety	To identify parental lines (CMS, restorer and maintainer) of sunflower	Joydebpur
590	Development of synthetic and composite sunflower variety	- To develop synthetic variety of sunflower - To develop composite variety of sunflower	Joydebpur
591	Creating new genetic variability in sunflower using induced mutation. i) Evaluation of M5 mutants created by Gamma Radiation.	- To broaden the genetic base - To create genetic variability, and - To develop high yield potential desired sunflower variety	Joydebpur
592	Creation of sunflower mutant through EMS i) Evaluation of M4 mutants	To create and detect genetic variability in sunflower for development of dwarf high yielding sunflower variety	Joydebpur
593	Molecular characterization of sunflower dwarf mutants (i) by the expression analysis of Gibberalic Acid (GA) pathway regulating genes	To analyze sunflower dwarf mutants for the expression of GA regulating genes	ORC field and ORC Molecular Biology Laboratory, Joydebpur
594	Molecular characterization of sunflower mutants (i) by the expression of <i>FAD</i> and <i>SAD</i> gene sequences	To know the expression of <i>FAD</i> and <i>SAD</i> gene sequences in sunflower mutants compared to non-treated plants	ORC field and ORC Molecular Biology Laboratory, Joydebpur
595	Screening of diverse genotypes of Oilseed crops using SSR primers. (i) Genetic diversity analysis of <i>Brassica rapa</i> genotypes using SSR primers	To study the genetic diversity among <i>Brassica rapa</i> gerplasm and variety at molecular level	ORC research field and ORC Molecular Biology Laboratory, Joydebpur
596	Seed increase of dwarf advance lines of sunflower	- To increase seed of dwarf advance lines of sunflower - To use seed in adaptive trial	Joydebpur
597	Maintenance of linseed germplasms	To maintain the collected germplasm for future breeding programme	Joydebpur
598	Preliminary Yield Trial of Linseed	- To select genotypes with high yield potential and better agronomic traits for different locations of Bangladesh. - To develop high yielding variety of Linseed.	Joydebpur, Pabna, Jamalpur, Rangpur
599	Maintenance of niger germplasm	To maintain the collected germplasm for future breeding programme.	Joydebpur

Sl.	Title of experiment	Objectives	Location(s)
600	Observation trial of Niger	• To select genotypes with high yield potential and better agronomic traits. • To develop high yielding variety of Niger.	Joydebpur
601	Maintenance of safflower germplasm	• To maintain the collected germplasm for future breeding programme.	Joydebpur
602	Performance of selected linseed genotypes under salinity condition in pot culture	• To select salt tolerant linseed genotypes under salinity condition	Joydebpur
603	Intercropping bunching onion (pata peaz) with groundnut at different row arrangement	• To find out the suitable row arrangement of leafy onion with groundnut for higher productivity and profitability	Joydebpur
604	Effect of seed priming on the yield and seed quality of groundnut (<i>Arachis hypogaea</i> L.)	• To find out the suitable seed priming method for better crop establishment and shortening the crop growth period of groundnut at field condition.	Joydebpur
605	Effect of spacing on growth and yield of perilla	• To find out the suitable spacing of perilla. • To find out the growth, yield, and yield component of perilla.	Joydebpur
606	Effect of planting time on yield and seed quality of perilla	• To determine optimum planting time for maximizing yield of perilla	Joydebpur
607	Study on physicochemical properties and fatty acid composition of perilla and chia	• To determine the oil content, saponification value and fatty acid composition of perilla and chia.	Joydebpur
608	Effect of spacing on growth and yield of BARI soybean-7	• To determine optimum spacing for maximizing the yield of soybean genotype as well as economic return.	Joydebpur
609	Development of Mustard (var. BARI Sarisha-18) - T. Aus (var. BRRI dhan 87) - T. aman (var. BRRI dhan75) cropping pattern for increasing cropping intensity and productivity	• Increase cropping intensity and productivity through crop intensification in rice-based cropping system. • Increase farmer's income, access to food and nutrition, employment opportunity and livelihood improvement.	Jamalpur and Tangail
610	Validation of intercropping garlic, onion, fenugreek, black cumin with groundnut in charland areas	• To find out the suitable intercrop combination of groundnut for higher productivity and profitability of charland area's stakeholders.	Tangail and Jamalpur
611	Effect of different tillage conditions on growth and yield of soybean varieties in southern region of Bangladesh	• To identify the suitable tillage practices on BARI developed soybean varieties • To increase the yield and farmers' income from soybean cultivation in southern region of Bangladesh.	BARI, Rahmatpur, Barishal
612	Performance of mustard, groundnut and sunflower varieties at haor areas in Bangladesh	• To observe the performance of mustard groundnut and sunflower varieties for haor areas.	Nikkli, Moulabhibazar and Sunamganj
613	Performance of soybean varieties in southern region of Bangladesh	• To identify the appropriate variety of soybean for southern region	Chadpur, Cumilla and Noakhali

Sl.	Title of experiment	Objectives	Location(s)
614	Performance of sunflower varieties in southern region of Bangladesh	To identify the suitable variety of sunflower for southern region.	Barisal, Potuakhali and Shatkhira
615	Performance of groundnut and sesame varieties at charland areas in Bangladesh	To see the performance of groundnut and sesame varieties for charland areas.	Faridpur and Kustia
616	Effect of irrigation on growth and yield of Canola type mustard variety	- To study the effect of different irrigation regimes on the growth and yield of canola type mustard variety. - To identify critical growth stages for irrigation of canola type mustard variety.	Joydebpur
617	Effect of transplanting time on yield and seed quality of sunflower variety	To determine optimum transplanting time for maximizing yield of sunflower variety	Joydebpur
618	Growth and maturity pattern of different mustard genotypes	To determine growth rate and maturity pattern of three different genotypes of mustard	Joydebpur
619	Intercropping of firingi with groundnut	To identify suitable row arrangement of firingi with groundnut for higher productivity and profit	Joydebpur
620	Intercropping of pea and kheshari as vegetables and fodder crop with dwarf type sunflower variety	To identify the suitable row arrangement of pea and kheshari for growing with sunflower for higher productivity and profit.	Joydebpur
621	Determination of fertilizer doses for Canola type mustard variety	To determine optimum fertilizer dose for maximizing yield of canola type mustard variety.	Joydebpur
622	Validation of intercropping of black cumin with groundnut in hilly areas	To identify the suitable row arrangement of black cumin with groundnut for higher productivity and profit in hilly areas	Bandarban
623	Performance of sunflower genotype in hilly areas of Bangladesh	To identify the suitable variety of sunflower in hilly region	Raikhali
624	Development of cropping pattern for increasing cropping intensity and productivity	- Increase cropping intensity and productivity through crop intensification in rice-based cropping system. - Increase farmer's income, access to food and nutrition, employment opportunity and livelihood improvement.	Joydebpur
625	Validation of intercropping chili with groundnut in haor areas	To identify the suitable row arrangement of chili with groundnut for higher productivity and profit in haor areas.	Keshoregonj, Sunamganj and Moulovibazar
626	Effect of sowing time and methods on the yield of Mustard in south-western saline areas	- To find out optimum sowing time for the selected mustard cultivars in saline areas - To observe the effect of different sowing methods on mustard yield in saline areas - To know the performance of mechanized mustard production	BARI, Satkhira

Sl.	Title of experiment	Objectives	Location(s)
627	On-farm adaptive trial of mustard genotypes in Barind tract areas	To select suitable genotype of mustard for Barind areas.	Joypurhat and Rajshahi
628	Survey of oilseed crop diseases and their existing disease management practices	- To assess disease status of the crop - To identify the different diseases of the crop - To know the present status of disease management practice of the farmers	All over the country
629	Screening of rapeseed-mustard varieties/lines against <i>Alternaria</i> leaf blight disease	- To find out the resistant source(s) against <i>Alternaria</i> leaf blight disease of mustard - The selected resistant lines will be advanced as variety or utilize in the breeding programme	Joydebpur
630	Evaluation of different group of commercial fungicides against <i>Alternaria</i> blight disease of mustard	- To find out the most effective fungicides in controlling <i>Alternaria</i> blight disease of mustard - To increase seed yield of mustard	Joydebpur
631	Screening of groundnut varieties/lines against Tikka, rust and other soil borne diseases	- To find out the resistant source(s) against Tikka (leaf spot), rust and other soil borne diseases of groundnut - The selected resistant lines will be utilized as variety or use in the breeding programme	Joydebpur
632	Evaluation of different group of commercial fungicides against Tikka (leaf spot) and rust disease of groundnut (<i>Arachis hypogaea</i>)	- To find out effective fungicides in controlling Tikka (leaf spot) and rust disease of groundnut - To increase seed yield of groundnut	Joydebpur
633	Evaluation of botanicals, fungicides, bio-agents and soil amendments against collar rot (<i>Sclerotium rolfsii</i>) of sunflower <i>in-vivo</i> as component of IPM (PhD programme)	To identify the most effective components against collar rot of sunflower caused by <i>Sclerotium rolfsii</i> under field condition.	Joydebpur
634	Development of IPM package against the major insect pests of sesame	- To find out the most effective management package(s) against insect pests of soybean. - To record the incidence and damage severity of these pests.	Joydebpur
635	Development of a management approach against flea beetle attacking mustard	- To record the incidence of flea beetle in mustard - To estimate damage severity of the pest in mustard varieties.	Gazipur and Jashore
636	Relative susceptibility of soyabean varieties to sucking pest, hairy caterpillar and leaf roller	To identify the resistant soyabean variety(ies) to sucking pest, hairy caterpillar and leaf roller.	Joydebpur
637	Relative susceptibility of groundnut cultivars against sucking insect pests, hairy caterpillar and leaf roller	To identify the resistant groundnut variety(ies) to sucking pest, hairy caterpillar and leaf roller.	Joydebpur

Sl.	Title of experiment	Objectives	Location(s)
638	Development of IPM package against the major insect pests of sunflower	- To find out the most effective management package(s) against insect pests of Sunflower. - To record the incidence and damage severity of these pests.	Joydebpur
SPICES RESEARCH CENTRE			
639	Development of diverse onion germplasm through hybridization	To produce F₂ bulbs from F₂ seeds and to develop diverse onion germplasm through hybridization.	SRC, Bogura
640	Development of inbred lines of onion (Advancing of generation S ₁ seed to S ₁ bulb)	To develop superior homogenous and homozygous inbred onion lines.	SRC, Bogura
641	development of inbred lines in onion (S ₁ bulb to S ₂ seed) set-ii	To develop superior inbred populations of onion.	RSRC, Gazipur
642	Development of inbred lines in onion (S ₁ seed to S ₁ bulb) set-iii	To develop superior inbred populations of onion.	RSRC, Gazipur
643	Population development in onion	To develop a diverse source population of onion with a view to increase the size, yield and keeping quality.	RSRC, Gazipur
644	Mass selection of short-day onion	To develop high yielding and storage type onion population.	RSRC, Gazipur
645	Searching of male sterile and maintainer lines of onion	To search and develop male sterile and maintainer lines of onion.	SRC, Bogura
646	Evaluation and selection of poly-crossed onion population	To develop poly crossed onion population for developing OP variety of onion.	RSRC, Gazipur
647	Evaluation of onion advanced lines for winter season	To evaluate the onion advanced lines for winter season and to select promising one or more.	SRC, Bogura
648	Advance yield trial of onion	To select superior winter onion line for higher yield.	SRC, Bogura
649	Characterization and evaluation of onion germplasm for winter season	To characterize and evaluate of onion germplasm and to select promising onion germplasm.	SRC, Bogura
650	Advanced yield trial of white onion	To study the performance of white onion lines and to select promising one especially for dry powder.	SRC, Bogura
651	Advance yield trial of negi onion (<i>Allium fistulosum</i> L.) genotypes	To find out the superior line on growth, yield and quality of two negi onion genotypes	SRSC, Faridpur
652	Purification of BARI released onion varieties	To purify existing onion varieties	SRC, Bogura
653	Regional yield trial of winter onion	To study the regional adaptability of the selected winter onion lines	SRC, Bogura, Cumilla, RSRC; Gazipur and Magura, SRSC; Faridpur and Lalmonirhat
654	Regional yield trial of winter onion against thrips	To study the regional adaptability of the selected winter onion lines against thrips and	SRC, Bogura, Cumilla, RSRC;

Sl.	Title of experiment	Objectives	Location(s)
		to select promising winter onion line(s) for releasing as a thrips tolerant variety.	Gazipur and Magura, SRSC; Faridpur and Lalmonirhat
655	Assessment of keeping quality in onion genotypes for long term storage	• To quantify postharvest losses and choose the best genotypes for storability.	SRC, Bogura
656	Screening of onion germplasm for salinity tolerance	• To evaluated the performance of onion across different salinity stress conditions.	SRC, Bogura
657	Study on winter onion varieties on the quality of onion bulb	• To observe the potentialities of quality including dry yield of existing three winter onion varieties.	SRSC, Faridpur
658	Development of chilli hybrids for higher yield, more edible dry powder, higher color and oleoresin content with improved nutritional quality	• To select superior winter chilli germplasm for higher yield.	SRC, Bogura
659	Production of single cross chilli hybrids through diallel mating	• To develop single cross Chilli hybrids through half diallel mating design.	RSRC, Gazipur
660	Evaluation of single cross chilli hybrids	• To determine heterosis of the crosses and select the best hybrid.	RSRC, Gazipur
661	Searching of CMS and maintainer lines of chilli	• To search the CMS and maintainer line of chilli and to make CMS and maintainer line from indigenous source.	SRC, Bogura
662	Development of inbred lines of chilli (advancing of generation S2 to S3)	• To produce S2 from S3 seeds to develop superior homozygous inbred lines of chilli.	SRC, Bogura
663	Collection and evaluation of local germplasm of chilli in Cumilla region	• To study the performance of different chilli lines for developing variety having higher yield.	Cumilla
664	Characterization and evaluation of ornamental chilli germplasm	• To identify chilli germplasm suitable for ornamental as well as table purpose.	SRC, Bogura
665	Advance yield trial of chilli	• To select superior chilli germplasm for higher yield.	SRC, Bogura
666	Advance yield trial of chilli genotypes against thrips and mite	• To test the performance of different chilli genotypes against thrips and mite.	SRC, Bogura
667	Advance yield trial of ornamental chilli	• To identify superior ornamental chilli germplasm in terms of yield potentiality and colour variations.	SRC, Bogura
668	Regional yield trial of chilli (Set-I)	• To study the regional adaptability of the selected chilli lines.	SRC, Bogura; SRSC, Faridpur and Lalmonirhat
669	Regional yield trial of winter chilli (Set-II)	• To study the regional adaptability of the selected chilli lines and to select promising winter chilli lines for releasing variety.	SRC, Bogura; Cumilla and Dinajpur

Sl.	Title of experiment	Objectives	Location(s)
670	Regional yield trial of chilli (Set-III)	• To evaluate the regional adaptability of the chilli lines and to select the best one.	RSRC Gazipur and RARS Cumilla
671	Screening of waterlogging stress tolerance chilli germplasm	• To find out suitable waterlogging tolerant chilli genotypes/cultivars for cultivation in rainy season.	RSRC Gazipur
672	Evaluation of garlic germplasm	• To select the promising garlic germplasm for releasing a variety.	SRC, Bogura
673	Advance yield trial of garlic line	• To select the promising garlic lines for releasing a variety.	SRC, Bogura
674	Regional yield trial of promising garlic line	• To select the promising garlic germplasm for releasing a variety.	SRC, Bogura, RSRC; Gazipur and Magura, SRSC; Faridpur and Lalmonirhat
675	Regional yield trial of garlic (<i>Allium sativum</i>)	• To assess the regional performance of garlic advance lines.	SRC, Bogura, RSRC; Gazipur and Magura, SRSC; Faridpur and Lalmonirhat
676	Evaluation of ginger germplasm	• To select the promising ginger germplasm for releasing a variety.	SRC, Bogura
677	Regional yield trial of promising ginger line	• To select the promising ginger germplasm for releasing a variety.	SRC, Bogura, RSRC, Magura and SRSC, Lalmonirhat
678	Evaluation of exotic ginger germplasm	• To characterize and study the performance of different ginger germplasm for the selection the promising one	RSRC, Gazipur
679	Advance yield trial of mutant ginger	• To assess the performances of selected promising mutant line.	SRC, Bogura, RSRC, Gazipur and SRSC, Lalmonirhat
680	Evaluation of turmeric germplasm	• To select superior turmeric lines for higher yield.	SRC, Bogura
681	Advance yield trial of turmeric	• To select superior turmeric lines for higher yield.	SRC, Bogura
682	Evaluation of turmeric (<i>Curcuma longa</i> L.) germplasms	• To assess the performance of turmeric genotypes.	SRSC, Faridpur
683	Advance yield trial of turmeric	• To evaluate different turmeric lines and to select the promising one for releasing a variety.	RSRC, Magura
684	Evaluation of coriander germplasm	• To identify the best germplasm with higher yield and desirable characters.	SRC, Bogura
685	Evaluation of fenugreek germplasm	• To evaluate the germplasm collected from different sources in terms of their yield potentiality and to identify the superior one(s).	SRC, Bogura

Sl.	Title of experiment	Objectives	Location(s)
686	Evaluation of sickle fruit fenugreek germplasm	• To evaluate the germplasm collected from different sources and to identify the best one with higher yield and desirable characters.	SRC, Bogura
687	Evaluation of fennel germplasm	• To identify the best germplasm with higher yield and desirable characters.	SRC, Bogura
688	Evaluation of dill germplasm	• To evaluate the germplasm collected from different sources and to identify the best genotype with higher yield and desirable characters.	SRC, Bogura
689	Evaluation of celery germplasm	• To evaluate the performance of different celery germplasm and to identify the superior genotypes.	SRC, Bogura
690	Regional yield trial of fenugreek	• To select the promising one for releasing a variety.	SRC, Bogura, Cumilla, RSRC; Gazipur and Magura, SRSC; Faridpur and Lalmonirhat
691	Evaluation of fennel (<i>Foeniculum vulgare</i>) germplasm	• To assess the performance of fennel germplasm.	SRSC, Faridpur
692	Evaluation of bay leaf germplasm	• To select the promising bay leaf germplasm for releasing a variety.	SRSC, Jaintapur, Sylhet
693	Screening of black cumin germplasm for salinity tolerance	• To find out salinity tolerance of some black cumin germplasm.	ARC, Benerpota, Satkhira
694	Evaluation of cinnamon germplasm	• To identify the best germplasm of cinnamon.	SRSC, Jaintapur, Sylhet
695	Evaluation of black pepper germplasm	• To evaluate the new germplasm of black pepper comparison with BARI Golmorich-1.	SRSC, Jaintapur, Sylhet
696	Physio-morphological study on betel leaf (<i>piper betle</i> l. cv. khasia pan)	• To find out the promising genotype for commercial cultivation in the Sylhet region	SRSC, Jaintapur, Sylhet
697	Collection, conservation, and characterization of small and large cardamon germplasm	• To identify of an appropriate germplasm suitable for specific region.	
698	Collection and evaluation of indigenous spices crop under sylhet region	• To study the performance of indigenous spices crop under sylhet region.	SRSC, Jaintapur, Sylhet
699	Regional yield trial of ajowan (<i>trachyspermum ammi</i> l.)	• To evaluate the performance of advance Ajowan lines based on agronomical and morphological characteristics.	RSRC; Gazipur and Magura and SRSC, Faridpur
700	Regional yield trial of Isabgol (<i>Plantago ovata</i>)	• To evaluate the performance of different Isabgol (<i>Plantago ovata</i>) germplasm and to select the promising one(s) for releasing a variety.	SRC, Bogura, Cumilla, RSRC; Gazipur and Magura, SRSC; Faridpur and Lalmonirhat

Sl.	Title of experiment	Objectives	Location(s)
701	Regional yield trial of chaba (<i>Piper chaba</i>)	To select the promising one(s) for releasing as a variety.	RSRC, Magura; Dumoria, khulna, kaligonj, and SRSC, Lalmonirhat
702	Yield and quality of seed bulb of onion after seed production	To assess the yield and study the performances of onion seed / mother bulbs after seed production regarding quality and shelf life.	RSRC, Gazipur, SRSC, Faridpur and SRSC, Lalmonirhat
703	Effect of planting method and sowing time on yield and quality of onion (<i>Allium cepa</i> L.)	To compare two planting methods (growing onions through conventional sets and growing late kharif onions by transplants) for obtaining higher yield and quality of onion and To find out optimum sowing time of onion for getting higher yield and quality of onion.	SRSC, Faridpur
704	Effect of sowing time and bulb size on seed yield of BARI Piaz-6 in AEZ-3	To find out the optimum sowing time and seed bulb size for true onion seed production of BARI Piaz-6 in northern region of Bangladesh.	SRSC, Lalmonirhat
705	Effect of variety and seed rate on the yield and quality of onion (<i>Allium cepa</i> L.) sets	- To search optimum seed rate for getting quality onion sets and - To compare varieties in producing onion sets.	SRSC, Faridpur
706	Performance of varieties on the yield and quality of onion (<i>Allium cepa</i> L.) through set to bulb method	To explore potentialities of new developed varieties such as BARI Piaz-4, BARI Piaz-6, LalTeer King and BARI Piaz-1 (as check) for getting higher yield and quality of onion in set to bulb method.	SRSC, Faridpur
707	Study of maturity indices on the true seed production of different winter onion varieties	To study the effects of maturity indices of different onion varieties on the quality true seed production.	SRSC, Lalmonirhat
708	Effect of spacing on the yield of Naga chili	To determine the effect of spacing on chili production under acidic soil of north eastern region of Bangladesh.	SRSC, Jaintapur, Sylhet
709	Effect of different growing media for ginger seedling production under pro-tray technique	To identify suitable growing media for producing ginger seedlings under pro-tray technique and to ensure sustainable ginger production.	SRC, Bogura
710	Effect of different rhizome size for ginger seedling production under pro-tray technique	To identify suitable rhizome size for producing ginger seedlings under the pro-tray technique and to ensure sustainable ginger production.	SRC, Bogura
711	Integrated weed management in turmeric	To find out the best management practices for controlling weed of Turmeric.	RSRC, Magura
712	Yield performance of turmeric in mango orchard	To find out the yield performance of turmeric in mango orchard.	RSRC, Cumilla

Sl.	Title of experiment	Objectives	Location(s)
713	Effect of sowing time on the on the yield and yield components of fenugreek in Cumilla region	• To find out the optimum sowing time for fenugreek in Cumilla region.	RSRC, Cumilla
714	Effect of different living and non-living standards on the establishment, growth and yield of black pepper cv. BARI Golmorich-1	• To study different living and non-living standards on the establishment, growth and yield of black pepper var. BARI Golmorich-1	SRSC, Jaintapur, Sylhet
715	Standardization of single node cutting for quick multiplication of black pepper	• To standardize the rapid multiplication of black pepper from a minimum amount of parent materials.	SRSC, Jaintapur, Sylhet
716	Effect of different organic fertilizers on yield and quality of onion	• To know the effect of different organic fertilizers on yield and quality of onion.	SRC, Bogura
717	Effect of different levels of nutrients on growth, yield and storage capacity of winter onion	• To know the effect of different fertilizer management practices on growth, yield and storage capacity of winter onion.	SRC, Bogura
718	Nutrient management on growth and bulb yield of onion	• To find out the varietal efficacy under different nutrient management package of onion (<i>Allium cepa</i> L.)	RSRC, Gazipur
719	Effect of different organic fertilizers on yield and storage quality of garlic (<i>Allium sativum</i> L.)	• To assess the effect of organic manures on yield and storage quality of garlic.	SRSC, Lalmoirhat
720	Effect of nitrogen and variety on yield and yield components of garlic	• To find out optimum dose of nitrogen and suitable garlic variety for higher yield.	RSRC, Gazipur
721	Effect of foliar application of different micronutrients on reducing tip burn of garlic	• To know the effect of foliar application of different micronutrients on reducing tip burn of garlic.	SRC, Bogura
722	Study on nitrogen and variety for secondary sprouting of garlic	• To find out the reason of secondary sprouting/splitting of garlic.	RSRC, Magura
723	Study on irrigation and variety for secondary sprouting of garlic	• To find out the reason of secondary sprouting/splitting of garlic.	RSRC, Magura
724	Effect of organic fertilizer for safe Naga chili production	• To check the significance and importance of organic manures for Naga chili cultivation.	SRSC, Jaintapur, Sylhet
725	Effect of lime on the growth and yield of Naga chili	• To determine the effect of lime for Naga chili production under acidic soil of north eastern region of Bangladesh.	SRSC, Jaintapur, Sylhet
726	Effect of different organic fertilizers on yield and quality of ginger	• To know the effect of different organic fertilizers on yield and quality of ginger.	SRC, Bogura
727	Growth and yield of black cumin influenced by integrated nutrient management	• To know the effect of different nutrient management practices on growth and yield of black cumin.	SRC, Bogura
728	Effect of N, P, K and S on growth and yield of fennel	• To study the response of N, P, K and S to yield and quality of fennel cv. BARI Mouri-2	SRC, Bogura & RSRC, Gazipur

Sl.	Title of experiment	Objectives	Location(s)
729	Population dynamics and management of thrips in bulb onion by using trap crops	To study the population dynamics and to evaluate the effectiveness of trap cropping Marigold, Carrot, Tomato and French bean with onion for the management of onion thrips.	SRC, Bogura
730	Development of bio-rational based management approach against major insect pests of chilli	To develop a bio-rational based management approach against major insect pests of chilli.	SRC, Bogura
731	Effect of different mulching materials against insect pest complex of chilli	To study the effect of different mulching materials against insect pest complex of chilli.	SRC, Bogura
732	Development of bio-rational based management approach against sucking pests of betel leaf	To study the population buildup of sucking insect pests as influenced by climatic factors and to evaluate the efficacy of different bio-rational based management approach against sucking insect pest's complex of betel leaf.	SRC, Bogura
733	Effect of fungicides on quality seed production by reducing purple blotch and Stemphylium blight of onion	To find out the effective fungicidal package for quality onion seed production.	SRSC, Lalmonirhat
734	Efficacy of new fungicides for controlling purple blotch disease of onion	To find out the effect of different fungicides for controlling purple blotch disease of onion.	RSRC, Magura
735	Control of foot and root rot disease of chilli	To find out the effective control measures against foot and root rot disease of chilli.	SRC, Bogura
736	Efficacy of new fungicides for controlling anthracnose of chilli	To evaluate the efficacy of some fungicides viz 48, 121, 246, 306, 341, 396, 430, 449, 450, 452 with a control were tested to reduce the anthracnose and increase the yield of chilli.	RSRC, Magura
737	Controlling disease and pest for safe Naga chili production	To find out suitable botanical product(s) for sustainable Naga chili production in Bangladesh.	SRSC, Jaintapur, Sylhet
738	Fungicidal management of leaf spot disease of ginger	To find out the effective fungicides to control leaf spot of ginger.	SRC, Bogura
739	Fungicidal management of rust disease of fenugreek	To find out the control measures of rust of Fenugreek.	SRC, Bogura
740	Survey on major disease of chaba (Piper chaba)	To find out major disease of Chaba.	RSRC, Magura
741	Assessment of onion production trend in onion growing area of Bangladesh through remote sensing technique	To focused on the integrated application of satellite Remote Sensing (RS) and Geographic Information System (GIS) for identifying and estimating of onion cultivated areas in the top onion growing areas (Rajshahi and Pabna district) of Bangladesh	SRC, Bogura

Sl.	Title of experiment	Objectives	Location(s)
742	Assessment of in-season machinery determination in garlic cultivation using geo-spatial technique	• To assess in-season machinery requirement in different farming activities of garlic production such as land preparation, harvesting and threshing etc. on various scales in timely and cost-effectively.	SRC, Bogura
743	Development of a power tiller operated garlic planter	• To develop and fabricate a garlic planter and then test as well as evaluate the machine and economic performance for garlic production and compare the yield performance with that of conventional method.	SRC, Bogura
744	Field performance evaluation of BARI power tiller operated multi-crop seeder in spices crop production	• To test the BARI power tiller operated multicrop seeder machine and evaluate the economic performance of production and compare the yield performance with that of conventional method to enhance spices crop productivity.	SRC, Bogura
745	Efficacy of different seed drying and storage method on quality of chilli seed and its effect on chilli production	• To study the efficacy of different seed drying and storage method on quality of chilli seed and to find out the suitable seed drying and storage method for chilli seed production.	RSRC, Gazipur
746	Studies on the processing and preservation of garlic paste	• To study the paste behavior of treated and untreated garlic paste under room and refrigerated temperature.	SRC, Bogura
747	Studies on quality of developed ginger-garlic mix paste during storage	• To investigate the effect of preservatives, storage conditions and time on the keeping quality of ginger-garlic mix paste.	SRC, Bogura
748	Development of shelf stable value added chatney from plum (<i>Prunus domestica</i>)	• To analyze chemical and proximate composition of developed products and to assess the storage stability and the acceptability of the processed products.	SRC, Bogura
749	Development of shelf stable value-added jam from plum (<i>Prunus domestica</i>)	• To analyze chemical and proximate composition of selected developed products and to assess the storage stability and the acceptability of the processed products.	SRC, Bogura
750	Development of shelf stable value added murobba from plum (<i>Prunus domestica</i>)	• To develop different murobbas from plum, to analyze chemical and proximate composition of fresh plum and developed products and to assess the storage stability and the acceptability of the processed products.	SRC, Bogura
751	Optimization of seed rate of onion mixed with black cumin in charland of AEZ-3	• To determine the seed rate of onion mixed with black cumin under Charland conditions.	SRSC, Lalmonirhat
752	Optimization of seed rate of onion mixed with coriander in charland of AEZ-3	• To determine the optimal seeding rate for cultivating onion and coriander together in Charland.	SRSC, Lalmonirhat
753	Performance of coriander varieties in charland of AEZ-3	• To select appropriate variety for higher yield of coriander in under Charland condition.	SRSC, Lalmonirhat

Sl.	Title of experiment	Objectives	Location(s)
754	Adaptive yield trial of black cumin under different sowing methods under charland condition	To find out suitable black cumin variety and sowing methods under charland condition.	SRSC, Lalmonirhat
PLANT GENETIC RESOURCE CENTRE			
755	Exploration and collection of Plant Genetic Resources for Food and Agriculture (PGRFA)	To enrich PGR collection and minimize genetic erosion.	Different agro-ecological zone of Bangladesh
756	Characterization of Hyacinth Bean Germplasm	- To explore the genetic diversity of hyacinth bean germplasm. - To identify the germplasm having useful traits	PGRC, BARI, Gazipur
757	Characterization of Ash Gourd Germplasm	- To characterize the germplasm and estimate genetic diversity. - To identify the promising germplasm	PGRC, BARI, Gazipur
758	Characterization of Bottle Gourd Germplasm	- To study the genetic diversity in bottle gourd germplasm. - To identify salient features.	PGRC, BARI, Gazipur
759	Characterization of Sponge Gourd Germplasm	- To study the genetic diversity in sponge gourd germplasm. - To identify salient features of studied germplasm	PGRC, BARI, Gazipur
760	Characterization of Ridge Gourd Germplasm	- To identify the genetic diversity in ridge gourd germplasm. - To identify useful traits for plant breeding programs.	PGRC, BARI, Gazipur
761	Characterization of Indian Spinach Germplasm	- To study the genetic diversity in Indian spinach germplasm. - To identify salient features of studied germplasm.	PGRC, BARI, Gazipur
762	Characterization of Chilli Germplasm	- To study the genetic variation in chilli germplasm. - To identify salient features that distinguishes germplasm from one another.	PGRC, BARI, Gazipur
763	Characterization of Brinjal Germplasm	- To characterize brinjal germplasm through qualitative and quantitative characters - To estimate genetic diversity for crop improvement program.	PGRC, BARI, Gazipur
764	Characterization of Muskmelon Germplasm	- To study the genetic diversity in muskmelon germplasm. - To identify accession having useful traits	PGRC, BARI, Gazipur
765	Characterization of Spinach Germplasm	- To study the genetic diversity in spinach germplasm. - To identify salient features of studied germplasm.	PGRC, Gazipur, Ishwardi, Pabna
766	Characterization of Amaranth Germplasm	To study the genetic variation observable in <i>Amaranthus</i> germplasm	PGRC, BARI, Gazipur

Sl.	Title of experiment	Objectives	Location(s)
		To identify salient features that distinguish germplasm from one another.	
767	Characterization of Lentil Germplasm (2 sets)	- To study the genetic diversity in lentil germplasm - To identify accession having useful traits.	Ishwardi, Pabna (set I) PGRC, BARI, Gazipur (set II)
768	Nutritional and Morphological Characterization of Tomato Germplasm for Varietal Improvement	To characterize tomato germplasm based on nutritional and morphological parameters for varietal improvement	PGRC, BARI, Gazipur
769	Characterization of Black gram Germplasm	- To study the genetic diversity in black gram germplasm. - To identify salient features of studied germplasm.	BARI, Jamalpur
770	Characterization of Grass Pea Germplasm (3 Sets)	- To study the genetic diversity in grass pea germplasm. - To identify salient features of studied germplasm.	Jashore (set I); Rangpur (set II); Ishwardi, Pabna (set III)
771	Characterization of Mustard Germplasm	- To study the genetic diversity in mustard germplasm. - To identify salient features of studied germplasm.	BARI, Khagrachari
772	Screening, Evaluation and Identification of Mung bean Germplasm under Waterlog Condition	- To identify the genetic variability based on qualitative and quantitative traits. - To evaluate morpho-physiological traits - To identify of source population under waterlog condition.	PGRC, BARI, Gazipur
773	Screening of Sesame Germplasm at Seedling Stage for Waterlogging Stress Tolerance	To investigate waterlogging stress tolerant potential in sesame at seedling stage	PGRC, BARI, Gazipur
774	Molecular Characterization of Landraces of Chilli in Bangladesh	- Estimation of genetic diversity & establish genetic relationship - Identification of genotypes with unique DNA profile - Identify duplicate among the collection	Molecular biology laboratory, PGRC, BARI, Gazipur
775	Molecular Characterization of Landraces of Guava in Bangladesh	- To establish allelic patterns and estimate genetic diversity - To generate a reference database to support cultivar protection and settle possible commercial disputes	Molecular biology laboratory, PGRC, BARI, Gazipur
776	Conservation of Germplasm in Active and Base Collection	- To register newly collected germplasm with passport information, - To assign accession number. - To conserve germplasm in active and base collection	PGRC, BARI, Gazipur
777	Monitoring of Germplasm in Active and Base Collection	- To test the viability of conserved germplasm. - To identify the germplasm for regeneration and multiplication	PGRC, BARI, Gazipur

Sl.	Title of experiment	Objectives	Location(s)
778	Distribution of Germplasm	• To explore the germplasm for crop improvement. • To facilitate in conducting research for academic degree. • To restore diversity loss in on-farms and natural habitat.	PGRC, BARI, Gazipur
779	Multiplication of Newly Collected Germplasm of Different Crops	• To multiply the seeds of newly collected germplasm	PGRC, BARI, Gazipur
780	Regeneration of Conserved Accessions of Different Crops	• To replenish their viability. • To maximize their quantity	PGRC, BARI, Gazipur
781	Conservation of Germplasm in Field Gene Bank	• To maintain germplasm at the field gene bank.	PGRC, BARI, Gazipur
782	Database Development and Data Entry for Germplasm Documentation	• To properly conserve, manage and use biodiversity of plant species	PGRC, BARI, Gazipur
PLANT BREEDING DIVISION			
783	Characterization and evaluation of chia germplasm for early and high yield	• Characterization and evaluation of chia germplasm to develop early, short and high yielding chia variety	Gazipur
784	Hybridization of barley	• Incorporation of saline and drought tolerant gene to develop saline and drought tolerant high yielding hull-less barley variety	Gazipur
785	Growing of F ₁ of barley (2 Sets)	• Develop hull-less, early, dwarf and high yield potential progenies.	Gazipur
786	Growing of F ₂ generation of barley	• To advance the generation; and • To select individual plant on the basis of desirable	Gazipur
787	Growing of F ₃ generation of barley	• To select the desirable individual plants for further evaluation	Gazipur
788	Growing of F ₄ , F ₅ and F ₆ generation of barley	• Selecting desirable families and individual lines in different filial generation	Gazipur
789	Advancing of F ₁ , F ₂ and F ₃ generations for developing saline tolerant barley line	• Development of saline tolerant variety of barley	Gazipur
790	Observation trial of promising barley lines	• To select better performing high yielding barley lines	Gazipur
791	Preliminary yield trial of hull-less barley	• To select better performing high yielding hull-less barley lines over location	Gazipur, Rangpur Jashore
792	Regional yield trial of hull-less barley	• To find out early matured, high yielding stable barley lines, and to verify the influence of the environments on the yield at different locations of Bangladesh	Gazipur, Jashore, Panchogorh, Satkhira
793	International barley yield trial for arid and semi-arid regions (IBYT-ASA-22)	• To maintain and enrich genetic pool of barley germplasm	Gazipur

Sl.	Title of experiment	Objectives	Location(s)
794	International barley yield trial for feed forage and malt in favorable environments (IBYT-FFM-22)	• To maintain and enrich genetic pool of barley germplasm	Gazipur
795	International barley observation nursery (IBON-22)	• To maintain and enrich genetic pool of barley germplasm	Gazipur
796	Screening of barley genotypes against spot blotch	• To identify disease resistant parental source for barley improvement	Gazipur
797	Induced mutagenesis in foxtail millet (<i>Setaria italica</i> L.) to develop variable population	• To create variability in the existing germplasm	Gazipur
798	Regional yield trial of foxtail millet	• To test the performance for early maturity and high yielding foxtail millet genotype over locations.	Gazipur, Jamalpur, Burirhat, Jashore
799	Observation trial of selected proso millet lines	• To select high yielding and lodging tolerant proso millet germplasm	Gazipur
800	Regional yield trial of proso millet	• To select high yielding and lodging tolerant proso millet germplasm	Gazipur, Jamalpur, Burirhat, Jashore
801	Preliminary yield trial of finger millet germplasm	• To develop short stature and early maturing finger millet variety	Gazipur
802	Population development of pearl millet	• To create broad genetic population for the development of suitable variety in future	Gazipur
803	Development of base population in sorghum	• To develop sorghum genotypes based on (i) medium height and high yield (ii) dwarf and earliness	Gazipur
804	Screening of sorghum lines under waterlogging stress condition	• To investigate the suitable waterlogged tolerant sorghum genotypes	Gazipur
805	Evaluation and selection of mutants for desirable traits in M ₂ generation of oat (<i>Avena sativa</i> L.)	• To evaluate M ₂ generation developed from the two oat genotypes of different doses of gamma rays, EMS and combination treatments. • To select desirable character plant or line	Gazipur
806	Induced mutagenesis in buckwheat to develop variability	• To assess the stability of buckwheat lines and • To investigate yield performance of different environments at different locations of Bangladesh	Gazipur
807	Regional yield trial of buckwheat	• To assess the stability of buckwheat lines and • To investigate yield performance of different environments at different locations of Bangladesh	Gazipur, Jamalpur, Debiganj
808	Molecular characterization of newly developed barley lines with released varieties	• Assessment of genetic variation in barley genotypes	Gazipur

Sl.	Title of experiment	Objectives	Location(s)
809	Modulation of drought induced oxidative stress in finger millet by trehalose and methyl jasmonate	• To examine drought induced oxidative stress and its manipulation by Trelahose (Tre) and Methyl jasmonate (J)	Gazipur
810	Nutritional analysis of BARI released minor cereals	• To determine nutritional content of BARI released minor cereals	Gazipur
811	Starch quality analysis of barley lines and varieties	• To investigate the variability for amylose and amylopectin content in different barley genotypes	Gazipur
812	Determination of total arsenic in minor cereals (barley, foxtail millet, proso-millet, finger-millet, pearl -millet, buckwheat, oat, quinoa and sorghum)	• Determination of arsenic level in minor cereals	Gazipur
813	Breeder seed production of barley	• To maintain and increase seed of the released varieties • Breeder seed will be produced to supply seed producing agency like BADC, DAE, NGOS and entrepreneurs • Distribution of quality seeds directly to the farmer	Gazipur, Burirhat, Debigonj, Ishwardi
814	Breeder seed production of foxtail millet, proso millet, sorghum and oat varieties	• To maintain and increase seed of the released varieties • Breeder seed will be produced to supply seed producing agency like BADC, DAE, NGOS and entrepreneurs • Distribution of quality seeds directly to the farmer	Gazipur, Jamalpur, Burirhat, Ishwardi
815	Maintenance and seed increase of barley lines	• To maintain and seed increase of barley lines	Gazipur
816	Maintenance and seed increase of foxtail millet	• To maintain and seed increase of foxtail millet germplasm	Gazipur
817	Maintenance of proso millet germplasm	• To maintain and seed increase of proso millet germplasm	Gazipur
818	Maintenance of pearl millet germplasm	• To maintain and seed increase of pearl millet germplasm	Gazipur
819	Seed increases of oat germplasm	• To seed increase of oat germplasm	Gazipur
820	Seed increase of buckwheat germplasm	• To seed increase of buckwheat germplasm	Gazipur
821	Maintenance and seed increase of quinoa germplasm	• To maintain and seed increase of quinoa germplasm	Gazipur
822	Technology transfer activities	• Quick dissemination of modern varieties of minor cereal through extension personnel and farmers by different kinds of training programme. • Demonstration trials of the BARI released varieties and	Gazipur, Khulna, Gaibanda, Rangpur, Bogra, Munshigonj, Tangail, Jamalpur, Barishal,

Sl.	Title of experiment	Objectives	Location(s)
		• Conduction of field days in the demonstration block for the farmers and extension personnel to demonstrate directly the performances of the modern technologies.	Rajshahai, Faridpur, Manikgonj, Shathkhira, Noakhali,
AGRONOMY DIVISION			
823	Growth and yield of sorghum as influenced by spacing and nutrient management	• To find out optimum fertilizer dose and suitable plant spacing and population for better growth and maximum grain yield of sorghum cultivation.	BARI, Gazipur
824	Effect of nutrient management and harvesting time on ratooning of sorghum as fodder crop	• To find out the optimum fertilizer dose and harvesting time of ratooning sorghum for higher fodder production.	BARI, Gazipur
825	Grain and fodder yield of sorghum as affected by cutting time	• To find out proper cutting time for maximum yield of fodder and grain yield in sorghum and the effect of cutting time on sorghum yield components.	BARI, Gazipur
826	Effect of sowing time and plant population on growth and yield of chia (<i>Salvia hispanica</i> L.)	• To find out suitable sowing time and optimum plant population for higher yield of chia.	BARI, Gazipur
827	Growth and yield of chia (<i>Salvia hispanica</i> L.) under different nutrient management	• To assess the growth, yield and quality of chia crop under nutrient management.	Gazipur and Jashore
828	Determination of seed rate and row spacing for potential yield of chia (<i>Salvia hispanica</i>)	• To determine optimum seed rate and row spacing for potential yield of chia seeds.	BARI, Gazipur
829	Effect of sampling technique on yield assessment of lentil	• To find out whether there is any variation of assessed yield from different sampling technique.	BARI, Gazipur
830	Growth and yield of barley as influenced by spacing and seed rate	• To find out optimum seed rate and plant spacing for higher grain yield of barley.	BARI, Gazipur
831	Determination of harvesting efficiency of mungbean	• To determine optimum harvesting time for higher seed yield of mungbean.	Gazipur and Ishurdi, Pabna
832	Estimation of optimum plant population of maize through functional model	• To estimate optimum plant population for higher grain yield of maize.	BARI, Gazipur
833	Performance of BARI released mustard varieties at Moulvibazar	• To select mustard varieties for Moulvibazar area.	Moulvibazar
834	Effect of sowing dates on sunflower at Moulvibazar	• To find out the optimum sowing date for BARI Surjomukhi-3 at Moulvibazar.	Moulvibazar
835	Yield performance and storage quality of onion under integrated nutrient management at AEZ-9	• To find out suitable nutrient management for yield performance and storage quality of onion.	Jamalpur
836	Growth and yield of black cumin influenced by integrated nutrient management	• To find out suitable nutrient management for growth and yield of black cumin.	Jamalpur

Sl.	Title of experiment	Objectives	Location(s)
837	Effect of management practice for year-round production of coriander as condiment in relation to weather condition	• To determine the suitable management practice for year-round coriander production as condiment and nutrition supply and higher market price during off season.	Jamalpur
838	Effect of planting date and variety on taro	• To determine the suitable taro variety and planting date for demand of vegetables in the lag period after monsoon for nutrition supply earlier and obtaining higher market price.	Jamalpur
839	Effect of spacing and fertilizer dose on transplanted sunflower under zero tillage condition in southern region of Bangladesh	• To find out suitable spacing and optimum fertilizer dose for transplanted sunflower under zero tillage condition in southern region of Bangladesh.	Rahmatpur, Barishal
840	Testing of fodder and seed yield performance of BARI released grass pea varieties	• To test the dual performance (both fodder and seed yield) of BARI released grasspea varieties.	Rahmatpur, Barishal
841	Performance of minor cereal crops under different tillage conditions in rice-based cropping systems in southern region of Bangladesh	• To evaluate the performance of minor cereals under different tillage conditions in rice-based cropping systems in southern region of Bangladesh.	Rahmatpur, Barishal
842	Effect of tillage and fertilizer doses on growth and yield of sunflower in southern region of Bangladesh	• To reduce cost of cultivation of sunflower in Southern region of Bangladesh.	Rahmatpur, Barishal
843	Effect of different concentration and application time of gibberellic acid on growth and yield of potato	• To find out the appropriate application time and GA ₃ concentration for maximizing seed potato production in Bangladesh by increasing seed tuber number per plant and yield at the research field.	Rajbari, Dinajpur
844	Effect of different sowing time and spacing of advanced linseed line (lin-w-17)	• To find out suitable sowing time and spacing for higher yield of linseed for Dinajpur region.	Rajbari, Dinajpur
845	Performance of garlic varieties at Dinajpur region	• To evaluate the performances of garlic varieties and economic profitability of these garlic varieties.	Rajbari, Dinajpur
846	Effect of planting date and nutrient management on yield of broccoli	• To find out optimum planting time and nutrient levels of broccoli in early planting condition when the demand and price of broccoli are high in the market.	Rajbari, Dinajpur
847	Effect of plant population and integrated nutrient management on yield of dwarf yard long bean	• To find out the suitable fertilizer management and optimum plant population (spacing) for higher yield of dwarf yard long bean	Jashore
848	Evaluation of yard long bean lines with BARI Barboti-1	• To find out the suitable advanced line of yard long bean for winter season in Bangladesh.	Jashore, Cumilla, Dinajpur and Gazipur
849	Effect of irrigation on growth and yield of chia	• To find out the optimum water requirement of Chia for higher growth and yield.	BARI, Gazipur

Sl.	Title of experiment	Objectives	Location(s)
850	Effect of planting time on the yield of chia	• To determine the optimum planting time for higher seed yield of Chia.	BARI, Gazipur
851	Effect of weeding and nutrient management practice on yield of sweet gourd	• To find out the optimum fertilizer dose and appropriate weed management method for getting higher sweet gourd fruit yield and economic return.	BARI, Gazipur
852	Effect of integrated weed management on tomato cultivation	• To find out suitable weed management practices in tomato.	BARI, Gazipur
853	Optimization of doses and time of application of pendimethalin on weed control of onion	• To find out the appropriate dose, and time of spray of Pendimethalin (Panida) for weed control of onion.	Ishurdi, Pabna
854	Weed management using herbicides under zero tillage mulched condition in garlic field	• To find out the suitable herbicide for controlling weed in garlic under zero tillage mulched condition.	Ishurdi, Pabna
855	Integrated weed management of mukhikachu (<i>Colocasia esculenta</i>) for sustainable agriculture	• To find out the effective and economic weed management of Mukhikachu.	BARI, Jashore
856	Weed control management in groundnut cultivation in <i>rabi</i> season	• To find out the effective and economic weed control method for groundnut cultivation.	Rahmatpur, Barishal
857	Effect of different herbicides for controlling weeds in potato field	• To find out the effectiveness of different herbicides for controlling weed in potato field.	Gazipur and RARS Cumilla
858	Efficacy of different herbicides for controlling weeds in bare place	• To find out the efficacy and suitable herbicide to control weeds in bare place.	BARI, Gazipur
859	Efficacy of different herbicides for controlling weeds in onion field	• To find out the suitable herbicide for controlling weed in onion field.	BARI, Gazipur and Jashore
860	Performance of different herbicides for controlling weeds in garlic	• To evaluate the performance of two herbicides for controlling weeds in garlic field.	Gazipur and Jamalpur
861	Improvement of existing cropping pattern through BARI garlic variety in the Chalanbeel area	• To compare the yield performance of BARI released garlic varieties against local variety to replace it by the best one for improving the garlic-jute cropping pattern.	Dobila village of Tarash upazila in Chalanbeel, Sirajganj
862	Performance of hybrid maize + potato intercropping in Chalanbeel area	• To evaluate the performance of maize + potato intercropping technology in Chalanbeel area.	Sirajgonj
863	Performance of integrated weed management of barley	• To validate the developed weed management practices in barley.	Nawvanger char, Jamalpur
864	Production programme of hybrid maize + sweet potato intercropping at Char land area in Rangpur and Jamalpur	• To find out suitable planting system of the component crops for higher productivity and economic return.	char area of Rangpur and Jamalpur

Sl.	Title of experiment	Objectives	Location(s)
865	Performance of intercropping spinach and red amaranth with brinjal	• To find out the suitable crop combination of spinach and red amaranth with brinjal for increasing total productivity, economic return and maximize land utilization through intercropping system.	Baleswar under sadarupazila of Cumilla district
866	Production programme of garden pea with sorghum intercropping at acidic soil at Moulvibazar	• To evaluate the performance of Sorghum + garden pea intercropping technology.	Narayonpur, Uttormajdihi, Srimongal, Moulvibazar
867	Production programme of intercropping garden pea with hybrid maize in acidic soil at Moulvibazar	• To evaluate the performance of Hybrid maize + garden pea intercropping technology.	Gias nagor, Sadar, and Moulvibazar
868	Production programme of intercropping pea with hybrid maize in Khagrachari	• To evaluate the potentiality of BARI developed pea –hybrid maize intercrop technology.	Hill valleys in Khagrachori
869	Intercropping maize with bush bean under different planting system	• To evaluate the performance of maize bush bean intercropping under different planting system.	Hill valleys in Khagrachori
870	Performance of intercropping of chili with maize in hill valleys of Khagrachari	• To verify the potentiality of hybrid maize-chili intercropping system in hill valleys of Khagrachari.	Hill valleys in Khagrachori
871	Yield process and crop competition of leafy vegetables intercropping system with chilli	• To find out the suitable intercrop combination of leafy vegetables and chilli for higher productivity and economic return.	BARI, Gazipur and Hathazari
872	Maize- legume strip cropping for resource conservation	• To maintain sustainable productivity and to conserve soil health and soil moisture.	BARI, Gazipur
873	Performance of intercropping bush bean with sorghum	• To find out the suitable crop combination of bush bean with sorghum for increasing total productivity and economic return.	BARI, Gazipur
874	Sorghum-legume strip cropping for resource conservation	• To maintain sustainable productivity and to conserve soil health and soil moisture.	BARI, Gazipur
875	Compatibility of minor cereals-groundnut intercropping	• To find out the suitable crop combination of minor cereals with groundnut for increasing total productivity and economic return.	BARI, Gazipur
876	Long term effect of four crop-based cropping pattern on soil health and crop productivity	• To increase cropping intensity and productivity in rice-based cropping pattern along with maintaining soil health.	BARI, Gazipur
877	Inclusion of black gram under mango orchard	• To observe the performance of different black gram varieties under mango orchard, to increase the land use efficiency and productivity as well as farmers income of northern region of Bangladesh.	BARI, Ishwardi
878	Performances of different pulse crops under mango orchard in southern region of Bangladesh	• To select the most appropriate pulse crop(s) for growing under mango orchard and to increase the cropping intensity for maximize the productivity as well as farmers income of southern region of Bangladesh.	Rahmatpur, Barishal

Sl.	Title of experiment	Objectives	Location(s)
879	Intercropping of vegetables spices with chilli in Chattogram region	• To assess the performance of radish, carrot, onion and garlic with chilli as intercrop.	Hathazari, Chattogram
880	Performance of cowpea intercropping with maize at Chattogram region	• To evaluate the performance of maize-cowpea intercrop influenced by planting arrangement for higher productivity.	Hathazari, Chattogram
881	Intercropping cowpea with sorghum under different planting system	• To evaluate the performance of sorghum cowpea intercrop influenced by planting arrangement for higher productivity.	Hathazari, Chattogram
882	Productivity and profitability analysis of intercropping hybrid maize with potato at different planting system	• To assess the economic performance of intercropping potato with maize.	Rajbari, Dinajpur
883	Intercropping of spices with chilli in cumilla region	• To find out the suitable crop combination of onion, garlic and coriander with chilli for increasing total productivity, economic return and maximize land utilization through intercropping system.	Cumilla
884	Intercropping of summer onion with mukhikachu in cumilla region	• To find out the suitable combination of onion with mukhikachu for increasing total productivity, economic return and maximize land utilization through intercropping system.	Cumilla
885	Development of fertilizer packages for five crop-based cropping patterns in rice-based cropping system	• To develop the fertilizer packages for five crop-based cropping patterns, to assess the agronomic performance and to estimate economic return of five crop-based cropping pattern in rice-based cropping systems.	Jashore
886	Development of vegetable-based cropping pattern for increasing cropping intensity and ensuring nutrition	• To find out the suitable cropping pattern for higher productivity and nutrition as well as economic return.	Jashore
887	Integrated nutrient management on garlic- maize -T.aman cropping pattern in Rangpur region	• To find out the optimum fertilizer dose and economic return for Garlic-Maize-T.Aman cropping pattern of Rangpur area	BARI, Burirhat, Rangpur
888	Development of alternate cropping pattern for increasing cropping intensity and productivity in Rangpur region	• To attain self-sufficiency in food of ever-increasing population and to increase farmers' income, cropping intensity and productivity of rice-based cropping system	BARI, Burirhat, Rangpur
889	Estimation of temperature co-efficient of wheat for adjusting proper sowing time	• To observe the growth behavior and yield of wheat as influenced by prevailing air temperature based on sowing time.	BARI, Gazipur
890	Exogenous chemical application development of water logging tolerance in chilli	• To develop waterlogging tolerance in chilli.	BARI, Gazipur

Sl.	Title of experiment	Objectives	Location(s)
891	Effect of seed treatment with folic acid and k fertilizer foliar application on sunflower under salinity stress	• To find out the effect of seed treatment with folic acid and potassium fertilizer foliar application on sunflower under salinity stress condition.	BARI, Gazipur
892	Integrated nutrient management for bitter gourd on floating bed cum trellis	• To develop nutrient management package for bitter gourd on water hyacinth made floating bed cum trellis.	Rahmatpur, Barishal
893	Integrated nutrient management for yard long bean on floating bed cum trellis	• To develop nutrient management package for hybrid yard long bean on floating bed cum trellis.	Rahmatpur, Barishal
894	Sorjan based integrated farming systems research for increasing agricultural productivity in southern region	• To develop location specific sorjan based farming systems under tidal flooding ecosystem in southern region of Bangladesh. • To integrate crops, fisheries, dairy, ducks and other enterprises for year-round production of vegetables-fruits-fishes-meat-milk-egg under sorjan based farming systems. • To increase agricultural productivity and profitability of sorjan systems through integration of crops, fishery, dairy, ducks and other enterprises. • To increase the agricultural diversity under sorjan systems in southern region.	Rahmatpur, Barishal
895	Performance of early vegetable production in the charland area	• To find out the suitable sowing time for early market to get higher productivity, economic return and nutritional development of charland farmers.	Nawvanger char, Jamalpur
896	Effect of sowing time and earthing up on sweet potato in Char land ecosystem	• To find out the suitable sowing time for early market to get higher productivity, economic return and nutritional development of charland farmers.	Nawvanger char, sadar, Jamalpur
897	Performance of different onion varieties in Charland area of Cumilla	• To compare the yield performance of BARI released onion varieties against local variety with replace it by the best one.	Cumilla
898	Adaptation of pulse and mustard varieties at Charland		Laksmikunda, Ishurdi, Pabna
899	Performance of intercropping leafy vegetables with sweet potato in Char area of Rangpur	• To find out suitable combination of sweet potato and leafy vegetables intercropping for higher productivity and economic return.	Mohipur char, Rangpur
900	Effect of management practices on mustard yield in Chalanbeel area	• To find out suitable management practices for mustard in Chalanbeel area.	Dobila, Tarash of Shirajgonj
901	Performance of BARI released minor cereal crops in acidic soil at Moulvibazar	• To select minor cereal crops in acidic soil at Moulvibazar	Akberpur, Moulvibazar

Sl.	Title of experiment	Objectives	Location(s)
902	Performance of BARI released blackgram varieties in acidic soil of semi hill valley at Moulvibazar under rain fed condition	To select blackgram varieties for acidic soil of semi hill valley at Moulvibazar under rain fed condition.	Akberpur, Moulvibazar
SOIL SCIENCE DIVISION			
903	Synchronization of different aged compost to crop demand, nutrient release and their contribution to the production of red amaranth	- To determine the nutrient releasing trend of compost of different ages - To synchronize the optimum age of compost for maximum benefit of the crop at its peak demand - To observe the changes in soil physical, chemical and biological properties	Joydebpur, Gazipur
904	Integrated nutrient management for cutting of Indian spinach under minimum tillage system	- To determine the exact balance fertilization for boosting up crop production - To observe the soil physico-chemical properties	Joydebpur, Gazipur
905	Integrated nutrient management for cutting of kangkong under minimum tillage system	- To determine the exact balance fertilization for boosting up crop production - To observe the soil physico-chemical properties	Joydebpur, Gazipur
906	Assessment of leaching loss of nutrients and determination of crop coefficient values of capsicum through lysimetric studies	- To find out the crop coefficient values (Kc) and evapotranspiration (Et) using lysimeter - To quantify leaching loss of nutrients	Joydebpur, Gazipur
907	Requirement of nitrogen for Mustard- Okra- T.aman cropping systems based on Conservation Agriculture practices	- To evaluate the effects of crop tillage and nitrogen on soil physico-chemical - To assess the system productivity	Joydebpur, Gazipur
908	Effect of crop establishment practices and IPNS based nutrient management on vegetable-based cropping system and soil physical health	- To investigate the performance of crops in vegetable based triple crops cropping system under the crop establishment and organic fertilizer application practices - To study the soil physico-chemical properties under crop establishment and organic dominant IPNS in the cropping system.	Joydebpur, Gazipur
909	Requirement of potassium fertilizer under tillage and residue management as a tool of conservation agriculture practice in the intensive Wheat-Mungbean-T.Aman cropping system	- To determine the optimum rate of potassium fertilizer for the intensive wheat-mungbean-T. Aman cropping system under CA practice, - To evaluate the effects of crop residue and K fertilizer on soil physico-chemical properties and component crop productivity - To assess the system productivity in the aforesaid cropping system.	Jashore
910	Effect of conservation tillage and phosphorus on the productivity Gardenpea-Maize-T.aman rice	To find out the effect of tillage and phosphorus on the productivity of the pattern	Joydebpur, Gazipur

Sl.	Title of experiment	Objectives	Location(s)
	cropping pattern and soil properties	• To observe the effect of tillage and phosphorus on soil physic-chemical properties	
911	Nutrient management for sustaining soil fertility and yield of Wheat-Mungbean-T.Aman cropping pattern	• To find out judicious fertilizer recommendation for Wheat-Mungbean-T.Aman cropping pattern for sustainable yield; • To monitor soil health after each cropping cycle of the pattern; and • To estimate the uptake of different major nutrients and make a balance sheet for each of the nutrients.	Ishurdi and Jashore
912	Nutrient management for sustaining soil fertility and yield of Mustard-Mungbean-T.Aman cropping pattern	• To find out judicious fertilizer recommendation for Wheat-Mungbean-T.Aman cropping pattern for sustainable yield; • To monitor soil health after each cropping cycle of the pattern; and • To estimate the uptake of different major nutrients and make a balance sheet for each of the nutrients.	Ishurdi and Jashore
913	Long-term integrated nutrient management for sustaining soil fertility and yield of Maize-Mungbean-T.Aman cropping pattern	• To find out judicious fertilizer recommendation for Maize-Mungbean-T.Aman cropping pattern for sustainable yield; • To monitor soil health after each cropping cycle of the pattern; and • To estimate the uptake of different major nutrients and make a balance sheet for each of the nutrients.	Joydebpur
914	Effect of crop residue and their biochars for crop production	• To compare the amelioration effects of CD, biochars and their feedstock on an acid soil • To investigate the effects of incorporation of CD, biochars from crop residues on growth and yield of maize; • To quantify the change of soil health	Joydebpur
915	Nutrient management for a rooftop garden	• To develop fertilizer recommendation for vegetables, fruits and flowers grown on the rooftop garden. • To find out the optimum soil and manure ratio as a media for better growth and development of crops under rooftop garden. • To increase yield, popularize rooftop garden in the urban area and ensure family nutrition.	Rooftop of Soil Science Division, BARI, Gazipur
916	Production of compost from household waste	• To optimize the process parameter to produce compost from kitchen waste; • To analyze the quality of compost produced from kitchen waste.	Composting shed, Soil Science Division, BARI

Sl.	Title of experiment	Objectives	Location(s)
917	Efficacy of different form of urea on nitrogen availability and yield of maize	• To find out use efficiency of different form of urea. • To find out the yield and yield components of maize as influenced by different form of urea. • To analyze cost and return of maize produced from different form of urea.	BARI central farm, Gazipur
918	Nutrient management of sesame in Barishal region	• To develop nutrient management package for sesame in Barishal region. • To increase the yield of sesame through fertilizer management.	Rahmatpur, Barishal
919	Effect of biochar on yield and nutrient uptake of cabbage	• To find out optimum dose of chemical fertilizer and biochar. • To find out nutrient uptake pattern as influenced by various level of biochar. • To increase soil fertility and sustain crop productivity.	Joydebpur and Jamalpur
920	Effect of kitchen waste compost on soil carbon accumulation and tomato yield	• To minimize waste disposal problem and increase soil fertility. • To enhance carbon accumulation in soil. • To increase crop yield.	Jamalpur
921	Nutrient management through compost and tricho compost on soil fertility improvement and yield of garlic	• To study the effect of compost and tricho compost for getting the healthy and vigorous plants for high yield goal. • To reduce the chemical fertilizers through organic manuring. • To evaluate benefit cost ratio of compost and trichocompost for profitable production of garlic.	Jamalpur
922	Nutrient management through organic manuring and biofertilizers on soil fertility improvement and yield of garlic	• To study the effect of tricho compost and Arbuscular mycorrhizae for getting the healthy and vigorous plants for high yield goal. • To reduce the chemical fertilizers through organic manuring. • To evaluate benefit cost ratio of trichocompost and Arbuscular mycorrhizae for profitable production of garlic.	Jamalpur
923	Effect of integrated nutrient management on the yield and nutrient uptake of foxtail millet	• To assess the effect of organic and inorganic fertilizer on the yield of foxtail millet; and • To increase soil fertility and sustain crop productivity.	Central Research Farm, BARI, Gazipur & Jamalpur
924	Effect of different form and dose of urea fertilizer on nitrous oxide emission, nitrogen use efficiency and yield of cauliflower	• To determine nitrous oxide emission from cauliflower field as influenced by different form, application method and dose of urea. • To increase Nitrogen use efficiency by cauliflower. decrease CO₂ gas emission from soil thus mitigating GHG emission	BARI central farm, Gazipur

Sl.	Title of experiment	Objectives	Location(s)
		To find out suitable form, application method and optimum dose of urea for cauliflower yield.	
925	Effect of different organic manures on carbon accumulation in soil and yield of crops in Mustard-Mungbean-T.aman cropping pattern	- To increase soil organic carbon and improve soil fertility - To increase yield of Mustard-Mungbean-T.aman	Central Research Farm, BARI, Gazipur and Jamalpur
926	Effect of different substrate composition on yield of dragon fruit in an extensive green roof	- Find out suitable substrate media for maximize dragon fruit yield. - Improvement of the substrate physicochemical properties.	Rooftop of Laboratory Building, Jamalpur
927	Effect of vermicompost on groundnut yield and soil fertility in charland	- To find out the effect of vermicompost on groundnut yield - To find out nutrient uptake and to increase soil fertility of char land by vermicompost application.	Nouvanger char, Jamalpur
928	Influence of organic fertilizers on the yield and nutrient uptake of carrots	To assess the effect of different organic fertilizers on yield and nutrient uptake of carrots.	Central Research Farm, BARI, Gazipur
929	Efficacy of different form of urea on nitrogen availability and yield of panikachu	- To find out use efficiency of different form of urea. - To find out the yield and yield components of panikachu as influenced by different form of urea. - To analyze cost and return of panikachu produced from different form of urea.	BARI central farm, Gazipur
930	Effect of co-composting biochar on Cabbage-Indian spinach-T.aman productivity	- To find out the soil health improvement after amendment. - To accelerate the sustainable carbon sequestration in to soil. - To develop a low-cost biochar-based fertilizer dose.	BARI central farm, Gazipur
931	Nutrient management for watermelon	To find out suitable fertilizers dose on the yield and quality of watermelon.	Lebukhali, Ptuakhali and SSD, BARI, Gazipur
932	Nutrient management of onion to reduce storage rots	To assess the balanced nutrition to reduce onion storage rots.	FRC, BARI, Rajshahi and RSC, BARI, Lalmonirhat
933	Development of fertilizer recommendation for chilli with onion intercropping system	To find out a suitable and economic fertilizer dose for maximizing the yield of chilli with onion intercropping system	BARI central farm, Gazipur
934	Effect of kitchen waste compost on broccoli yield and carbon accumulation in soil	- To minimize waste disposal problem and increase soil fertility. - To improve the stock of organic carbon in the soil.	BARI central farm, Gazipur

Sl.	Title of experiment	Objectives	Location(s)
		• To increase crop yield.	
935	Effect of nitrogen and potassium on the yield and nutrient uptake of Shahebkachu	• To find out effect of nitrogen and potassium on Shahebkachu • To find out optimum dose of nitrogen and potassium for Shahebkachu production	Rahmatpur, Barishal
936	Effect of different nutrients on Betel nut (<i>Areca catechu</i>) in southern region of Bangladesh	• To find out the effect of different fertilizer on betelnut production. • To find out the optimum dose of fertilizer for betelnut production.	Rahmatpur, Barishal
937	Integrated nutrient management for pineapple in Barishal region	• To find out the effect of different fertilizer on pineapple production. • To find out the optimum dose of fertilizer for maximizing pineapple yield.	Rahmatpur, Barishal
938	Integrated potash management for mustard	• To find out judicious application of potassium fertilizer for maximum production of mustard. • To estimate the uptake of nutrients and make a balance sheet of nutrients.	Jamalpur
939	Application of vermiwash on yield and nutritional quality of tomato	• To investigate the foliar application of vermiwash on yield and nutrient uptake of tomato • To improve nutritional quality of tomato by effective and organic vermiwash application.	Jamalpur
940	Development of permanent block for identifying nutrient deficiencies symptom of crops round the year	• Development of a demonstration site in RARS Jamalpur for the farmers, extension personnel and researcher round the year. • Create visual materials for lecture and discussion. • Identify the complexity of symptoms caused by nutrient deficiencies along with pest attack	Jamalpur
941	Development of fertilizer recommendation for linseed groundnut intercropping system	• To find out a suitable and economic fertilizer dose for maximizing the yield from the intercropping system.	Jamalpur
942	Development of fertilizer recommendation for knolkhol maize intercropping system	• To find out a suitable and economic fertilizer dose for maximizing the yield from the intercropping system.	BARI Central farm, Joydebpur, Gazipur
943	Effect of different form of urea and irrigation management on Greenhouse Gas emission on Pani kachu cultivation in Bangladesh	• To compare GHG emissions from different form of urea under two water management conditions	Central farm, BARI, Gazipur
944	Integrated Nutrient Management of year round four vine crops model for a intensive rooftop garden	• To develop fertilizer recommendation for year-round 4 vine crops modal for an intensive rooftop garden. • To find out the optimum soil and manure ratio as a media for better growth and development of crops under rooftop garden.	Rooftop of Soil Science Division, BARI

Sl.	Title of experiment	Objectives	Location(s)
945	Study on soil properties variation through the soil profile in saline areas of seven Upazilas of Satkhira District	To evaluate the spatial variability of physico-chemical properties through the soil profile in saline areas of Satkhira.	Seven Upazillas of Satkhira
946	Utilization of banana peel on increasing tomato yield and improving soil fertility	- To minimize banana peel disposal problem - To find out the effect of banana peel fertilizer on tomato yield - To find out nutrient uptake and to increase soil fertility by the application of banana peel fertilizer	BARI, Gazipur
947	Determination of heavy metal status of different vegetables from industrially polluted and non-polluted areas	- To study the accumulation of heavy metals in vegetables; - To correlate the heavy metals uptake with essential plant nutrients; and - To compare the heavy metal status of vegetables grown in polluted and non-polluted areas.	Vegetables and soil samples collected from industrial polluted and non-polluted areas, kodda, Gazipur
948	Effect of seed priming on yield and nutrient uptake of cauliflower	- To investigate the role of seed priming on yield and quality of cauliflower - To find out the interactive effect of seed priming on nutrient uptake	Micronutrient Experimental Field, SSD, BARI, Joydebpur
949	Effect of boron on yield and nutrient uptake of mungbean	- To study the effect of boron on yield and nutrient uptake of mungbean. - To estimate optimum dose of boron for higher yield of mungbean. - To find out the boron use efficiency of mungbean.	OFRD, BARI, Rangpur
950	Dynamics of soil and foliar applied boron and zinc to improve yield and quality of Strawberry	- To identify a suitable combination of Zn and B fertilization for strawberry production; and - To compare the effects of the method of micronutrient application foliar vs. soil fertilization on plant yield of strawberry.	Micronutrient Experimental Field, SSD, BARI, Joydebpur
951	Bioremediation of heavy metals polluted soil from industrial effluents polluted areas using microbes and biochar	- To evaluate the efficiency of microbes and biochar as a bioaccumulator for heavy metal in contaminated soil; - To determine the uptake pattern of heavy metal in the root, shoot and grain/fruit system of tested crop as influenced by microbes and biochar; and - To quantify the heavy metal status of polluted soils.	Shade house, SSD, BARI, Joydebpur, Gazipur
952	Bioremediation of arsenic in contaminated soils using microbes and biochar	- To evaluate the role of microbes and biochar in arsenic availability - To find out the suitable microbes and biochar for soils in reducing arsenic contamination - To mitigate arsenic contamination and to improve crop quality	Shade house, SSD, BARI, Joydebpur, Gazipur

Sl.	Title of experiment	Objectives	Location(s)
953	Assessment of heavy metal pollution and health risks in the soil-plant-human systems	• Determine the contamination levels of chromium (Cr), lead (Pb), cadmium (Cd), nickel (Ni), and arsenic (As) in soil and plants; • Evaluate the potential health risks caused by heavy metals and metalloids in different age groups via different pathways; and • Analyze the bioaccumulation factor of heavy metals and metalloids in soil-plant systems.	Crops and soil samples collected from selected different locations.
954	Estimation of greenhouse gas emission and carbon sequestration from crop fields	• To obtain quantitative estimates of greenhouse gases (CO₂, CH₄ and N₂O) and the carbon sequestration for dominant cropping patterns; and • To determine the impact of management practices for carbon sequestration under different cropping patterns.	Experimental Field, SSD, and other suitable cropping pattern from other Division, BARI, Joydebpur, Gazipur.
955	Estimation of CO ₂ and N ₂ O emission from organic manures and amenders in maize field	• To evaluate the CO₂ and N₂O emission from terrace soils due to application of biochar, cowdung, poultry manure and vermicompost • To observe the maize yield and nutrient uptake, • To enhances soil physicochemical properties.	BARI Central Farm, Gazipur
956	Effect of boron fertilization on lentil in Barishal region	• To study the effects of B on the yield and quality of lentil	Rahmatpur, Barisal.
957	Nanoscale zinc oxide particles for improving yield and quality of tomato	• To study the effects of ZnO nano particles on the yield and quality of tomato. • To calculate zinc content and uptake of tomato; and • To evaluate the efficiency of ZnSO₄ and ZnO nanoparticles.	Micronutrient experimental field, SSD, BARI, Joydebpur, Gazipur.
958	Effect of boron on yield and quality of bitter gourd	• To study the effect of boron on number of flower setting and yield of bitter gourd; and • To find out the optimum level of boron for maximizing the yield and quality of bitter gourd	Joydebpur, Gazipur
959	Foliar application of boron on reproductive growth of sunflower	• To determine the effect of foliar spray of boron on yield contributing characters of sunflower. • To find out the optimum rate of boron for maximizing the yield and quality of sunflower.	Joydebpur, Gazipur
960	Foliar application of manganese on yield and nutrient uptake of groundnut	• To investigate the effect of manganese on yield and quality of groundnut. • To find out the optimum dose of manganese to maximizing the yield of groundnut.	Joydebpur, Gazipur.

Sl.	Title of experiment	Objectives	Location(s)
961	Effect of foliar application of zinc in sweet orange	- To determine the efficiency of Zn sources in providing the plants with sufficient micronutrients. - To compare new doses of sweet orange orchards with traditionally used sources.	Cumilla
962	Boron and zinc management for quality litchi production	- To find out the effect of micronutrient especially Boron and Zinc on litchi production. - To develop a balanced fertilizer recommendation for maximizing the yield of litchi. - To protect fruit dropping and cracking.	Farmers litchi orchard, Ishurdi, Pabna
963	Determination of critical limit of zinc for chickpea	- To evaluate the available Zn status of Calcareous and Non-Calcareous soils using DTPA extraction reagents and to correlate extractable Zn with soil properties, dry matter yield and Zn content by chickpea; and - To determine and update of critical limit of zinc in different soils for chickpea.	Shade house, SSD, BARI, Joydebpur
964	Study on collection, isolation and screening of indigenous <i>Rhizobium</i> strains, arbuscular mycorrhizal fungi, <i>Azotobacter</i> , phosphate solubilizing bacteria and <i>Azospirillum</i> strain(s) for different crops from different AEZs of Bangladesh	- To select the best indigenous <i>Rhizobium</i> strain(s), arbuscular mycorrhizal fungi, <i>Azotobacter</i>, phosphate solubilizing bacteria and <i>Azospirillum</i> strain(s) from different AEZs of Bangladesh - To prepare biofertilizer for different legume and other crops	Rahmatpur, Jessore, Joydebpur, Hathazari, Rajshahi, Dinajpur, Rangpur, Ishurdi, Khagrachari
965	Assessment of Arbuscular mycorrhizal association in different plants and crops	- To study the percent root colonization and AM fungal spore population in the rhizosphere soil - To produce suitable AM inoculum for future use in different plants and crops	Khagrachori, Jamalpur, Gopalganj, Rangpur, Jashore
966	Effect of <i>Azotobacter</i> on the growth and yield of Chilli	- To study the role of <i>Azotobacter</i> on the growth and yield of chilli - To find out the nutrient uptake as influenced by <i>Azotobacter</i>	Net House of SSD, Gazipur
967	Bio control of fusarium wilt disease of cowpea by dual inoculation with <i>Rhizobium</i> and arbuscular mycorrhiza	- To observe the effect of pre-inoculation of AM and <i>Rhizobium leguminosarum</i> on the disease resistance of cowpea crops infected by pathogen - To produce healthy and vigorous seedlings of cowpea crops	Net House, SSD, Joydebpur, Gazipur
968	Effect of Arbuscular mycorrhizal fungi and phosphorus on vegetables, spices and legume crops	- To study the effect of combined use of arbuscular mycorrhiza and phosphorus on the performing of vegetables spices and fruit crops under field condition - To reduce to use of P-fertilizer for vegetables, spices and legume crops	Joydebpur

Sl.	Title of experiment	Objectives	Location(s)
969	Effect of biofertilizer, vermicompost and chemical fertilizers on cowpea	- To study the effect of bio-fertilizer and vermicompost on yield of cowpea - To find out nutrient uptake as influence by bio-fertilizer and vermicompost - To reduce the chemical fertilizer in cowpea cultivation	Joydebpur, Jamalpur
970	Study on the rhizobial population and other soil microorganism status of different soils (AEZs) of Bangladesh	- To study the native rhizobial and other soil microorganism population of different soils of Bangladesh - To know the effect of climate change on the rhizobial population and other soil microorganisms	Different AEZs of Bangladesh.
971	Effect of cropping pattern and seasonal variation on soil microbial biomass carbon and nitrogen in different AEZs soil of Bangladesh	- To determine soil microbial biomass carbon and nitrogen in different cropping pattern - To find out the seasonal variation of microbial biomass carbon and nitrogen and - To monitor the soil fertility status	Joydebpur
972	Study on symbiotic, biochemical and molecular characterization of Rhizobial strains isolated from different AEZs and their PGPR activity and N ₂ fixation properties in pulse and oil seed legume	- To isolate and identify effective rhizobial strains from acidic, drought, saline and hilly areas of Bangladesh. - To measure nodulation test of collected strains in respective crops. - To measure plant growth promoting activity and N fixation capacity in respective crops. - Genomic DNA isolation, PCR amplifications and sequencing to know family, genus and species of effective rhizobial strains.	Rahmatpur, Jessore, Joydebpur, Hathazari, Rajshahi, Dinajpur, Rangpur, Ishurdi, Khagrachari, Raikhali, Patuakhali, Sathkhira, Noakhali, Cox's Bazar, Sylhet and different AEZs.
973	Response of lentil varieties to elite strains of <i>Rhizobium</i>	- To study the response of <i>Rhizobium</i> inoculation with different varieties of lentil - To study the effect of <i>Rhizobium</i> inoculation and varieties at different locations - To popularize the use of <i>Rhizobium</i> inoculant instead of applying urea-N for lentil production	Joydebpur, Ishurdi, Jamalpur and Jashore
974	Validation of biofertilizer on different legumes (Mungbean, lentil, chickpea, groundnut, soybean etc.)	To popularize the rhizobium biofertilizer technology for producing pulse and oilseed legumes in the farmer's level.	Kushtia, Faridpur, Patuakhali, Bhol a, Sathkhira, Sylhet, Cox's Bazar, Meherpur, Jessore, Jamalpur Rajshahi, Pabna, Rangpur, Kishore gonj, Noakhali, Lakhmipur,

Sl.	Title of experiment	Objectives	Location(s)
975	Effect of Arbuscular mycorrhizal inoculation on maize at different salinity levels	- To evaluate the role of AMF and the percentage of AM colonization on growth and nutrient uptake of maize under salinity stress condition. - To observe the effect of AM under salinity stress condition. - In order to further understand salt tolerance mechanisms in inoculated plants.	Joydebpur
976	Effect of bio-fertilizer and chemical fertilizers on nodulation pattern, nodule initiation date and yield of pulse crop varieties	- To know the microbial population status, nodulation pattern and nodule initiation date of chickpea varieties. - To increase the yield of chickpea by using bio-fertilizer with low input cost	BARI, Gazipur, Jamalpur and RARS Ishurdi, Pabna.
977	Effect of sterilization of peat on survival of microbial population at two storage condition	To know the survival of <i>Rhizobium</i> in inoculant using different autoclave process and storage condition	SSD, BARI, Gazipur and BAEC, Savar, Dhaka
978	Effect of Arbuscular mycorrhizal fungi, biochar and vermicompost on maize in saline soil	To evaluate the effect of indigenous Arbuscular Mycorrhizal Fungi (AMF), biochar and vermicompost on nodulation, colonization and yield character of maize in 8 dS m⁻¹ saline soil.	Net house, Soil Science Division, BARI, Joydebpur, Gazipur.
979	Isolation of salt tolerant <i>Rhizobium</i> and their characterization, plant growth promoting and symbiotic performance on pulse and oilseed legume	- To isolate and identify effective rhizobial strains from coastal saline areas of Bangladesh. - To characterize morphological, biochemical and PGPR of effective rhizobial strains - To measure nodulation test of collected strains in respective crops.	Noakhali, Lakhmipur, Cox's Bazar, Chittagong, Satkhira, Bhola, Borguna, Patuakhali, Satkhira
980	DNA isolation, molecular characterization and gene sequences of salt tolerant rhizobial strains and their symbiotic effect on soybean and groundnut at different salinity level	- To Isolate DNA, molecular characterize and gene sequence of effective salt tolerant bacteria under stress condition. - To measure stress related enzyme activity soybean and groundnut - To measure N fixation capacity and growth performance of soybean and groundnut at different salinity level	Net house, Soil Science Division, BARI, Joydebpur, Gazipur.
981	Salt tolerant bacterial performance on soybean and groundnut in saline stress coastal region of Bangladesh	- To check the infection ability of <i>Rhizobium</i> on soybean and groundnut roots in native saline stress condition - To measure N fixation capacity, growth and yield performance of soybean and groundnut	Subornocho, Noakhali; Kuruskul, Cox's Bazar; Kuakata, Patuakhali, and Benerpota, Satkhira
982	Effects of biofertilizer, biochar and chemical fertilizers on yield and qualitative properties of	To study the effects of bio-fertilizer and biochar on yield and qualitative properties of groundnut	Joydebpur, Gazipur

Sl.	Title of experiment	Objectives	Location(s)
	Groundnut-Dhaincha-T.aman rice cropping pattern	- To reduce the use of chemical fertilizer in groundnut and rice cultivation - To estimate the nutrient uptake by crops and recording other quality of the soil	
983	Isolation of phosphate solubilizing bacteria and their efficacy on the growth of barley	- To isolate the phosphate solubilizing bacteria (PSB) from rhizospheric soil from different AEZs of Bangladesh - To evaluate the efficacy of PSB on growth of barley - To monitor the soil fertility status	BARI, Gazipur
984	Effect of Different Biofertilizers on the Growth and Yield of Onion	To find out the effectiveness of different biofertilizers for minimizing the use of chemical N and P in respect of growth and yield of Onion.	BARI, Gazipur
PLANT PATHOLOGY DIVISION			
985	In vitro screening of endophytic microorganism against wilt disease causing pathogen <i>Nalanthamala psidii</i> of guava	To find out endophytic biocontrol agent against <i>Nalanthamala psidii</i>	BARI, Gazipur
986	Identification and characterization of <i>Alternaria</i> spp. collected from different solanaceous and cruciferous crops of Gazipur	To study the variability of <i>Alternaria</i> spp. isolated from different solanaceous and cruciferous crops.	BARI, Gazipur
987	Isolation, identification and molecular characterization of causal organisms of chilli anthracnose	- To identify the pathogens responsible for chilli anthracnose. - To preserve the isolated pathogens.	BARI, Gazipur
988	Identification of associate pathogens of imported vegetable seeds in Bangladesh	To identify different pathogens associated with imported vegetable seeds.	BARI, Gazipur
989	<i>In vitro</i> evaluation of antifungal activity of cinnamon powder against <i>Aspergillus</i> sp.	To find out effectiveness of cinnamon powder as an antifungal element	BARI, Gazipur
990	Effect of <i>Trichoderma harzianum</i> on survival of Sclerotia of <i>Sclerotinia sclerotiorum</i> in soil	To find out antagonistic effect of <i>Trichoderma harzianum</i> on sclerotia of <i>S. sclerotiorum</i>	BARI, Gazipur
991	Yield loss assessment of lentil varieties due to stemphylium Blight disease	To measure and quantify the loss of yield in different lentil varieties due to Stemphylium blight disease.	Ishurdi
992	Selection of resistant guava seedlings against <i>Nalanthamala psidii</i> wilt disease pathogen	To evaluate guava seedlings against <i>Nalanthamala psidii</i>, wilt disease causing pathogen	BARI, Gazipur
993	Screening of onion varieties and lines against purple blotch disease	To find out the resistant varieties/lines against purple blotch disease.	BARI, Gazipur

Sl.	Title of experiment	Objectives	Location(s)
994	Screening of lentil lines against Stemphylium blight disease	• To find out the resistant lines/varieties against Stemphylium blight of lentil	Ishurdi, Pabna
995	Screening of pumpkin lines against powdery mildew disease	• To find out the resistant lines/varieties against the disease	Ishurdi, Pabna
996	Screening of mustard varieties/lines against Alternaria blight and white mold (<i>Sclerotinia sclerotiorum</i>) disease	• To select resistant sources against the white mold disease	BARI, Burirhat
997	Evaluation of new fungicides against early blight of tomato	• To find out the appropriate chemical fungicide to control the disease	BARI, Gazipur
998	Evaluation of new fungicides against early blight of tomato	• To find out the appropriate chemical fungicide to control the disease	Jessore
999	Effect of fungicides in controlling Phomopsis blight and fruit rot disease of brinjal	• To study the efficacy of different new fungicides for controlling Phomopsis blight and fruit rot of brinjal.	BARI, Gazipur
1000	Evaluation of fungicides in controlling powdery mildew of pumpkin	• To find out the effective fungicide(s) in controlling powdery mildew of pumpkin.	BARI, Gazipur
1001	Efficacy of new fungicides in controlling powdery mildew of sweet gourd	• To find out the effective fungicide(s) in controlling powdery mildew of sweet gourd.	BARI, Gazipur
1002	Evaluation of new fungicides against late blight of potato	• To find out the appropriate chemical fungicide to control the disease	Jamalpur BSPC, Debiganj Rangpur and Bogra
1003	Efficacy of different new fungicides in controlling sigatoka disease of banana	• To find out the effective fungicides in controlling sigatoka disease of banana	Bogura
1004	Efficacy of different new fungicides in controlling sigatoka disease of banana	• To find out the effective fungicides in controlling sigatoka disease of banana	BARI, Gazipur
1005	Evaluation of different new fungicides in controlling anthracnose of chilli	• To find out an effective chemical in controlling Anthracnose of Chilli	BARI, Gazipur
1006	Management of purple blotch disease of onion seed crop through fungicides	• To study the efficacy of nine different fungicides for controlling purple blotch disease of onion seed crop.	BARI, Gazipur
1007	Effect of bio-fungicide in controlling purple blotch disease of onion	• To find out the effective bio-fungicides against purple blotch of onion	Jashore
1008	Effect of fungicides in controlling purple blotch disease of onion	• To find out the effective fungicides against purple blotch of onion	Jashore
1009	Evaluation of new fungicides for controlling purple blotch disease of onion	• To find out the effective fungicides against purple blotch disease of onion.	BARI, Gazipur

Sl.	Title of experiment	Objectives	Location(s)
1010	Efficacy of fungicides against white mold of sunflower	• To evaluate the efficacy of different fungicides for controlling white rot of sunflower	BARI, Burirhat
1011	Efficacy of new fungicides in controlling late blight of potato	• To find out the appropriate chemical fungicide to control the disease	Jamalpur, Rangpur, and Bogra
1012	Effect of different chemicals in controlling common scab disease of potato	• To evaluate the efficacy of different chemicals against common scab disease of potato	Burirhat, Rangpur
1013	Efficacy of new fungicides in controlling Alternaria blight disease of mustard	• To find out the effective fungicides against Alternaria blight disease of mustard	Jamalpur
1014	Effect on planting time and spray schedule for controlling purple blotch of onion	• To find out optimum planting time and actual time of spray for controlling purple blotch of onion	Jashore
1015	Management of leaf spot disease of aloe vera	• To find out the effective management practice against leaf spot and leaf blight of aloe vera	Ishurdi, Pabna
1016	Validation of score and Rovral against Alternaria leaf spot and flower blight disease of marigold	• To confirm the effectiveness of fungicides against Alternaria leaf spot and flower blight disease of marigold	Ishurdi, Pabna
1017	Effect of sowing date and fungicide spray on the incidence of Sclerotinia stem rot and yield of sunflower	• To find out the suitable planting date to manage the disease.	Ishurdi
1018	Evaluation bio-fumigation with mustard to control bacterial wilt in tomato	• To find out effectiveness of mustard as a bio-fumigant element to control bacterial wilt of tomato	BARI, Gazipur
1019	Screening of new bio-fungicides against powdery mildew disease of pumpkin	• To find out effective bio-fungicides against powdery mildew disease of pumpkin	BARI, Gazipur
1020	Screening of new bio-fungicides against seedling disease caused by <i>Sclerotium rolfsii</i> and <i>Fusarium oxysporum</i> of lentil	• To find out effective biological management against foot and root rot of lentil	Jashore
1021	Evaluation of microbial products for controlling Fusarium wilt of chickpea	• To observe the efficacy of microbial products in controlling Fusarium wilt of Chickpea.	BARI, Gazipur
1022	Screening of new bio-fungicides against seedling disease caused by <i>Sclerotium rolfsii</i> of barley	• To identify effective new bio-fungicides against soil borne pathogens	BARI, Gazipur
1023	Screening of composts and biochars against seedling disease caused by <i>Sclerotium rolfsii</i> of barley	• To identify effective new bio-fungicides against soil borne pathogens	BARI, Gazipur
1024	Management of foot rot and wilt disease of chilli	• To develop wilt and foot rot disease management technology of Chilli.	BARI, Gazipur

Sl.	Title of experiment	Objectives	Location(s)
1025	Effect of plant activators on Fusarium wilt of chilli under field condition	• To find out effective plant activator for controlling Fusarium wilt of chilli	Jashore
1026	Integrated management of white mold disease of red salvia and marigold	• To reduce disease incidence and increase crop yield	BARI, Gazipur
1027	Management of powdery mildew of pumpkin on floating bed cum trellis	• To find out an effective control measure against powdery mildew of pumpkin	Rahmatpur
1028	Studies on seed transmission of <i>Xanthomonas campestris</i> pv. <i>Campestris</i> in cabbage	• To know the level of seed infection to initiate and cause severe black rot of cabbage in Bangladesh.	BARI, Gazipur
1029	Prevalence of <i>Ralstonia solanacearum</i> on cold storage and field potato	• To know the status of <i>Ralstonia solanacearum</i> on tuber	BARI, Gazipur
1030	Molecular and biochemical approach for the detection of <i>Ralstonia solanacearum</i> from potato	• To validate molecular technique for the identification of <i>R. solanacearum</i> from potato.	BARI, Gazipur
1031	The efficacy test of <i>bacillus</i> -based products (EMOs) for controlling greening disease of sweet orange	• To control the greening disease (<i>Candidatus liberibacter</i> spp.) of BARI Malta 1	Hathazari
1032	The efficacy test of EMOs (<i>Bacillus oryzicola</i> YC7007 and <i>bacillus velezensis</i> BARI/hat/gl6) for controlling bacterial wilt in <i>Solanaceous</i> vegetable	• To control the wilt of eggplant in very susceptible variety of BARI Bt Begun 2	Hathazari and Pathology Lab. BARI, Gazipur.
1033	Study of Propiconazole degraded <i>Bacillus velezensis</i> BARI/hat/gl6 for suppressing <i>Lasiodiplodia theobromae</i> in mango	• To find out degraded the proportion of Triazole Propiconazole from the mango considering the human health • To control the stem end rot	Hathazari and Pathology Lab. BARI, Gazipur
1034	Management of bacterial wilt disease of ginger through physical seed sorting	• To observe the effect of seed health on bacterial wilt disease of ginger. • To suggest suitable seed that will be helpful for minimization of loss.	BARI, Gazipur
1035	Evaluation of selected okra lines resistant to okra Yellow Vein Mosaic Virus (OKYVMV)	• To find out OKYVMV resistant/ tolerant okra variety/line.	BARI, Gazipur
1036	Screening of cucumber germplasm against cucumber mosaic virus (CMV)	• To find out resistant/tolerant cucumber germplasm(s) against CMV.	BARI, Gazipur
1037	Identification of the citrus Tristeza virus genotypes and their interactions on different citrus species	• To detect Citrus Tristeza virus and their interactions on different citrus species.	BARI, Gazipur

Sl.	Title of experiment	Objectives	Location(s)
1038	Studies on symptomatic variability of PRSV-P	To characterize the genetic diversity of PRSV-P isolates occurring in the major papaya producing regions in Bangladesh.	BARI, Gazipur
1039	Survey, isolation and identification of plant-parasitic nematodes of different fruits of Bangladesh	- To know the prevalence of plant-parasitic nematodes in some economically important fruit crops in Bangladesh - To identify those nematodes based on morphological characters	BARI, Gazipur
1040	Screening of bio-fungicides against root-knot nematode <i>Meloidogyne incognita</i> of tomato	To develop effective, cheap and eco-friendly package for root knot diseases of tomato	BARI, Gazipur
1041	Screening of bio-fungicides against bacterial wilt and root-knot nematode of tomato	To develop effective, cheap and eco-friendly package for root knot and bacterial wilt diseases of tomato	BARI, Gazipur
1042	Development of biorational management package against root knot nematode and bacterial wilt of tomato	To develop effective, cheap and eco-friendly package for root knot and bacterial wilt diseases of tomato	BARI, Gazipur
1043	Development of bio-rational management package for Fusarium wilt and Sigatoka diseases of banana	To develop integrated management package(s) against panama and sigatoka diseases of banana	OFRD, Kushtia and Narshingdi
1044	Development of biorational management package against root knot nematode and bacterial wilt of eggplant	To develop effective, cheap and eco-friendly package for root knot and bacterial wilt diseases of eggplant	BARI, Gazipur
1045	Development of bio-agent based management practice against foot and root rot of lentil	To find out effective biological management against foot and root rot of lentil	Jashore
1046	Survey, isolation and identification of major diseases of flowers (Gerbera, Tuberose and Gladiolus)	- To identify new diseases as well as previously recorded diseases of the flowers. - To assess the disease status (severity and estimated losses) of flowers	BARI, Gazipur
1047	Survey on occurrences of bacterial wilt disease of Bt-brinjal in Bangladesh	To find out the wilt disease infection scenario in Bt-brinjal	BARI, Gazipur
1048	Survey on pre and post-harvest diseases of onion in Bangladesh	To assess the pre-harvest and post-harvest diseases status of onion.	BARI, Gazipur
1049	Survey of major diseases of cashew nut and coffee at hilly areas in Bangladesh	- To find out the present status of major diseases of Cashew nut and Coffee in Bangladesh - To identify the causal organism of major diseases of Cashew nut and Coffee in Bangladesh	BARI, Gazipur
1050	Survey of diseases of Malta in southern region	- To identify the diseases of Malta. - To determine the severity of the diseases	Ramatpur, Barishal

Sl.	Title of experiment	Objectives	Location(s)
1051	Survey and identification of watermelon diseases in Bangladesh	• To identify watermelon disease.	BARI, Gazipur
1052	Survey of aloe vera plant diseases	• To identify new diseases as well as existing diseases of Aloe vera plant.	Ishurdi, Pabna
1053	Survey of major diseases of selected fruits and vegetables in northern region	• To know the disease status of selected fruits and vegetables and to characterize the causal agents of diseases	Rangpur
1054	Validation of integrated management package against cmv of chilli (<i>Capsicum annum</i> L.)	• To confirm the effectiveness of management package against CMV	BARI, Gazipur and SRC, Bogora
1055	Demonstration on integrated management of Fusarium wilt and Nemic disease of banana	• To validate the integrated package against Fusarium wilt and nemec disease of banana	Ghagurduar, Shibgonj, Bogura
1056	Validation of score and roval against alternaria leaf spot and flower blight disease of marigold	• To confirm the effectiveness of fungicides against Alternaria leaf spot and flower blight disease of marigold	Ishurdi, Pabna
1057	Validation of fungicidal management technology against foliar diseases (purple blotch, stemphylium leaf blight and botrytis leaf blight) of onion	• To validate of management technology in controlling foliar diseases of onion • To increase bulb yield	Burirhat, Rangpur
ENTOMOLOGY DIVISION			
1058	Evaluation of different management packages against flower thrips and pod borers of mungbean	• Finding out the effectiveness of integrated management packages against flower thrips and pod borers of mungbean • Providing indication of integrated management approach for cost effective mungbean cultivation	Gazipur
1059	Evaluation of several management packages against pod borer, <i>Helicoverpa armigera</i> infesting chickpea	• To evaluate the efficacy of different bio-rational based IPM packages against pod borer in chickpea	Gazipur
1060	Comparative evaluation of different IPM packages against major insect pests of brinjal	• To evaluate different IPM packages for the control of major insect pests of brinjal • Production of toxic synthetic chemical pesticide free brinjal	Gazipur
1061	Evaluation of new dimensional management options against sucking pests of brinjal	• To obtain a suitable management option against sucking pests of brinjal through new microbial pesticides	Gazipur
1062	Management of whitefly, <i>Bemisia tabaci</i> for suppressing tomato leaf curl virus	• To develop a management option for whitefly, <i>Bemisia tabaci</i> for suppressing tomato leaf curl virus	Gazipur
1063	Sustainable management options against whitefly, whitefly-vectored begomoviruses and fruitworm in tomato	• To develop suitable IPM packages for the control of major insect pests of tomato and • To produce toxic chemical pesticides free tomato	Gazipur

Sl.	Title of experiment	Objectives	Location(s)
1064	Development of bio-rational management package against major insect pests attacking country bean	• To develop IPM package(s) against major insect pests infesting country bean. • To produce toxic pesticide free country bean	Gazipur
1065	Development of bio-rational based management package(s) against common cutworm, <i>Spodoptera litura</i> infesting cabbage	• To develop bio-rational based IPM package(s) for the management of common cutworm infesting cabbage	Gazipur
1066	Evaluation of some bio-pesticides against diamondback moth, <i>Plutella xylostella</i> attacking cauliflower	• To evaluate of some bio-pesticides against diamondback moth, <i>Plutella xylostella</i> attacking cauliflower	Gazipur
1067	Development of bio-rational management approach against insect pest complex of okra	• To develop a bio-rational based IPM package to manage the insect pest complex of okra.	Gazipur
1068	Efficacy of different pheromone impregnated sticky traps against fruit fly attacking bitter gourd	• To test the efficacy of different pheromone impregnated sticky traps against fruit fly attacking bitter gourd	Gazipur
1069	Survey and monitoring of incidence of leaf miner in cucumber and its natural enemies	• To document the incidence of leaf miner in cucumber • To record the natural enemies of cucumber leaf miner	Gazipur
1070	Population dynamics and bio-rational management of whitefly complex infesting guava	• To document the damage severity and seasonal population fluctuation of whitefly complex attacking guava • To develop bio-rational based management option against whitefly complex of guava.	Gazipur
1071	Assessment of the pest status of asian citrus psyllid (<i>Diaphorina citri</i>) and documentation of its natural enemies	• To document the status of Asian citrus psyllid (<i>Diaphorina citri</i>) and its natural enemies.	Gazipur
1072	Seasonal fluctuation of major insect pests and their natural enemies of citrus in Gazipur region	• To know the status of major insect pest of citrus and their natural enemies.	Gazipur
1073	Biorational based management of major insect pests of chilli	• To find out the best management approach to combat major insect pests of chilli	Gazipur
1074	Efficacy of <i>Trichogramma pretiosum</i> and <i>Telenomus remus</i> for parasitizing the eggs of fall armyworm in laboratory	• To know the effectiveness of <i>Trichogramma pretiosum</i> and <i>Telenomus remus</i> as egg parasitoids of Fall armyworm	Gazipur
1075	Mass rearing of two different egg parasitoids (<i>Trichogramma pretiosum</i> and <i>Telenomus remus</i>) on eggs of <i>Corcyra cephalonica</i> under laboratory condition	• To develop mass rearing protocol of <i>Trichogramma pretiosum</i> and <i>Telenomus remus</i>	Gazipur

Sl.	Title of experiment	Objectives	Location(s)
1076	Host and oviposition preference of <i>Trichogramma pretiosum</i> and <i>Telenomus remus</i> on the eggs of different lepidopteran insect pests in laboratory	• To know the suitability of different lepidopteran host species for development, and reproductive performance of <i>Trichogramma pretiosum</i> and <i>Telenomus remus</i>	Gazipur
1077	Development of mass rearing protocol of prey mite (<i>Tetranychus urticae</i>)	• To develop mass rearing technique(s) of prey mite (<i>Tetranychus urticae</i>) for rearing of predatory mite	Gazipur
1078	Development of mass rearing protocol of predatory mite (<i>Neoseiulus longispinosus</i>)	• To develop suitable protocols for mass rearing of predatory mites (<i>Neoseiulus longispinosus</i>)	Gazipur
1079	Development of eco-friendly management approach against pulse beetle, <i>Callosobruchus chinensis</i> (Coleoptera: Bruchidae) in stored mungbean	• To develop an effective management option against pulse beetle	Gazipur
1080	Determination of pre harvest interval for lambda-cyhalothrin, chlorpyrifos, cypermethrin and fenvalerate in major vegetables	• To determine the pre harvest interval (PHI) for lambda-cyhalothrin, chlorpyrifos, cypermethrin in spinach and for fenvalerate in yard long bean.	Gazipur
1081	Determination of pre harvest interval for cypermethrin and lambda-cyhalothrin in mango	• To determination of pre harvest interval (PHI) for cypermethrin and lambda-cyhalothrin in mango	Gazipur
1082	Study on residue degradation of newly registered along with some commonly used insecticides in selected vegetables under supervised field trial	• To determine the rate of degradation of residue level of lambda-cyhalothrin + fenvalerate in lettuce and cypermethrin + chlorpyrifos in red amaranth.	Gazipur
1083	Quantification of pesticide residue load in major vegetables collected from different regions of Bangladesh	• To detect and quantify the number of left-over residues of pesticides in different vegetable samples collected from local market of different regions of Bangladesh	Gazipur
1084	Development of analytical method for the determination of fipronil using Gas Chromatography Triple Quadrupole Mass Spectrometry	• To develop and validate an analytical method for the analysis of fipronil using gas chromatography triple quadrupole mass spectrometry	Gazipur
1085	Monitoring of multiple pesticide residues in major fruits collected from different regions of Bangladesh	• To develop and validate an analytical method for the analysis of commonly used pesticides in mango, litchi, guava, dragon fruit and ber using QuEChERS Extraction and Gas Chromatography. • To monitor pesticide residues in mango, litchi, guava, dragon fruit and ber collected from different regions of Bangladesh.	Gazipur
1086	Monitoring of multiple pesticide residues in betel leaf collected	• To develop and validate an analytical method for the analysis of pesticide residues in betel leaf.	Gazipur

Sl.	Title of experiment	Objectives	Location(s)
	from different regions of Bangladesh	To monitor pesticide residues in betel leaf samples collected from different regions of Bangladesh.	
1087	Determination of multiple pesticide residues in capsicum, green chilli, carrot, lettuce leaf and coriander leaf collected from different markets of Bangladesh	- To develop and validate an analytical method for the analysis of commonly used pesticides in carrot, capsicum, green chilli, lettuce leaf and coriander leaf using QuEChERS Extraction and Gas Chromatography. - To monitor pesticide residues in carrot, capsicum, green chilli, lettuce leaf and coriander leaf collected from different regions of Bangladesh.	Gazipur
1088	Determination of pre harvest interval for neonicotinoid insecticides in selected vegetables under supervised field trial	To determine the pre harvest interval (PHI) of acetamiprid in radish.	Gazipur
1089	Determination of pesticide residues in poultry meat using QuEChERS Extraction and Gas chromatography	To monitor pesticide residues in poultry meat using QuEChERS Extraction and Gas Chromatography.	Gazipur
1090	Risk assessment of selected pesticide residues in major fruits and vegetables	To assess the health risk of the selected pesticide residues found in mango, litchi, guava, ber, cauliflower and hyacinth bean.	Gazipur
1091	Determination of abamectin residue using High Performance Liquid Chromatography	To develop and validate an analytical method for the analysis of abamectin using High Performance Liquid Chromatography (HPLC).	Gazipur
1092	Detection and quantification of different pesticides residue in dry fish collected from different locations	- To validate the detection and quantification method in dry fish and - To detect and quantify the pesticide residue levels in farm gate & marketed dry fish	Gazipur
1093	Monitoring of pesticide residue in dry fruits	- To validate the detection and quantification method in dry fruits and - To monitor pesticide residues in dry fruit collected from different markets of Bangladesh.	Gazipur
1094	Detection and quantification of pesticide residue in herbal medicine	- To develop and validate an analytical method for the analysis of pesticide residues in herbal medicine. - To monitor pesticide residues in herbal medicine collected from different markets of Bangladesh.	Gazipur
1095	Detection and quantification of pesticide residue in onion	- To develop and validate an analytical method for the analysis of pesticide residues in onion. - To detect and quantify the pesticide residue level in marketed onion	Gazipur

Sl.	Title of experiment	Objectives	Location(s)
1096	Determination of multiple pesticide residue in milk collected from different markets of Bangladesh	- To develop and validate an analytical method for the analysis of pesticide residues in milk. - To monitor pesticide residues in milk collected from different markets of Bangladesh	Gazipur
1097	Development of analytical method for the determination of clothianidin residue using High Performance Liquid Chromatography	To develop and validate an analytical method for the analysis of clothianidin using high performance liquid chromatography	Gazipur
1098	Determination of organochlorine pesticide residue in herbal medicine collected from different markets of Bangladesh	- To develop and validate an analytical method for the analysis of pesticide residues in herbal medicine. - To monitor organochlorine pesticide residues in herbal medicine collected from different markets of Bangladesh	Gazipur
1099	Purity analysis of different brands of marketed pesticides	- To quantify the active ingredient, present in different marketed brands of selected pesticides and - To know the purity level of different formulated products of different pesticides	Gazipur
ON-FARM RESEARCH DIVISION			
1100	Effect of potassium fertilizer on the yield of Mukhikachu	- To develop potassium rate for the production of Mukhikachu - To develop a suitable variety for Mukhikachu production in Fulbaria - To increase yield and economic return of the farmers	Fulbaria, Mymensingh
1101	On-farm fertilizer trial for Potato-Maize-T. Aman Rice cropping pattern in Rangpur Region	To find out the optimum fertilizer dose of the cropping pattern Potato-Maize-T. Aman Rice	Rangpur
1102	Effect of Boron on the yield of Foxtail millet in Northern Charland	- To identify the optimum dose of Boron for Foxtail millet production in northern Charland - To increase productivity and profitability of the farmers	Char Chilmari and Char Thetrai, Ulipur, Kurigram
1103	Response of Lentil to zinc, boron, and molybdenum in the soils of Karatoa Bangali Floodplains soils of Bogura	To find out the optimum doses of Zn, Band Mo for Lentil cultivation	On-Station, Bogura
1104	Effect of phosphorus on the growth and yield of lentil	To determine the appropriate level of phosphorus fertilizer on yield and yield attributes of lentil	Ganggarampur, Pabna
1105	Effect of nitrogen on crop productivity and soil health under different rice-based cropping systems	To study the effect of nutrient management and cropping system on the crop productivity	Pabna

Sl.	Title of experiment	Objectives	Location(s)
		and soil health under different rice-based cropping systems	
1106	Effect of vermicompost on irrigation management, growth, yield and fruit quality of watermelon in coastal saline soil	• To reduce irrigation frequency in watermelon field. • To know the effect of vermicompost on growth and yield of watermelon • To enhance fruit quality (sweetness & color) of watermelon	Amtoli, Borguna & Kuakata, Patuakhali
1107	Fertilizer recommendation for Sunflower-T. Aus- T. Aman cropping Pattern in coastal saline soil	• To develop pattern-based fertilizer recommendation for Sunflower – Aus - Aman rice • To reduce production cost minimizing fertilizer doses of the crops of the pattern. • To conserve soil health through optimum use of fertilizers.	Kalapara, Dumki Patuakhali and Amtoli, Barguna
1108	Effect of NPK Briquette on Yield of Cucumber at AEZ-18	• To find out the response of NPK briquette on cucumber • To compare the doses of NPK briquette than other application	Charfashion and Bhola Sadar
1109	Effect of foliar application of boron on the growth and yield of Mungbean	• To find the efficacy of Boron foliar spray on Mungbean yield	Gournadi
1110	Nutrient management for mango-based agroforestry system in Cumilla region	• To get higher yield from agroforestry system. • To increase production and economic return of farmers	Cumilla and Chandpur
1111	Effect of boron on the growth and seed yield of sunflower in acidic soil of Sylhet region	• To find out the suitable dose of boron for sunflower cultivation in acidic soil	Kamal Bazar and Moulvibazar
1112	Effect of lime on the growth and seed yield of sunflower in acidic soil of Sylhet region	• To find out the suitable lime dose for production of sunflower in acidic soil	Kamal Bazar and Moulvibazar
1113	On-farm trial on biofertilizer of different legume crops (Mungbean, lentil, chickpea, groundnut, soybean etc.)		Lentil: Feni Groundnut: Noakhali Soybean: Noakhali, Laxmipur
1114	Nutrient management for onion bulb production of BARI Piaz-4	• To determine suitable nutrient package for Onion • To increase sustainable yield of Onion bulb production	FSRD site Faridpur and MLT site, Rajbari
1115	Integrated nutrient management of BARI Shahebikachu-1 in Southern region of Bangladesh	• To find out appropriate doses of fertilizers for BARI Shahebikachu-1 production.	MLTs, Gournadi
1116	Effect of Boron fertilizers on relay lentil in southern region of Bangladesh	• To find out the response to Boron fertilizer on relay Lentil in southern region	MLT site, Gournadi, Barishal

Sl.	Title of experiment	Objectives	Location(s)
1117	Effect of organic fertilizer to mitigate soil salinity and maximize yield of potato in coastal saline soil	• To assess the effects of organic fertilizer on Potato yields; • To increase soil fertility and sustain soil productivity	MLT site Kuakata, Patuakhali and Amtoli, Borguna
1118	Performance of Water hyacinth residue as an organic manure for cauliflower production at AEZ-14	• To find out alternate source of organic manure • To popularize the use of residue of water hyacinth	Gopalganj Sadar and Tungipara; Najirpur, Pirojpur
1119	Effect of rice straw burn ash on soil properties and yield of mustard	• To select suitable Mustard variety under rice straw ash cultivation practice for higher yield and profit.	MLT site, Hobiganj
1120	Effect of lime and fertilizer management on yield of onion in acidic soil	• To find out the economic dose of lime and fertilizers for Onion cultivation	FSRD site and MLT sites
1121	Effect of lime and fertilizer management on the growth and yield of Mukhikachu in acidic soils of Sylhet region	• To find out the economic dose of lime and fertilizer for the production of mukhikachu	MLT sites Moulvibazar and Shayestaganj
1122	Fertilizer management of zero tillage potato in saline areas	• To determine the appropriate nutrient management of zero tillage Potato in saline area	Dacope, Khulna
1123	Nutrient management for yield improvement of BARI Bt Begun in Mymensingh region	• To develop a optimum fertilizer package for BARI Bt Begun-4 • To increase productivity as well as maximize farmers income	Gouripur and Trishal upazila of Mymensingh district
1124	Effect of different fertilizers doses on chilli with onion intercropping system at charland of Mymensingh	• To find out a optimum fertilizer dose for Chilli and Onion intercropping system • To increase yield and economic return	Gouripur and Trishal upazila of Mymensingh district
1125	Validation of fertilizer management on fruit yield of BARI Bt Begun	• To validate the effect of fertilizer management on fruit yield of BARI Bt. Brinjal-4	Shibaloya, Manikganj
1126	Development of fertilizer recommendation for Maize-T. Aus-T. Aman cropping pattern in Karatoa Bangali floodplain (AEZ-4)	• To find out a suitable and economic fertilizer dose for sustainable crop productivity and soil fertility for Maize-T. Aus-T. Aman cropping pattern • To increase the productivity and income of the farmers'	Gabtolli/Sherpur
1127	Development of fertilizer recommendation for Lentil-Maize-T. Aman rice cropping pattern	• To find out a cropping pattern based economically viable fertilizer dose for AEZ 11. • To increase crop productivity and sustain soil health	Paba, Rajshahi
1128	Development of fertilizer package for Bitter gourd production in charland	• To find out suitable fertilizer package for Bitter gourd production in Charland • To increase farmers income	Char Begumganj, Kurigram

Sl.	Title of experiment	Objectives	Location(s)
1129	Effect of nutrient management on the yield of onion	• To see the effect of plant nutrient management approaches on growth and yield of Onion • To increase Onion production and farmers income	, Ganggarampur, Pabna/MLT site, Kashinathpur, Pabna
1130	Development of fertilizer recommendation for four crop-based Potato-Boro rice-Yard long bean-T. Aman rice cropping pattern	• To develop an optimum fertilizer dose for higher productivity and profitability at Mymensingh region • To increase total productivity and farmers income	Gouripur, Mymensingh
1131	Effect of fertilizer application methods on Maize grown under strip tillage system in High Barind Tract	• To find out the best application methods for fertilizer application in RCT system for maize cultivation.	Godagari, Rajshahi
1132	Nutrient management of Betel nut	• To find out optimum fertilizer dose for betel nut • To increase production and farmers' income	Barisal, Sadar and Daulatkhan, Bhola
1133	Effect of different fertilizer management packages on yield of Soybean in Chandpur	• To see the performance of different fertilizer packages on yield of Soybean	Chandpur
1134	Effect of liming on flowering, fruit set, fruit retention, yield and quality of Lotkon	• To observe the effectiveness of liming on flowering, fruit set, fruit retention, yield and quality of Lotkon.	Narsingdi
1135	Effect of Zn on Lentil production in charland ecosystems	• To evaluate the response of Lentil to Zn fertilization • To find out a suitable dose of Zn for the maximization of Lentil yield in charland condition	Ulipur, Kurigram
1136	Effect of fertilizer doses on Turmeric at Madhapur Tract	• To find out the optimum fertilizer dose for Turmeric • To increase productivity and economic return of farmers	Modhupur, Tangail
1137	Integrated nutrient management for Bitter gourd cultivation in calcareous soil	• To determine suitable nutrient package for Bitter gourd • To increase sustainable yield of Bitter gourd	Sholakundu, Sadar, Faridpur
1138	Effect of liming on Mukhikachu	• To find out an optimum dose of lime for the cultivation of Mukhikachu at Mymensingh region • To increase yield and farmers' income	Phulbaria, Mymensingh
1139	Development of fertilizer package for Garlic-Maize-T. Aman rice cropping pattern in the charland	• To develop cropping system-based fertilizer dose for charland. • To increase crop productivity and sustain soil health	Ulipur
1140	Development of Potato-Maize-T. Aman rice cropping pattern against Wheat-Jute-T. Aman rice cropping pattern in char area of Kishoreganj	• To increase land use efficiency and total productivity • To increase farmers income and employment opportunity	Hossainpur, Kishoreganj

Sl.	Title of experiment	Objectives	Location(s)
1141	Improvement of Sweet Gourd-Kenaf-Fallow cropping pattern against existing cropping pattern in haor areas of Kishoreganj	• To develop two crops-based cropping patterns for haor areas. • To increase cropping intensity, productivity and income of farmers	Hossainpur, Kishoreganj
1142	Development of Potato-Red Amaranth-Cucumber-T. Aman cropping pattern against existing Maize-Fallow-T. Aman cropping pattern	• To increase cropping intensity • To increase yield and income of the farmers • To retain soil fertility	Hossainpur, Kishoreganj
1143	Effect of sowing date on yield performance of Garden pea variety (BARI Motorshuti-3)	• To determine the optimum sowing time for obtaining maximum yield of garden pea. • To increase farmers income	Tarakandi, Sherpur
1144	Effect of Plant spacing on the bulb yield of Onion	• To find out the optimum spacing of Onion bulbs production. • To increase total yield and farmer's income	Tarakandi, Sherpur
1145	Effect of intercropping Onion with okra at charland of Mymensingh	• To select a suitable intercrop combination in Onion-okra intercropping system • To obtain maximizing the yield of Onion and okra • To increase yield and income of farmers	Gouripur and Mymensingh sadar
1146	Effect of planting method of cucumber in AEZ-8 & 9	• To select a suitable planting method for cucumber in medium low land • To maximize the yield • To increase the income of farmers	Gouripur and Tarakanda site, Mymensingh
1147	Development of Sweet Potato-Jute-T. Aman cropping pattern against Fallow-Jute-T. Aman cropping pattern	• To develop an economically viable cropping pattern by inclusion of Sweet Potato in fallow-Jute-T. Aman cropping pattern • To increase cropping intensity as well as maximize farmers income	Netrokona
1148	Intercropping of Cabbage and Cauliflower with Sugarcane	• To find out the suitable crop for intercropping with Sugarcane • To increase productivity and return by intercropping system • To maximize land utilization	Atia, Delduar, Tangail
1149	Intercropping of Onion and Potato with Sugarcane	• To find out the suitable crop for intercropping with Sugarcane • To increase productivity and return by intercropping system • To maximize land utilization	Atia, Delduar, Tangail
1150	Intercropping of Potato with Brinjal	• To increase productivity and return by intercropping system • To maximize land utilization	Atia, Delduar, Tangail
1151	Intercropping of leafy vegetables with summer Maize in the farmers field at Manikganj	• To validate the leafy vegetables and summer Maize intercropping in farmers' field.	Pouli, Sadar Manikganj
1152	Development of Potato-Jute-T. Aman cropping pattern against	• To improve the existing cropping pattern by including new crop varieties.	Narsingdi

Sl.	Title of experiment	Objectives	Location(s)
	Wheat-Jute-T. Aman rice cropping pattern	• To increase crop yields and economic return of farmers.	
1153	Performance of intercropping Banana with vegetables	• To find out suitable intercrop combination. • To increase total productivity	Narsingdi
1154	Development of four crops-cropping pattern Potato-Potato-Jute-T. Aman against Tobacco-Maize-T. Aman	• To increase cropping intensity and crop productivity	Kishoreganj, Nilphamari
1155	Effect of seed Potato cutting dimension on the performance of Potato production planted with Potato planter	• To identify the suitable cutting dimension of seed Potato for production with Potato planter • To increase profitability of the farmers	Ajodhpur, Rangpur
1156	Development of Groundnut seed storage system at farmers level	• To identify the suitable storage system for quality Groundnut seed at farmer's level • To make availability of Groundnut seed at farmers level	Char Chilmari, Kurigram
1157	Development of alternate cropping Pattern Onion/Groundnut-T. Aman against of Groundnut – T. Aman in Charland area	• To increase cropping intensity and productivity in Charland • To increase productivity and profitability of the farmers	Char Chilmari and Char Thetrai, Ulipur, Kurigram
1158	Effect of sowing dates and varieties on early planted Potato	• To find out the suitable sowing date and variety (s) for early Potato cultivation	Rangpur
1159	Effect of mulching on growth and yield of Garlic	• To find out the effect of mulching on Garlic cultivation • To increase productivity and profitability of the farmers	Ranigonj&ARS Dinajpur
1160	Development of alternate cropping pattern Potato-Maize/vegetable - T. Aman rice against Potato-Maize -T. Aman rice	• To increase cropping intensity, productivity and profitability	MLT site, Sadar, Thakurgaon and MLT site Ranigonj, Dinajpur
1161	Effect of planting time on Sweet Potato in char land conditions	• To find out the suitable planting time of Sweet Potato varieties • To increase the productivity of sweet potato in char land conditions	Saghata, Gaibandha
1162	Development of alternate cropping pattern Mustard-Boro-T. Aman against Fallow-Boro-T. Aman in active Brahmaputra-Jamuna Floodplain of Gaibandha	• To intensify cropping system from double to triple. • To increase the system productivity and profitability	Saghata, Gaibandha
1163	Performance of Intercropping Chilli with Turmeric under Karatoa Bangali Floodplain Soils	• To see crops performances under a mixed cropping system • To observe the disease and insect infestations of the companion crops	Shibganj, Bogura
1164	Intercropping Taro (Mukhikachu) with Garlic under	• To see crops performances under a mixed cropping system	Shibganj, Bogura

Sl.	Title of experiment	Objectives	Location(s)
	Karatoa Bangali Floodplain Agro-Ecological Zone	To observe the pest reactions and profitability of the companion crops	
1165	Development of alternate cropping pattern Onion/Maize-T. Aus- T. Aman rice against Maize-T. Aus-T. Aman rice in Karatoa Banglali Floodplain	- To develop an intensified economically profitable cropping pattern over the existing Maize-T. Aus-T. Aman rice cropping pattern - To increase production and economic return	Sonatola/ Shibganj/ Sherpur MLT Site (AEZ 4), Bogura
1166	Effect of planting method on the yield of Lentil	- To know the performance of Lentils at different planting system - To study the effectiveness of minimum tillage systems in conserving the residual soil moisture	Gabtali and Sonatola, Bogura
1167	Improvement of Cropping Patterns with Summer Vegetables and T. Aus rice	To increase cropping intensity, productivity and profitability	Shyampur, Rajshahi
1168	Improvement of Onion based intensified cropping patterns against Onion-Jute-T Aman rice cropping pattern	To increase cropping intensity and productivity in the AEZ-11	Shyampur, Rajshahi
1169	Mixed cropping of Black cumin with Lentil at different seed ratios	- To find out suitable combination of Lentil and black cumin - To ensure the maximum utilization of the land for higher yield and income	Shyampur, Rajshahi and MLT site, Paba, Rajshahi
1170	Mixed cropping of Mustard with Lentil at a different seed ratio	- To determine the optimum seed for mustard mixed with lentil and grasspea - To increase cropping intensity - To increase productivity and income of the farmers	Shibpur and Paba, MLT site, Rajshahi
1171	Performance of mixed Lentil and Linseed under strip and conventional tillage method	- To assess the performance of lentil as mixed with linseed under the strip and conventional tillage method - To introduce conservation agricultural technique	On station and Shibpur MLT site, Rajshahi
1172	Development of alternate cropping pattern Mustard-Proso millet (Cheena) -T.Aus -T. Aman against Mustard-Boro-T. Aman	To increase crop cropping intensity, productivity and profitability of the farmers	Paba, Rajshahi
1173	Development of Lentil- Millet-T. Aman rice cropping pattern against Lentil-Fallow-T. Aman rice in Barind area	To compare the productivity of the proposed patterns with the existing one	Basantapur, Godagari, Rajshahi
1174	Collection, conservation, characterization and multiplication of Euphorbia neriifolia in Bangladesh	- To collect E. neriifolia from different regions of Bangladesh - To characterize and conserve of collected Germplasm following the standard descriptor - To multiply the collected Germplasm in Ex-situ condition	Barind Station, Rajshahi; Joydebpur; OFRD, Shyampur, Rajshahi and Bogura

Sl.	Title of experiment	Objectives	Location(s)
1175	Effect of irrigation and rice husk ash on yield and post-harvest quality of onion	To examine the influence of irrigations along with rice husk ash on growth, yield and post-harvest quality of onion	ARS Pabna/MLT site, Sujanagar
1176	Development of alternate cropping pattern Field pea-Boro- T. Aman rice against Mustard-Boro-T. Aman rice	- To improve the existing cropping pattern by inclusion of field pea - To increase the farmers' income	MLT site Jhikargacha, Jessore
1177	Development of alternate cropping pattern Mustard-Jute-T. Aman rice against Lentil-Jute-T. Aman rice	- To improve the existing cropping pattern by inclusion of mustard - To increase the farmers' income	Shalikhia, Magura
1178	Development of improved cropping pattern with T. Aman-Water melon- D. Aus	- To increase cropping intensity and productivity. - To increase farmer's income, access to food and nutrition, employment opportunity and woman's participation in agriculture	Dacope
1179	Development of improved cropping pattern with T. Aman/Mustard-Okra or Watermelon	- To increase cropping intensity and productivity. - To increase farmer's income, access to food and nutrition, employment opportunity and woman's participation in agriculture.	Satkhira
1180	Development of alternate cropping pattern with Mustard-Dwarf Yard Long bean-T.Aus-T. Aman against T. Aman-Boro-T.Aus	- To increase cropping intensity and productivity. - To increase farmer's income, access to food and nutrition, employment opportunity and woman's participation in agriculture.	Satkhira
1181	Development of Four-Crop based cropping pattern with T. Aus - Cole crop/Relay Pointed Gourd – Eggplant	- To increase cropping intensity and productivity through vegetable based cropping system. - To increase farmer's income, access to food and nutrition, employment opportunity and woman's participation in agriculture.	Satkhira
1182	Intercropping of pulse crop with dragon fruit	- To increase cropping intensity and economic return - To increase land productivity by absorbing atmospheric nitrogen by legume	Kushtia and Chuadanga
1183	Effect of selective herbicides in Black cumin	- To find out the optimum dose of Oxadiazon and Carfentrazone-ethyl group herbicides and - To reduce cost of production and increase yield	Sholakundu, Faridpur
1184	Effect of stacking on the quality of Sesame seed	To find out the suitable stacking technique of sesame for higher quality seed & oil	Sholakundu, Faridpur and MLT site, Rajbari
1185	Development of alternate cropping pattern Boro-B.Aman/Mustard against Boro-B. Aman-Fallow	To increase the cropping intensity, system productive efficiency and economic return	Sholakundu, Faridpur

Sl.	Title of experiment	Objectives	Location(s)
1186	Intercropping of Chilli with Sweet Gourd in Coast Region	- To find out suitable intercropping combination - To increase total production	Amtoli, Borguna Dumki&Kuakata , Patuakhali
1187	A Survey on Diseases Associated with Watermelon Cultivation on Southern Region of Bangladesh	- To document the diseases and their degree of incidence associated with Watermelon cultivation in southern region. - To assess the losses associated with identified diseases of watermelon	Patuakhali, Bhola and Barguna district
1188	Evaluation of various IPM tools against pod borers on Mungbean in southern region of Bangladesh	- To find out suitable IPM tools against pod borers on mungbean - To decrease damage of mungbean yield due to pod borers attacks	Patuakhali and Borguna
1189	Integrated management approach for controlling root rot disease (caused by Sclerotium rolfsii) of sunflower	- To find out suitable management approach to control the root rot disease - To reduce root rot disease incidence in sunflower field	Patuakhali and Borguna
1190	Integrated weed management of Mungbean	- To find the suitable method/s for weed management in Mungbean cultivation - To find out low cost Mungbean weed management option	Rahmatpur, Barishal and MLTs, Gournadi
1191	Development of improved cropping pattern Potato- Mung bean- T. Aus- Yard long bean against Potato- Yard long bean- T. Aus-T. Aman rice	- To increase the cropping intensity and productivity through improved cropping pattern. - To increase the income of the farmers	Chandina, Cumilla
1192	Effect of sowing time and varieties on the yield of BARI developed hybrid summer Tomato in Cumilla region	- To screen BARI released summer tomato varieties at medium high land areas of Cumilla region - To find out a suitable date for summer tomato cultivation in Cumilla region - To introduces among the farmers, increase production and economic return	Cumilla, Chandpur and Brahmanbaria
1193	Performance of brinjal varieties intercropping with potato in Cumilla region	- To observe the performance of intercropping brinjal with potato in Cumilla region - To find out the suitable variety of brinjal for intercropping with potato - To increase production and economic return	Debidwer, Chandina, Barura of Cumilla, Kashba, B. Baria and Shaharasti of Chandpur.
1194	Effect of different seeding ratios on the performance of coriander field pea mixed cropping system	- To investigate the effects of different mixed cropping arrangements of Coriander and Field pea yield and economic return at farmer's field - To find the land use advantage in the intercropping system	Debidwer, Chandina of Cumilla
1195	Intercropping of short duration vegetables with Bt Brinjal	Assess yield & plant mortality percentage of Bt Brinjal within intercropping compared to pure stand cropping.	Debidwer, Chandina, Barura of Cumilla, Kashba, B. Baria

Sl.	Title of experiment	Objectives	Location(s)
		• Determine the suitable vegetable as intercropped with Bt Brinjal for highest productivity & profitability.	and Shahrasti of Chandpur
1196	Performance of different intercrop combinations in haor areas of Sylhet region	• To find out suitable intercrop combination for increasing productivity of haor farmers	Moulvibazar and Shayestaganj
1197	Improvement from Fallow-T. aus rice-T. aman rice to Mustard-T. aus rice-T. aman rice under AEZ-20 of Sylhet	• To develop alternate cropping pattern for increasing cropping intensity and productivity	All MLTs and FSRD Site
1198	Effect of planting method on the performance of bottle gourd varieties in Sylhet region	• To select suitable cultivation methods for increasing yield and economic return of Bottle gourd	Hakaluki haor under MLT site Moulvibazar
1199	Performance of bush bean intercropped with groundnut in haor areas of Sylhet region	• To find out the suitable intercrop combination of sesame with groundnut for higher productivity and profitability	MLT sites Moulvibazar and Sunamganj
1200	Performance of Relay Cowpea with T. Aman in coastal area of Cox's Bazar	• To test the performance of cowpea for fallow land utilization. • To see economic return and farmers reaction	Chokoria and Coxsbazer sadar, Coxsbazer
1201	Performance of Relay watermelon with T. Aman in coastal area of Cox's Bazar	• To validate the technology relay watermelon with T. Aman to the farmer's level. • To increase production and farmers income with utilize the fallow land	Chokoria and Coxsbazer sadar, Coxsbazer
1202	Development and validation of improve management technologies for increasing the quality yield of existing cashewnut garden in Bandarban hill district	• To develop appropriate sustainable management practices for higher yield and quality of cashewnut in Bandarban Hill District, Bangladesh.	Bandarban, Raikhali Ramgarh and Khagrachhari
1203	Intercropping Chilli with Sweet Gourd	• To find out suitable intercropping combination • To increase total production	MLT Site, Dirahsram, Gazipur and Munshiganj
1204	Development of alternate cropping pattern Wheat-Jute-T. Aman against farmers existing Mustard-Jute-T. Aman pattern in Gopalganj region	• To introduce wheat cultivation as an alternate crop • To establish a 2nd year pattern	MLT site, Muksudpur, Gopalganj Sadar
1205	Development of cropping pattern Bitter gourd- Fallow- T. Aman against farmers existing pattern Fallow-Fallow-T. Aman in coastal area of Bangladesh	• To improve cropping intensity • To increase economic return of farmers	Chokoria and Coxsbazer sadar, Coxsbazer
1206	Development of cropping pattern Potato-Red amaranth-Okra-T. Aman rice against farmers existing pattern Fallow-	• To improve cropping intensity • To increase economic return of farmers	Chokoria and Coxsbazer sadar, Coxsbazer

Sl.	Title of experiment	Objectives	Location(s)
	Okra-T. Aman rice in coastal area of Bangladesh		
1207	Development of five crops-based cropping pattern against farmers three crops	• To develop an economically viable cropping pattern in charland • To increase cropping intensity as well as maximize the farmers' income.	charland of Mymensingh Sadar, Mymensingh
1208	Development of Foxtail Millet-Jute-T. Aman cropping pattern against Fallow-Jute-T. Aman cropping pattern	• To develop an economically viable cropping pattern by inclusion of Kaon in fallow-Jute-T. Aman cropping pattern • To increase cropping intensity as well as maximize farmers income	Netrakona
1209	Variety replacement in the existing cropping pattern Wheat- Jute-T. Aman rice	• To improve the existing cropping pattern by including 2nd year crop varieties • To increase crop yields and economic return of farmers	FSRD site, Atia, Tangail
1210	Variety replacement in the existing cropping pattern Wheat- Sesame-T. Aman rice	• To improve the existing cropping pattern by including 2nd year crop varieties • To increase crop yields and economic return of farmers	FSRD site, Atia, Tangail
1211	Variety replacement in the existing cropping pattern Lentil-Jute-T. Aman rice	• To improve the existing cropping pattern by including 2nd year crop varieties • To increase crop yields and economic return of farmers	FSRD site, Atia, Tangail
1212	Development of Boro-T. Aman-Garlic cropping pattern against Boro-T. Aman-Fallow cropping pattern	• To improve the existing cropping pattern by including 2nd year crop varieties • To increase crop yields and economic return of farmers	MLT site, Mirzapur, Tangail
1213	Development of T. Aman-Garden Pea- Boro cropping pattern against T. Aman-Fallow-Boro cropping pattern	• To increase productivity and cropping intensity • Utilization of fallow land by introducing garden pea	Modhupur/FSRD site, Tangail
1214	Development of alternate cropping pattern Maize-Summer Onion-T. Aman rice against Maize-Fallow-T. Aman rice in Karatoa Bangali floodplain	• To study the agro-economic performance of the alternate cropping pattern rice over the existing pattern. • To increase the production of onion as spices crop as well as increase productivity and profitability for higher income	Sonatola/Shibganj/Sherpur MLT Site (AEZ 4), Bogura
1215	Development of alternate cropping pattern relaying Brinjal with Onion-T. Aman rice against Onion-Jute-T. Aman rice cropping pattern	• To see agro-economic performance of the alternate cropping pattern • To increase productivity and profitability	Shibpur MLT, Rajshahi
1216	Development of alternate cropping pattern Mustard-T. Aus-T. Aman rice against Boro-Fallow -T. Aman rice cropping pattern	• To see agro-economic performance of the alternate cropping pattern • To increase productivity and profitability	Paba MLT, Rajshahi

Sl.	Title of experiment	Objectives	Location(s)
1217	Development of mechanization package for four crops-based cropping patterns	• To reduce the turnaround period in the whole cropping pattern • To assess the crop productivity.	FSRD site, Ajoddhapur, Rangpur
1218	Development of Zn fortified crops based cropping pattern	• To find out the feasibility of fitting Zn enriched and or medicinal crops in cropping pattern and increase Zn availability in food system under Corona Pandemic	Char Bongram, Chilmari
1219	Development of healthy oilseed crops-based cropping pattern	• To find out the profitable cropping pattern including relatively safe oilseed crops/variety BARI Sarisha-18 and BARI Surjamukhi-3	Char Bongram, Chilmari
1220	Development of four crop-based cropping pattern Potato-Cucumber relaying with Sweet gourd- T. Aman rice against Potato-Boro-T. Aman rice	• To see the performance of creeper vegetables included four crops-based cropping patterns, • To increase the cropping intensity and productivity at famers level.	Dhaperhat, Sadullapur
1221	Improvement of alternate cropping pattern Wheat-Summer onion - T. Aman rice against Wheat-Fallow-T. Aman rice in medium high land of AEZ-1	• To improve the existing cropping pattern for increasing cropping intensity and productivity by introducing of Summer onion • To increase crop yield and farmers' income	MLT site Raniganj, Dinajpur
1222	Validation of four crop-based cropping pattern Mustard-Vegetables-T. Aus-T. Aman rice against farmers existing pattern	• To develop a new cropping pattern for increasing cropping intensity and fallow land utilization	MLT site Habigonj
1223	Development of Mustard-Summer Vegetables-Jute cropping pattern against Mustard-Fallow-Jute cropping pattern	• To develop an economically viable cropping pattern by inclusion of summer vegetable in mustard jute cropping pattern • To increase cropping intensity and maximize farmers income	Netrakona
1224	Development of Bitter gourd/Ash gourd/Cucumber-Mungbean-T. Aman rice cropping pattern against Bitter gourd/Ash gourd/Cucumber-Fallow-T. Aman rice	• To improve the existing cropping pattern by inclusion of Mungbean • To increase cropping intensity and farmers income	Muktagacha, Mymensingh
1225	Development of alternate cropping pattern Wheat-Mungbean-T. Aman rice against Wheat-Fallow-T. Aman rice	• To improve the existing cropping pattern for increasing cropping intensity and productivity by inclusion of Mungbean • To increase crop yield and farmers' income	MLT site Raniganj, Sadar Dinajpur
1226	Development of alternate cropping pattern Maize-Mungbean-T. Aman rice against Maize-Fallow-T. Aman rice	• To improve the existing cropping pattern for increasing cropping intensity and productivity by inclusion of Jute • To increase crop yield and farmers' income	MLT site Pirganj, Thakurgaon
1227	Validation of Wheat-based cropping pattern at farmers field in Charland, Jamalpur	• To evaluate the on station selected cropping pattern at farmer's field in Charland, Jamalpur	MLT site Melandah, Jamalpur

Sl.	Title of experiment	Objectives	Location(s)
		• To increase cropping intensity • Popularize the pattern to the farmers	
1228	Development of alternate cropping pattern Vegetable-Boro rice-T. Aman rice against Vegetable-Fallow-T. Aman rice in Narsingdi	• To see agro-economic performance of the alternate cropping pattern • To increase economic return of farmers	OFRD, BARI, Shibpur, Narsingdi.
1229	Development of alternate cropping pattern Sunflower-T. Aus-T. Aman rice against existing pattern Relay Cowpea-Fallow- T. Aman rice in the Southern coastal region	• To establish sunflower as an alternate crop of relay cowpea in the Southern coastal region • To increase total productivity and farmers' income	Bauphal, Amtali & Kuakata
1230	Development of vegetables-based cropping pattern in Narsingdi	• To increase the cropping intensity and farmers income through vegetable-based cropping pattern • To popularize the vegetable-based cropping pattern	Shibpur, Narsingdi
1231	Intercropping of different rabi vegetables with Sweet gourd in hill valleys of Bandarban	• To find out the best sweet gourd + rabi vegetables intercrop at farmer's field for increasing farm yield and income of the farmers.	Bandarban (Sadar and Rowangchhari upazila), AEZ-29
1232	Intercropping of short duration vegetables and spices with Bushbean in Sylhet region	• To find out the suitable intercrop combination for increasing yield and economic return.	Hakaluki haor under MLT site, Moulvibazar
1233	Intercropping of Coriander with Groundnut on yield and economics of system productivity in haor areas of Sylhet	• To find out the suitable intercrop combination for increasing yield and economic return.	MLT sites, Moulvibazar and Sunamganj
1234	Intercropping of Cauliflower with Bt brinjal	• To find out the performance of cabbage as intercrop with Bt. brinjal • To increase total productivity and economic return.	MLT Site Narail
1235	Validation of Groundnut and Onion intercropping in charland of Tangail	• To find out a suitable intercrop combination of groundnut and onion • To increase productivity and income of the farmers'	Bhuapur, Tangail
1236	Intercropping of vegetables, Spices and Red amaranth in Sugarcane	• To find out suitable profitable intercrop combinations with sugarcane • To intensify use of land for growing vegetables and spices crops	FSRD Site, Solakundu and Modhukhali, Faridpur
1237	Intercropping of Soybean with Maize in Bhola	• To find out the appropriate intercrop combination for higher yield • To early establishment of soybean with minimum fertilizer and also to escape from natural hazard	MLT site Dawlatkhan and Bhola Sadar, Bhola

Sl.	Title of experiment	Objectives	Location(s)
1238	Intercropping of Sorghum with Cowpea at coastal Area of Noakhali	- Assess yield within intercropping compared to pure stand cropping. - Determine the optimum spatial arrangement for the mixture of sorghum with cowpea for highest yield	OFRD, BARI, Noakhali
1239	Intercropping of Sweet gourd with Cabbage	- To evaluate the performance of sweet gourd as intercrop with cabbage - To increase the income of farmers	Dhirashram MLT sites, Gazipur
1240	Evaluation of comparative productivity and profitability of Safflower and Linseed intercropping system at Saline Area of Noakhali	To find out most efficient safflower with linseed intercropping systems for maximizing system productivity	OFRD, BARI, Noakhali
1241	Evaluation of row arrangement intercropping system of Safflower with Sunflower at coastal saline fallow areas of Noakhali	To find out most efficient row arrangement intercropping system of safflower with sunflower for maximizing system productivity of the saline fallow lands.	OFRD, BARI, Noakhali
1242	Intercropping of Cabbage with Brinjal	- To find out the optimum population of cabbage as intercrop with brinjal - To increase total productivity and economic return.	Shibpur, Narsingdi
1243	Intercropping of vegetables with Chilli in Southern region of Bangladesh	- To find out the suitable intercrop combination for higher productivity and economic return - To increase cropping intensity in the coastal area	Kuakata and Bauphal
1244	Grass pea as relay crop with T. Aman rice in low lying areas of Narail	- To evaluate the performance of BARI khesari varieties - To disseminate and popularize the varieties among the farmers	MLT site Tularampur, Narail
1245	Determination of optimum sowing time for Jute seed relay with Onion bulb production	To find out the optimum jute seed sowing time before harvest of onion as relay	Saltha Upazilla, Faridpur
1246	Performance of Lentil under relay with T. Aman rice	- To verify the agro-economic performance of Lentil as relay crop with T. Aman rice in Bhola. - To ensure higher productivity and economic return	Sadar and Daulatkhan, Bhola
1247	Performance of Grass pea varieties as relay with T. Aman rice in low lying areas	- To evaluate the performance of BARI khesari varieties as relay crop - To increase farmers' income	MLT site Tularampur, Narail
1248	Performance of Garden pea relay with T. Aman rice in Bhola	- To verify the agro-economic performance of relay garden pea in Bhola. - To introduce conservation agricultural practice. - To ensure higher yield and economic return from garden pea.	Farmers' fields of Sadar, Daulatkhan and Charfashion

Sl.	Title of experiment	Objectives	Location(s)
1249	Effect of planting time for Onion bulb production of BARI Piaz-4	To find out optimum planting time of BARI Piaz-4	FSRD, Faridpur and MLT, Rajbari
1250	Identification of critical weed competition periods for Black cumin in Faridpur	To find out the critical weed competition periods for black cumin	FSRD site Faridpur
1251	Effect of planting methods on the yield of Ginger at farmers field	- To evaluate the performance of Ginger varieties at farmers' level with best planting method - To increase farmers income	Fulbaria, Mymensingh
1252	Effect of varieties and planting dates on Ginger	- To find out the suitable varieties for ginger cultivation. - To find out the optimum planting time at Sherpur region	FSRD site, Tarakandi, Sherpur
1253	Survey, monitoring and documentation of major insect pests of pulse crops in high Barind tract	To find out the major pests of pulse crops	Chapai Nawabganj
1254	Survey, monitoring and documentation of major insect pests, diseases and soil nutrients of Betel leaf in Rajshahi region	- To find out the major pests, diseases and soil nutrients of betel vine - To estimate losses of betel vine due to pests and diseases attack	Bagmara and Durgapur Region, Rajshahi
1255	Effect of planting method and seedling age on Sunflower in haor areas	- To find out the suitable planting system for Sunflower to save it from natural disaster in the haor area - To increase yield and farmers' income	Nikli (haor)
1256	Weed management options for dry direct seeded Aus rice in High Barind Tract	- To develop weed management options for dry direct seeded Aus rice in HBT. - To find-out economic weed strategy for dry direct seeded Aus rice in HBT	FSRD site, Godagari or Duboil, Tanore, Rajshahi
1257	Field validation of ICM techniques in reducing flower and fruit dropping of Mango at High Barind Tract	- To reduce flower and fruit dropping by improved management packages in farmer's field. - To reduce indiscriminate use of insecticides.	Godagari, Rajshahi and Sapahar, Noagaon.
1258	Productivity and profitability of Okra under different plant spacing	- To find out a suitable spacing arrangement for okra production under AEZ-3 - To increase farmers income	Mithapukur, Rangpur & Khulna
1259	Performance of Garlic varieties under zero tillage method with mulch	- To evaluate the performance of Garlic under zero tillage cultivation method - To find out the effect of mulching on Garlic cultivation - To increase the production and farmers' income	FSRD site, Delduar
1260	Effect of mulching on yield of Watermelon in coastal area	- To reduce mortality rate of transplanted watermelon seedling - To reduce irrigation frequency - To escape hail storming loss	MLT site Kuakata

Sl.	Title of experiment	Objectives	Location(s)
		• To early harvest of watermelon	
1261	Optimization of Okra spacing and sowing dates in the saline soils of southwestern Bangladesh	• To determine appropriate spacing and optimum sowing time of okra • To increase yield and farmers' income	OFRD, Khulna and MLT Site, Batiaghata
1262	Management of pod borer, <i>Maruca vitrata</i> using chemicals, botanicals and biopesticides in Mungbean at southern districts	• To evaluate the effectiveness of chemicals and botanicals against pod borer, <i>Maruca vitrata</i> of mungbean • To identify the effective chemicals and botanicals	Patuakhali and Borguna
1263	Controlling of bird pests in Sunflower crop using different repellent tools at coastal areas of Bangladesh	• To evaluate the effectiveness of repellent tools against bird pests in Sunflower • To minimize production cost of Sunflower.	Bauphal and Kalapara, Patuakhali
1264	Field validation of bio-rational based management techniques for the control of Mango fruit fly in Rajshahi region	• To popularize bio-rational based management techniques in controlling Mango fruit fly among the farmers.	Charghat and Bagha of Rajshahi district
1265	Development of management techniques against scale insect attacking Mango	• To develop the proper management technique(s) to control Mango scale insect.	Charghat and Bagha of Rajshahi district
1266	Survey and documentation of insect pests attacking Potato in Rajshahi region	• Documentation of insect pests attacking Potato at Tanor, Godagari and Mohanpur of Rajshahi district	Tanor, Godagari and Mohanpur of Rajshahi district.
1267	Integrated management of sigatoka leaf spot and panama disease of Banana	• To control panama and sigatoka disease of Banana in Kushtia	Kushtia and Chuadanga MLT site
1268	Management of gummosis disease of Citrus in Narsingdi	• To identify suitable fungicide for controlling Gummosis. • To increase yield and farmers' income	OFRD, BARI, Shibpur, Narsingdi.
1269	Development of cropping pattern in Mango based agroforestry systems	• To see the performance of different cropping pattern under Mango based agro-forestry systems • To increase productivity and income of the agro-forestry systems	Shibpur MLT sites, Rajshahi
1270	Performance of pulses in Mango based Agro-forestry system in HBT	• To increase cropping intensity and productivity in the High Barind Tract	FSRD site, Kadamshahar, Godagari, Rajshahi
1271	Feasibility of growing shade tolerant vegetable crops in fruit tree-based agroforestry systems	• To introduce short duration shade tolerant crops in agroforestry systems • To increase productivity and income of the agroforestry systems	FSRD site Pushpapara
1272	Performance of intercropping Red amaranth/Jute leaf with Turmeric under Mango-based agroforestry system	• To assess the performance of intercropping red amaranth/jute (leaf) with turmeric under Mango-based agroforestry system	Cumilla and Chandpur

Sl.	Title of experiment	Objectives	Location(s)
		To find out the suitable variety(ies) of Turmeric under Mango-based agroforestry system	
1273	Performance of intercropping Red amaranth/Jute leaf with summer vegetables under Mango-based agroforestry system	- To observe the performance of intercropping red amaranth/ jute leaf with summer vegetables in the Mango-based agroforestry system. - To increase production and economic return.	Cumilla and Chandpur
1274	Performance of intercropping Red amaranth/Jute leaf with BARI Tomato and Sweet gourd varieties under Mango-based agroforestry system	- To observe the performance of red amaranth along with winter vegetables in the mango-based agroforestry system. - To increase total production and economic return	Cumilla and Chandpur
1275	On-Farm trial of hybrid bitter gourd varieties	- To see the performance of bitter gourd varieties at the farmer's field of Sherpur - To popularize the newly released bitter gourd varieties among the farmers.	FSRD site, Tarakandi and MLT site Jhinaigati
1276	On-Farm trial of hybrid pumpkin varieties	- To see the performance of pumpkin varieties at the farmer's field of Sherpur - To popularize the newly released pumpkin varieties among the farmers	FSRD site, Tarakandi and MLT site Jhinaigati
1277	On-Farm trial of chili varieties at farmers field	- To see the performance of chili varieties at farmers' field - To find out the suitable variety and to increase farmer income	Trishal, Mymensingh sadar and Netrokona
1278	On-Farm trial of Foxtail Millet varieties at farmers field	- To see the performance of BARI released Kaon variety at farmers' field - To increase farmers income	Trishal
1279	On-Farm trial of Bottle gourd varieties at farmers field	- To see the performance of Bottle gourd varieties at farmers' field - To find out the suitable variety	Muktagacha, Mymensingh
1280	On-Farm trial of bitter gourd varieties at farmers field	- To see the performance of bitter gourd varieties at farmers' field - To find out the suitable variety	Muktagacha, Mymensingh
1281	On-farm trial of Sweet Potato varieties	- To evaluate and select suitable varieties in Tangail region - To popularize the BARI varieties among the farmers	Bhuapur, Tangail
1282	Performance of Potato varieties in farmers' fields	- To select suitable Potato varieties in Tangail region - To increase profitability of farmers	Atia and Dhanbari, Tangail
1283	On-farm trial of hybrid pumpkin varieties at Tangail region	- To see the performance of the BARI developed pumpkin variety in the farmer's field. - To popularize, disseminate and the productivity of BARI developed pumpkin varieties in Tangail region	Atia and Dhanbari, Tangail

Sl.	Title of experiment	Objectives	Location(s)
1284	Performance of country bean variety in summer season	- To observe the yield performance of the BARI released summer country bean varieties - To popularize country bean varieties during summer for raising farm income	FSRD site, Atia, MLT site, Modhupur, Dhonbari, Tangail
1285	On-Farm trial of different summer Onion varieties at Tangail	- To find out suitable variety of summer Onion for Tangail region. - To popularize summer Onion varieties among the farmers	FSRD site Atia, MLT site Modhupur, Dhonbari, Tangail
1286	On-Farm trial of hybrid Brinjal varieties in Tangail region	To see the performance of the variety in farmers' field	Atia and Dhanbari, Tangail
1287	On-Farm trial of hybrid tomato varieties	To see the performance of winter hybrid tomato varieties in farmers' field	Atia and MLT site, Dhanbari, MLT site Ghatail, Tangail
1288	On-farm trial of hybrid bitter gourd varieties	- To see the performance of hybrid bitter gourd varieties at the farmer's field of Tangail. - To popularize the newly released hybrid bitter gourd varieties among the farmers.	FSRD site, Atia and Dhanbari, Tangail
1289	On-farm trial of sunflower varieties	- To find out suitable sunflower variety for Manikganj region - To popularize BARI varieties and to increase farmer income	Saturia and Shibaloya, Manikganj
1290	On-farm trial with zero tillage cultivation of Garlic	- To utilize low lying areas for Garlic production after receding of flood water. - To minimize cost of production and to increase farmer income	Ghior, Manikganj
1291	On-farm trial of Onion bulb production in Narsingdi	- To evaluate the performances of BARI released winter Onion variety - To increase yield and economic return	Narsingdi
1292	On-farm trial of Chili varieties	To know the performances of BARI released chili varieties for higher yield and cost return analysis	Narsingdi
1293	On-Farm Verification Trial of Lentil Varieties in Dinajpur	- To find out the appropriate variety for Dinajpur region - To increase productivity and profitability of the farmers	Ranigonj, Dinajpur and Pirgonj, Thakurgaon, Rajbari
1294	On-Farm Trial of Tomato Varieties at Farmer's Field of Dinajpur	To introduce BARI tomato varieties in the farming system of Dinajpur region	Ranigonj, Dinajpur
1295	On Farm Verification of Onion varieties in Dinajpur District	To popularize BARI developed Onion variety among the farmers	Ranigonj, Pirgonj, Dinajpur

Sl.	Title of experiment	Objectives	Location(s)
1296	On-Farm Trial with BARI Brinjal varieties	• To increase the productivity of eggplant varieties at farm level in Gaibandha	Sadar, Sadullapur, Saghata, Gaibandha
1297	On-farm trial of BARI Winter Tomato varieties at Gaibandha	• To introduce BARI tomato varieties at Gaibandha	Sadar, Sadullapur and Saghata, Gaibandha
1298	On-farm trial of Chickpea varieties at char areas of Gaibandha	• To know the performance of Chickpea at farmers' level	Saghata, Gaibandha
1299	On-farm trial of stolon producing taro varieties at Gaibandha	• To see the performance of stolon-producing aroids at the farmers' level.	Palashbari, Gaibandha
1300	On-farm trial of rhizome producing Taro varieties at Gaibandha	• To know the performance of Taro at the farmers' level	MLT site, Palashbari, Gaibandha
1301	On farm verification trial of Sesame varieties	• To observe the performance of BARI sesame varieties in Rajshahi areas. • To popularize BARI sesame varieties to the farmers in these areas.	MLT site, Rajshahi
1302	On-farm validation of Proso millets in High Barind Tract	• To select suitable genotypes for the Barind area	FSRD site, Basantapur, Godagari, Rajshahi
1303	On-Farm Trial with BARI Brinjal varieties	• To evaluate the performance of BARI brinjal varieties in Pabna region • To popularize BARI brinjal varieties and farmers income	Ganggarampur, Pabna
1304	Adaptive trial of BARI pepper varieties in Jashore region	• To evaluate the performance of BARI developed pepper varieties • To find out the best variety compared to Local variety	MLT site Jhikargacha, Kaliganj and Jashore
1305	On-farm validation of EMO for controlling bacterial wilt in eggplant in the Khulna region	• To validate efficacy of strain YC7007 against wilt of eggplant in Khulna region. • To compare the variety against bacterial wilt	MLT site, Satkhira, and MLT site Dumuria and Koyra, Khulna
1306	Adaptive trial of summer country bean varieties in gher boundary	• To determine high yielding country bean variety in summer season. • To popularize BARI released variety	MLT site Dumuria, Khulna
1307	On farm trial of BARI developed Sweet Potato varieties	• To observe the performance of BARI released sweet potato varieties in Kushtia • To popularize BARI developed Sweet potato	Kushtia
1308	On-farm trial of Garlic under zero tillage condition in Shariatpur	• To observe the performance of BARI Rashun in Shariatpur under farmers field	North Dubuldi, Jazira, Shariatpur under MLT Madaripur

Sl.	Title of experiment	Objectives	Location(s)
1309	On farm adaptive trial of BARI winter Brinjal varieties in Faridpur	To observe the performance of BARI brinjal varieties under farmers field	Rajbari and Madaripur
1310	On-Farm Trial of BARI Hybrid Tomato Varieties in Coastal Region	- To evaluate the performance of BARI released hybrid tomato variety under farmers' field condition - To disseminate and popularize the BARI Hybrid Tomato varieties in southern region	FSRD site Jamla, MLT site Bauphal; and MLT site Kuakata
1311	On -Farm Trial of Chilli Varieties in Coastal Region	- To find out the suitable chilli varieties for coastal saline and non-saline areas - To disseminate, popularize the BARI Chilli varieties in coastal areas	FSRD site Jamla and MLT site Kuakata
1312	On-Farm Trial of Groundnut Varieties in Coastal Region	- To find out the suitable Groundnut varieties for coastal areas - To increase the groundnut production and productivity in coastal areas	FSRD site Jamla, MLT site Barguna, MLT site Bauphal and MLT site Kuakata
1313	On-Farm Trial Watermelon Varieties in Coastal region	- To select suitable watermelon varieties for coastal region. - To identify the yield difference between OP and Hybrid varieties - To enhance Watermelon production in coastal saline soil	Amtoli, Borguna, Bauphal & Kalapara, Patuakhali, Charfashion, Dawlatkhan & BholaSadar, Bhola
1314	On-Farm Trial of Summer Hybrid Tomato Varieties in Gopalganj Region	To disseminate and popularize the BARI released summer hybrid Tomato at on-farm level	Gopalganj Sadar and Tungipara
1315	On-Farm Trial of Turmeric Varieties in Gopalganj Region	To disseminate and popularize the BARI released summer hybrid Tomato at on-farm level	Gopalganj Sadar and Tungipara
1316	On-farm trial of BARI Sweet Potato varieties	- To find out suitable BARI released SweetPotato varieties at AEZ-18 - To increase production and economic return	Bhola Sadar and MLT site Dawlatkhan, Bhola
1317	On Farm trial of BARI Capsicum varieties in Charland	- To evaluate the performance of BARI released capsicum variety in thefarmers' field. - To popularize the BARI released capsicum variety among the farmers	Bhola
1318	On-farm trial of Soybean varieties under rainfed condition	- To evaluate the adaptively of soybean varieties in char lands under rainfed condition - To popularize soybean crops among the farmers of char lands	Bhola sadar and Daulatkhan, Bhola
1319	On-farm trial of BARI developed hybrid sweet gourd varieties in Sylhet region	To select suitable Sweet gourd variety for the Sylhet region	MLT sites, Moulvibazar and

Sl.	Title of experiment	Objectives	Location(s)
			FSRD site, Kamalbazar
1320	On-farm trial of watermelon varieties in Sylhet region	• To select suitable watermelon variety for the Sylhet region	Sayestaganj, Hobiganj
1321	On-Farm trial of BARI developed lemon varieties in the hilly areas of Bandarban	• To test the performance of BARI lemon varieties in hilly areas of Bandarban with other popular lemon varieties of Bangladesh • To popularize the BARI developed lemon varieties • To increase lemon production and farmers income	Tonkaboti, Bandarban sadar, Bandarban hill district
1322	Performance of BARI Mango varieties in the hilly areas of Bandarban	• To select the suitable BARI mango varieties in hilly areas of Bandarban • To popularize the BARI developed mango varieties in hilly areas of Bandarban	Tonkaboti, Bandarban sadar, Bandarban hill district
1323	On-farm trial of BARI developed summer eggplant variety	• To evaluate the performance of the variety in farmers' field	Noakhali
1324	On-farm trial of BARI developed broccoli variety	• To evaluate the performance of broccoli variety in farmer's field	Noakhali
1325	On-farm trial of Sunflower varieties at charland of Noakhali region	• To find out the suitable sunflower variety for charland of Noakhali region • To popularize the variety among the farmers	Noakhali, Laxmipur
1326	On-farm trial of BARI hybrid tomato variety	• To evaluate the performance of BARI released hybrid tomato variety under farmers' field condition • To disseminate and popularize the BARI Hybrid Tomato varieties in southern region	MLT Site Dirahsram , Gazipur and MLT Site, Munshiganj
1327	On-farm trial of stolon-producing taro varieties	• To evaluate the performance of stolon-producing aroids at the farmers' level	MLT site, Munshiganj and MLT Site Dirahsram , Gazipur
1328	On-farm trial of rhizome producing Taro varieties	• To know the performance of Taro at the farmers' level	MLT site, Munshiganj and MLT Site Dirahsram , Gazipur
1329	Adaptive Trial with Newly Released Potato Varieties	• To popularize the newly released improved potato varieties. • To collect the feedback of the newly released varieties	Barishal, Bhola, Borguna, Bogura, Chittagonj and Thakurgoan,
1330	Promotion and Dissemination of Newly Released Late Blight Resistant Potato Variety	• To popularize the newly released improved potato varieties • To collect the feedback of the newly released varieties	Dinajpur, Rangpur, Bogura, Jamalpur, Rajshahi,

Sl.	Title of experiment	Objectives	Location(s)
		To increase the production as well as income of the growers	Niphamary, Panchagarh, Thakurgoan, and Jashore
1331	Promotion and Dissemination of Newly Released Climate SMART (Heat and Salt tolerant) Potato Variety	- To popularize the newly released improved potato varieties. - To collect the feedback of the newly released varieties. - To increase the production as well as income of the growers.	Barishal, Patuakhali, Barguna, Khulna, Satkhira, Chattagram, Cox's Bazar, Noakhali, Bhola and Jashore.
1332	Adaptive Trials with Sweet Potato Varieties	- To popularize the newly released improved sweet potato varieties. - To collect the feedback of the newly released varieties.	Gazipur, Bogura, Gaibanda, and Barishal
1333	Adaptive Trials with BARI Released Varieties of Panikachu	To test the adaptability of the improved varieties of Panikachu at farmers' level.	Gazipur, Narsingdi and Barishal
1334	Adaptive Trials with BARI Released Varieties of Mukhikachu	To test the adaptability of the improved varieties of Mukhikachu at farmers' level.	Gazipur, Bogura and Barishal
1335	Nutrient Management and Storage Methods on the Yield and Storability of Sweet Potato	- To disseminate the developed fertilizer package for the yield and storability of sweet potato. - To collect the feedback of the newly developed fertilizer package	Kushtia, Jamalpur, Jessore
1336	Fertilizer dose for stolon producing BARI Panikachu-2	- To disseminate the developed fertilizer package for the yield of BARI Panikachu-2 - To collect the feedback of the newly developed fertilizer package	Kushtia, Jamalpur, Jessore
1337	Evaluation of Heat Tolerant and Late Blight Resistant Potato Lines	- To know the genetic makeup of the genotypes - To know the genetic variation and phylogenetic relationship among the varieties - To identify the stress tolerant gene and genetic linkage mapping	Molecular Biology lab. Gazipur, Rangpur, BSPC, Debiganj and Ishordi, Pabna, Shampur, Rajshahi
1338	Preliminary Yield Trial (PYT) of Late Blight Resistance Potato derived from QTL mapping populations	- To select superior genotype (s) for subsequent program of late blight resistance variety development - To improve germplasm of potato	TCRC, Gazipur, BSPC, Debiganj and Rangpur
1339	On-farm trial of onion varieties in char land	- To evaluate the performance of onion varieties at different char land - To popularize onion variety among the different char land farmers - To promote their adoption	Shariakandi, Bogura; Gaibandha; Nilpamari; Kurigram,

Sl.	Title of experiment	Objectives	Location(s)
			Pabna; Sirajganj and Jamalpur
1340	Adaptive trial of onion variety in saline area	• To study the performance of onion varieties in saline area. • To popularize new onion variety at different locations among the farmers. • To promote their adoption	-
1341	Adaptive trial of chilli varieties in saline area	• To study the performance of chilli varieties in saline area. • To popularize new chilli variety in saline area among the farmers. • To promote their adoption	Satkhira, Patuakhali, Borguna, Noakhali, Coxsbazar, Khulna and Vola
1342	Effect of poultry litter biochar in ameliorating acid soil	• To investigate the effectiveness of poultry litter biochar on the amelioration of acidic soil.	Gazipur and Norshindhi
1343	Development of fertilizer recommendation for chilli onion intercropping system	• To find out a suitable and economic fertilizer dose for maximizing the yield of chilli onion intercropping system	Gazipur and OFRD, Bogra
1344	Development of Mustard (var. BARI Sarisha-18) - T. Aus (var. BRRI dhan87) - T. aman (var. BRRI dhan75) cropping pattern for increasing cropping intensity and productivity	• Increase cropping intensity and productivity through crop intensification in rice-based cropping system. • Increase farmer's income, access to food and nutrition, employment opportunity and livelihood improvement.	Jamalpur and Tangail
1345	Validation of intercropping garlic, onion, fenugreek, black cumin with groundnut in charland areas	• To find out the suitable intercrop combination of groundnut for higher productivity and profitability of charland area's stakeholders.	Tangail and Jamalpur
1346	Performance of mustard, groundnut and sunflower varieties at haor areas in Bangladesh	• To observe the performance of mustard groundnut and sunflower varieties for haor areas.	Nikkli, Moulabhibazar and Sunamganj
1347	Performance of soybean varieties in southern region of Bangladesh	• To identify the appropriate variety of soybean for southern region	Chadpur, Cumilla and Noakhali
1348	Performance of sunflower varieties in southern region of Bangladesh	• To identify the suitable variety of sunflower for southern region	Barisal, Potuakhali and Shatkhiria
1349	Performance of groundnut and sesame varieties at charland areas in Bangladesh	• To see the performance of groundnut and sesame varieties for charland areas	Faridpur and Kustia
1350	Validation of intercropping of black cumin with groundnut in hilly areas	• To identify the suitable row arrangement of black cumin with groundnut for higher productivity and profit in hilly areas	Bandarban
1351	Validation of intercropping chili with groundnut in haor areas	• To identify the suitable row arrangement of chili with groundnut for higher productivity and profit in haor areas	Keshoregonj, Sunamganj and Moulovibazar

Sl.	Title of experiment	Objectives	Location(s)
1352	On-farm adaptive trial of mustard genotypes in Barind tract areas	To select suitable genotype of mustard for Barind areas	Joypurhat and Rajshahi
1353	Adaptive trials with BARI barley varieties and lines in Southern belt and Barind areas	- To observe the performance of BARI barley varieties in dry and saline areas - To disseminate and popularize BARI barley varieties to the farmers.	Saline areas Satkhira, Khulna, Noakhali and Barind tract
1354	Adaptive trials with BARI barley and oat varieties in Char areas	- To observe the performance of BARI barley varieties in dry and char areas - To popularize and disseminate BARI barley varieties to the farmers of dry areas.	Bogura, Tangail, Rangpur, Faridpur, Manikgong and Gaibandha
1355	Up-scaling of BARI foxtail millet and proso millet varieties in Char and Barind areas	To disseminate and popularize BARI Foxtail millet varieties to the farmers of char areas.	Munshigonj, Rangpur, Tangail, Bogura, Jamalpur, Rajshahi and Gaibandha
1356	On farm trial of chilli and legume vegetables (pea and bushbean) intercropping	To validate the developed combination of chilli and legume vegetables intercropping for higher productivity and monetary advantage in farmers' field	Cumilla, Hathazari and Bogra
1357	On farm trial of onion and garlic with brinjal intercropping	To validate the developed combination of onion and garlic with brinjal intercropping for higher productivity and monetary advantage in farmers' field	Pabna, Ishurdi, Jamalpur, Cumilla and Sharpur
1358	On-Farm Trials of BARI Developed Eggplant variety (OP)	To evaluate the performance of the eggplant variety in farmers' field	Bogura, Cumilla, Pabna, Rajshahi, Patuakhali, Satkhira, and Mymensingh
1359	On-Farm Trial of BARI Developed Eggplant Hybrids	To evaluate the performance of the hybrid eggplant variety in farmers' field	Bogura, Cumilla, Pabna, Rajshahi, Patuakhali, Satkhira, and Mymensingh
1360	On-Farm Trial of BARI Developed winter Tomato variety (OP and Hybrid)	To evaluate the performance of the variety under farmers'	Rajshahi, Cumilla, Patuakhali, Noakhali, Cox's Bazar and Bandarban
1361	On-Farm Trial of BARI Developed Summer Hybrid Tomato	To evaluate the performance of summer hybrid variety in farmers' field	Cumilla, Pabna, Bandarban, Patuakhali and Noakhali
1362	On-Farm Trial of BARI Developed Hybrid Pumpkin variety	To evaluate the performance of hybrid pumpkin variety in farmers field	Khulna, Cumilla, Mymensingh,

Sl.	Title of experiment	Objectives	Location(s)
			Patuakhali, and Rangpur
1363	On-Farm Trial of BARI Developed Bitter gourd variety	To evaluate the performance of bitter gourd variety in farmer's field	Cumilla, Mymensingh, Jessore, Pabna, Bandarban, Rajshahi and Rangpur
1364	On-Farm Trial of BARI Developed Watermelon variety	To evaluate the performance of watermelon gourd variety in farmer's field	Bhola, Patuakhali, Khulna, Cumilla, Bandarban and Rajshahi
1365	On-farm trial of BARI developed Country bean variety	To evaluate the performance of BARI Country bean varieties	FSRD site Faridpur
1366	Adaptive trial with newly released BARI Brinjal varieties in Southern region of Bangladesh	To study the performance of 2nd yearly released BARI Brinjal varieties in Barishal	MLT site, Gournadi, Barishal
1367	On-farm trial of Foxtail millet in coastal region of Bangladesh	- To find out suitable millet variety for coastal region - To introduce millet in coastal region	Patuakhali, Barguna, Khulna and Cumilla
1368	On-farm trial of Barley varieties in coastal region of Bangladesh	- To find out suitable Barley variety for coastal region - To introduce Barley in coastal region	Patuakhali, Barguna and Cumilla
1369	Performance of different Onion varieties in Gopalganj district	- To evaluate the performance of Onion varieties at different locations - To popularize BARI developed Onion variety among the farmers	Gopalganj, Jashore and Narsingdi
1370	On farm verification trial of different variety of Garlic	- To study the performance of Garlic varieties in farmers' field. - To popularize 2nd year Garlic variety at different locations among the farmers to promote their adoption.	Gopalganj, Pirojpur and Jashore
1371	On-farm trial of BARI developed winter hybrid Tomato	To evaluate the performance of winter Hybrid Tomato varieties in farmers' field	Gopalganj and Pirojpur
1372	Adaptive trial of Mustard varieties in southwestern part Bangladesh	To evaluate the performance of different Mustard varieties at Gopalganj and Pirojpur district.	Gopalganj and Pirojpur
1373	Adaptive trial of different varieties of Mungbean	- To evaluate the performance of Mungbean varieties - To increase productivity and popularize among the farmers	Gopalganj, Pirojpur and Dinjapur
1374	On-Farm trial of BARI developed winter Bottle gourd varieties	To introduce high yielding BARI released Bottle gourd varieties (ii) to increase yield and income of farmers.	Bandarban (Sadar and Rowangchhari upazila), AEZ-29

Sl.	Title of experiment	Objectives	Location(s)
1375	On-Farm trial of BARI developed Broccoli varieties	To evaluate the performance of BARI released Broccoli variety at farmer's field and to popularize and disseminate among the farmers of Bandarban.	Bandarban (Sadar and Rowangchhari upazila), AEZ-29
1376	Adaptive trial of winter Eggplant varieties	To evaluate the performance of the Bt Brinjal varieties against local varieties in farmers' field under proper management conditions	Dumuria, Khulna.
1377	On-farm trial of BARI developed Mukhikachu varieties	- To evaluate the performance of Mukhikachu varieties field condition. - To increase production and income	Narsingdi
1378	On-farm trial of BARI Turmeric varieties in Narsingdi	- To evaluate the performance of BARI released Turmeric variety at farmer's field. - To increase production and farmer's income.	Narsingdi
1379	Adaptive trial of BARI released Sweet potato varieties in AEZ 11	- To popularize the 2nd yearly released improved Sweet Potato varieties. - To collect the feedback of the 2nd yearly released varieties	Puthia, Rajshahi
1380	Performance of BARI released Potato varieties in farmers' fields	- To introduce the BARI released Potato varieties in the locality - To increase economic return of farmers	MLT site Pirganj, Thakurgaon and Sherpur
1381	Performance of BARI Chickpea varieties in Dinajpur	- To find out the appropriate variety for Dinajpur region - To increase yield and income of the farmers	Dinajpur and Rangpur
1382	On farm trial of BARI Dragon fruit varieties	To evaluate the performance of BARI released different dragon fruit varieties	FSRD site, Faridpur
1383	Integrated Farming for Improving Livelihood of Resource Poor Farm Households in a Participatory Approach	- Optimization of homestead land use for the availability of vegetable round the year - Utilization of family labour and inclusion of new and profitable technologies as Income Generating Activities (IGA). - Improvement of human nutrition by supplying required vitamin A, C, iron, calcium and thiamin - Incorporation of leguminous crops in the existing cropping pattern - Strengthen linkage among researchers, extension agents and farmers to expedite technology transfer process.	FSRD sites of Rangpur, Barind (Rajshahi), Pabna, Faridpur, Noakhali, Patuakhali, Sylhet, Tangail, Jamalpur, Bogura, Mymensingh and Gopalganj
1384	Status of farm machinery in char areas of Mymensingh region	- To know the farmers' perception about existing farm machinery - To document the extent of farm mechanization in char areas - To know the factors affecting adoption of farm machinery	Mymensingh

Sl.	Title of experiment	Objectives	Location(s)
1385	Socio-economic study of floating agriculture in Haor area of Bangladesh	• To know the socio-economic profile of the vegetable's growers on floating bed • To examine production practices and changing profitability of selected crops with adoption of floating technology • To identify the problems faced by the farmers of floating agriculture	Kishoreganj, B. Baria, Moulvibazar, Sylhet, Habiganj and Shreemongal
1386	Adoption and profitability of Sweet orange and Mandarin in Sylhet region	• To know the adoption status of Mandarin and Sweet orange • To document the production practice of Mandarin and Sweet orange • To estimate the profitability and constraints of Mandarin and Sweet orange	Sylhet region
1387	Agro-economic performance of zero tillage Garlic in Chalan Beel areas of Sirajganj district	• To document the management practice and input use level of garlic in the study area • To estimate the profitability of garlic in zero tillage condition • To explore the problems and potentiality of garlic	OFRD Bogura
1388	Productivity and profitability of Seaweed cultivation in Cox's Bazar District	• To document the socioeconomic profile of sea weed growers • To identify the input use pattern for sea weed production • To estimate the productivity and profitability of sea weed cultivation • To know the problems and constraints of sea weed cultivation	OFRD Cox's Bazar
1389	Pilot production Program of Mustard varieties at Jamalpur region	• To increase the production of oil seed crops	Jalalpur
1390	Pilot production Program of Garden pea variety at Sherpur region	• To increase the productivity of legume crops. • To popularize BARI variety among the farmers	FSRD site, Tarakandi, Sherpur
1391	Pilot Production program of summer Bottle gourd variety	• To popularize and disseminate the BARI developed summer Bottle gourd variety in Tangail region • To increase productivity and farmer's income	FSRD site, Atia, MLT site Modhupur, Dhanbari, Tangail
1392	Pilot Production program of capsicum varieties	• To disseminate BARI capsicum varieties • ii. To popularize the variety among the farmers	-
1393	Pilot Production program of BARI Piaj-4 in the farmers' field at Manikganj	• To popularize and disseminate BARI Piaj-4 variety in the farmers' field. • To increase yield and farmers' income	Shibaloya, Manikganj
1394	Pilot Production of cereals, pulses, oilseeds, vegetable and	• To increase the crop productivity of BARI released crop varieties in the Charland's of Gaibandha	Sundarganj, Sadar, Gaibandha

Sl.	Title of experiment	Objectives	Location(s)
	spices crop in char areas of Gaibandha		
1395	The Seed Production program of Pulse, Oilseed, Cereal at On-Station, Shyampur, Rajshahi	• To adopt BARI released latest varieties in the farmer's field • To increase the productivity of cropping pattern-based system research	On-Station, Shayampur, Rajshahi and MLT site paba, Rajshahi
1396	Production program of BARI Sharisha-18	• To introduce BARI Sharisha-18 in farmers' field	Kaliganj, Narail and Shimakhali
1397	Pilot production program of selected BARI released varieties in Southwestern region of Bangladesh	• To popularize BARI released varieties. • To increase the productivity and farmers income	Khulna, Bagerhat and Satkhira
1398	Production program of BARI Surjamukhi-3	• To disseminate and popularize dwarf variety of BARI Surjamukhi-3	Kushtia
1399	Pilot production program of cereals, pulses, oilseeds and vegetable crops in Cumilla region	• To validate and popularize the BARI developed cereals, pulses, oilseeds and vegetablecrop varieties inCumilla region	Kosba, B.barua and Chandpur
1400	Production program of BARI Alu-72, BARI Alu-73 and BARI Alu-78	• To popularize the BARI developed potato variety in coastal region • To increase potato production and farmer's income	Chokoria and Coxsbazer sadar, Coxsbazer
1401	Production program of Mango in the hilly areas of Bandarban region	• To popularize BARI released mango variety • To increase mango production and farmers' income	Bandarban sadar, Bandarban hill districts
1402	Up scaling of Sunflower varieties in the coastal region	• To disseminate BARI Surjamukhi-2 and 3 in southern region • To popularize BARI Surjamukhi varieties in farmers' level • To increase cropping intensity and farmers income	16 upazillas of Patuakhali, Borguna, Pirojpur and Bhola
1403	Production of Garlic with zero tillage method	• To increase cropping intensity in coastal region • To increase farmers income • To utilize fallow land during late Rabi season	Bauphal, Kuakata and Patuakhali Sadar
1404	Pilot Production program of Tomato varieties	• To popularize the BARI developed Tomato variety in coastal region • To increase oilseed production and farmer's income	Chokoria and Coxsbazer sadar, Chuadanga, Mujibnagar, Bheramara and Kushtia sadar
1405	Pilot Production program of Potato varieties	• To popularize the BARI developed Potato variety in coastal region • To increase Potato production and farmer's income	Chokoria and Coxsbazer sadar, Coxsbazer

Sl.	Title of experiment	Objectives	Location(s)
1406	Pilot Production program of Dragon fruit	To introduce BARI released dragon fruit at farmers level	Kushtia sadar
1407	Pilot Production program of Bitter gourd in the farmers field at Manikganj	- To popularize and disseminate BARI Bitter Gourd-1 at farmer's field - To know farmers' opinion about the BARI developed varieties - To increase yield and farmers' income	Gurkhi, SadarManikganj
1408	Production program of BARI Bt Brinjal varieties	- To evaluate the performance of Bt brinjal varieties under the farmers' field condition - To popularize the varieties among the farmers to promote their adoption in different areas of Bangladesh.	Pabna,Rangpur, Bogura,Dinajpur, Tangail,Mymensingh,Kishoreganj ,Jessore,Khulna, Kushtia,Faridpur ,Patuakhali,Barishal,Bhola,Noakhali,Cumilla,Sylhet,Bandarban,Narsingdi,Cox's bazar,Gaibandha, Gazipur,Munshiganj, Manikganj

IRRIGATION AND WATER MANAGEMENT DIVISION

1409	Automated Model Selection using Bayesian and Asynchronous Successive Halving Algorithm (ASHA) for Predicting Daily Minimum and Maximum Temperatures	- To build multiple regression models for a given training data set and optimize their hyperparameters using optimization algorithms - To select the model that performs the best on the test data set.	BARI, Gazipur
1410	Optimum water and fertilizer management of Dwarf sunflower for various sowing dates using APSIM (Gazipur)	- To generate data for conducting field experiments for more than two seasons - To parameterize and calibrate the model by using field data - To validate the model by representing field data and - Finally, to simulate the model	BARI, Gazipur
1411	Response of Mustard to Different Levels of Irrigation	- To determine the effect of irrigation at different growth stages of mustard; - To understand the effects of irrigation on yield and yield components of mustard.	BARI, Gazipur
1412	Response of Mungbean to Different Levels of irrigation	- To determine the effect of irrigation at different growth stages of mungbean; - To understand the effects of irrigation on yield and yield components of mungbean.	IWM, BARI, Gazipur and Rahmatpur, Barishal
1413	Growth and Yield of Chilli as Influenced by Different Levels and Intervals of Drip Irrigation	- Observe the effect of different drip irrigation levels on growth and yield of chilli. - Study the soil wetting patterns and water productivity under different irrigation regimes.	BARI, Gazipur

Sl.	Title of experiment	Objectives	Location(s)
1414	Effect of Irrigation on Bulb Yield and Water use of Summer Onion	• To find out response of summer onion to different levels of irrigation • To evaluate economic feasibility of summer onion production	BARI, Gazipur and Ishurdi
1415	Irrigation Scheduling of Dragon Fruit Production	• To find out the effect different level of irrigation on yield of dragon fruit • To evaluate economic feasibility of dragon fruit production	Ishurdi, Pabna
1416	Yield and Water Productivity Indices of Different Garlic Varieties Under Sprinkler Irrigation	• To compare the performance of different garlic varieties in terms of yield and water productivity • To determine yield response factors of different garlic varieties • To assess cost effectiveness of garlic cultivation under sprinkler irrigation	BARI, Gazipur
1417	Design and Development of a Portable Sprinkler Irrigation System for Small Farmlands	• Design and development of a portable sprinkler system that is capable of irrigating small farmlands. • Study and evaluate the hydraulic and operational performance of the developed sprinkler system.	BARI, Gazipur
1418	Effect of Irrigation methods and Mulching on growth and flowering of Gladiolus as cut flower	• To find out the suitable irrigation method with mulching for gladiolus cultivation	BARI, Gazipur
1419	Performance of Fertigation System on Pumpkin Cultivation	• To investigate the performance of pumpkin under fertigation systems • To study the cost effectiveness of the system.	BARI, Gazipur
1420	Effect of Fertilizer and Irrigation Frequency on the Yield and Quality of Export and Processing Potato	• To find out the fertilizer dose for optimum yield, dry matter and quality of processing potato • To find out the appropriate irrigation frequency and date for optimum yield, dry matter and quality of processing potato	BARI, Gazipur
1421	Effect of Irrigation on Mango Fruit Cracking in Chattogram Region	• To explore suitable of irrigation scheduling to mitigate mango fruit cracking during dry season in Chattogram region	BARI, Hathazari, Chattogram
1422	Optimization of surface drainage for winter crop (potato) in Southern Bangladesh	• Determine the optimal surface drainage for winter crop (i.e., potato) by testing variations in depth and spacing • Analyse the economic feasibility of surface drainage and • Determine the long-term crop yield variability of the selected crop (potato) due to rainfall patterns for the coastal zone of Bangladesh using the crop simulation model, APSIM.	Khulna

Sl.	Title of experiment	Objectives	Location(s)
1423	Feasibility of surface drainage for winter crop for greater resilience of smallholder farm income and food security in Southern Bangladesh (ACIAR)	• Determine the optimal surface drainage for winter crop (i.e., sunflower) by testing variations in depth and spacing • Analyse the economic feasibility of surface drainage and • Determine the long-term crop yield variability of the selected crop (sunflower) due to rainfall patterns for the coastal zone of Bangladesh using the crop simulation model, APSIM.	Khulna
1424	Effect of Saline Water Irrigation with Different Doses of Potassium on Crop Growth and Yield of Mungbean	• To investigate the response of Mung bean to different salinity levels of irrigation water	BARI, Gazipur
1425	Deep Learning Emulators for Saltwater Intrusion Management Modelling in Coastal Aquifers	• To develop a deep learning based coupled simulation-optimization methodology for saltwater intrusion processes in coastal aquifers • To develop a saltwater intrusion management model that maximizes groundwater extraction while minimizing salinity intrusion into the aquifer	Coastal aquifers of the southern Bangladesh
1426	Interpretable and Explainable Machine Learning Algorithms for Predicting Saltwater Intrusion in Coastal Aquifers	• To use, for the first time, interpretable and explainable machine learning based models to predict saltwater intrusion in coastal aquifers • To analyze the individual predictions using Shapely and LIME outputs to understand the model-predictor relationships • To assess model interpretability through examining Partial Dependence plots	BARI, Gazipur
1427	Accuracy and Robustness VS Computational Time for Multi-objective Optimization Algorithms in the Emulator Based Coupled Simulation-Optimization Approach for Saltwater Intrusion Management Model: Comparison of GA and PSO	• To determine the accuracy and robustness of multiple objective optimization algorithms in a coupled simulation-optimization framework • To address the stochastic nature of multi-objective optimization algorithms in obtaining global optimal solutions	Coastal aquifers of the southern Bangladesh.
1428	Monitoring of Ground Water Level at Different BARI Stations	• Installation of observation well at different BARI stations • Regular monitoring of groundwater level at 7 days interval • To determine the depletion of groundwater level	BARI HQ, All RARS of BARI and SRC, Bogura
1429	Assessment of Groundwater Quality in Some Research Stations of BARI	• To determine the suitability groundwater for drinking and irrigation purposes	Barishal, Cumilla, Bogura, Rajshahi, Ishurdi, Jessore, Hathazari, Rangp

Sl.	Title of experiment	Objectives	Location(s)
			ur, Jamalpur, Satkhira, Gazipur
1430	Dissemination of Water Saving Technologies for Non-Rice Crops in Saline Area	- To disseminate BARI developed water saving irrigation technologies for crop production at farmers' level. - To increase the crop-water productivity and reduce irrigation water use in saline areas of Bangladesh.	Patuakhali, Barguna, Bhola, Satkhira and Noakhali
1431	Dissemination of Water Saving Technologies for Non-Rice Crops in Hilly Area	- To promote the water saving technologies among the farmers in hilly area - To study the suitability of the water saving technologies	Khagrachari and Raikhali
FARM MACHINERY AND POST-HARVEST ENGINEERING DIVISION			
1432	Development and evaluation of four-wheel tractor operated seeder	To design, develop and evaluate a suitable four-wheel tractor operated seeder for completing seeding operation in a single pass	Gazipur
1433	Design and development of a tractor operated vegetable seedling transplanter	- To design and fabricate a tractor operated vegetable seedling transplanter - To test and performance evaluation of the transplanter - To compare the performance of the transplanter with conventional method	Gazipur
1434	Energy use analysis of conservation agriculture tillage systems for Rice-Soybean cropping pattern	- To assess the productivity of CA tillage practices - To quantify the input-output energy flow in Rice-Maize cropping pattern - To evaluate energy efficiency and financial profitability of the systems	Gazipur and Bogura
1435	Design and development of onion and garlic detopper	- To design and fabricate an onion and garlic detopper - To test and performance evaluation of the detopper	Gazipur
1436	Investigation of long-term conservation agriculture at BARI and adaptive trials of conservation machinery and water management systems in the southern delta of Bangladesh	- Establishment of CA platform to visualize the benefits of conservation agriculture in yield and soil properties with long term experiment - Testing, demonstration and adoption of selected CA and irrigation machinery and methods in the selected areas	Gazipur, Barishal, Patuakhali and Khulna
1437	Design and development of tractor operated potato harvester	- To develop a tractor operated potato harvester - To test and performance evaluation of the potato harvester	Gazipur and Panchagarh
1438	Development of an orchard weeder cum mini tiller	- To develop an orchard weeder cum mini tiller - To test and performance evaluation of the mini tiller	Gazipur, Chuadanga and Jamalpur

Sl.	Title of experiment	Objectives	Location(s)
1439	Design and development of self-propelled power boom sprayer for field crops	• To design and fabricate a petrol engine operated boom sprayer for upland crops • To increase the spray efficiency of boom sprayer over the knapsack sprayer • To ensure proper application of herbicide, insecticides and reduce spraying time	Gazipur and Noakhali
1440	Development of an automatic irrigation device	• To develop an automated irrigation device from locally available materials • To calibrate the device to determine exact soil moisture content • On-farm evaluation and fine tuning of the device based on field performance	Gazipur
1441	Development of spraying system for coconut tree	• To develop a climbing part to reach near the spraying targeted area • To integrate a power sprayer with the climbing part • To test and performance evaluation of the whole system	Gazipur and Barishal
1442	Development of a barley thresher	• To develop a barley thresher to thresh hulled and hull-less barley varieties in a single feeding • To evaluate performance of the barley thresher • On-farm evaluation and fine tuning of the thresher based on users' feedback	Gazipur
1443	Development of a power operated coconut tree climber	• To design and fabricate a power operated coconut tree climber • To test and performance evaluation of the climber	Gazipur and Barishal
1444	Testing and evaluation of combine harvester for harvesting mungbean and soybean in coastal areas	• To evaluate the performance of the combine harvester for mungbean and soybean • To modify and improve the combine harvester for harvesting mungbean and soybean	Gazipur, Jamalpur, Noakhali and Patuakhali
1445	Design and Development of an oat dehulling machine	• To develop a small-scale oat dehulling machine to remove the hulls from oat grains • To evaluate performance of the dehulling machine • On-farm evaluation and fine tuning of the machine based on early users' feedback	Gazipur
1446	Design and Development of a mungbean dehuller	• To develop a mung bean dehuller to efficiently dehull mung beans • To evaluate performance of the mung bean dehuller	Gazipur
1447	Adaptive trial of BARI chilli seed separator	• To evaluate performance of the chilli seed separator • To study the economic analysis	Gazipur, Bogura and Thakurgaon

Sl.	Title of experiment	Objectives	Location(s)
1448	Development of soymilk making machinery	• To develop soymilk making machinery to increase consumption of soybean as food for humans	Gazipur
1449	Upscaling and fine tuning of coffee postharvest processing machinery	• To upscale coffee dehuller, roaster and grinder • To evaluate the performance of these machines • To determine the quality of coffee and economic analysis of the machine	Gazipur, Khagrachari and Bandarban
1450	Design and development of a jute decorticator	• To design and develop a suitable, portable and handy jute decorticator • To evaluate performance of the jute decorticator in laboratory and on-farm	Gazipur and Faridpur
1451	Development and adoption of suitable technology for hygienic food production	• To design and develop a low-cost solar tunnel dryer for efficient and hygienic drying of potato and mushroom • To design and develop a spiral potato slicer for value addition of potato chips	Gazipur, Tangail and Bogura
1452	Development of four blades automatic cashew shelling machine	• To design and fabricate a four blades automatic cashew nut shelling machine • Performance evaluation of the cashew nut shelling machine • Financial analysis of the cashew nut shelling machine	Gazipur, Khagrachari and Bandarban
1453	Improvement of mechanical coconut dehusker	• To improve the mechanical coconut dehusker • Performance evaluation of the improved dehusker	Gazipur and Noakhali
1454	Design and development of a power operated tomato seed separator cum pulper	• To improve the tomato seed separator cum pulper • Testing and performance evaluation of the tomato seed separator	Gazipur and Thakurgaon
1455	Development of a suitable fruits bagging tool	• To design and fabricate a fruit bagging tool • To evaluate performance of the fabricated fruit bagging tool	Gazipur and Rajshahi
1456	Development of a sensor based automated squirrel repellent	• Development of a machine vision system to detect squirrels • Development of an ultrasound generator • Development of a rotating dummy owl as a scarer	Gazipur and Moulavibazar
1457	Development of sensor based supplementary seed metering device in precision seeder to overcome missing of bold grain seeds	• To design and develop sensor based supplementary seed meter • To overcome seed missing due to seed locking/bridging • To evaluate field performance of the sensor-based supplementary seed meter for sowing maize/chickpea/groundnut	Gazipur

Sl.	Title of experiment	Objectives	Location(s)
1458	Development of cost-effective, intensified & sustainable recirculating aquaculture system (RAS) in Bangladesh	• To design and set-up a mini-RAS • To develop a cost-effective RAS using locally available resources • To validate the RAS for commercial species, reduction of operational cost and business model analysis	Gazipur
1459	Development of a fertilizer sensor using fluorescence technology and field mapping	• To identify the fluorescence characteristic of soil and fertilizer • Development of a portable fertilizer sensor by fluorescence (FL) response	Gazipur
1460	Development of sensor-based automation system for existing storage	• To develop a sensor-based automation system for existing storage • Development of IoT and mobile application-based monitoring system of temperature and humidity	Gazipur
1461	Fine tuning of the solar assisted cabinet dryer for vegetable seeds	• Comparison of drying system efficiency at different drying conditions • Evaluating economic analysis of the system	Gazipur
1462	Adaptability testing of BARI developed agricultural machinery for high value crop production in coastal area	• Evaluation of the performance of BARI developed machinery for crop production in the coastal areas of Bangladesh • Fine tuning of the machinery based on farmers' and service providers' feedbacks • Machinery dissemination in the coastal areas	Patuakhali, Bhola, Satkhira, Noakhali, and Lakshmipur
1463	Adaptation of BARI developed farm machinery in the selected areas of Bangladesh	• To conduct adaptive trials in the selected farmers' fields • To build up the skill of the farmers, operators, mechanics and manufacturers • Dissemination of the machines to the farmers and users	Kishoreganj, Jamalpur, Dinajpur, Rajshahi, Bogura, Patuakhali, Jashore and Bandarban
POST HARVEST TECHNOLOGY DIVISION			
1464	Optimization of processing parameters for frozen tender jackfruit	• To preserve tender jackfruit in frozen conditions applying different postharvest pretreatment.	PHTD, BARI, Gazipur
1465	Effect of packages for vacuum fried jackfruit chips	• To standardize of packages for keeping vacuum fried jackfruit chips with maintaining quality at ambient condition.	PHTD, BARI, Gazipur
1466	Development of a suitable packet for keeping vacuum fried jackfruit chips	• Designing and fabricating packages for jackfruit chips on the basis of different physico-chemical parameters	PHTD, BARI, Gazipur
1467	Optimization of processing parameters for freeze dried chips from jackfruit	• To study the processing, packaging and quality aspect of freeze-dried chips from jackfruit and thus suggest ways and means for production of good quality freeze dried jackfruit chips.	PHTD, BARI, Gazipur

Sl.	Title of experiment	Objectives	Location(s)
1468	Effects of frying temperature and time on physicochemical changes and shelf life of vacuum fried chips from giant taro	• To optimize the vacuum fried taro chips processing to produce quality taro chips at suitable frying temperature and time.	PHTD, BARI, Gazipur
1469	Comparison of cooking methods and oils on physicochemical, nutritional, minerals and bioactive compounds of mixed vegetables	• To document and compare the cooking oil effect on physicochemical, nutritional, minerals and phytochemical compounds	PHTD, BARI, Gazipur
1470	The nutritional, physicochemical, minerals and bioactive compounds analysis of selected BARI mosur (lentil) varieties	• Develop lentil extruded chips using single screw extruder and study their physicochemical and nutritional properties, minerals profiling, phytochemical, energy values, amino acid compositions, phenolic acid profile and protein fractions	PHTD, BARI, Gazipur
1471	Effect of moisture content on the processing and quality of BARI mosur (lentil) chips using single screw extruder	• To determine the proper moisture level for producing quality and economically feasible extruded lentil chips and study the physical, chemical and nutritional changes of the lentil chips during processing and storage.	PHTD, BARI, Gazipur
1472	Effect of vegetable pomace on the formulation of probiotic pickle	• To grow lactic acid bacteria through fermenting selected vegetables and to develop probiotic pickle using the fermented vegetables.	PHTD, BARI, Gazipur
1473	Comparative study of domestic and internationally produced jam and jelly in terms of their physicochemical, nutritional, color, texture and sensory evaluation	• To collect the domestic and overseas jam and jelly from the local and city market of Bangladesh and evaluate their physicochemical and nutritional composition, color, texture and sensory evaluation.	PHTD, BARI, Gazipur
1474	Extraction of annatto color and evaluation their microbial and antimicrobial activity before applying in food processing	• To extract the annatto color in powder form using cheapest source and its application to the food processing (jam, jelly, marmalade etc.) instead of synthetic food color	PHTD, BARI, Gazipur
1475	Morphological, physicochemical, nutritional, minerals and bioactive compounds analysis of fresh figs (<i>Ficus carica</i> L.) indigenous to Bangladesh	• To evaluate morphological, physicochemical, nutritional, minerals, color and bioactive compounds of round and oval shape fresh fig fruits	PHTD, BARI, Gazipur
1476	Physico-chemical characteristics of plum in various concentrations of sodium chloride and sucrose during preservation	• To process and preserve fresh plums using various concentrations of sucrose-sodium chloride and study the shelf life in ambient conditions	PHTD, BARI, Gazipur
1477	Changes in the quality characteristics during storage of plum jam and its optimal preparation conditions	• To evaluate the processing method of plum jam	PHTD, BARI, Gazipur

Sl.	Title of experiment	Objectives	Location(s)
1478	Standardization of processing method for osmo-dehydrated sugar coated plum	• To optimize the dehydration conditions for plum and to produce the value-added products with higher shelf life.	PHTD, BARI, Gazipur
1479	Optimization of processing method for dragon fruit jam	• To optimize dragon fruit jam processing technique	PHTD, BARI, Gazipur
1480	Effects of different sanitizers on the nutritional quality and shelf life of fresh-cut moringa sticks	• To evaluate the effects of different sanitizers and storage temperatures on the quality and shelf life of fresh cut moringa sticks.	PHTD, BARI, Gazipur
1481	Determination of microbial hazards in fresh-cut fruits and salad vegetables used in street food vendor, hotels and restaurant at Rajshahi and Khulna	• To identify and quantify the hazardous agents (microbial load) in fresh-cut fruits and salad vegetables collected from Rajshahi and Khulna district.	PHTD, BARI, Gazipur
1482	Optimization of processing technique for roasted jackfruit seed maintaining nutritional quality	• To optimize the processing parameters of roasted jackfruit seed with maintaining shelf life and nutritional quality.	PHTD, BARI, Gazipur
1483	Development of value added ready to serve (RTS) Sapota powder through fortification by ascorbic acid and β -carotene	• To develop a process for the development of ready to serve (RTS) sapota powder through fortification.	PHTD, BARI, Gazipur
SEED TECHNOLOGY DIVISION			
1484	Effect of seedling age on seed yield potential of sweet pepper varieties	• To find out the optimum age of seedling on seed yield of sweet pepper varieties	STD, BARI, Gazipur
1485	Determination of seed maturity index of sweet pepper	• To determine the appropriate seed maturity index of sweet pepper	STD, BARI, Gazipur
1486	Effect of different seed drying methods on seed quality of sweet pepper	• To find out the suitable drying methods of sweet pepper.	STD, BARI, Gazipur
1487	Germination and seedling performance of Cashew nut as influenced by chemical scarification	• To find out the suitable pre-sowing seed invigoration treatment to improve the germination characteristics of cashew nut.	STD, BARI, Gazipur
1488	Germination and seedling performance of watermelon as influenced by seed priming	• To know the effect of seed priming on germination and seedling establishment of watermelon. • To find out the suitable priming technique of watermelon for higher germination and good quality seedling.	STD, BARI, Gazipur
1489	Growth, yield and seed quality parameters of okra as influenced by different growth regulators	• To evaluate the effect of GA ₃ and NAA alone and at their different combinations on growth, yield and seed quality of okra.	STD, BARI, Gazipur
1490	Seed yield and quality of chickpea varieties as influenced by water stress	• To find out the effect of water stress on seed yield and quality of chickpea varieties.	STD, BARI, Gazipur

Sl.	Title of experiment	Objectives	Location(s)
1491	Assessment of seed quality of soybean through accelerated aging method	• To study certain changes associated with loss of viability during accelerated ageing of soybean and • To predict duration of soybean seed storability in storage.	STD, BARI, Gazipur
1492	Effect of different storing methods on seed quality of groundnut under ambient condition	• To know the effect of storing methods on seed quality of groundnut	STD, BARI, Gazipur
1493	Effect of vermicompost leach on seed germination and seedling emergence of onion seeds against drought stress	• To find out a suitable vermicompost treatment for better seed germination and seedling emergence under drought stress condition	STD, BARI, Gazipur
1494	Effect of vermicompost leach on seed germination and seedling emergence of onion seeds against salt stress	• To find out a suitable vermicompost treatment for better seed germination and seedling emergence under salt stress condition	STD, BARI, Gazipur
1495	Effect of sowing time of male inbred line on Hybrid seed production of BARI hybrid Mistikumra-1	• To determine the accurate sowing date of male inbred line for perfect synchronization of male and female flower	STD, BARI, Gazipur
1496	Improving field emergence performance of soybean by sand matrix priming	• To examine the effect of sand matrix priming on field emergence performance of soybean.	STD, BARI, Gazipur
1497	Effect of fungicides on prevalence of seed borne fungi and seed quality of capsicum seed during storage	• To study the prevalence of seed borne fungi on capsicum seeds. • To find out the effective seed treatment for controlling seed borne fungi in seed storage of capsicum.	STD, BARI, Gazipur
1498	Effect of storage conditions and seed treatments on seed viability of soybean	• To know the effect of different storage conditions and seed treatments on seed viability of soybean	STD, BARI, Gazipur
1499	Effect of different packaging materials and storage conditions on quality of sesame seed during storage	• To evaluate the effect of different packaging materials and storage condition on physiological quality of sesame seed • To predict the longevity of sesame seed in storage	BARI, Gazipur
SEED PRODUCTION PROGRAM			
1500	Breeder seed production of onion	• To produce quality seed of onion	BARI, Gazipur
1501	Quality seed production of garden pea	• To produce better quality seed of garden pea	BARI, Gazipur
1502	Quality seed production of mungbean	• To produce quality seed of mungbean	BARI, Gazipur
1503	Breeder seed production of Country bean	• To produce quality seed of country bean	BARI, Gazipur
1504	Breeder seed production of Bottle gourd	• To produce quality seed of Bottle gourd	BARI, Gazipur

Sl.	Title of experiment	Objectives	Location(s)
1505	Quality seed production of Water melon	• To produce quality seed of water melon	BARI, Gazipur
BIO-TECHNOLOGY DIVISION			
1506	Development of <i>in vitro</i> propagation protocol for gerbera	• To develop a suitable <i>in vitro</i> propagation protocol of gerbera.	BARI, Gazipur
1507	Micropropagation of liliun (<i>Lilium longiflorum</i>)	• To develop a suitable micropropagation protocol of liliun.	BARI, Gazipur
1508	Tissue culture propagation of BARI strawberry varieties for field evaluation	• To produce large number of propagating materials for BARI Strawberry varieties.	BARI, Gazipur
1509	Large-scale multiplication of BARI released banana varieties through tissue culture	• To produce large number of propagating materials for BARI released banana varieties.	BARI, Gazipur
1510	<i>In vitro</i> regeneration of papaya (<i>Carica papaya</i> L.)	• To develop an efficient regeneration protocol of papaya for future transformation work.	BARI, Gazipur
1511	Development of an efficient <i>in vitro</i> regeneration protocol for BARI mungbean varieties	• To develop a reproducible <i>in vitro</i> plant regeneration protocol of BARI mungbean varieties for future transformation work.	BARI, Gazipur
1512	<i>In vitro</i> regeneration of country bean (<i>Lablab purpureus</i> L. Sweet)	• To develop an <i>in vitro</i> plant regeneration protocol of country bean for future transformation work.	BARI, Gazipur
1513	<i>In vitro</i> regeneration of soybean (<i>Glycine max</i> L.)	• Development of <i>in vitro</i> regeneration protocol for soybean.	BARI, Gazipur
1514	Rescue of amritsagar banana from extinction through biotechnological approaches	• Collection and <i>in vitro</i> propagation of Amritsagar banana variety. • Large-scale propagation through tissue culture to prevent the extinction of Amritsagar banana variety and to reintroduce its cultivation at farmers' level.	BARI, Gazipur
1515	PCR-based detection and characterization of papaya viruses in Bangladesh	• Diagnosis and characterization of papaya viruses prevailing in Bangladesh using advanced molecular techniques. • Generating information for developing virus resistant transgenic papaya.	BARI, Gazipur
1516	Study on relative bacterial wilt tolerance of Bt eggplant varieties and their non-Bt parents	• Collection and characterization of bacterial wilt isolates from different parts of the country. • 2. To observe the comparative performance of BARI Bt eggplant varieties and their corresponding non-Bt eggplant varieties on artificial inoculation of bacterial wilt pathogen.	BARI, Gazipur
1517	Identification of abiotic stress tolerant genes from sorghum through biochemical and molecular techniques	• To identify gene(s) related to drought and salt tolerance. • To clone gene(s) related to drought and salt tolerance.	BARI, Gazipur

Sl.	Title of experiment	Objectives	Location(s)
1518	Transformation of tomato for broad-spectrum resistance against leaf curl viruses	• Construction of appropriate plasmid vectors for virus derived resistance against ToLCV. • Transformation of tomato plants with vectors harbouring cloned virus sequences.	BARI, Gazipur
1519	Exploring the development of gametophyte-mediated genetic transformation systems in crop plants	• Exploring gametophyte-mediated genetic transformation systems in model plants. • Application of gametophyte-mediated genetic transformation systems in crop plants.	BARI, Gazipur
1520	Validation trial of tissue cultured plantlets of banana, pineapple and strawberry under field conditions	• To evaluate the field performance of plantlets raised from tissue culture.	Hill Agricultural Research Center, Khagrachari
1521	Sustaining Bt eggplant in Bangladesh by implementing effective stewardship	• To sustain the first GE crop Bt brinjal in the long run.	BARI, Gazipur
1522	DNA profiling of elite eggplant cultivars by molecular markers	• Molecular characterization of popular elite eggplant cultivars.	BARI, Gazipur
1523	Confined field trial of transgenic 3R-gene late blight resistant potato	• To develop late blight resistant transgenic 3R-gene potato varieties in Bangladesh.	BARI, Gazipur
PLANT PHYSIOLOGY DIVISION			
1524	Effect of potassium on dry matter, starch and reducing sugar of potato processing variety	• To evaluate dry matter yield and quality at variable source and dose of K fertilizer • To find out optimum dose of K and source	BARI, Gazipur
1525	Estimating leaf area in BARI mungbean varieties by non-destructive linear measurement	• To generate co-efficient value/Correction factor for measure the leaf area in mungbean	BARI, Gazipur
1526	Induction of seed dormancy in groundnut by foliar application of growth regulators	• To find out suitable growth regulator and optimum dose for dormancy induction • To inhibit sprouting of seeds in field at maturity	BARI, Gazipur
1527	Effect of elevated temperature on flowering, seed yield and quality of onion	• To investigate the response of onion to heat stress, and • To study the effect of fluctuated temperatures on onion seed production	BARI, Gazipur
1528	Screening of brinjal genotypes against salinity at seedling stage	• To identify the salt-tolerant genotype(s) based on seedling traits	BARI, Gazipur
1529	Screening of sweet-pepper advance lines against salinity at seedling stage	• To identify the salt-tolerant genotype(s) based on seedling traits	BARI, Gazipur
1530	Screening of mungbean genotypes against salinity	• To find out saline tolerant Mungbean genotype(s)	Joydebpur
1531	Dormancy breakdown and germination acceleration of BARI Alu-62 through GA ₃ and KNO ₃ application	• To observe the effect of dormancy breakdown and germination acceleration of BARI Alu-62	BARI, Gazipur

Sl.	Title of experiment	Objectives	Location(s)
1532	Phenology, growth and yield of chickpea as influenced by sowing dates	• To generate basic data for crop model (DSSAT/APSIM)	BARI, Gazipur
1533	Screening of linseed genotypes against drought stress	• To select drought tolerant linseed genotypes (s) for growing in drought prone areas.	BARI, Gazipur
1534	Morpho-physiological evaluation of selected tomato varieties under drought condition at early flowering stage	• To select drought tolerant tomato variety(s) • To evaluate the morpho-physiological responses of tomato under drought stress	BARI, Gazipur
1535	Phytochemicals accumulation in Bt begun cultivar at variable Planting time	• To quantify different phytochemicals concentrations at various planting time	BARI, Gazipur
1536	Physiological and biochemical response of selected tomato hybrids against salinity	• To study the physiological mechanism of salinity tolerance in tolerant and susceptible genotypes of tomato.	BARI, Gazipur
1537	Physiological and biochemical response of selected brinjal genotype against salinity	• To identify the salt tolerant brinjal genotype(s) on the basis of physiological parameters and yield	BARI, Gazipur
1538	Evaluation of selected grasspea genotypes against salinity in coastal region	• To find out saline tolerant Grass pea genotype(s)	Satkhira, Dumuria/Dacope, Khulna
1539	Screening of sunflower genotype under excess moisture condition	• To find out waterlog tolerant sunflower genotype	BARI, Gazipur
1540	Growth reproductive efficiency and yield of mungbean as influenced by sink manipulation	• To evaluate the impacts of flower removal on growth and yield of Mungbean	BARI, Gazipur
1541	Novel <i>Bacillus</i> strain Y007 ameliorates salinity stress in tomato plants	• To understand the responses, adaptation and tolerance of salinity stress in tomato plants at physiological and biochemical levels under influence of Y007.	BARI, Gazipur
VERTEBRATE PEST DIVISION			
1542	Efficacy of rodenticide baits with decreased concentration of bromadiolone	• To find out highly effective and safe doses of anticoagulant rodenticide i.e., bromadiolone for controlling rodents.	Gazipur, Rajshahi
1543	Modification and evaluation of indigenous trap for controlling field rat.	• To develop effective eco-friendly technique to control the rodent pest.	Gazipur, Rangpur, Dinajpur
1544	Evaluation of wrapping materials for poison baiting inside the burrow	• To find out highly effective wrapping materials of poison for effective inside burrow baiting.	Gazipur, Rajshahi, Dinajpur
1545	Evaluation of plant oils as repellent against rodents.	• To find out an effective rodent repellent to minimize crop losses due to rodents.	Gazipur, Rajshahi
1546	Evaluation of Soybean as boarder crop of groundnut for reducing rodent damage in groundnut field	• To reduce rodent damage in crop field • To developed effective rodent management techniques.	Gazipur

Sl.	Title of experiment	Objectives	Location(s)
1547	Survey of squirrel damage in different fruits and vegetables in selected areas of Bangladesh	• To know the incidence and status of squirrel, • To know the nature and extent of damage of squirrel in fruits and vegetables.	Cumilla
1548	Efficacy of different repellent against pest birds and bird diversity in sunflower field	• To find out the effectiveness of repellent against bird from crop's field • To determine the bird damage and species diversity in sunflower field	Gazipur, Patuakhali
1549	Field evaluation of five rodenticide for controlling rats	• To evaluate the efficacy of rodenticide (Acute and chronic poison) for controlling rats.	Gazipur, Dinajpur
AGRICULTURAL ECONOMICS DIVISION			
1550	Cost and returns of selected pulse crops in Bangladesh	• To determine the level of input use and estimate the cost and return of selected pulses crop cultivation at farm level; • To estimate the economic returns and competitiveness of some selected pulse crops in Bangladesh; and • To identify problems and opportunities related to selected pulse crops cultivation at farm level.	Rajshahi and Faridpur
1551	Value chain analysis of selected gher based vegetables in Southern region of Bangladesh	• To analyze the supply chain of Gher based fresh vegetables; • To document the current market situation of Gher based fresh vegetables with regard to production, consumption, and trade; • To identify value chain map of Gher based fresh vegetables and estimate the value added by different market actors; and • To assess gender involvement in Gher based vegetable value chain development activities.	Bagerhat, Khulna and Sathkhira
1552	Supply chain analysis of malta (sweet orange) in Bangladesh	• To estimate the profitability of malta (sweet orange) cultivation. • To identify the major supply chains involved in the marketing of malta; • To estimate the marketing costs, margins, and efficiency of marketing channels; and • To find out the problems of production and marketing of malta, and to suggest some policy measures for its improvement.	Khagrachari, Banderban and Panchagar
1553	Farm typology delineation and characterization in coastal areas of Bangladesh	• The study delineates farm types to undertake distinct case studies (under each of the farm types) that examine the impact of the project's proposed interventions in terms of profit, risk, the extent of adoption, and whole-farm impact.	Khulna, Patuakhali, and Barguna
1554	Impact of climate change on crop farming in selected coastal zone of Bangladesh	• To determine the economic impacts of climate change on crop farming;	Khulna, Bagherhat, Satkhira,

Sl.	Title of experiment	Objectives	Location(s)
		• To forecast the impact of climate change on crop farming in selected coastal zone of Bangladesh; and • To assess farmer's perceptions and to investigate farmers' adaptation measures due to climate change.	Noakhali, Patuakhali and Bhola.
1555	Adoption status of BARI developed onion varieties at farm level in Bangladesh	• To assess the adoption status of BARI developed onion varieties at farm level; • To identify the factors responsible for the adoption of BARI onion varieties at the farm level; • To know the storage system and estimate the post-harvest loss of onions at the farm level; • To estimate the profitability of BARI developed onion variety cultivation; and • To explore the problems of BARI developed onion variety adoption.	Faridpur, Pabna, Rajshahi and Magura
1556	Price volatility of watermelon in Bangladesh	• To estimate the farm level financial profitability of watermelon production, • To explore the reasons for price spiral of watermelon and • To recommend policy guidelines for watermelon price stability	Patuakhali, Khulna, Chattogram and Thakurgaon
1557	Socioeconomic study on local cultivar Duhazri Alu in Chattogram district	• To document socioeconomic and contextual information of the growers/cultivar's; • To estimate the input use, productivity, and profitability of the local potato cultivar; • To know the farmers and consumers perceptions to this cultivar; and • To derive policy recommendations.	Chattogram
1558	Baseline study on cashew nut production processing and marketing in Bandarban hill district	• To document socio-demographic profile of the respondents; • To know the current status of input use, productivity, profitability, processing and marketing of cashew nut; • To identify the existing problems/constraints for cashew nut production, processing and marketing; and • To derive policy implications and recommendations.	Bandarban
1559	Level of pesticide use on brinjal production at some selected areas of Jashore region	• To assess the level of pesticide use of brinjal production • To estimate the economic impact of pesticide use of brinjal production • To compare the IPM use on Bt-brinjal and conventional cultivation • To estimate the draw backs of use of IPM technology for brinjal production.	Jashore, Jhenaidah and Kushtia

Sl.	Title of experiment	Objectives	Location(s)
1560	Impact of and returns on investment from lentil research and development in Bangladesh	• To know the adoption status of HYV lentil varieties at the farm level; • To explore the socioeconomic impacts of HYV lentil variety adoption at the farm level; and • To estimate the rate of returns and foreign exchange savings from investment on lentil R&D in Bangladesh.	Faridpur Magura, Kushtia and Jhenaidah Manikgonj and Sirajganj
1561	Climatic stresses, adaptation strategies and capacity assessment of pulses growing farmers in the coastal areas of Bangladesh	• To evaluate farmer's perception about the adaptation strategies, • To cost and capacity of adaptation, problem and • Willingness to adapt any adaptation strategies to reduce climate variable stress effect on their farm.	Patuakhali and Jhalokathi
1562	Profitability and varietal adoption of chickpea in some selected areas of Bangladesh	• To estimate the area covered by the chickpea varieties; • To know the adoption status of BARI Chola varieties at farm level; • To estimate the profitability of the BARI Chola; • To examine the factors affecting the yield of chickpea; and • To find out the constraints to BARI chickpea cultivation.	Rajshahi, Chapainowabgonj and Jhenaidah
1563	Socioeconomic study of floating agriculture in haor area of Kishoreganj	• To examine the cost benefit analysis and economic viability of vegetables production on the floating bed	Kishoreganj
1564	Case study of farm machinery in char areas of Mymensingh district	• To know the farmers' perception about existing farm machinery. • To explore the relationship between the selected characteristics of the farmer and their attitude towards farm mechanization. • To identify the problems of using farm machinery. • To make some recommendations.	Mymensingh
AGRICULTURAL STATISTICS AND INFORMATION & COMMUNICATION TECHNOLOGY (ASICT)			
1565	Synchronization of Machine Learning and Sentinel Imageries for Lentil Yield Estimation in the Fragmented Small-Holding Agricultural Landscapes in High Barind Tract of Bangladesh.	• To assess the lentil fields at individual field scale in the fragmented smallholder farming system using satellite imageries; • To estimate the lentil yield using high resolution Sentinel imageries from a machine learning perspective.	Godagari upazila of Rajshahi district.
1566	A Study of Yield Gaps in Mustard in Selected Areas of Bangladesh.	• To examine the nature and extent of yield gaps in mustard. • To analyze the factors accounting for yield gaps.	Naogaon, Pabna, and Sirajganj

Sl.	Title of experiment	Objectives	Location(s)
		- To examine the need, availability, and accessibility of agricultural extension services at the field level in reducing yield gaps. - To recommend crop specific and region-specific measures for bridging the yield gaps.	
1567	Yield prediction of mustard crop by using satellite based remote sensing technique in Bangladesh.	- To create map of selected mustard fields using satellite images - To estimate mustard yield by satellite based remote sensing technique	Tangail, Sirajgonj and Bogura
1568	Onion yield forecasting models using satellite imagery in Bangladesh.	- To develop yield prediction model of onion crop using remote sensing technique - To forecast onion yield by satellite based remote sensing technique	Pabna, Faridpur, Rajbari and Rajshahi
1569	Expressional analysis of Dicer-like, Argonaute, and RNA-dependent RNA polymerase genes in <i>Brassica rapa</i> L in response to <i>Alternaria blight</i> disease.	- To identify and characterize the RNAi-related gene in <i>Brassica rapa</i> L. - To analyze the expression profile of the genes against <i>Alternaria Blight</i> disease.	BARI
1570	Potato yield forecasting using satellite images and crop simulation model under changing climate.	- To delineate potato fields using satellite imageries - To estimate potato yield using satellite imageries and AquaCrop model - To forecast potato, yield along with adaptation strategies under changing climate using AquaCrop model	Munshigonj and Sunamgonj districts.
REGIONAL AGRICULTURAL RESEARCH STATION, JAMALPUR			
1571	Evaluation of sobri kola germplasm at Jamalpur region	To release a new export quality lime variety	Jamalpur
1572	Effect of stem pruning on the growth and yield of dragon fruit	To get a good canopy and with good yield of Dragon fruit.	Jamalpur
1573	Propagules production and distribution of different fruits during 2020-2021	To distribute among the farmers and growers	Jamalpur
1574	Evaluation of bottle gourd lines in summer	To observe the performance of yield and yield contributing characters of bottle gourd germplasm for winter	Jamalpur
1575	Collection and evaluation of ridge gourd germplasm	To observe the performance of yield and yield contributing characters of ridge gourd germplasm	Jamalpur
1576	Evaluation of sponge gourd lines in summer	To release a new summer variety	Jamalpur
1577	Evaluation of teasle gourd lines in summer at Jamalpur region	To release a new summer variety	Jamalpur

Sl.	Title of experiment	Objectives	Location(s)
1578	Evaluation of Indian spinach germplasm	• To release a new variety	Jamalpur
1579	Hybridization of hyacinth bean	• To produce new crop superior to the existing ones.	Jamalpur
1580	Effect of vine pruning on the growth and yield of bottle gourd	• To observe the effect of vine pruning on the yield of bottle gourd in summer	Jamalpur
1581	Advanced yield trial of selected hyacinth bean lines	• To release a new variety	Jamalpur
1582	Development of low-cost hydroponic solution for vegetable production	• To reduce the solution cost for vegetable production and get higher BCR for hydroponic system	Jamalpur
1583	Production of selected vegetables through automatic hydroponic system	• To reduce the labour cost in hydroponics culture system	Jamalpur
1584	Demonstration trial of hydroponic culture at RARS Jamalpur	• To popularise the hydroponics culture system in Jamalpur region	Jamalpur
1585	Effect of substrates on the growth and yield of BARI cactus 1	• To find out the suitable substrate (s) for BARI Cactus-1	Jamalpur
1586	Effect of substrates on the growth and yield of cryptanthus	• To find out the suitable substrate(s) for cryptanthus • To increase the quality	Jamalpur
1587	Effect of potassium on growth, yield and storage quality of sweet potato	• To find out the effect of potassium on growth, yield and storage quality of sweet potato	Jamalpur
1588	Maintenance of Sweet Potato Germplasm	• To development of high yielding as a well as processing and export quality sweet potatoes and use for future breeding program.	Jamalpur
1589	Hybridization in <i>Brassica campestris</i>	• To develop new varieties of crops having higher yield.	Jamalpur
1590	Hybridization in <i>Brassica napus</i>	• To develop new varieties of crops having higher yield.	Jamalpur
1591	Confirmation of F ₁ generation of <i>Brassica napus</i>	• To confirmed F ₁	Jamalpur
1592	Selection in segregating generation (F ₂ -F ₆) of <i>Brassica campestris</i>	• To advanced generation	Jamalpur
1593	Observation yield trial of <i>Brassica rapa</i> L (Set-III) (yellow seed)	• To find out the high yield potential genotypes of this species.	Jamalpur
1594	Observation yield trial of <i>Brassica rapa</i> L (Set-IV) (brown seed)	• To find out the high yield potential genotypes of this species.	Jamalpur
1595	Observation yield trial of <i>Brassica napus</i>	• To find out the high yield potential genotypes of this species.	Jamalpur

Sl.	Title of experiment	Objectives	Location(s)
1596	Preliminary yield trial of <i>Brassica napus</i>	• To find out the high yield potential genotypes of this species.	Jamalpur
1597	Screening of <i>Brassica napus</i> for selecting short duration genotypes	• To study of genetic diversity and phenotypic variability.	Jamalpur
1598	Characterization of chilli germplasm	• To identify desirable genotypes of chilli for breeding programs.	Jamalpur
1599	Characterization of hyacinth bean germplasm	• To know the genetic diversity. • To develop a photographic monograph.	Jamalpur
1600	Evaluation of barley germplasm	• To test the performance of the selected genotypes. • Identifying early maturing, dwarf and high yielding barley germplasm.	Jamalpur
1601	Seed increase of advance line of finger millet	• To increase the seed stock of finger millet line for distribution to the farmers and other organizations and demonstration at farmer's field.	Jamalpur
1602	Earthing up and sowing time effect on sweet potato in char land ecosystem	• To find out the suitable increase productivity, economic and nutritional development of charland farmers	Nao vangar char Jamalpur
1603	Effect of planting time and variety on taro	• To find out suitable planting time and variety on taro	Jamalpur
1604	Performance of early vegetable production in the Charland area	• To find out the suitable vegetables for early cultivation at charland • To get higher market price and nutritional security.	Nao vangar char, Jamalpur
1605	Effect of management practice for year-round production of coriander as condiment in relation to weather condition	• To find out the suitable management practices for cultivating against weather condition. • To get higher productivity, market price and nutritional security.	Jamalpur
1606	Performance of integrated weed management of barley	• To validate the developed weed management practices in barley	Jamalpur
1607	Performance of hybrid maize and sweet potato intercropping at char land in Jamalpur	• To performance of maize + sweet Potato intercropping technology and adoption.	Jamalpur
1608	Performance of relay snake gourd in brinjal +onion intercropping at medium high land under AEZ-9 without trellis	• To observe the performance of onion and snake gourd as intercropping and relay cropping with brinjal at medium high land under AEZ-9	Jamalpur
1609	Sustainable substrate composition as influenced by organic amendment on dragon fruit in an extensive green roof	• To assess the improvement soil-substrate properties and dragon fruit growth and yield at the rooftop.	Jamalpur
1610	Nutrient management through organic manuring and biofertilizers on the yield of	• To study the effect of bio-fertilizer (AMF) and tricho compost on yield of onion and reduce the chemical fertilizer in onion cultivation.	Jamalpur

Sl.	Title of experiment	Objectives	Location(s)
444	Determination of Diversity and Molecular Characterization of Advanced Breeding Lines of Potato Using SSR Markers	- To study the genetic variation and diversity of advanced Potato lines - DNA fingerprinting and documentation	Molecular Biology Lab. TCRC, Gazipur,
445	Identification and Characterization of R-Genes for Late Blight Disease of Potato in Cip Germplasm	- To identify R-genes from CIP germplasm - Varieties with R-genes will be used in the breeding program - To pyramid R-genes for durable resistance of late blight - To characterize CIP germplasms of potato	TCRC research field Molecular Biology Lab, Joydebpur, Gazipur
446	In Vitro Regeneration of Sweet Potato (Ipomoea Balatas L) for Transgenic Protocol Development	To develop an efficient plant regeneration protocol for genetic transformation of sweet potato in future	Tissue Culture Lab, TCRC, Gazipur
447	Development of Low-Cost Nutrient Solution for Mini-Tuber Production in Aeroponic Technique	Cost effective nutrient solution development for Aeroponic	Green house, TCRC, Gazipur
448	Production Of Nucleus Seed Potato (Mini Tuber, G0) Using In Vitro Plantlet	To increase the number of seeds	BSPC, Debiganj
449	Production Of Breeder and Foundation Potato Seed at BSPC, Debiganj, Panchagarh During 2021-2022	- Ensuring the demand of quality seeds throughout the country - Producing breeder seed for BADC	BSPC, Debiganj
450	Seed Production and Distribution of Sweetpotato and Aroids	Seed production of all the varieties is a regular programme for maintaining varieties purity and distribution to farmers and others.	Gazipur
PULSES RESEARCH CENTRE			
451	Hybridization of blackgram	To develop high yielding, short duration, small seeded and BYMV and Powdery mildew tolerant/resistance variety	Ishurdi, Pabna
452	Confirmation F ₁ generation of blackgram	To obtaining fruitful results from hybridization between two or more parents.	Ishurdi, Pabna
453	Growing and evaluation of F ₂ generation of blackgram	To attain more desirable segregants and to advance towards more homozygosity among the progenies	Ishurdi, Pabna
454	Growing and evaluation F ₃ generation of blackgram	To advance towards more homozygosity among the progenies	Ishurdi, Pabna
455	Growing and evaluation of blackgram F ₄ generation	To advance the generation to attain homozygosity.	Ishurdi, Pabna
456	Growing and evaluation of blackgram F ₅ generation	To advance the generation to attain homozygosity.	Ishurdi, Pabna
457	Observation trial of blackgram	To find high yielding and disease resistant superior genotypes over the existing varieties	Ishurdi, Pabna

Sl.	Title of experiment	Objectives	Location(s)
1624	Evaluation of tillage practices of groundnut in charland ecosystem of Jamalpur region	• To evaluate different tillage practices on the growth and yield of the groundnut, and analysis the financial performance of the tillage system.	Jamalpur
1625	Effect of tillage system and crop residue retention on soil carbon sequestration in wheat-mungbean-T. amon cropping system	• To observed the effect of the different CTP practices (ST, MT and CT) and crop residue retention on SOC sequestration and the optimum combination in CTP practices with fixed crop residue retention for higher crop yield.	Jamalpur
1626	Development and operation of a groundnut harvesting machine	• To develop and operate a powered groundnut harvesting machine for small and medium size farms that is suitable to the local soil and environmental conditions.	Jamalpur
1627	Seed multiplication of mustard, chick pea and grass-pea during 2020-2021	• To increase the seed stock of mustard, chick pea and grass-pea for distribution to the farmers and other organizations and demonstration at farmer's field.	Jamalpur
REGIONAL AGRICULTURAL RESEARCH STATION, JASHORE			
1628	Development of integrated weed management practices of lentil in Jashore region	• To development the integrated weed management practices of lentil in Jashore region	Jashore
1629	Performance of fieldpea under different sowing conditions	• To find out suitable sowing condition for better crop establishment and higher yield of field pea.	Jashore
1630	Performance of lentil and field pea intercropping with chickpea	• To evaluate the performance of lentil and field pea intercropping with chickpea	Jashore
1631	Characterization of sonamung germplasm	• To select desirable lines	Jashore
1632	Breeder seed production of pulses	• To increase the breeder seed stock of pulses	Jashore
1633	Maintenance of germplasm of sesame	• To select short duration and high yielding lines	Jashore
1634	Seed increase of advanced lines of sesame	• To select short duration and high yielding lines.	Jashore
1635	Adaptive trials with newly released heat and salt tolerant potato varieties	• To evaluate the performance of the heat and salt tolerant varieties of potato in the farmer's field	Sadar, Jashore
1636	Block demonstration on BARI Misti alu-17	• To disseminate BARI Misti alu-17 to the farmers	Sadar, Jashore
1637	Effect of spacing and sowing time on the yield and quality of BARI Borboti-2	• To find out the effect of spacing and sowing time on the yield	Sadar, Jashore
1638	Advanced yield trial of selected stem amaranth germplasm	• To see the yield potentiality and develop a new stem amaranth variety	Sadar, Jashore

Sl.	Title of experiment	Objectives	Location(s)
1639	Collection and evaluation of Indian dillenia germplasm	• To develop a variety of Indian dillenia (Chalta)	Sadar, Jashore
1640	Evaluation of pummelo germplasm	• To find out the promising germplasm and develop new varieties	Sadar, Jashore
1641	Collection and evaluation of bullock's heart genotypes	• To find out the promising germplasm and develop new varieties	Sadar, Jashore
1642	Characterization of grasspea germplasm	• To identify the important traits of grasspea accessions	Jashore
1643	Development of fertilizer packages for five crop-based cropping patterns in rice-based cropping system	• To find out judicious fertilizer recommendation for T.Aman- broccoli-spinach-yard long bean-T.Aus cropping pattern for sustainable yield, • To monitor soil health after each cropping cycle.	Jashore
1644	Development of vegetable-based cropping pattern for increasing cropping intensity and ensuring nutrition	• To find out the suitable cropping pattern for higher productivity and nutrition as well as economic return.	Jashore
1645	Integrated weed management of mukhikachu (<i>Colocasia esculenta</i>) for sustainable agriculture	• To find out the proper weed management practice of mukhikachu.	Jashore
1646	Effect of plant population and integrated nutrient management on yield of dwarf yard long bean	• To find out the optimum fertilizer dose and appropriate plant spacing for higher yield of yard long bean.	Jashore and Agronomy Division, Gazipur
1647	Nutrient management for sustaining soil fertility and yield of wheat-mungbean-T.aman cropping pattern	• To find out sustainable fertilizer recommendations for the patter, • To monitor soil health, • To estimate uptake of different nutrient for the cropping pattern and to make a balance sheet for each of the nutrient.	Jashore
1648	Nutrient management for sustaining soil fertility and yield of mustard-mungbean-T. aman cropping pattern	• To find out sustainable fertilizer recommendations for the patter, • To monitor soil health, • To estimate uptake of different nutrient for the cropping pattern and to make a balance sheet for each of the nutrient.	Jashore
1649	Effect of foliar application of micronutrient on quality and yield of tomato	• To find out the response of foliar application of Zinc and Boron on quality and yield of BARI Tomato-21.	Jashore
1650	Effect of minimum tillage and crop residue retention on soil physico-chemical properties and crop yields under a rice-based cropping system	• To observe the effects of tillage and residue retention on soil properties and crop yields in the rice-based cropping system, • To assess the system productivity in rice-based cropping system.	Jashore

Sl.	Title of experiment	Objectives	Location(s)
1651	Requirement of K fertilizer under conservation agriculture practice in the intensive wheat-mungbean-T. aman cropping system	• To determine the optimum rate of potassium fertilizer under conservation agriculture (CA) practice, • To evaluate the effects of K fertilizer on soil properties and cropping system productivity.	Jashore
1652	Development of bio-agent based management practice against foot and root rot of lentil	• To find out the effective bio-control agent against foot and root rot disease of lentil.	Jashore
1653	Effect on planting time and spray schedule for controlling purple blotch of onion	• To find out optimum planting time and actual spray schedule for controlling purple blotch disease of onion.	Jashore
1654	Validation of score and rovrat against alternaria leaf spot and flower blight disease of marigold	• To validate the effectiveness of score and rovrat against alternaria leaf spot and flower blight disease of marigold	Jashore
1655	Effect of plant activators on fusarium wilt of chilli under field condition	• To find out the effective plant activators against fusarium wilt disease of chilli	Jashore
1656	Evaluation of new fungicides against early blight of tomato	• To find out effective new chemical fungicide to control early blight of tomato	Jashore
1657	Evaluation of new fungicides for controlling purple blotch disease of onion	• To find out the effective new chemical fungicides against purple blotch disease of onion.	Jashore
1658	Evaluation of different new fungicides in controlling sigatoka disease of banana	• To find out the effective new chemical fungicides against sigatoka disease of banana	Monirampur, Jashore
1659	Efficacy of new fungicides in controlling powdery mildew of sweet gourd	• To find out the effective chemical fungicides against powdery mildew disease of sweet gourd	Jashore
1660	Survey and identification of major diseases of vegetable crops in saline area	• To identify the vegetable diseases and existing management practices in saline area	Satkhira, District
1661	Comparative evaluation of newly developed IPM packages against major insect pests of brinjal	• To evaluate the different bio-rational based management approaches against major insect pest of brinjal	Jashore
1662	Evaluation of new dimension management options against sucking pests of brinjal	• To develop new dimensional integrated management approach against sucking attacking brinjal	Jashore
1663	Sustainable management options against whitefly, whitefly-vectored begomoviruses and fruitworm in tomato	• To upscale and validate BARI developed IPM package to manage the insect pest complex of tomato	Jashore

Sl.	Title of experiment	Objectives	Location(s)
1664	Population dynamics and management of rugose spiraling whitefly, <i>Aleurodicus rugioperculatus</i> martin infesting coconut	• To document the seasonal population abundance of rugose spiraling whitefly in coconut as well as develop appropriate management strategy for this pest	Jashore
1665	Bio-rational based management of major insect pests of county bean	• To develop an environment friendly and bio-rational based management packages against major insect pests attacking country bean	Jashore
1666	Development of bio-rational based management package(s) against common cutworm, <i>Spodopteralitura</i> infesting cabbage	• To develop a bio-rational based sustainable management approach for management of common cutworm in cabbage	Jashore
1667	Development of bio-rational management package(s) against flea beetle, <i>Phyllotretasteriolata</i> attacking cabbage	• To develop a bio-rational based sustainable management approach for the major insect pests of cabbage	Jashore
1668	Development of a management approach against flea beetle attacking mustard	• To develop effective management approach against flea beetle attacking mustard	Jashore
1669	Development of eco-friendly management approach against thrips of roses	• To develop a bio-rational based sustainable management approach against thrips of roses	Jashore
1670	Development of a management approach against pod borer attacking yard long bean	• To develop management package(s) against pod borer attacking yard long bean.	Jashore
1671	Evaluation of some bio-pesticides against sucking insect pests of yard long bean	• To select suitable bio-pesticides or new chemical insecticide against sucking pests attacking yard long bean.	Jashore
1672	Survey and monitoring of insect pests and their natural enemies of dragon fruit, sweet orange and mandarin	• To document the insect pests and their natural enemies of mandarin orange, sweet orange and dragon fruit in Jashore region.	Sharsha, Jashore
1673	Adaptive trial of BARI released barley varieties in Jashore region	• To select suitable variety	Jashore
1674	Collection of chili germplasm in jashore region	• To increase the breeding material	Jashore
1675	Level of pesticide use on brinjal production at some selected areas of Jashore region	• To assess the level of pesticide, use on brinjal production • To estimate the economic impact of pesticide, use on brinjal production • To compare the IPM use on Bt. brinjal and conventional cultivation • To estimate the drawbacks of use of IPM technology for brinjal production.	Jashore, Jhenaidah and Kushtia

Sl.	Title of experiment	Objectives	Location(s)
1676	Trends in groundwater tables and present status of irrigation water in north west and south west regions of Bangladesh	• To find out the trend of GWTs that helps to take policy for sustainable agriculture and judicious use of GW • To design irrigation well for specific area	Jashore
1677	Intercropping of cauliflower with Bt. brinjal	• To find out the performance of cauliflower as intercrop with brinjal in Narail district	Tularampur, Narail
1678	Performance of grass pea varieties as relay with t. Aman rice in low lying areas	• To evaluate the performance of BARI grasspea varieties for increasing yield and farmers' income	Tularampur, Narail
1679	Validation trial on production and bulb preservation techniques of liliun	• To popularize liliun production and bulb preservation techniques at farmer's level.	Jhikargacha, Jashore

REGIONAL AGRICULTURAL RESEARCH STATION, AKBARPUR, MOULVIBAZAR

1680	Collection, evaluation and characterization of different genotypes of winter hyacinth bean under high rain fall areas of north-eastern region of Bangladesh	• To develop new Hyacinth Bean variety.	Akbarpur, Moulvibazar
1681	Collection, evaluation and characterization of different genotypes of summer hyacinth bean under high rain fall areas of north-eastern region of Bangladesh	• To develop new summer hyacinth bean variety.	Akbarpur, Moulvibazar
1682	Effect of decomposed water hyacinth on growth and yield of brinjal	• To determine the effect of decomposed water hyacinth for increasing the yield of Brinjal.	Akbarpur, Moulvibazar
1683	Performance of BARI released winter hybrid tomato varieties in acid soil at Sylhet region	• To evaluate the performance of BARI released tomato varieties for this region	Akbarpur, Moulvibazar
1684	Evaluation of off-season jackfruit germplasm	• To evaluate the off-season jackfruit germplasm.	Akbarpur, Moulvibazar
1685	Performance of BARI Released groundnut varieties in acidic soil at Moulvibazar	• To select and disseminate suitable groundnut varieties for higher productivity in acidic soil at Moulvibazar.	Akbarpur, Moulvibazar
1686	Performance of BARI realized minor cereal crops in acidic soil at Moulvibazar	• To validate the developed BARI minor cereal crops in acidic soil for farmers food security at Moulvibazar	Akbarpur, Moulvibazar
1687	Performance of BARI released blackgram varieties in acidic soil of semi hill valley at Moulvibazar under rainfed condition	• To measure the yield potentiality of blackgram varieties in acid soil of semi hill valley at moulvibazar under rain fed condition	Akbarpur, Moulvibazar
1688	Production programme of garden pea with sorghum intercropping at acidic soil at Moulvibazar	• To validate the developed pea and sorghum intercropping in farmers field	Akbarpur, Moulvibazar

Sl.	Title of experiment	Objectives	Location(s)
1689	Production program of intercropping garden pea with hybrid maize in acidic soil at Moulvibazar	• To validate the developed pea and hybrid maize intercropping in farmers field	Akbarpur, Moulvibazar
1690	Performance of mukhikachu varieties under Moulvibazar areas	• To find out the performance of the improve varieties of Mukhikachu for Moulvibazar areas	Akbarpur, Moulvibazar
1691	Effect of sowing dates on sunflower at Moulvibazar	• To find out optimum sowing date for BARI Surjomukhi-3 at Moulvibazar	Akbarpur, Moulvibazar
1692	Performance of BARI released Mustard varieties at Moulvibaza	• To select mustard varieties for Moulvibazar area	Akbarpur, Moulvibazar
1693	Effect of spacing on the growth and yield of Mukhikachu variety at Moulvibazar	• To find out the optimum spacing for obtaining maximum yield of mukhikachu at Moulvibazar.	Akbarpur, Moulvibazar
REGIONAL AGRICULTURAL RESEARCH STATION, RAHMATPUR, BARISHAL			
1694	Effect of stem pruning and different staking methods on growth and yield of tomato	• To find out the suitable level of pruning on growth and yield of tomato • To find out suitable staking methods on growth and yield of tomato	Rahmatpur, Barishal
1695	Effect of topping and mulching on vegetative growth and yield of okra	• To determine the effect of topping on growth and yield of okra. • To determine the effect of different mulching color on growth and yield of okra.	Rahmatpur, Barishal
1696	Effect of transplanting dates and mulching on growth and yield of tomato	• To find out an appropriate date of transplanting of tomato crop in southern part of Bangladesh • To know the effect of different mulching materials on plant growth and yield potential of tomato crop.	Rahmatpur, Barishal
1697	Growth and yield performance of bitter gourd varieties on different trellis	• To find out the effects of different trellis on the growth and yield of bitter gourd.	Rahmatpur, Barishal
1698	Integrated nutrient management on growth and yield of brinjal	• To investigate the effects of integrated nutrient management on soil fertility and crop yield.	Rahmatpur, Barishal
1699	Impact of plant spacing on the growth, fruit quality and yield of okra in southern region of Bangladesh	• To find the most suitable plants pacing regime okra yield in the Southern region of Bangladesh.	Rahmatpur, Barishal
1700	Standardization of growing media of vegetable production technique on rooftop	• To suggest suitable growth media and production packages of year-round rooftop fruit gardening.	Rahmatpur, Barishal
1701	Evaluation of green coconut germplasm	• To find out green coconut as well as coconut variety	Rahmatpur, Barishal
1702	Collection and evaluation of coconut germplasm	• To identify promising coconut lines with desirable characteristics • To develop high yielding variety	Rahmatpur, Barishal

Sl.	Title of experiment	Objectives	Location(s)
1703	Hybridization in Coconut (Dwarf × BARI Coconut-2)	• To develop semi dwarf coconut variety • To increase the size of coconut • To incorporate desirable traits	Rahmatpur, Barishal
1704	Effect of IBA concentrations and dipping time for rooting of dragon fruit stem cuttings	• To evaluate the effect of indol butyric acid on rooting of dragon fruit stem cuttings. • To produce true to type as well as large number of plantlets of dragon fruit.	Rahmatpur, Barishal
1705	Effect of pre-harvest fruit bagging on postharvest quality and shelf life of dragon fruit	• To evaluate the effect of preharvest fruit bagging materials on the yield, postharvest quality and shelf life of dragon fruit	Rahmatpur, Barishal
1706	Effects of combined application of chemical fertilizer and vermicompost on growth and yield of dragon fruit	• To evaluate the integrated effects of different levels of vermicompost and chemical fertilizer on the growth and yield of dragon fruit.	Rahmatpur, Barishal
1707	Potassium management for sweet orange yield and quality	• To find out response of potassium on sweet orange yield and fruit quality. • To determine the effect of different doses of potassium.	Rahmatpur, Barishal
1708	Effect of pruning time on growth and yield of guava	• To find out the suitable pruning times of guava • To know the relationship among the pruning times guava plants	Rahmatpur, Barishal
1709	Performance of swarupkathi peyara (rootstock) and BARI Peyara-2 (scion) grafts in flood prone southern region of Bangladesh	• To find out the graft suitability between Swarupkathi peyara as rootstock and BARI peyara 2 as scion • To replace local guava variety by BARI released improved variety	Rahmatpur, Barishal
1710	Collection and evaluation of banana (sabri kola) germplasm	• To select superior one(s) for commercial cultivation • To conserve germplasm	Rahmatpur, Barishal
1711	Effect of vermicompost on growth, yield and quality of sweet orange	• To study the effect of vermi-compost on growth, morpho-physical attributes of sweet orange. • To study the effect of vermicompost on yield and quality attributes of sweet orange.	Rahmatpur, Barishal
1712	Collection and evaluation of velvet apple (<i>Diospyros discolor</i>) germplasm	• To enrich the germplasm pool for velvet apple (bilatigub) • To screen the superior line • To develop new variety	Rahmatpur, Barishal
1713	Collection and evaluation of local Wax Apple (Jamrul) germplasm	• To identify promising local Wax apple line with desirable characteristics. • To conserve germplasm.	Rahmatpur, Barishal
1714	Effect of sowing date and spacing on growth and yield of black cumin (<i>Nigella sativa</i> L.)	• To evaluate sowing time on growth, yield and quality of black cumin • To standardized suitable spacing of black cumin in Barishal region.	Rahmatpur, Barishal

Sl.	Title of experiment	Objectives	Location(s)
1715	Evaluation of betel nut germplasm in Barishal region	To select the suitable line/entries for releasing as new variety(ies) for Barishal region	Rahmatpur, Barishal
1716	Effect of plant spacing on the growth and yield of shahebikachu in Barishal region	- To find out suitable plant spacing for better growth and higher yield of shahebikachu. - To standardized suitable spacing of shahebikachu in Barishal region.	Rahmatpur, Barishal
1717	Effects of spacing and fertilizer dose on transplanted sunflower under zero tillage condition in southern region of Bangladesh	To find out the optimum spacing and fertilizer dose for getting higher yield of transplanted sunflower under zero tillage condition in southern region of Bangladesh.	Rahmatpur, Barishal
1718	Intercropping of soybean with sunflower at different planting ratios for increasing total productivity and land use efficiency in southern region	- To find out the suitable planting ratio of sunflower and soybean intercropping system in southern region of Bangladesh - To increase the total productivity and land use efficiency	Rahmatpur, Barishal
1719	Effects of different tillage conditions on the growth and yield of soybean varieties in southern region of Bangladesh	- To examine the effects of different tillage practices on BARI developed soybean varieties. - To increase the yield and farmers' income from soybean cultivation in southern region of Bangladesh.	Rahmatpur, Barishal
1720	Effects of different production systems on the productivity of vegetable crops in the low-lying areas of southern region	To study the effects of different production systems on the productivity of vegetable crops in low-lying areas of the southern region of Bangladesh.	Rahmatpur, Barishal
1721	Effects of management practices on growth and yield of pineapple under coconut orchard in southern region	To develop suitable management package for increasing the yield and quality of pineapple in southern region of Bangladesh.	Rahmatpur, Barishal
1722	Pilot production programme of pineapple as intercropping under coconut orchard in southern region	- To utilize the orchard fallow land for pineapple cultivation. - To disseminate the fruit orchard-based pineapple production technology in the southern region of Bangladesh.	Rahmatpur, Barishal
1723	Testing of fodder and seed yields performances of BARI released grasspea varieties	To test the dual performances (both fodder and seed yields) of BARI released khesari varieties	Rahmatpur, Barishal
1724	Integrated nutrient management for bitter gourd and yard long bean on floating bed cum trellis	- To develop nutrient management practice for bitter gourd and yard long bean on water hyacinth made floating bed. - To increase the yield of the vegetables under floating agriculture system.	Rahmatpur, Barishal
1725	Performances of different pulse crops under mango orchard in Southern region of Bangladesh	- To select the most appropriate pulse crop(s) for growing under mango orchard - To increase the cropping intensity	Rahmatpur, Barishal
1726	Effect of tillage and fertilizer doses on sunflower growth and	To reduce cost of cultivation	Rahmatpur, Barishal

Sl.	Title of experiment	Objectives	Location(s)
	yield in southern region of Bangladesh	• To increase soil health through reducing soil erosion	
1727	Weed control management in groundnut cultivation in <i>Rabi</i> season	• To find the suitable method for controlling weeds in groundnut • To find out low-cost management option for weed control.	Rahmatpur, Barishal
1728	Performances of minor cereal crops under different tillage conditions in rice-based cropping systems in southern region of Bangladesh	• To evaluate the performances of minor cereals under different tillage conditions in rice-based cropping systems. • To increase the cropping intensity and economic return.	Rahmatpur, Barishal
1729	Sorjan Based Integrated Farming Systems Research for Increasing Agricultural Productivity under Tidal Flooding Ecosystem in Southern Region of Bangladesh	• To develop location specific sorjan based farming systems technology under tidal flooding ecosystem in southern region of Bangladesh. • To increase agricultural productivity and profitability of sorjan systems through integration of crops, fishery, dairy, ducks and other enterprises.	Rahmatpur, Barishal
1730	Effects of management practices on the yield and quality of murta plant (Shitalpati)	• To develop suitable management package for increasing the yield of murta plant (shitalpati). • To improve the quality of shitalpati (cooling mat).	Nalchity, Jhalakati
1731	Effects of chemical treatments of murta cane on the quality of shitalpati (cooling mat) in Bangladesh	• To develop suitable chemical treatment/ process of murta cane for improving the quality of shitalpati in Bangladesh.	Rahmatpur, Barishal
1732	Adaptation and fine-tuning of BARI Zero-till Seeder for expanding pulse crops in wet clay soil of coastal fallows	• To expand mechanized mugnbean production in excessively wet clay soil of coastal fallows	Kalapara, Patuakhali
1733	Performance evaluation of lifter and power sprayer for spraying pesticide on coconut tree	• To evaluate the performance of the different sprayer for coconut tree • To reduce the spraying cost of coconut tree	Rahmatpur, Barishal
1734	Survey and monitoring of insect pests of hog plum in southern region of Bangladesh	• To record the insect pests and documenting their incidence on hog-plum in southern region of Bangladesh	Barishal, Jhalakati, Pirojpur
1735	Development of bio-rational management approach against leaf eating caterpillar of betel vine	• To find out appropriate management practices against leaf eating caterpillar of betel vine	Barishal, Jhalakati
1736	Evaluation of some bio-pesticides against rugose spiraling whitefly attacking coconut	• To develop bio-rational based management approach against Rugose Spiraling Whitefly of coconut	Rahmatpur, Barishal

Sl.	Title of experiment	Objectives	Location(s)
1737	Development of integrated management package(s) against coconut mite	• To find out eco-friendly management practices against coconut mite	Rahmatpur, Barishal
1738	Survey, monitoring and documentation of major insect pests of betel leaf	• Identification of insect pests attacking betel leaf • Determination of damage severity of insect pests	Barishal, Jhalakati, Pirojpur
1739	Development of environment friendly management approach against betel vine black fly, <i>Aleurocanthus</i> spp. (Aleyrodidae: Hemiptera)	• To find out eco-friendly management practices against betel vine black fly	Rahmatpur, Barishal
1740	Survey, monitoring, and documentation of major insect pests of betel nut in southern region of Bangladesh	• To record the insect pests and document their incidence on betel nut in southern region of Bangladesh	Barishal, Jhalakati, Pirojpur
1741	Development of eco-friendly management package against major insect pests of mungbean in southern region	• To find out promising IPM package against major insect pests of mungbean for Southern region • To produce toxic pesticide free mungbean	Barishal, Jhalakati
1742	Field validation of eco-friendly management package against flower thrips and pod borer complex of mungbean in southern region	• To validate promising IPM package against major insect pests of mungbean for Southern region • To produce toxic free mungbean	Barishal, Jhalakati
1743	Development of bio-rational pest management package against major insect pests of cucurbits grown on floating bed	• To develop bio-rational based pest management package against major insect pests of cucurbit. • To produce toxic synthetic chemical pesticide free cucurbits.	Rahmatpur, Barishal
1744	Development of bio-rational management approach against insect pest complex of okra grown on floating bed	• To develop appropriate strategy for managing the insect pest complex of okra grown on floating bed.	Rahmatpur, Barishal
1745	Development of bio-rational pest management approach against thrips-mite complex in chili grown on floating bed	• To develop appropriate strategy for managing the thrips-mites complex infesting chili grown on floating bed.	Rahmatpur, Barishal
1746	Management of powdery mildew of pumpkin on floating bed cum trellis	• To find out an effective chemical in controlling powdery mildew of pumpkin • To reduce yield losses of that crops.	Rahmatpur, Barishal
1747	Survey and identification of major diseases of vegetable and spice crops on floating bed cultivation in Barishal region	• To identify different diseases and its causal organisms. • To assess the disease status (disease incidence and severity)	Gopalganj, Madaripur, Barishal, Pirojpur
1748	Survey on malta diseases at southern region of Bangladesh	• To identify the diseases of Malta. • To determine the severity of the diseases	Barishal, Pirojpur, Jhalakati

Sl.	Title of experiment	Objectives	Location(s)
1749	Integrated weed management of sesame	- To find the suitable method(s) for weed management in sesame at farmers field condition - To find out low cost sesame weed management option(s).	Rahmatpur, Barishal
1750	Effect of Boron foliar spray on mungbean	To examine the efficacy of Boron foliar spray on mungbean yield	Rahmatpur, Barishal
1751	Effect of stubble height on relay field pea	To test different stubble heights of indigenous long T. <i>Aman</i> rice on fieldpea in southern Bangladesh.	Rahmatpur, Barishal
1752	Effect of N, P, K and S on the growth and yield of Shahebkachu	- To find out effect of NPKS for Shahebkachu - To increase the yield of Shahebkachu through fertilizer management	Rahmatpur, Barishal
1753	Effect of different nutrients on betel nut (<i>Areca catechu</i>) in southern region of Bangladesh	- To examine the effect of different fertilizers on betel nut. - To Find out the optimum dose of fertilizer for betel nut.	Rahmatpur, Barishal
1754	Integrated nutrient management for pineapple in Barishal region	- To find out the effect of different fertilizer on pineapple. - To find out the optimum dose of fertilizer for maximizing pineapple yield.	Rahmatpur, Barishal
1755	Effect of boron fertilization on lentil in Barishal region	- To find out the response of BARI Masur-8 to boron fertilizer - To determine the optimum dose of boron for maximizing the yield of BARI Masur-8	Rahmatpur, Barishal
1756	Nutrient management of sesame in Barishal region	- To develop nutrient management package for sesame in Barishal region - To increase the yield of sesame through fertilizer management	Rahmatpur, Barishal
1757	Integrated nutrient management for local bitter gourd cultivar	- To find out the response of fertilizer on local bitter gourd cultivar. - To develop nutrient management package for bitter gourd.	Rahmatpur, Barishal
1758	Integrated nutrient management for Chilli in southern region of Bangladesh	To find out efficacy of poultry manure with chemical fertilizer on chilli production	Rahmatpur, Barishal
REGIONAL AGRICULTURAL RESEARCH STATION, HATHHAZARI, CHATTOGRAM			
1759	Evaluation of sweet orange (kata malta) line	To evaluate sweet orange lines for developing a variety.	Hathazari, Chattogram
1760	Evaluation of local eggplant (potha begun) germplasm	To collect and observe their yield potentialities for developing a new variety of this popular cultivar.	Hathazari, Chattogram
1761	Advanced yield trial of stem amaranth germplasm	To develop a high yielding stem amaranth variety for winter season.	Hathazari, Chattogram
1762	Evaluation of local chilli (halda morich) germplasm	To develop a regional variety. On the other hand, high yielding variety is essential for	Hathazari, Chattogram

Sl.	Title of experiment	Objectives	Location(s)
		obtaining higher yield of chilli. The present investigation was done to observe their yield potentialities and other performances.	
1763	Intercropping of vegetables and spices with chilli in Chattogram region	• To evaluate the performance of the intercropping system of vegetables with chilli for higher productivity and economic return.	Hathazari, Chattogram
1764	Yield process and crop competition of leafy vegetables intercropping system with chilli	• To find out optimum chilli leafy vegetables combination for higher productivity and economic return and study the effect of intercropping on component crops.	Hathazari, Chattogram
1765	Effect of nitrogen on growth and yield of sunflower under Chattogram region	• To evaluate the effect of different nitrogen rates on growth and grain yield of sunflower under ecological conditions of Hathazari, Chattogram and to find out the optimum and economic fertilizer dose for sunflower.	Hathazari, Chattogram
1766	Performance of cowpea intercropping with maize at Chattogram region	• To evaluate the performance of maize-cowpea intercrop as influence by planting arrangement for higher productivity.	Hathazari, Chattogram
1767	Intercropping cowpea with sorghum under different planting system	• To find out suitable planting systems of sorghum and cowpea as intercropping for higher productivity, economic return and national nutritional food security.	Hathazari, Chattogram
1768	Study of propiconazole degraded <i>Bacillus velezensis</i> bari/hat/gl6 for suppressing <i>Lasiodiplodia theobromae</i> in mango	• To degrade the propiconazole properties as well as to control the SER of mango.	Hathazari, Chattogram
1769	The efficacy test of <i>bacillus</i> -based products (Emos) for controlling greening disease of sweet orange	• To control the greening disease by the novel <i>Bacillus</i> sp. YC7007 and YC7012 that species already was patented and novel species (Hossain <i>et al.</i> , 2016 and 2019).	Hathazari, Chattogram
1770	The efficacy test of Emos (<i>Bacillus oryzicola</i> YC7007 AND <i>Bacillus velezensis</i> BARI/HAT/GL6) for controlling bacterial wilt in <i>solanaceous</i> vegetable	• To control the bacterial wilt of solanaceous crops like BARI <i>Bt</i> begun 2, BARI tomato 15 and local Halda Morich which were very susceptible variety.	Hathazari, Chattogram
1771	Effect of irrigation on mango fruit cracking in Chattogram region	• To find out the critical stage of irrigation to mitigate mango fruit cracking of mango.	Hathazari, Chattogram
1772	Effect of irrigation on the yield and quality of black pepper	• To the determination of critical stages or period of irrigation and increase of black pepper production.	Hathazari, Chattogram
1773	Baseline study on cashew nut production processing and marketing in bandarban hill district	• To derive policy implications and recommendations.	Hathazari, Chattogram

Sl.	Title of experiment	Objectives	Location(s)
1774	Socioeconomic study on local cultivar duhazri alu in Chattogram District	• To document socioeconomic and contextual information of the growers/cultivar's; • To estimate the input use, productivity, and profitability of the local potato cultivar; • To know the farmers and consumer's perceptions to this cultivar; and • To derive policy recommendations.	Hathazari, Chattogram
REGIONAL AGRICULTURAL RESEARCH STATION, BURIRHAT, RANGPUR			
1775	Inter-varietal hybridization of mango	• To develop new mango hybrids having desirable characters like size, regular bearing and shelf life and also off season bearing.	Burirhat, Rangpur
1776	Evaluation of exotic mango germplasm	• To find out the superior germplasm of exotic mango for releasing as a variety • To conserve genetic resources of fruits	Burirhat, Rangpur
1777	Performance study of late winter tomato in Rangpur region of Bangladesh	• To find out the suitable and good quality tomato variety for late winter tomato in Rangpur region of Bangladesh.	Burirhat, Rangpur
1778	Effect of sowing date on onion true seed production at Rangpur region	• To find out suitable sowing date for onion seed production at Rangpur region	Burirhat, Rangpur
1779	Evaluation of locally collected foxtail millet germplasm at Rangpur Region	• To select better performing foxtail millet germplasm	Burirhat, Rangpur
1780	In-situ evaluation of pummelo	• To find out early and late Pummello germplasm • To find out a suitable Pummello germplasm for releasing as a variety • To conserve the fruit genetic resource	Burirhat, Rangpur
1781	Collection and evaluation of buckwheat germplasms	• To collect and evaluate the performance of buckwheat germplasm • To select superior germplasm for releasing as variety. • To conserve the plant genetic resources.	Burirhat, Rangpur
1782	Performance of intercropping leafy vegetables with sweet potato in char area of Rangpur	• To find out suitable combination of sweet potato and leafy vegetables intercropping system for higher productivity and maximum economic return	Burirhat, Rangpur
1783	Development of alternate cropping pattern for increasing cropping intensity and productivity in Rangpur region	• Increase cropping intensity and productivity through crop intensification in rice-based cropping system. • Increase farmer's income, access to food and nutrition, employment opportunity and woman's participation in agriculture	Burirhat, Rangpur
1784	Integrated nutrient management on garlic- Maize -T.Aman cropping pattern in Rangpur Region	• To find out the best fertilizer dose and economic return for Garlic- Maize -T.Aman cropping pattern of Rangpur areas	Burirhat, Rangpur

Sl.	Title of experiment	Objectives	Location(s)
1785	Integrated nutrient management on garlic- T.aus -T.aman cropping pattern in Rangpur Region	To find out the best fertilizer dose and economic return for Garlic- T.Aus -T.Aman cropping pattern of Rangpur region	Burirhat, Rangpur
1786	Integrated nutrient management on onion seed production- T.aus -T.aman cropping pattern in Rangpur Region	To find out the best fertilizer dose and economic return for Onion seed- T Aus - T.Aman cropping pattern of Rangpur areas	Burirhat, Rangpur
1787	Status of pod borer complex and their natural enemies on country bean	- To find out status of pod borer complex and their natural enemies on bean - To identify the natural enemies of pod borer complex	Burirhat, Rangpur
1788	Development of management approach against tomato leaf miner, <i>Tutaabsoluta</i>	- To find out the most effective management approach against tomato leaf miner, <i>Tutaabsoluta</i> - To produce insecticide free tomato	Burirhat, Rangpur
1789	Development of a bio-rational based management approach against betel vine black fly, <i>Aleurocanthus</i> spp.	- To develop the most effective bio-rational based management package for the management of betel vine black fly - To produce insecticide free betel leaf	Aldatpur, Gangachara, Rangpur
1790	Development of a bio-rational based management approach against Asian citrus psyllid	- To develop an eco-friendly sustainable management package against Asian citrus psyllid - To produce insecticides free lemon	Burirhat, Rangpur
1791	Survey and monitoring of insect pests of sunflower and their natural enemies in northern region of Bangladesh	- To document major insect pests and their natural enemies of sunflower - To estimate the damage caused by insect pests in sunflower	Burirhat, Rangpur
1792	Development of eco-friendly management tactics for controlling onion thrips (<i>Thripstabacilindeman</i>)	To develop eco-friendly management technique to control onion thrips	Burirhat, Rangpur
1793	Isolation and characterization of entomopathogenic microbes for rugose spiraling whitefly management	- To develop microbial bio control agents against insect pests. - To develop environmentally friendly management strategies for insect pests using beneficial microbes.	Burirhat, Rangpur
1794	Seasonal fluctuation and natural enemies of major insect pests of citrus at Regional Agricultural Research Station, Burirhat, Rangpur	- To document the seasonal fluctuation of major insect pests of citrus - To record the natural enemies of major insect pests of citrus	Burirhat, Rangpur
1795	Field validation of bio-rational based management packages against fruit fly in mango	- To validate the most effective bio-rational based management package for the management of fruit fly in mango - To produce insecticide free mango	Burirhat, Rangpur

Sl.	Title of experiment	Objectives	Location(s)
1796	Monitoring of scale insect in cucurbit crops in Rangpur Region	• To document the incidence and pest status of scale insect in cucurbit crops	Burirhat, Rangpur
1797	Survey and monitoring of insect pests and their natural enemies of sweet orange and dragon fruit	• To document major insect pests and natural enemies of sweet orange and dragon fruit	Burirhat, Rangpur
1798	Survey of major diseases of selected fruits and vegetables in northern region	• To know the disease status of selected fruits and vegetables and to characterize the causal agents of diseases	Burirhat, Rangpur
1799	Screening of mustard varieties/lines against Alternaria blight and white mold (Sclerotinia sclerotiorum) disease	• To select resistant sources against the white mold disease	Burirhat, Rangpur
1800	Multiplication, purification and maintenance of indigenous potato varieties	• To maintain its' purity and future research and variety development.	Burirhat, Rangpur
1801	Effect of different chemicals in controlling common scab disease of potato	• To evaluate the efficacy of different chemicals against common scab disease of potato	Burirhat, Rangpur
1802	Validation of fungicidal management technology against foliar diseases (purple blotch, Stemphylium leaf blight and Botrytis leaf blight) of onion	• To validate of management technology in controlling foliar diseases of onion • To increase bulb yield	Burirhat, Rangpur
REGIONAL AGRICULTURAL RESEARCH STATION, ISHURDI, PABNA			
1803	Weed management using herbicides under zero tillage mulched condition in garlic field	• To find out the suitable herbicide(s) for controlling weed in garlic under zero tillage mulched condition	Ishurdi, Pabna
1804	Optimization of doses and time of application of Pendimethalin on weed control in onion	• To find out the appropriate dose and time of Pendimethalin application for effective weed control of onion	Ishurdi, Pabna Rajbari, Dinajpur
1805	Adaptation of BARI released crop varieties at charland	• To adapt and disseminate suitable crop varieties for higher productivity at charland	Sadar, Ishurdi, Sujanagar, Bera
1806	Inclusion of black gram under mango orchard	• To utilize of the land of mango orchard with pulse crop	
1807	Effects of chemical application on flowering, fruit setting and yield of litchi	• To find out the effects of selected chemicals on flowering and yield in litchi	Ishurdi, Pabna
1808	Effect of foliar spray of boron and zinc on fruit dropping reduction in litchi	• To find out the effect of Boron and Zinc on reducing fruit drop in litchi	Ishurdi, Pabna
1809	Effects of chemical fertilizer on growth and yield of hybrid pointed gourd	• To find out the suitable dose of chemical fertilizer for growth and yield of pointed gourd	Ishurdi, Pabna
1810	Effect of sowing time on the development of sclerotinia rot disease of sunflower	• To find out the actual scenario for disease development in different sowing times	Ishurdi, Pabna

Sl.	Title of experiment	Objectives	Location(s)
1811	Validation of score and roval against <i>Alternaria</i> leaf spot and flower blight disease of marigold	• To validate the effectiveness of score and roval against <i>Alternaria</i> leaf spot and flower blight disease of marigold	Ishurdi, Pabna
1812	Survey and identification of aloe vera diseases	• To identify the diseases of aloe vera and their damage severity	Kholabaria, Natore Sadar, Natore
1813	Management of leaf spot disease of aloe vera	• To find out the effective management practices against leaf spot disease of Aloe vera	Ishurdi, Pabna
1814	Yield loss assessment of lentil varieties due to stemphylium blight disease	• To measure and quantify the loss of yield in lentil varieties due to Stemphylium blight disease	Ishurdi, Pabna
1815	Screening of lentil lines against stemphylium blight disease	• To find out the resistant sources against stemphylium blight disease of lentil	Ishurdi, Pabna
1816	Screening of pumpkin lines against powdery mildew disease	• To find out the resistant sources against powdery mildew disease of pumpkin	Ishurdi, Pabna
1817	Management of white mold disease of bush bean caused by <i>Sclerotinia sclerotiorum</i> through the application of bio-control agents and different organic amendments	• To develop an effective management package(s) against white mold disease of bush bean	Ishurdi, Pabna
1818	Screening of okra lines against okra yellow vein mosaic virus	• To find out the resistant sources against okra yellow vein mosaic virus disease	Ishurdi, Pabna
1819	Morphological characterization of bottle gourd germplasm	• To characterize the germplasm and regenerate seeds for conservation • To develop a photographic monograph with descriptor of the collection	Ishurdi, Pabna
1820	Nutrient management for sustaining soil fertility and performance of wheat-mungbean-T.aman rice cropping pattern	• To find out sustainable fertilizer recommendations for Wheat- Mungbean-T.aman rice cropping pattern • To observe the nutritional status of soil	Ishurdi, Pabna
1821	Nutrient management for sustaining soil fertility and performance of mustard-mungbean-T.aman cropping pattern	• To find out sustainable fertilizer doses for Mustard-Mungbean-T. aman cropping pattern, and its soil health and productivity	Ishurdi, Pabna
1822	Bio-rational based management of legume pod borer, <i>Maruca vitrata</i> attacking summer country bean	• To develop effective IPM package(s) against legume pod borer infesting summer country bean. • To produce toxic pesticide free country bean	Ishurdi, Pabna
REGIONAL AGRICULTURAL RESEARCH STATION, CUMILLA			
1823	Morphological characterization of mango germplasm	• To characterize different breeding lines • To identify suitable parents for hybridization program • To develop photographic monograph with descriptors.	Cumilla

Sl.	Title of experiment	Objectives	Location(s)
1824	Hybridization in mango	• To develop a hybrid mango variety of desired character(s).	Cumilla
1825	Collection and evaluation of lemon germplasm	• To select suitable lines of lemon • To conserve germplasm.	Cumilla
1826	Collection and evaluation of lime germplasm	• To select suitable lines of lime • To conserve germplasm.	Cumilla
1827	Collection and evaluation of pummelo germplasm	• To select suitable lines of pummelo • To conserve germplasm.	Cumilla
1828	Collection and evaluation of year-round (off-season) jack fruit germplasm	• To find out superior year-round jack fruit genotypes to develop as variety.	Cumilla
1829	Collection and evaluation of cucumber germplasm	• To search for a disease resistant line (specially wilt and virus disease) • To evaluate collected germplasm as well as to strengthen cucumber breeding program.	Cumilla
1830	Screening of okra germplasm against YVMV	• To find out superior okra lines to release as variety with tolerance to YVMV and high yield.	Cumilla
1831	Collection and evaluation of local germplasm of ridge gourd	• To find out superior ridge gourd lines to release as variety.	Cumilla
1832	Participatory variety selection trial with stolon producing panikachu germplasm	• To evaluate the selected germplasm in farmers field to know the farmer's opinion as well as acceptance • To select high yielding stolon producing panikachu line(s) as a better one for release as a variety.	Cumilla, Brahmanbaria, Chandpur
1833	Participatory variety selection trial of mukhikachu lines	• To select high yielding mukhikachu line(s) as a better one for release as a variety • To evaluate the selected germplasm in farmers field to know the farmer's opinion as well as acceptance.	Cumilla, Brahmanbaria, Chandpur
1834	Advanced yield trial with stolon producing panikachu germplasm	• To select high yielding stolon producing panikachu line(s) as a better one for release as a variety.	Cumilla
1835	Effect of two different plant growth regulators on production traits of sunflower	• The objectives of this study were to evaluate the effect of foliar application of two different plant growth regulators on seed yield and oil content of sunflower.	Cumilla
1836	Effect of sowing time on yield and yield components of sesame in Cumilla region	• To know the effect of sowing time on yield and yield attributes of sesame.	Cumilla
1837	Effect of sowing time on the yield and yield components of fenugreek in Cumilla region	• To know the appropriate sowing time for maximum yield of fenugreek in Cumilla region.	Cumilla
1838	Performance of different onion varieties in charland areas of Cumilla	• To observe the yield performance of high yielding onion varieties in charland area of Cumilla	Meghna, Cumilla

Sl.	Title of experiment	Objectives	Location(s)
1839	Screening of different chilli germplasm in waterlogging condition	• To find out suitable waterlogging tolerant chilli germplasm for cultivation in flooding area.	Cumilla
1840	Development of fertilizer recommendation for Mustard/Boro mixed cropping system	• To find out a suitable and economic fertilizer dose for maximizing the yield of Mustard/Boro mixed cropping system	Cumilla
1841	Effect of different mulch and nitrogen application methods on the growth, yield of winter tomato	• To determine the effects of different mulch on soil temperature and yield of tomato in Cumilla region. • To find out appropriate N-fertilizer application technique for winter tomato cultivated with mulch.	Cumilla
HILL AGRICULTURAL RESEARCH STATION, KHAGRACHARI			
1842	Evaluation of jackfruit germplasm in the hill region	• To identify superior small sized jackfruit germplasm with high yield potentiality and edible qualities.	Khagrachari
1843	Performance of mango (kanchamitha) germplasm at hilly region	• To assess the performance in respect of yield and quality as a green mango for recommendation as variety under the agro-climatic conditions of CHT.	Khagrachari
1844	Evaluation of indigenous ber germplasm at Khagrachari	• To select superior land races for commercial cultivation in the hilly areas.	Khagrachari
1845	Evaluation of sweet orange germplasm in the hilly region	• To evaluate the collected germplasms to identify the superior germplasm for developing variety.	Khagrachari
1846	<i>In-situ</i> evaluation of year-round pummelo germplasm	• To select high yielding desirable line for year-round bearing.	Khagrachari
1847	Evaluation of promising coffee germplasm in the hilly region of Bangladesh	• To find out the suitable germplasm for varietal development activities.	Khagrachari
1848	Characterization and evaluation of turmeric lines	• To evaluate collected turmeric germplasm for higher rhizome yield with better quality.	Khagrachari
1849	Effect of different standard on growth and yield of black pepper (<i>P. nigrum</i>)	• To examine effect of pole types on the early growth of black pepper.	Khagrachari
1850	Regional yield trial of french bean lines	• To develop new variety(s) of French bean with desirable horticultural characters.	Khagrachari
1851	Demonstration of hybrid maize-bushbean intercropping in hilly area	• To increase yield and economic return of farmers and improve the productivity of existing cropping pattern.	Khagrachari
1852	Intercropping of Chili with Maize in hilly area	• To verify the potentiality of hybrid maize-chili intercropping system.	Khagrachari
1853	Maize based intercropping technologies in the hill valleys of Khagrachori	• To evaluate the suitability and economic performance of BARI Bushbean intercrop with BARI Hybrid Maize at farmer's field of hill valleys in Khagrachori	Khagrachari

Sl.	Title of experiment	Objectives	Location(s)
1854	Characterization of mustard	• To characterization of mustard genotypes for further research	Khagrachari
HILL AGRICULTURAL RESEARCH STATIONS, RAMGAR, KHAGRACHARI			
1855	Evaluation of velvet bean at hilly region	• To collect and velvet bean line(s).	Ramgarh
1856	Performance of advance star apple (<i>Chrysophyllumcainito</i> L.) germplasm in hilly region	• One star apple line was selected as advance line. This line was evaluated again in this year in order to release as variety. That's why present study was undertaken.	Ramgarh
1857	Evaluation of promising cashewnut germplasm in hill tract	• Twently promising germplasm were selected having high yield potentiality and quality nut in order to develop a variety. That's why present study was undertaken.	Ramgarh
1858	Evaluation and adaptability of promising coffee germplasm at ramgarh.	• To find out the suitable germplasm for varietal development activities.	Ramgarh
HILL AGRICULTURAL RESEARCH STATIONS, RAIKHALI, RANGAMATI			
1859	Evaluation of mango germplasm for green consumption at hill valley in chattogram hill tracts	• To evaluate the mango germplasm for green consumption (kachamitha) in Chattogram Hill Tracts	Raikhali
1860	Evaluation of phalsa in hilly area of rangamati	• To evaluate phalsa germplasm in hilly area	Raikhali
1861	Evaluation of pummelo in hilly region of rangamati	• To select superior pummelo line(s)	Raikhali
1862	Evaluation of dragon fruit germplasm in rangamati hilly area	• To find out the suitable dragon fruit germplasm for higher yield and quality	Raikhali
1863	Evaluation of dwarf coconut in hilly area of rangamati	• To observe the performances of dwarf coconut in hill valley	Raikhali
1864	Collection and evaluation of custard apple germplasm	• To select superior custard apple line(s) in hilly area	Raikhali
1865	Evaluation of newly collected mango germplasm	• To select suitable mango germplasm in respect of yield and quality	Raikhali
1866	Evaluation of eggfruit in hilly area	• To select suitable eggfruit lines in respect of yield and quality	Raikhali
1867	Evaluation of jabuticaba in hilly area	• To select suitable jabuticaba lines in respect of yield and quality	Raikhali
1868	Collection and evaluation of coffee germplasm	• To select suitable coffee lines in respect of yield and quality	Raikhali
1869	Collection and evaluation of cashew germplasm	• To select suitable cashew lines in respect of yield and quality	Raikhali
1870	Collection and evaluation of avocado germplasm	• To select suitable avocado lines in respect of yield and quality	Raikhali
1871	Evaluation of star apple germplasm	• To select suitable star apple germplasm in respect of yield and quality	Raikhali

Sl.	Title of experiment	Objectives	Location(s)
REGIONAL HORTICULTURE RESEARCH CENTRE, SHIBPUR, NARSHINGDI			
1872	Clonal selection of banana cv. Amritsagar	• To find out the suitable germplasm/lines to release a new variety	Shibpur, Narsingdi
1873	Development of appropriate control measure against banana weevil	• To compare the effectiveness of bagging in banana fruit	Shibpur, Narsingdi
1874	<i>In-situ</i> evaluation and collection of superior burmese grape genotypes	• To select superior burmese grape germplasm for releasing as a variety	Shibpur, Narsingdi
1875	Controlling disease and pest for safe vegetable (cv. Bari begun-10) production	• To find out suitable botanical product(s) for sustainable brinjal cv. BARI begun-10 production in Bangladesh.	Shibpur, Narsingdi
REGIONAL HORTICULTURE RESEARCH CENTRE, CHAPAINAWABGANJ			
1876	<i>In-situ</i> evaluation of a late mango germplasm	• To select the superior line for commercial cultivation in the late season • To develop new late variety extending the availability period	Chapainawabganj
1877	Evaluation of early mango germplasm	• To find out the superior early mango germplasm for releasing as a variety • To conserve genetic resources of fruits	Chapainawabganj
1878	Characterization and evaluation of mango chance seedlings obtained from MI ChaL-001	• To select the superior germplasm for commercial cultivation in the late season • To find out variabilities from its mother tree • To develop new variety	Chapainawabganj
1879	Inter-varietal hybridization of mango (SET-II)	• To incorporate desirable characters • To develop good quality hybrid variety(ies)	Chapainawabganj
1880	Evaluation of custard apple germplasm	• To select superior lines for releasing variety(ies) • To increase fruit genetic resources	Chapainawabganj
1881	Evaluation of pomegranate germplasm	• To select a suitable variety of pomegranate • To develop variety (ies)	Chapainawabganj
1882	<i>In situ</i> evaluation of bael germplasm	• To find out suitable bael germplasm for resleasing as a variety • To conserve fruit genetic resources	Chapainawabganj
1883	Effect of cocodust as growing media for mango sapling production	• To develop soilless mango sapling production • To facilitate mango sapling transport/export	Chapainawabganj
1884	Effect of ultra-high-density plantation of mango at varying spacing on yield and profit	• To find out the optimum spacing for ultra-high-density plantation (UHDP) • To evaluate the possibility of UHDP orchard for quality yield and profit	Chapainawabganj
1885	Effect of length of heading back in ultra-high-density plantation on growth, stature and yield of mango	• To find out the suitable length of heading back to cope the structure with the space • To control the plant height for higher yield and quality	Chapainawabganj

Sl.	Title of experiment	Objectives	Location(s)
REGIONAL HORTICULTURE RESEARCH CENTRE, LEBUKHALI, PATUAKHALI			
1886	Performance of some okra hybrids against YVMV	• To find out the high yielding YVMV resistant okra hybrid	Lebukhali, Dumki, Patuakhali
1887	Hybridization of watermelon	• To develop high yielding watermelon hybrid varieties	Lebukhali, Dumki, Patuakhali
1888	Performance of year-round pumpkin hybrids	• To develop high yielding pumpkin hybrid varieties • To select pumpkin hybrid varieties for winter and summer season	Lebukhali, Dumki, Patuakhali
1889	Effect of sowing time and spacing on yield and quality of BARI Begun-12	• To find out the best sowing time of BARI Begun 12	Lebukhali, Dumki, Patuakhali
1890	Effect of Nitrogen concentration on Different Growth Stage of Watermelon in Hydroponic Culture	• To find out optimum nitrogen dose for vegetative stage of Watermelon • To find out optimum nitrogen dose for reproductive stage of Watermelon	Lebukhali, Dumki, Patuakhali
1891	Identification of Pumpkin Germplasm Tolerant to Waterlogging Condition	• To Identify Waterlogging Tolerant Pumpkin Germplasm at Seedling Stage	Lebukhali, Dumki, Patuakhali
1892	Collection and evaluation of local lime germplasm	• To select the superior lines for release a new variety • To conserve genetic resources	Lebukhali, Dumki, Patuakhali
1893	Collection and evaluation of Dragon fruit germplasm	• To find out the suitable germplasm for higher yield and quality	Lebukhali, Dumki, Patuakhali
1894	Evaluation of dwarf Coconut in Patuakhali region	• To observe the performances of dwarf coconut in Patuakhali region	Lebukhali, Dumki, Patuakhali
1895	Enrichment and maintenance of fruit tree repository	• To conserve and maintain different horticultural crops for longer period and future use	Lebukhali, Dumki, Patuakhali
CITRUS RESEARCH CENTRE, JAINTIAPUR, SYLHET			
1896	Collection and evaluation of mandarin germplasm	• To select suitable lines • To develop new mandarin variety	Jaintapur
1897	Morphophysiological characterization and evaluation of seedless lemon germplasm	• To identify suitable germplasm for releasing as variety • To enrich gene pool for future research	Jaintapur
1898	Collection and evaluation of burmese grape germplasm	• To find out suitable early and late burmese grape line(s) • To develop superior variety	Jaintapur
1899	Conservation and evaluation of pineapple germplasm	• To conserve the genetic diversity of pineapple in Bangladesh • To select suitable germplasm releasing as variety	Jaintapur

Sl.	Title of experiment	Objectives	Location(s)
1900	Collection and evaluation of coffee germplasm	• To select suitable coffee lines for releasing as variety	Jaintapur
1901	Evaluation of cashew nut germplasm	• To select superior lines for releasing as variety	Jaintapur
1902	Evaluation of dragon fruit germplasm	• To find out suitable germplasm for higher yield and quality • To develop variety (s)	Jaintapur
1903	Evaluation of organic fertilizers for soil health management and safe fruit production	• Improve soil health avoiding chemical fertilizers • To ensure high yield and safe fruit production	Jaintapur
1904	Controlling disease and pest for safe fruit production enhancing the export potentiality	• To manage pest and diseases for safe fruit production • To enhance export potentiality	Jaintapur
1905	Evaluating beneficial microorganisms for safe and quality fruit production	• To evaluate beneficial microorganisms for safe fruit production and enhancing their export potentiality.	Jaintapur
1906	Collection, conservation and characterization of small and large cardamom germplasm	• To collect small and large cardamom germplasm • To study the morphophysiological behavior of small and large cardamom	Jaintapur
1907	Evaluation of black pepper Lines	• To select suitable line(s) for releasing a variety	Jaintapur
1908	Evaluation of cinnamon germplasm	• Characterization of cinnamon genotypes collected from different region of Bangladesh. • To select suitable germplasm for releasing as variety.	Jaintapur
1909	Evaluation of bay leaf germplasm	• To select the superior line(s) for releasing as variety.	Jaintapur
1910	Collection and Evaluation of Khasia paan (<i>Piper betle</i> L.)	• To identify suitable germplasm for releasing as variety. • To enrich gene pool for future research.	Jaintapur
1911	Collection and evaluation of indigenous spices crop under Sylhet region	• To enrich gene pool.	Jaintapur
1912	Mother orchard establishment of BARI released citrus fruit varieties	• To supply true to type quality planting materials of released varieties	Jaintapur
1913	Conservation of germplasm in field gene bank	• Conservation and maintenance of germplasm in field gene bank.	Jaintapur
FRUIT RESEARCH STATION, BINODPUR, RAJSHAHI			
1914	Inter-varietal hybridization of mango	• To incorporate desirable characters • To develop good quality hybrid variety(ies)	FRS,Binodpur, Rajshahi
1915	Collection and evaluation of mango germplasm	• To find out the superior mango germplasm for releasing as a variety • To conserve genetic resources of fruits	FRS,Binodpur, Rajshahi

Sl.	Title of experiment	Objectives	Location(s)
1916	Characterization and evaluation of late mango germplasm	• To develop suitable late mango variety (ies) • To increase the period of availability of mango • To increase fruit yield and quality.	FRS,Binodpur, Rajshahi
1917	Purification of shahi pepe through half-sib method	• To regain the characteristics of Shahi Pepe • To maintain the germplasm	FRS,Binodpur, Rajshahi
1918	Evaluation of local/sour type ber germplasm	• To select suitable ber varieties for different regions • To conserve fruit genetic resources	FRS,Binodpur, Rajshahi
1919	Evaluation of local and exotic lime germplasm	• To select the superior lines for release a new variety • To conserve genetic resources	FRS,Binodpur, Rajshahi
1920	Collection and evaluation of custard apple germplasm	• To select superior lines for releasing variety(s) • To increase fruit genetic resources	FRS,Binodpur, Rajshahi
1921	Effect of different doses of paclobutrazol on off-season flowering, fruiting, yield and fruit quality of mango cv. BARI Aam-3 and BARI Aam-4	• To observe the response of paclobutrazol on producing off-season mango	FRS,Binodpur, Rajshahi
1922	Survey and identification of Brick kiln smoke causes black tip on mango in Rajshahi region	• To make a survey to identify the actual present condition of black tip problem caused by brick kiln on mango • To collect black tip of mango sample	Survey on different location at Rajshahi Region
LAKHA RESEARCH CENTRE, CHAPAI NAWABGANJ			
1923	Influence of chemical and non-chemical fertilizers of lac host plant <i>Flemingia</i> sp., lac insect growth and incidence of lac insect pests	• To know the effect of chemical and non-chemical fertilizers to <i>Flemingia semialata</i> plant for better lac production	Chapai nawabganj
1924	Determination of suitable pruning method of lac host <i>Flemingia semialata</i> Roxb. for baishakhi crop season	• To determine the most suitable method of pruning of the lac host <i>Flemingia semialata</i> for maximum shoots for fair larval settlement	Chapai nawabganj
1925	Field validation of biorational based management techniques for the control of mango fruit fly in chapainawabganj region	• To popularize bio-rational based management techniques in controlling mango fruit fly among the farmers.	Bamondanga, and Atahar Upazilla of Chapai nawabganj
BREEDER SEED PRODUCTION CENTRE, DEBIGANJ, PANCHAGARH			
1926	Observation trial with clonal hybrids and exotic varieties for early heat tolerance	• To find out suitable genotypes for cultivation in earlier time prior to mid of October and to make a crossing plan using parents those will be selected in this study.	Debiganj, Panchagarh

Sl.	Title of experiment	Objectives	Location(s)
1927	Response of potato to phosphorus in old himalayan piedmont plain soil	• To study the effect of phosphorus on the yield and quality of potato and to evaluate the effect of P fertilizer on P uptake and fertilizer P recovery at Non-calcareous Grey Floodplain soil of Debiganj.	Debiganj, Panchagarh
1928	Effects of seed tuber size and spacing on yield and processing quality of potato	• To study the effects of seed tuber size and spacing on yield and processing quality of potato.	Debiganj, Panchagarh
1929	Effects of seed tuber size on yield and quality performance of processing potato varieties under field condition	• To study the effects of seed tuber size on yield and quality performance of processing potato varieties under field conditions.	Debiganj, Panchagarh
1930	Screening of early potatoes (solanum tuberosum l.) Varieties/germplasm against bacterial wilt disease	• To find suitable potato varieties for planting early and to fit potatoes into diversified cropping systems, to find out the resistance or tolerant varieties against the disease.	Farmer's field Debiganj, Panchagarh
1931	Effect of different organic matter for managing soil-borne diseases (common scab) of potato	• To select effective organic matter to minimize these diseases for potato production	Debiganj, Panchagarh
1932	Survey on major potato diseases of Bangladesh	• The present survey work was undertaken to determine disease incidence and severity and to determine the causal agent of potato	Debiganj, Panchagarh
1933	Evaluation of avocado germplasm	• To evaluate two avocado fruit germplasms	Debiganj, Panchagarh
AGRICULTURAL RESEARCH SUB-STATION, THAKURGAON			
1934	Breeder Seed Production of Summer Vegetables 2021	• To produce quality breeder seeds of selected BARI released popular summer vegetable varieties	Thakurgaon
1935	Breeder Seed Production of Winter Vegetables 2021-2022	• To produce quality breeder seeds of selected BARI released popular Winter vegetable varieties	Thakurgaon
1936	Regional Yield Trial of French Bean lines	• To select a suitable French line to release new French bean variety	Thakurgaon
1937	Collection and maintenance of fruit variety/cultivars	• To enrich and maintain gene pool for varietal improvement and development	Across Bangladesh
1938	Collection and maintenance of vegetable variety/cultivars	• To enrich and maintain gene pool for varietal improvement and development	Across Bangladesh
1939	Field screening of BARI released potato varieties/lines for processing and export purpose	• To select suitable potato varieties/ lines for processing and export purpose	Farmers field Thakurgaon
1940	Effect of sowing dates on BARI released popular potato varieties for yield and yield potential	• To select a suitable sowing date for potato varieties for high yield potential	Farmers field of Thakurgaon
1941	Adaptive trial of BARI released high yielding potato varieties	• To adapt BARI released high yielding potato varieties in northern region of Bangladesh	Farmers field of Thakurgaon

Sl.	Title of experiment	Objectives	Location(s)
1942	Development of management approach against Tomato leaf miner, <i>Tuta absoluta</i>	• To develop an effective management approach against tomato leaf miner in tomato	Thakurgaon
1943	Evaluation of sustainable management options against whitefly, whitefly-vectored begomoviruses and fruitworm in tomato	• To develop an effective management approach/ package against tomato whitefly, whitefly-vectored begomovirus and fruit worm in tomato	Thakurgaon
1944	Field Validation of Bio-Rational Based Management Options Against Insect Pest and Diseases of Guava at Chaklahat, Panchghar	• To validate BARI developed bio-rational based management tools against insect pest and diseases of Guava	Farmers field at Chaklahat of Panchghar
1945	Field Validation of Bio-Rational Based Management Options Against Insect Pest and Diseases of Orange at Boda of Panchghar	• To validate BARI developed bio-rational based management tools against insect pest and diseases of Orange	Farmers field at Boda of Panchghar
1946	Effect of Chemicals on Bacterial Wilt Management in Tomato	• To develop a chemical-based management approach against bacterial wilt of tomato.	Research and farmers' field, Thakurgaon
1947	Demonstration of popular BARI variety in Crop Museum and BARI Technology Village (BTv) at Munshirhat, Thakurgaon	• To introduce BARI release promising varieties and technologies to the farmers of Thakurgaon	MLT site and farmers' field, Thakurgaon
AGRICULTURAL RESEARCH STATION, PAHARTALI, CHATTOGRAM			
1948	Effect of bud thinning on quality and yield of dragon fruit	• To determine optimum number of fruits in the plant • To improve the quality and yield of fruit	Khulshi, Chattogram
1949	Identification of suitable light for enhancing day length for off season dragon fruit production	• To identify the economically suitable light for off season dragon fruit production commercially	Khulshi, Chattogram
1950	Evaluation of kanchan nagor guava germplasm	• To find out best kanchannagor genotypes to release as variety • To find out year-round genotype of guava	Khulshi, Chattogram
1951	Evaluation of pummello germplasm in Chattogram region	• To identify superior pummelo genotypes for releasing as variety	Khulshi, Chattogram
1952	Hybridization of mango at Chattogram region	• To develop good quality colored mango • To transfer the sweetness and lessen fibre • To extend the seasonal availability	Khulshi, Chattogram
1953	Evaluation of kancha-mitha mango germplasm in Chattogram region	• To identify promising lines • To select desirable mango lines for higher yield and qualities to release as a kancha-mitha variety.	Khulshi, Chattogram
1954	Evaluation of star gooseberry genotypes in Chattogram region	• To identify superior star gooseberry genotypes for releasing as variety.	Khulshi, Chattogram

Sl.	Title of experiment	Objectives	Location(s)
1955	Collection and evaluation of aonla genotypes in Chattogram region	• To identify superior aonla genotypes for releasing as variety	Khulshi, Chattogram
1956	Collection and evaluation of coffee germplasm in Chattogram region	• To find out superior coffee genotype • To release a coffee variety (Arabica) in Bangladesh.	Khulshi, Chattogram
1957	Evaluation of local and exotic mango germplasm in Chattogram region	• To find out superior mango genotype to release as variety	Khulshi, Chattogram
1958	Evaluation of Rambhutan germplasm in Chattogram region	• To collect more rambutan germplasm • To make new varieties suitable for commercial cultivation	Khulshi, Chattogram
1959	Collection and evaluation of hyacinth bean lines at Chattogram region	• To evaluate collected germplasm of hyacinth bean for higher yield	Khulshi, Chattogram
1960	Effect of spacing and population density on growth and yield of hyacinth bean var. BARI sheem 8	• To identify appropriate spacing and population density for better yield of hyacinth bean	Khulshi, Chattogram
AGRICULTURAL RESEARCH STATION, RAJBARI, DINAJPUR			
1961	Effect of Different Concentration and Application Time of Gibberellic Acid on Growth and Yield of Potato	• To find out appropriate concentration and appropriate time of GA ₃ application in potato tuber production and to increase seed tuber number per plant and accelerate seed production scheme	Dinajpur
1962	Effect Of Different Sowing Time and Spacing of Advanced Linseed Line (Lin-W-17)	• To find out the appropriate sowing time and spacing of linseed for Dinajpur region	Dinajpur
1963	Performance Of Garlic Varieties at Dinajpur Region	• To find out suitable garlic variety for Dinajpur region	Dinajpur
1964	Effect of vermicompost and rice husk ash on the yield of summer tomato	• To evaluate the effect of organic matter on the growth and yield of summer tomato and to increase safe vegetable production and economic return	Dinajpur
1965	On Farm Trial of Lentil Varieties in Dinajpur	• To observe the performance of BARI released lentil variety in Dinajpur region	MLT Site, Raniganj, sadar, Dinajpur
1966	On-Farm Trial of BARI Onion Varieties in Dinajpur region	• To evaluate the performance of onion varieties	MLT Site, Raniganj, sadar, Dinajpur
1967	On Farm Trial of BARI Developed Tomato Varieties	• To evaluate the performance of BARI developed tomato varieties	MLT Site, Raniganj, Sadar, Dinajpur
1968	Integrated Nutrient Management for Growth and Yield of Broccoli	• To find out optimum planting time and nutrient dose of broccoli in early planting condition	Dinajpur
1969	Productivity And Profitability Analysis of Intercropping	• To observe the performance of potato as intercrop with maize and to assess the	Dinajpur

Sl.	Title of experiment	Objectives	Location(s)
	Hybrid Maize with Potato at Different Planting System	economic performance of inter cropping potato with long duration maize	
1970	Performance of bitter gourd varieties at Dinajpur region	• To find out suitable variety of bitter gourd for Dinajpur region	Dinajpur
1971	Performance of BARI Chola Varieties in Dinajpur	• To select suitable chickpea variety for Dinajpur region	Dinajpur
1972	Effect of mulching on growth and yield of garlic varieties	• To find out suitable garlic varieties and effect of mulching on garlic production in Dinajpur region	MLT Site, Raniganj, Sadar, Dinajpur
1973	Development of Alternate Cropping Pattern Wheat-Mungbean-T. Aman Against Wheat- Fallow-T. Aman Rice	• To improve the existing cropping pattern for increase cropping intensity and productivity by inclusion of mungbean and to increase crop yield and farmers income	MLT Site, Pirgonj, Thakurgaon
1974	Development of Alternate Cropping Pattern Maize-Mungbean-T. Aman Against Maize- Fallow-T. Aman Rice	• To improve the existing cropping pattern for increase cropping intensity and productivity by inclusion of mungbean and to increase crop yield and farmers income	MLT Site, Raniganj, Sadar, Dinajpur
1975	Development of Alternate Cropping Pattern Wheat-Summer Onion-T. Aman Against Wheat- Fallow-T. Aman Rice	• To improve the existing cropping pattern for increase cropping intensity and productivity by inclusion of summer onion and to increase crop yield and farmers income	MLT Site, Raniganj, Sadar, Dinajpur
1976	Development of alternate cropping pattern Potato-Maize/vegetable- T. Aman rice against Potato-Maize-T. Aman rice	• To reduce the turnaround period in the whole cropping pattern and to assess the crop productivity	MLT Site, Pirgonj, Thakurgaon
AGRICULTURAL RESEARCH STATION, BINERPOTA, SATKHIRA			
1977	Management of rugose whitefly to overcome the threat in poses to the coconut vegetation in south-western belt of Bangladesh	• To develop an eco-friendly management technique for minimizing the biosecurity concerns at south-western belt of Bangladesh	Binerpota, Satkhira
1978	Survey and identification of major insect pest and pest management practices of hog plum in southern area of Bangladesh	• To document the pest problems and pest management practices	Satkhira and Pirojpur
1979	Profitability analysis of sorjan system and intercropping of 'offseason watermelon-winter vegetables' in tidally flooded saline agro-ecosystem	• To find out the suitable crop combination for increasing total productivity, return and maximize land utilization through intercropping system • To bring out the Tidally flooded water stagnant lands under cultivation	Binerpota, Satkhira
1980	BARI Technology Village (BARI - TV), Nagarghata, Tala, Satkhira	• To bring BARI developed crop varieties and technologies to the end users within a short period of time • To minimize yield gap between research station and farmers' field	Tala, Satkhira

Sl.	Title of experiment	Objectives	Location(s)
		• To increase cropping intensity • To establish and strengthen Farmer-Scientist-Extension workers linkage and to motivate farmers for adoption of new and improved technologies • To identify farmer's constraints on different technologies and to generate feedback for appropriate on-station research • To develop surrounding areas of station as the primary centre of dissemination of BARI developed agricultural technologies	
1981	Year-round vegetable cultivation on gher dyke	• To find out the suitable vegetable pattern for cultivation in the boundaries around fisheries gher for the best economic return	Kaligonj, Satkhira
1982	Effect of different mulch materials on growth and yield of brinjal in saline soil of Satkhira	• To select the suitable mulch materials for brinjal production in saline areas of Satkhira	Binerpota, Satkhira
TUBER CROP RESEARCH SUB STATION, BOGRA			
1983	Tuber crops improvement Effect of tuber size and spacing on yield of bari alu-90	• To find out optimum size of tuber of potato for obtaining its desirable growth and yield • To assess a proper plant spacing for getting higher yield of potato • To evaluate the effects of tuber size and plant spacing for enhancing the productivity of BARI Alu 90	Bogura
1984	Effect of planting times and fertilizer levels on growth and yield of beta-carotene content sweet potato	• To find out the optimum date of sowing for desirable growth and yield of sweet potato. • To determine a suitable dose of N, P and K fertilizers for enhancing the productivity of sweet potato, and • To evaluate the effects of sowing date and fertilizers for enhancing the productivity and profitability of sweet potato	Bogura
1985	Development of management approach against root aphid (<i>pemphigus</i> sp.) attacking potato	• To find out the most effective management option for root aphid on potato • To know the damage severity of the pest	Joypurhat
1986	Evaluation of advanced materials of potato against potato cutworm (<i>agrotis ipsilon</i>) in field condition	• To evaluate advanced lines of potato against cut worm in the field	Bogura
1987	Screening of different sweet potato varieties/lines against potato weevil (<i>cylas fromicarius fab.</i>)	• To identify the suitable varieties/lines resistance/tolerant to sweet potato weevil infestation • To determine the effects of sweet potato weevil infestation on the yield	Bogura

Sl.	Title of experiment	Objectives	Location(s)
TUBER CROP RESEARCH SUB STATION, MUNSHIGANJ			
1988	Dry matter partitioning and yield of processing potato varieties	• To find out growth, dry matter partitioning and yield performance of processing potato varieties.	Munshiganj
REGIONAL PULSE RESEARCH STATION, MADARIPUR			
1989	Preliminary Yield Trial (PYT) of Lentil	• To evaluate lentil genotypes in multiple location and to assess their performances	Madaripur
1990	On-Farm Trials of Promising Lentil Genotypes	• To develop new lentil variety	Madaripur
1991	Preliminary Yield Trial of Cowpea	• To evaluate exotic cowpea genotypes in multiple location and to assess their performances	Madaripur
1992	Preliminary Yield Trail of Mungbean	• To evaluate mungbean genotypes in multiple location and to assess their performances	Madaripur
1993	Participatory Varietal Selection of Mungbean	• To find out the farmers' preferred stable blackgram genotypes	Madaripur
1994	Screening of Selected Mungbean Genotypes Against Powdery Mildew (PM) And Cercospora Leaf Sport (CLS)	• To develop new mungbean variety resistant against PM and CLS	Madaripur
1995	Screening of Mungbean Genotypes Against Thrips	• To find out thrips resistant mungbean varieties	
1996	Climatic Stresses Adaptation Strategies and Capacity Assessment of Pulses Growing Farmers in the Coastal Areas of Bangladesh	• To examine the nature and extent of climate variability stress affecting pulses crops along with exploring adaptation knowledge & strategies.	Madaripur
PULSES RESEARCH SUB-STATION, BARI, GAZIPUR			
1997	Study heat tolerance in lentil genotypes under field conditions	• To identify heat tolerant genotypes in available germplasm and their utilization in breeding program.	Gazipur
1998	Evaluation of exotic cowpea genotypes	• To evaluate cowpea for yield and disease resistance	Barishal, Madaripur and Chittagong
1999	Screening of cowpea germplasm at NaCl salinity	• To observe the effects of salt stress on germination and growth responses of cowpea germplasm	Glass house, Gazipur
2000	Screening of mungbean genotypes against waterlogging stress at vegetative growth stage on the basis of physiological parameters	• To find out waterlog tolerant mungbean genotypes and to study the tolerance mechanism	Gazipur
2001	Screening of mungbean germplasm under NaCl salinity	• To observed the effects of salt stress on germination and growth responses of mungbean germplasm	Gazipur

Sl.	Title of experiment	Objectives	Location(s)
2002	Evaluation of AVMU mungbean lines for MYMV and Thrips resistant	• Identification and evaluation of mungbean lines for thrips and MYMV	Gazipur, Ishwardi, Madaripur and Barishal
2003	Effect of different mulch materials on soil salinity and yield of cowpea	• To evaluate the effects of mulch on the productivity of cowpea	Farmers field of Patuakhali
2004	Performance of different legumes as forage in southern region of Bangladesh	• To find the suitable legumes for forage in southern region of Bangladesh	Farmers field of Barishal and Patuakhali
2005	Performance of pea germplasm as affected by shoot picking on growth and yield	• To find out the effect of shoot picking for vegetable on growth, yield and economic return of field pea.	Gazipur



BANGLADESH RICE RESEARCH INSTITUTE

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Sl.	Research Title	Objectives	Location
PLANT BREEDING DIVISION			
1	Hybridization (Development of Upland B. Aus and Jhum Rice)	• To develop varieties in combination of multiple traits such as quick seedling emergence and vigorous growth, short growth duration (95-100 days), tolerance to lodging, drought and pre-harvest sprouting and good eating quality	Gazipur
2	Confirmation of F ₁	• To confirm the cross as true F ₁ s and use of the selected F ₁ s to produce F ₂ seeds	Gazipur
3	Segregating population	• Rapid advancement of segregating population for shortening breeding cycle through field RGA	Gazipur
4	Identification of superior lines from LST	• Rapid advancement of segregating population for shortening breeding cycle through field RGA	Gazipur
5	Observational Yield Trial (OYT)	• To select genetically fixed lines based on uniformity in morpho-agronomic characters having early seedling emergence, good seedling vigor, uniformity in heading, short growth duration	Gazipur
6	Preliminary Yield Trial (PYT)	• Evaluation of initial yield potential in replicated plots.	Gazipur
7	Secondary Yield Trial (SYT)	• Confirmation of yield potential in replicated plots	Gazipur
8	Hybridization (Development of Jhum Rice)	• To develop high yielding rice variety with low (10-19%) to high (25%) grain amylose content and drought tolerance suitable for Jhum cultivation	Gazipur
9	Confirmation of F ₁	• To confirm the cross as true F ₁ s and use of the selected F ₁ s to produce F ₂ seeds	Gazipur
10	Segregating population	• To advance progenies with emphasis on high yield with low (10-19%) to high (25%) grain amylose content and drought tolerance suitable for Jhum cultivation	Gazipur
11	Observational Yield Trial (OYT)	• To select genetically fixed lines based on uniformity in morpho-agronomic characters having high yield with low (10-19%) to high (25%) grain amylose content and drought tolerance suitable for Jhum cultivation	Gazipur
12	Preliminary Yield Trial (PYT)	• Evaluation of initial yield potential in replicated plots.	Gazipur
13	Secondary Yield Trial (SYT)	• Confirmation of yield potential in replicated plots	Gazipur
14	Advanced Yield Trial (AYT)	• Advanced evaluation of promising entries in replicated trial under targeted hill condition	Chottogram hill districts (Khagrachari and Bandarban)
15	Hybridization (Development of Transplanted T. Aus Rice)	• Introgression of earliness, pre-harvest sprouting tolerance and tolerance to high	Gazipur

Sl.	Research Title	Objectives	Location
		temperature into high yielding varieties	
16	Growing of F ₁ populations	• To confirm the crosses as true hybrid	Gazipur
17	Segregating population	• Advancement of segregating generations following single seed descent-based RGA method	Gazipur
18	Line Stage Testing (LST)	• Screening of genetically fixed breeding lines for homogeneity, plant type, grain yield potential, grain quality and other attributes	Gazipur
19	Observational Yield Trial (OYT)	• Selection of homogeneous breeding lines with acceptable grain quality having high yield with good plant type	Gazipur, Cumilla, Rajshahi, & Rangpur
20	Preliminary Yield Trial (PYT)	• Initial yield evaluation of advanced breeding lines in replicated trials for whole Bangladesh	Gazipur, Cumilla, Rajshahi, & Rangpur
21	Advanced Yield Trial (AYT)	• To evaluate specific and general adaptability of the advance breeding lines as compared with standard checks under on station condition	Gazipur
22	Regional Yield Trial (RYT) for non-saline tidal prone ecosystem	• Evaluation of agronomic performance, specific and general adaptability under on station condition	Gazipur, Sonagazi and Greater Barishal
23	Proposed Variety Trial (PVT)	• On-farm evaluation of proposed genotype by the NSB team for recommendation to release as a new variety.	Sites selected by SCA
24	Maintenance and seed increase of key parents	• To maintain genetic purity of parent materials with seed production	Gazipur
25	Hybridization (Development of Shallow Flooded Rice Varieties)	• Generation of genotypes in combination with slow elongation, high yield and submergence tolerance for shallow flooded water sub-ecosystem (flood water depth 0.5-1.0 m)	Gazipur
26	Confirmation of F ₁	• Confirmation of crosses with introgression of genes for slow elongation, high yield and submergence tolerance for shallow flooded deep-water sub-ecosystem (flood water depth 0.5-1.0 m) into improved genetic background	Gazipur
27	Segregating population	• Advancement of segregating generations following single seed descent-based RGA method	Gazipur
28	Observational Yield Trial (OYT)	• Evaluation of tall breeding lines	Gazipur
29	Preliminary Yield Trial (PYT)	• Initial yield evaluation of advanced breeding lines in replicated trials for shallow flooded sub-ecosystem	Gazipur
30	Secondary Yield Trial (SYT)	• Confirmation of potential advanced lines compared to standard checks in replicated trial	Gazipur
31	Maintenance and seed increase of land races	• Maintenance of seed purity and seed increase of land races	Gazipur
32	4.1 Hybridization (Development of Rainfed Lowland Rice (RLR), T. Aman)	• Introgression of genes from diverged genetic background for improvement of standard T. Aman varieties	Gazipur
33	Confirmation of F ₁	• To confirm the crosses as true hybrid	Gazipur
34	Field RGA	• Rapid advancement of F ₃ -F ₅ generations through following single seed descent-based	Gazipur

Sl.	Research Title	Objectives	Location
		RGA method	
35	Line Stage Testing (LST)	• Selection of progenies with improved plant type, earliness, acceptable grain quality and high yield potential compared to standard varieties	Gazipur
36	Observational Yield Trial (OYT)	• Selection of homogeneous breeding lines with desirable agronomic characters with less or no unproductive tiller, intermediate plant height, short growth duration, acceptable grain quality and high yield potential	Gazipur, Cumilla and Rangpur
37	Preliminary Yield Trial (PYT)	• Initial yield evaluation of advanced lines compared to standard checks	Gazipur
38	Secondary Yield Trial (SYT)	• Confirmation of yield potentiality of the advanced lines compared to standard checks	Gazipur
39	Regional Yield Trial (RYT)	• To evaluate specific and general adaptability of the advance breeding lines as compared with standard checks in on-station condition	Gazipur, Cumilla, Satkhira, Kushtia, Rangpur, Rajshahi and Sonagazi
40	Hybridization (Improvement of deep-water rice)	• To develop semi deep water/ stagnant rice varieties with strong stems, higher grain (3.5 - 4.5 t/ha) and straw (14 - 15 t/ha) yield, moderate elongation, drought and submergence tolerance. • To develop deep-water rice varieties with facultative type elongation and drought tolerance, higher grain (2.5 - 3.5 t/ha) and straw (10 - 12 t/ha) yields. • To develop materials having perennial growth habit, vegetative propagation ability, fast growth and tallness, higher grain and straw yield.	Gazipur
41	Confirmation of F ₁	• Confirmation of crosses with introgression of genes for slow and fast elongation, higher grain and straw yield for semi and deep flooded environment	Gazipur
42	Segregating population	• Advancement of segregating generations under rainfed conditions	Gazipur
43	ALART, stagnant shallow flooding in tidal areas (tall and fast growth)	• Selection of tall advanced breeding lines, lodging tolerance, fast growth, more grain yield for stagnant tidal conditions	7 locations at BRRI Satkhira and Barishal
44	RYT-2, shallow flood (slow elongation, more straw and grain yield)	• Selection of semi deep-water rice advanced lines having moderate elongation, submergence tolerance, more straw and grain yield	Sylhet, Cumilla, Sirajganj, Munshiganj, Manikganj and Faridpur
45	ALART (Deep flood)	• Evaluation of deep-water advanced breeding and local pure lines having fast elongation, more straw and grain yield for deep flooding conditions	Sylhet, Sirajganj, Pabna, Cumilla, Gopalganj, Munshiganj, Manikganj and Faridpur
46	PVT (Semi-deep-water condition)	• Adaptive trial of 3 tall advanced breeding lines having fast growth, moderate elongation, submergence and drought tolerance, more	Sylhet, Pabna, Sirajganj, Cumilla, Chandpur,

Sl.	Research Title	Objectives	Location
		straw and grain yield for semi-deep-water condition	Faridpur, Manikganj, Tangail, Munshiganj
47	Collection and seed increase of deep-water rice land races	• Maintenance of seed purity and seed increase of land races having higher elongation ability	BRRI Gazipur
48	Seed increase of BRRI dhan 91 and conducting demonstration trials	• Increasing the seeds of BRRI dhan 91 and to set establish trials in farmers' field	Gazipur, Sylhet, Sirajganj, Pabna, Cumilla, Tangail, Chandpur, Brammonbaria, Gopalganj, Bagerhat, Munshiganj, Manikganj and Faridpur
49	Hybridization (Development of Salt Tolerant Rice)	• Introgression of salinity tolerant traits/ gene(s) in high yielding varieties suitable for RLR ecosystem	Gazipur
50	Confirmation of F ₁	• To confirm the crosses as true hybrid	Gazipur
51	Quality Check (QC) analysis of F ₁ s	• Generation Advancement	Gazipur
52	FRGA	• Generation Advancement	Gazipur
53	Line Stage Test (LST) Trial	• Identification of uniform lines based on plant height, flowering date and grain type	Satkhira, Gazipur
54	Observational Yield Trial (OYT)	• Selection of genetically fixed salt tolerant breeding lines with acceptable grain quality having high yield potential with good plant type	Gazipur, Satkhira and Khulna
55	Trait paneling of OYT lines	• Assessment of presence/ availability of favorable alleles in breeding lines/population	Out Sourcing
56	Grain quality analysis of OYT, PYT, AYT & RYT lines	• To evaluate key economic traits based on consumers preference	Gazipur
57	Preliminary Yield Trial (PYT)	• Initial yield evaluation of advanced lines compared to standard checks in replicated trial	Gazipur, Satkhira and Khulna
58	Advanced Yield Trial (AYT)	• Confirmatory yield evaluation of advanced lines compared to standard checks	Gazipur, Satkhira and Khulna
59	Regional Yield Trial (RYT)/PVS/Adaptive trials	• To evaluate specific and general adaptability of the advance breeding lines as compared with standard checks in on-farm condition	Gazipur, Satkhira and Khulna (5-6 locations)
60	Advanced Lines Adaptive Research Trial (ALART)	• Evaluation of specific and general adaptability of the advanced breeding lines as compared with standard checks under on-station condition	Locations selected by ARD
61	Hybridization (Development of Salt Tolerant Boro Rice)	• Introgression of salinity tolerant genes in genetically advanced genotypes	Gazipur
62	Confirmation of F ₁	• To confirm the crosses as true hybrid	Gazipur
63	Quality check (QC) analysis of F ₁ s	• To confirm the crosses as true hybrid	Gazipur
64	FRGA	• Generation Advancement	Gazipur
65	Line Stage Testing (LST)	• Identification of uniform lines based on plant height, flowering date and grain type	Satkhira, Gazipur
66	Observational Yield Trial (OYT)	• Selection of breeding lines with strong plant type, uniformity in heading, salinity tolerance in the field condition	Gazipur, Satkhira and Khulna

Sl.	Research Title	Objectives	Location
67	Trait paneling of OYT lines	• Assessment of presence/ availability of favorable alleles in breeding lines/population	Out Sourcing
68	Grain quality analysis of OYT, PYT, AYT & RYT, ALART lines	• To evaluate key economic traits based on consumers preference	GQN, BRRI
69	Preliminary Yield Trial (PYT#1 & 2)	• Initial yield evaluation of advanced lines compared to standard checks in replicated trial	Gazipur, Satkhira and Khulna
70	Advanced Yield Trial (AYT#1 & 2)	• Confirmatory yield evaluation of advanced lines compared to standard checks	Gazipur, Satkhira and Khulna
71	Regional Yield Trial (RYT)/PVS/Adaptive trials	• To evaluate specific and general adaptability of the advance breeding lines as compared with standard checks in on-farm condition	Gazipur, Satkhira and Khulna (5-6 locations)
72	ALART#1 & 2	• Evaluation of specific and general adaptability of the advanced breeding lines as compared with standard checks under on-station condition	Locations selected by ARD
73	Screening rice germplasm for salinity tolerance	• To identify new sources of salinity tolerance	BRRI
74	Maintenance of parent	• Maintenance of parent for future use in the hybridization or in the experiment as check variety	Gazipur
75	Hybridization (Development of Premium Quality T. Aman Rice)	• Introgression of genes of small grain (national & international grade) with aroma and Antioxidant into high yielding rice genetic background	Gazipur
76	Confirmation of F ₁	• To confirm the crosses as true hybrid	Gazipur
77	Pedigree nursery	• Selection of progenies with improved plant type, earliness, premium quality grain and high yield potential compared to standard varieties	Gazipur
78	Observational Yield Trial (OYT)	• Selection of genetically fixed lines with fine grain properties having high yield with good plant type	Gazipur
79	Preliminary Yield Trial (PYT)	• Initial yield evaluation of advanced lines compared to standard checks	Gazipur
80	Secondary Yield Trial (SYT)	• Secondary yield evaluation of advanced lines compared to standard checks	Gazipur
81	Seed Purification and Seed increase of RYT and ALART Materials	• Evaluation of some advanced lines along with standard checks	Gazipur
82	Regional Yield Trial (RYT-long slender)	• To select long grain type advanced lines better than Indian long grain type Jira-shail. • To evaluate adaptability and fine grain quality of the advance breeding lines compared with standard long grain type check Jira-shail in farmers field	3 locations in Nowgaon, 2 in Rajshahi, 3 in Dinajpur and 2 in Kushtia
83	Regional Yield Trial (RYT-short slender)	• To select short grain type advanced lines better than Indian short grain type Jira. • To evaluate adaptability and fine grain quality of the advance breeding lines compared with standard short grain type Jira as check in farmers' field.	3 locations in Nowgaon, 2 in Rajshahi, 3 in Dinajpur and 2 in Kushtia
84	Regional Yield Trial (ALART-	• To select very long basmati type advanced	3 locations in

Sl.	Research Title	Objectives	Location
	very long type)	lines better than BRRI dhan38. • To evaluate adaptability and very long grain basmati type advanced breeding lines compared with long grained BRRI dhan38 in farmers' field.	Nowgaon, 2 in Rajshahi, 3 in Dinajpur and 2 in Kushtia
85	Maintenance of parents	• Maintenance of parent for future use in the hybridization or in the experiment as check variety	Gazipur
86	Hybridization (Development of Premium Quality Rice, Boro)	• Introgression of extra-long grain and small grain with or without aroma into high yielding rice genetic background	Gazipur
87	Confirmation of F ₁	• To confirm the crosses as true hybrid	Gazipur
88	FRGA	• Generation Advancement	Gazipur
89	Line Stage Testing (LST)	• Identification of uniform lines based on plant height, flowering date and grain type	Gazipur
90	Observational Yield Trial (OYT#1, 2 & 3)	• Selection of homogeneous breeding lines with fine grain properties having high yield with good plant type	Gazipur
91	Preliminary Yield Trial (PYT)	• Initial yield evaluation of advanced lines compared to standard checks	Gazipur
92	Secondary Yield Trial (SYT#1 & 2)	• Secondary yield evaluation of advanced lines compared to standard checks	Gazipur
93	Regional Yield Trial (RYT)	• To evaluate specific and general adaptability of the advance breeding lines as compared with standard checks in on-station condition	Total 10 locations
94	Advanced Line Adaptive Research Trial (ALART)	• On-farm evaluation of advanced breeding lines compared to standard checks for testing their specific and general adaptability	Total 10 locations (selected by ARD)
95	Proposed Variety Trial (PVT)	• On-farm evaluation of advance breeding lines compared to standard checks for testing their specific and general adaptability	Total 10 locations (selected by SCA)
96	Re-Proposed Variety Trial (PVT)	• On-farm evaluation of advance breeding lines compared to standard checks for testing their specific and general adaptability	Total 10 locations (selected by SCA)
97	Maintenance of parents	• Maintenance of parent for future use in the hybridization or in the experiment as check variety	Gazipur
98	Hybridization (Development of Photo-sensitive Rice, T. Aman)	• Development of strong photo-sensitive (Nizersail type) and medium photo-sensitive (Gainza type) premium quality rice for T. Aman season	Gazipur
99	Confirmation of F ₁	• To confirm the crosses as true hybrid	Gazipur
100	Pedigree nursery	• Selection of progenies with improved plant type, earliness, premium quality grain and high yield potential compared to standard varieties	Gazipur
101	Observational Yield Trial (OYT)	• Selection of genetically fixed lines having high yield with photosensitivity	
102	Preliminary Yield Trial (PYT)	• Initial yield evaluation of advanced lines compared to standard checks	Gazipur
103	Secondary Yield trial (SYT)	• To evaluate specific and general adaptability	Gazipur

Sl.	Research Title	Objectives	Location
		of the advance breeding lines as compared with standard checks in on-station condition	
104	Hybridization (Development of Rice Varieties for Favorable Boro Environment)	• To create variations for the development of new genotypes with high yield and acceptable grain quality	Gazipur
105	Confirmation of F ₁	• To confirm the crosses as true F ₁ s and use of the selected F ₁ s to produce F ₂ seeds and use in making different types of crosses	Gazipur
106	Segregating RGA (F ₂ -F ₆)	• Generation Advance	Gazipur
107	Line Stage Testing (LST)	• To select uniform genotypes in terms of plant height and days to flowering with key target traits	Gazipur
108	Observational Yield Trial (OYT)	• Selection of superior lines with desired agronomic characters	Gazipur, Cumilla, Habiganj, Rangpur
109	Advanced Yield Trial (AYT)	• Evaluation of breeding lines for yield potential in multi-locations in replicated trial	Gazipur, Cumilla, Habiganj
110	Regional Yield Trial (RYT#1, 2 & 3)	• To evaluate specific and general adaptability of the advance breeding lines as compared with standard checks in on-station condition	Total 9 locations
111	Advanced Line Adaptive Research Trial (ALART)	• On-farm evaluation of advanced breeding lines compared to standard checks for testing their specific and general adaptability	Total 10 locations (selected by ARD)
112	Estimation of Breeding Values of Elite Irrigated Breeding Pool	• To assess the baseline breeding value of the parents used in the breeding program	Gazipur, Cumilla, Habiganj, Rangpur
113	Hybridization (Development of Cold Tolerant Rice)	• To create variations for the development of new genotypes with cold tolerance at reproductive and seedling stage with acceptable grain quality	Gazipur
114	Confirmation of F ₁	• To confirm the crosses as true F ₁ s and use of the selected F ₁ s to produce F ₂ seeds and use in making different types of crosses	Gazipur
115	Segregating RGA (F ₂ -F ₆)	• Generation Advance	Gazipur
116	Line Stage Testing (LST)	• To select uniform genotypes in terms of plant height and days to flowering with key target traits	Gazipur
117	Observational Yield Trial (OYT#1) [Cold stress (15 Oct seeding) & non-stress (15 Nov seeding)]	• Selection of superior and cold tolerant lines under natural cold condition	Gazipur, Habiganj
118	Observational Yield Trial (OYT#2) [Cold stress (15 Oct seeding) & non-stress (15 Nov seeding)]	• Selection of superior and cold tolerant lines under natural cold condition	Gazipur, Habiganj
119	Advanced Yield Trial (AYT)	• Evaluation of breeding lines for yield potential in multi-locations in replicated trial	Gazipur, Rajshahi, Rangpur, Habiganj, Kishoreganj and Sunamganj
120	Regional Yield Trial (RYT)	• To evaluate specific and general adaptability of the advance breeding lines as compared with standard checks in on-station condition	Gazipur, Rajshahi (3 locs), Rangpur (3 locs),

Sl.	Research Title	Objectives	Location
			Habiganj (3 locs)
121	Advance Line Adaptive Research Trial (ALART)	• On-farm evaluation of advanced breeding lines compared to standard checks for testing their specific and general adaptability	10-12 locations including 6-8 haor sites by Adaptive Research Division
122	Validation of QTLs for spikelet fertility under cold stress	• To validation of QTLs for spikelet fertility under cold stress	Gazipur
123	Evaluation IRRI bred breeding lines	• Evaluation of breeding lines for yield potential in multi-locations in replicated trial	Habiganj
124	Hybridization (Development for Zinc Enriched Rice, T. Aman)	• Development of new genotypes with high zinc and iron content along with resistance to major insect pests and diseases, abiotic stress tolerance and acceptable grain quality	Gazipur
125	Confirmation of F ₁	• To confirm the crosses as true F ₁ s and use of the selected F ₁ s to produce F ₂ seeds and in different types of crosses	Gazipur
126	Pedigree nursery	• To select progenies with emphasis on modern plant type, large panicle, more grains in panicle, lodging resistance and acceptable grain quality	Gazipur
127	Observational Yield Trial (OYT)	• Selection of homogeneous breeding lines with desirable agronomic characters with less or no unproductive tiller, intermediate plant height, short growth duration, acceptable grain quality and high yield potential	Gazipur
128	Preliminary Yield Trial (PYT)	• Initial yield evaluation of advanced lines compared to standard checks	Gazipur
129	Secondary Yield Trial (SYT)	• Confirmation of yield potentiality of the advanced lines compared to standard checks	Gazipur
130	Regional yield Trial (RYT)	• Evaluation of agronomic performance, specific and general adaptability under on station condition	All BRRI R/S and Gazipur
131	Advanced Lines Adaptive Research Trial (ALART)	• Evaluation of specific and general adaptability under on farm condition	10 locations (selected by ARD)
132	Hybridization (Development for Zinc Enriched Rice, Boro)	• Development of new genotypes with high zinc and iron content along with resistance to major insect pests and diseases, abiotic stress tolerance and acceptable grain quality	Gazipur
133	Confirmation of F ₁	• To confirm the crosses as true F ₁ s and use of the selected F ₁ s to produce F ₂ seeds and in different types of crosses	Gazipur
134	Pedigree nursery	• To select progenies with emphasis on modern plant type, large panicle, more grains in panicle, lodging resistance and acceptable grain quality	Gazipur
135	Observational Yield Trial (OYT)	• Selection of homogeneous breeding lines with desirable agronomic characters with less or no unproductive tiller, intermediate plant height, short growth duration, acceptable grain quality and high yield potential	Gazipur
136	Preliminary Yield Trial (PYT)	• Initial yield evaluation of advanced lines	All BRRI R/S

Sl.	Research Title	Objectives	Location
		compared to standard checks	and Gazipur
137	Secondary Yield Trial (SYT)	• Confirmation of yield potentiality of the advanced lines compared to standard checks	Gazipur
138	Regional yield Trial (RYT)	• Evaluation of agronomic performance, specific and general adaptability under on station condition	Gazipur
139	Hybridization (Development of Insect Resistant Rice (IRR), T. Aman)	• Introgression of genes of BPH and gall midge into high yielding rice genetic background	Gazipur
140	Confirmation of F ₁	• To confirm the crosses as true hybrid	Gazipur
141	Quality check (QC) analysis of F ₁ s	• To confirm the crosses as true hybrid	Gazipur
142	Line Augmentation	• Introgression of <i>bph</i> genes (<i>bph17</i> and <i>bph32</i>) to develop advanced breeding lines	Gazipur
143	FRGA	• Generation Advance	Gazipur
144	Line Stage Testing (LST)	• Identification of uniform lines based on good plant type, flowering date and grain type	Gazipur
145	Observational Yield Trial (OYT)	• Selection of genetically fixed breeding lines with resistant to BPH/GM, earliness having high yield with good plant type	Gazipur, Rajshahi, Cumilla
146	Trait paneling of OYT lines	• Assessment of presence/availability of favorable alleles in breeding lines/population	Out sourcing
147	Grain quality analysis of OYT & AYT lines	• To evaluate key economic traits based on consumers preference	Gazipur
148	Advanced Yield Trial (AYT)	• To evaluate/confirm yield performance of the advance breeding lines as compared with standard checks at multi-locations trials	Gazipur, Rajshahi, Cumilla
149	Advanced Line Adaptive Research Trial (ALART)	• On-farm evaluation of advance breeding lines compared to standard checks for testing their specific and general adaptability	Sites selected by ARD
150	Screening breeding lines for BPH and GM resistance	• To identify new sources of BPH and GM resistance	Entomology Division, BRRI
151	Maintenance and seed increase of key parents.	• To maintain genetic purity of parent materials with seed production	Gazipur
152	Hybridization (Development of Insect Resistant Rice, Boro)	• Introgression of genes of BPH and gall midge into high yielding rice genetic background	Gazipur
153	Confirmation of F ₁	• To confirm the crosses as true hybrid	Gazipur
154	Quality check (QC) analysis of F ₁ s	• To confirm the crosses as true hybrid	Gazipur
155	Line Augmentation	• Introgression of <i>bph</i> genes (<i>bph17</i> and <i>bph32</i>) to develop advanced breeding lines	Gazipur
156	RGA	• Generation Advance	Gazipur
157	Line Stage Testing (LST)	• Identification of uniform lines based on good plant type, flowering date and grain type	Gazipur
158	Observational Yield Trial (OYT)	• Selection of genetically fixed breeding lines with resistant to BPH/GM, earliness having high yield with good plant type	Gazipur, Rangpur, Cumilla
159	Trait paneling of OYT lines	• Assessment of presence/availability of favorable alleles in breeding lines/population	Gazipur
160	Grain quality analysis of OYT, PYT & AYT lines	• To evaluate key economic traits based on consumers preference	Out Sourcing
161	Preliminary Yield Trial (PYT)	• Initial yield evaluation of advanced lines compared to standard checks	Gazipur, Rangpur, Cumilla

Sl.	Research Title	Objectives	Location
162	Advanced Yield Trial (AYT)	• To evaluate/confirm yield performance of the advance breeding lines as compared with standard checks at multi-locations trials	Gazipur, Rangpur, Cumilla
163	Regional yield Trial (RYT)	• Evaluation of agronomic performance, specific and general adaptability under on station condition	10 BRRI R/S
164	Screening breeding lines for BPH and GM resistance	• To identify new sources of BPH and GM resistance	Entomology Division, BRRI
165	Maintenance and seed increase of key parents.	• To maintain genetic purity of parent materials with seed production	Gazipur
166	Hybridization (Development of Disease Resistant Rice, T. Aman)	• Introgression of high yield, lodging tolerance and disease resistance trait for BB, Blast & RTV	Gazipur
167	Confirmation of F ₁	• To confirm the crosses as true hybrid	Gazipur
168	Segregating population	• Advancement of segregating generations following single seed descent-based RGA method	Gazipur
169	Observational Trial (OYT)	• Selection of genetically fixed breeding lines with strong plant type, uniformity in heading, good PACP in the field condition and tolerance to disease (BB & Blast) in artificial inoculation condition	Gazipur, Cumilla, Rangpur & Rajshahi
170	Preliminary Yield Trial (PYT#1) (GD <120 days)	• Initial yield evaluation of advanced breeding lines in replicated trials for BB resistance with short duration	Gazipur, Cumilla, Rangpur & Rajshahi
171	Preliminary Yield Trial (PYT#2) (GD >120 days)	• Initial yield evaluation of advanced breeding lines in replicated trials for BB resistance with medium duration	Gazipur, Cumilla, Rangpur & Rajshahi
172	Multi-location Trial (MLT)	• Confirmatory yield evaluation of advanced lines compared to standard checks in different locations	Gazipur, Cumilla (2), Rangpur, Rajshahi, Bogura, Satkhira
173	Maintenance and seed increase of key parents.	• To maintain genetic purity of parent materials with seed production	Gazipur
174	Hybridization (Development of Disease Resistant Rice, Boro)	• Introgression of high yield, lodging tolerance and disease resistance trait for BB & Blast	Gazipur
175	Confirmation of F ₁	• To confirm the crosses as true hybrid	Gazipur
176	Segregating population	• Advancement of segregating generations following single seed descent-based RGA method	Gazipur
177	Observational Yield Trial (OYT)	• Selection of genetically fixed breeding lines with strong plant type, uniformity in heading, good PACP in the field condition and tolerance to disease (BB & Blast) in artificial inoculation condition	Gazipur, Cumilla, Rangpur & Rajshahi
178	Preliminary Yield Trial (PYT#1) (GD <150 days)	• Initial yield evaluation of advanced breeding lines in replicated trials for BB resistance with short duration	Gazipur, Cumilla, Rangpur & Rajshahi
179	Preliminary Yield Trial (PYT#2) (GD >150 days)	• Initial yield evaluation of advanced breeding lines in replicated trials for BB resistance with medium duration	Gazipur, Cumilla, Rangpur & Rajshahi
180	Advanced Yield Trial (AYT#1) (GD <150 days)	• To evaluate/confirm yield performance of the advance breeding lines as compared with standard checks at multi-locations trials	Gazipur, Cumilla, Rangpur & Rajshahi

Sl.	Research Title	Objectives	Location
181	Advanced Yield Trial (AYT#2) (GD >150 days)	• To evaluate/confirm yield performance of the advance breeding lines as compared with standard checks at multi-locations trials	Gazipur, Cumilla, Rangpur & Rajshahi
182	Regional yield Trial (RYT_GSR)	• Evaluation of agronomic performance, specific and general adaptability under on station condition	BRRI R/S
183	Hybridization (Development of Submergence and Water Stagnation Tolerance Rice Varieties)	• Introgression of submergence and medium stagnant water tolerant genes into modern genetic background with high yield potential, short/long growth duration, weakly/strongly photoperiod sensitivity, grain quality etc.	Gazipur
184	Confirmation of F ₁	• Confirmation of crosses with introgression of genes for submergence tolerance (particularly <i>SUB1</i>) and water stagnation tolerance into improved genetic background	Gazipur
185	Segregating population	• Advancement of segregating generations following single seed descent-based RGA techniques	Gazipur
186	Line Stage Testing	• Screening of genetically homozygous lines for homogeneity, grain quality, grain yield potential and <i>SUB1</i> -specific SNP markers	Gazipur
187	Line Augmentation	• Introgression of <i>Sub1</i> to develop advance lines quickly	Gazipur
188	Observational Yield Trial-1 (SUB)	• Initial evaluation of the genotypes with tolerance against controlled submergence, rainfed and flood prone farmers field conditions	Gazipur and Rangpur
189	Preliminary Yield Trial-1 (SUB1)	• Preliminary evaluation of yield and survivability of promising breeding lines in replicated trial under controlled submergence and flash flood prone farmers' field.	Gazipur and Rangpur
190	Preliminary Yield Trial-2 (Sub1)	• Preliminary evaluation of yield and survivability of promising breeding lines in replicated trial under controlled submergence and flash flood prone farmers' field.	Gazipur and Rangpur
191	Preliminary Yield Trial-3 (SUB)	• Preliminary evaluation of yield and survivability of promising breeding lines in replicated trial under controlled submergence and flash flood prone farmers' field.	Gazipur and Rangpur
192	Preliminary Yield Trial-4 (Sub1)	• Preliminary evaluation of yield and survivability of promising breeding lines in replicated trial under controlled submergence and flash flood prone farmers' field.	Gazipur
193	Preliminary Yield Trial-5 (Sub1)	• Preliminary evaluation of yield and survivability of promising breeding lines in replicated trial under controlled submergence and flash flood prone farmers' field.	Gazipur
194	Preliminary Yield Trial-6 (Sub1)	• Preliminary evaluation of yield and survivability of promising breeding lines in replicated trial under controlled submergence and flash flood prone farmers' field.	Gazipur
195	Secondary Yield Trial-1 (Sub)	• Secondary evaluation of yield and survivability of promising breeding lines in replicated trial under controlled submergence	Gazipur

Sl.	Research Title	Objectives	Location
		and flash flood prone farmers' field.	
196	Secondary Yield Trial-2 (Sub)	• Secondary evaluation of yield and survivability of promising breeding lines in replicated trial under controlled submergence and flash flood prone farmers' field.	Gazipur
197	Advanced Yield Trial (Sub+BB)	• Advanced evaluation of yield and survivability of promising breeding lines in replicated trial under controlled submergence and flash flood prone farmers' field.	Gazipur and Rangpur
198	PVS Trial	• Evaluation of genotypes in the real submergence and/or medium stagnation prone environments of the farmers' field with the participation of farmers under the management practices of researchers	Gazipur and Rangpur
199	Advanced Line Adaptive Research Trial (ALART)	• Evaluation of specific and general adaptability of the advanced breeding lines as compared with standard checks under on-station condition and in the real submergence and/or medium stagnation prone environments of the farmers' field	Locations selected by ARD
200	Investigation on mixed seed samples of BRRI dhan51	• To investigate seed purity of BRRI dhan51.	Gazipur
201	Maintenance of submergence and Stagnant flood tolerant genotypes	• To ensure seed safety of submergence tolerant genotypes	Gazipur
202	Screening of Core parental material for submergence tolerance	• Screening of Core parental material for submergence tolerance	Gazipur
203	Hybridization (Development of Drought Tolerant Rice, T. Aman)	• Introgression of drought tolerance gene into high yielding rice genetic background	Gazipur
204	Confirmation of F ₁	• To confirm the crosses as true F ₁ and use of the selected F ₁ s to produce F ₂ seeds and in different types of crosses	Gazipur
205	Field RGA	• Rapid advancement of F ₄ -F ₅ generations through field RGA	Gazipur
206	Line Stage Testing (LST)	• Selection of drought tolerant progenies with improved plant type, earliness, acceptable grain quality and high yield potential compared to standard varieties	Gazipur
207	Observational Yield Trial (OYT)	• Selection of homogeneous breeding lines with drought tolerant quality having high yield with good plant type	Gazipur (Control), Rajshahi (One Stress and another Control)
208	Regional Yield Trial (RYT)	• Evaluation specific and general adaptability under on-station condition	Gazipur, Cumilla, Satkhira, Kushtia, Rangpur, Rajshahi and Sonagazi
209	Hybridization (Development of Water Saving Rice)	• Introgression genes of high yield and water saving	Gazipur
210	Confirmation of F ₁	• To confirm the crosses as true hybrid	Gazipur
211	Segregating population	• Advancement of segregating generations following single seed descent-based RGA	Gazipur

Sl.	Research Title	Objectives	Location
		method	
212	Observational Yield Trial (OYT)	• Selection of genetically fixed breeding lines with strong plant type, uniformity in heading, good PACP in the field condition	Gazipur
213	Advanced Yield Trial (AYT)	• To evaluate/confirm yield performance of the advance breeding lines as compared with standard checks	Gazipur
214	International Upland Rice Observational Nursery (International Network for Genetic Evaluation of Rice, T. Aman)	• Sharing germplasm and breeding lines through international platform for the acceleration of rice improvement	Gazipur
215	International Rainfed Lowland Rice Observational Nursery Module 1 (IRLON)-3 set	• Sharing germplasm and breeding lines through international platform for the acceleration of rice improvement	Gazipur, Rangpur, Barishal
216	International Rice Soil Stress Tolerance Nursery (IRSSTN) - Module 1 (Coastal salinity, wet season)	• Sharing germplasm and breeding lines through international platform for the acceleration of rice improvement	Satkhirra
217	International Rice Tungro Nursery (IRTN) -2 sets	• Sharing germplasm and breeding lines through international platform for the acceleration of rice improvement	Gazipur
218	International Rice Stem Borer Nursery (IRSBN)- 2 sets	• Sharing germplasm and breeding lines through international platform for the acceleration of rice improvement	Gazipur
219	International Rice Bacterial Blight Nursery (IRBBN) -3 sets	• Sharing germplasm and breeding lines through international platform for the acceleration of rice improvement	Gazipur
220	International Rice Submergence Tolerance Nursery for Flood prone environment (IRSTN-FP)	• Sharing germplasm and breeding lines through international platform for the acceleration of rice improvement	Gazipur
221	International Irrigated Rice Observational Nursery (IIRON-3 Set) (International Network for Genetic Evaluation of Rice, Boro)	• Sharing germplasm and breeding lines through international platform for the acceleration of rice improvement	Gazipur, Barishal, Habiganj
222	International Rice Soil Stress Tolerance Nursery (IRSSTN) – 1 sets)	• Sharing germplasm and breeding lines through international platform for the acceleration of rice improvement	Satkhirra
223	International Temperate Rice Observational Nursery (IRTON) -2 sets	• Sharing germplasm and breeding lines through international platform for the acceleration of rice improvement	Gazipur, Rangpur
224	Hybridization (Deployment and Validation of High Beta-carotene Rice and High-Iron & Zinc Rice Varieties (Healthier Rice Project), T. Aman)	• Introgression of high iron and zinc gene into high yielding rice genetic backgrounds of BRRI dha71, BRRI dhan79 and BRRI dhan81, BRRI dhan87, and BRRI dhan92 and BRRI dhan99	Gazipur
225	Marker Assisted Backcrossing (MABC)	• BC ₃ F ₂ generation in the background of BRRI dha48, BRRI dhan67 and BRRI dhan71, and BRRI dhan84, BRRI dhan87 and BRRI dhan89 will be advanced through marker assisted breeding	Gazipur
226	Contained Trial (CT)	• To evaluate agronomic and product performance (Vitamin A level) of the advanced introgressed breeding lines under	Gazipur

Sl.	Research Title	Objectives	Location
		contained trial at screen house condition.	
227	Multiplication of selected materials of Contained Trial (CT)	• Seed multiplication for Confined Field Trail (CFT)	Gazipur
228	Hybridization (Deployment and Validation of High Beta-carotene Rice and High-Iron & Zinc Rice Varieties (Healthier Rice Project), Boro)	• Introgression of high iron and zinc gene into high yielding rice genetic backgrounds of BRRI dha71, BRRI dhan79 and BRRI dhan81, BRRI dhan87, and BRRI dhan92 and BRRI dhan99	Gazipur
229	Marker Assisted Backcrossing (MABC)	• BC ₃ F ₂ generation in the background of BRRI dhan48, BRRI dhan67 and BRRI dhan71, and BRRI dhan84, BRRI dhan87 and BRRI dhan89 will be advanced through marker assisted breeding	Gazipur
230	AGGRi Network Trials for Favorable Environment	• To identify genetically diverged high breeding value line to leverage in the breeding program	Gazipur, Rajshahi, Cumilla
231	Advanced yield trial (AYT) of AGGRiNet materials	• To select superior breeding lines for further advancement	Gazipur, Rajshahi, Cumilla
232	Estimation of breeding value for elite breeding pools of T. Aman ecosystem	• To select candidates for deep sequencing	Gazipur, Rajshahi, Rangpur
BIO-TECHNOLOGY DIVISION			
233	Development of low Glycemic Index (GI) rice variety through anther culture.	• To generate low glycemic index rice through anther culture	Gazipur
234	Development of salt tolerant rice variety through anther culture	• To develop salt tolerant rice DH lines through anther culture	Gazipur
235	Development of premium quality rice variety through anther culture	• To develop premium quality rice DH lines through anther culture	Gazipur
236	Development of Aus variety through anther culture	• To develop short duration high yield Aus rice variety through anther culture	Gazipur
237	Development of antioxidant enriched black rice variety through anther culture	• To develop antioxidant enriched high yielding black rice	Gazipur
238	Effect of hormone on plant regeneration of rice genotypes	• To observe the effect of day on calli production and regeneration	Gazipur
239	Effect of incubation days on callus induction and plant regeneration of rice genotypes	• To create somaclonal variation towards development of high yielding rice varieties	Gazipur
240	Development of High yielding variety	• To create somaclonal variation towards development of high yieldingrice varieties	Gazipur
241	Development of somaclone using EMS treaded rice seed	• To develop modern rice varieties for Aus and T. Aman	Gazipur
242	Improvement of BRRI dhan47 through somclonal variation	• To create somaclonal variation for reducing seed shattering of BRRI dhan47.	Gazipur
243	Development of antioxidant enriched black rice variety through somaclonal variation	• To create somaclonal variation for development of antioxidant enriched high yielding modern rice varieties	Gazipur

Sl.	Research Title	Objectives	Location
244	Development of rice variety through wide hybridization followed by embryo rescue	• To develop high yielding variety through wide hybridization followed by embryo rescue technique.	Gazipur
245	Development of high yielding photosensitive rice variety through anther culture	• To develop photosensitive rice variety	Gazipur
246	Development of premium quality rice (kalijira type) through somaclonal variation	• To develop high yielding short stature aromatic Kilizira type varieties	Gazipur
247	Identification of QTLs for taller seedling height	• To identify QTLs for taller seedling height for developing tidal submergence tolerant rice variety	Gazipur
248	Studies Study on Kernel Elongation of Rice	• To develop long slender rice variety with high kernel elongation (>1.7)	Gazipur
249	Marker assisted selection for fragrance in F ₄ Population of BRRI dhan87 and Kalijira.	• To develop high yielding aromatic rice	Gazipur
250	Marker assisted selection for aromatic and submergence tolerance rice genotype	• To develop high yielding submergence tolerant aromatic rice variety	Gazipur
251	Development of salt tolerant transgenic rice	• To develop salt tolerant transgenic rice lines	Gazipur
252	Introgression of salt tolerant mangrove gene	• To develop salt tolerance transgenic rice lines	Gazipur
253	Development of salt tolerant transgenic rice with <i>PVA1</i>	• To develop salt tolerant transgenic rice lines	Gazipur
254	Development of high yielding aromatic rice lines through genome editing	• To develop high yielding aromatic rice lines using CRISPR-Cas9 technology.	Gazipur
255	Development of high yielding blast resistant rice lines through genome editing	• To develop high yielding blast resistant lines using CRISPR-Cas9 technology.	Gazipur
256	Isolation and cloning of stress tolerant gene from Wheat	• Isolate and cloning of drought tolerance gene	Gazipur
257	Development of variants using NMU of BRH-11-9-11-4-5B having reduced sterility	• To reduced sterility of BRH-11-9-11-4-5B(CN6)	Gazipur
258	Development of Kilijira type rice variety through mutation by NMU	• To develop high yielding short stature aromatic Kilizira type varieties	Gazipur
259	Development of Premium Quality Rice through Mutation by EMS (Ethyle Methanesulfonate)	• To develop high yielding, short stature aromatic rice lines	Gazipur
260	Development of high yielding sheath blight resistant rice variety	• To develop Sheath Blight resistant lines	Gazipur
261	Identification of major regulators for C4 rice	• Characterizing <i>Setaria italica</i> mutant population for loss of C4 functions	Gazipur
GENETIC RESOURCES AND SEED DIVISION			
262	Collection of rice (<i>Oryzasativa</i> L.) germplasm (Rice Germplasm Conservation and Management).	• To collect cultivated and wild rice germplasm from unexplored areas of Bangladesh and to store the collected rice germplasm for different users.	All over the country

Sl.	Research Title	Objectives	Location
263	Rejuvenation and conservation of rice germplasm.	To rejuvenate the Genebank accessions with fresh stock and to register the new collection by giving BRRI Genebank accession number after cross checking the duplication.	Gazipur
264	Rice germplasm supply and exchange.	- To provide/supply rice germplasm accessions from BRRI Genebank to different divisions of BRRI for screening against biotic and abiotic stresses. - To share germplasm to researchers from home and abroad with prescribed MTA for rice improvement.	GRSD, Gazipur
265	Morphological characterization of rice germplasm.	To characterize rice germplasm as per BRRI prescribed "Germplasm Descriptors and Evaluation Form" as developed from biodiversity international and UPOV convention.	Gazipur
266	Documentation of rice germplasm.	To document the characterized rice germplasm through morpho-physiological data, digital photo, leaflet and to develop a computer database documentation system for different users.	GRSD, Gazipur
267	Molecular characterization of rice germplasm.	To characterize the rice germplasm through molecular tools (DNA Fingerprinting).	Mol. Lab, GRSD, BRRI
268	Regional Yield Trial (RYT) of Balam and Jesso-Balam rice germplasm of southern region (Exploratory and Genetic Studies).	To confirm the yield potentiality of the popular rice germplasm of southern region (Balam and Jesso-Balam) of Bangladesh by comparing with standard checks.	Gazipur and BRRI R/S, Barishal
269	Regional Yield Trial (RYT) of Sada Mota and Lal Mota rice germplasm of southern region.	To confirm the yield potentiality of the popular rice germplasm of southern region (Sada Mota and Lal Mota) of Bangladesh by comparing with standard checks.	Gazipur and BRRI R/S, Barishal
270	Selection of superior genotypes from T. Aman/ Boro rice germplasm based on agro-morphological traits.	To identify rice germplasm with higher total biomass yield and higher phenotypic acceptance.	Gazipur
271	Secondary Yield Trial (SYT) of aromatic rice germplasm.	To evaluate the yield performance of ten aromatic rice germplasms compared to standard check.	Gazipur
272	DNA Finger printing of rice germplasm (Continued).	To characterize the Kalijira rice germplasm accessions through molecular tools (DNA Fingerprinting).	Molecular Lab, GRSD, Gazipur
273	Evaluation of photosensitive rice germplasm collected from Northern districts of Bangladesh.	To identify rice germplasm suitable for late transplanting after flood in Northern region of Bangladesh (Bogura, Kurigram, Lalmonirhat, Gaibandha, Rangpur and Jamalpur).	Gazipur
274	On-farm conservation of local rice germplasm.	To demonstrate the local rice diversity to the farmers of Rangpur and Sonagazi and to identify the superior germplasm through farmer's selection with reason.	Rangpur, Faridpur regions and Sonagazi
275	Characterization of similar named groups of rice germplasm.	To characterize and evaluate the similar named Banshful and Rata groups of rice germplasm accessions through quantitative and qualitative traits for developing their core	Gazipur

Sl.	Research Title	Objectives	Location
		collections.	
276	Secondary Yield Trial (SYT) of Jirasail genotype.	• To evaluate the initial yield performance of popular Jirasail germplasm for comparing with standard check.	Gazipur
277	Molecular characterization of pigmented rice germplasm.	• To characterize pigmented rice germplasm using SSR markers.	Gazipur
278	Secondary Yield Trial (SYT) of Jhum rice landraces.	• To evaluate the initial yield performance and other agronomic characteristics of selected popular Jhum rice landraces.	Gazipur
279	Identification and selection of Sticky rice from Jhum rice germplasm.	• To identify and to study the selection criteria for developing sticky rice varieties from Jhum rice germplasm.	Gazipur
280	Genetic fingerprinting of resistant or moderately resistant germplasm from blast screening using microsatellite DNA markers.	• To conform the blast resistant gene(s) in the selected genotypes.	Gazipur
281	Conformation of selected blast resistant materials using differential blast isolates and molecular markers.	• To be conform the resistance of the selected genotypes.	Gazipur
282	DNA Fingerprinting of latest BRRI varieties.	• To characterize the latest BRRI varieties through molecular tools (DNA Fingerprinting).	Molecular Lab, GRSD, BRRI.
283	Nucleus seed production (Seed Production and Variety Maintenance).	• To maintain genetic purity and homogeneity of morphological characteristics of BRRI developed rice varieties as a source of breeder seed.	Gazipur
284	Maintenance of BRRI recommended HYVs and LIVs.	• To maintain the BRRI recommended HYVs (High Yielding Variety) and LIVs (Locally Improved Variety) for encouraging farmers to cultivate and for any other purpose.	Gazipur
285	Breeder seed production and distribution.	• To produce and supply of breeder seed (BS) of BRRI developed rice varieties as per indent of GO, NGOs and PS seed producing organizations /companies/entrepreneurs.	Gazipur and all BRRI R/S
286	Sending <i>khudebarta</i> (SMS) for Breeder Seed Distribution.	• To make it easy for our clients to get the information of BS distribution.	Gazipur
287	Monitoring of breeder seed production farms.	• To visit breeder seed plots of BRRI regional stations at flowering and maturity stages for ensuring the quality of produced seed as BS standard.	Breeder seed producing plots at eleven BRRI R/S
288	Monitoring of foundation seed production farms.	• To visit foundation seed (FS) plots of seed producing agencies at flowering and maturity stages for improving the quality of produced seed as FS standard by sharing experiences.	GO, NGOs and Private Seed Producing Farms
289	Effect of regional variation of weather parameters, cultural management, post-harvest processing and seed storage on seed quality of BRRI dhan89.	• To determine viable period of seed in different storage. • To determine speed of germination and germination percentage.	Gazipur
290	Dormancy and storage ability of newly released BRRI rice varieties.	• To find out dormancy duration and storage ability of newly released BRRI rice varieties (after BRRI dhan64) during storage.	Gazipur

Sl.	Research Title	Objectives	Location
291	Publication on seed production technology package.	• To make seed technology knowledge available to the growers by preparing leaflet on seed production techniques for BRRI Rice Seed Network partners.	Gazipur
292	Digital rice herbarium.	• To easily identify difference between different BRRI variety in a look.	Gazipur
HYBRID RICE DIVISION			
293	Source nursery elite lines	• Identification of prospective maintainers and restorers from diverse genetic origin & NPT background	Gazipur
294	Source nursery restorer lines	• Identification of prospective restorers for making experimental rice hybrids	Gazipur
295	Source nursery CMS lines	• Evaluation of locally developed and exotic CMS lines with their corresponding B lines	Gazipur
296	Test cross nursery	• Confirmation of B and R from the crossed entries, selection of heterotic rice hybrids and conversion of prospective materials into new CMS lines	Gazipur
297	Back cross nursery	• Developing CMS lines from identified maintainer by back crossing.	Gazipur
298	CMS maintenance and evaluation nursery	• Maintain and evaluate of CMS and maintainer lines	Gazipur
299	Field Rapid Generation Advance (FRGA) for B and R line improvement	• Quick fix up population with target genes	Gazipur
300	Generation advancement in segregating lines of Fatema dhan	• Homozygous line development in the BG of NPT	Gazipur
301	Blast tolerant hybrid rice parental lines development	• Quick fix up population with target genes for blast tolerant parental lines development	Gazipur
302	submergence tolerant hybrid rice parental lines development	• submergence tolerant parental lines development	Gazipur
303	Parental lines development for premium quality hybrid rice development	• Parental lines development with premium and/or aroma	Gazipur
304	Breeding for outcrossing potentials in CMS lines	• To select best CMS lines for enhancing seed production of hybrid rice	Gazipur
305	Identification of M and R using home and exotic materials	• Identification of prospective maintainers and restorers	Gazipur
306	Generation advancement in segregating lines of Fatema dhan	• Homozygous line development in the BG of NPT	Gazipur
307	Observational Trials (OT)	• Selection of promising hybrids	Gazipur
308	Evaluation of experimental hybrids	• Evaluation of test hybrids with 3 checks	Gazipur
309	Preliminary Yield Trials (PYT)	• To study the wider adaptability and yield potentiality of promising hybrids	Gazipur
310	MLT (Gazipur + Ishardi + Barisal + Rangpur) (2 sets)	• To study the yield potentiality of promising hybrids at farmers field	Gazipur
311	Demonstration trials	• To assess yield performance of BRRI developed hybrids	Gazipur
312	MST HRDC	• Identification of prospective maintainers and restorers from MST materials.	Gazipur
313	PBM HRDC	• Identifying promising maintainer or restorer	Gazipur

Sl.	Research Title	Objectives	Location
		lines through GCA and SCA.	
314	Assesment of specific and general adaptability for selection of suitable rice hybrids under saline prone areas	• Selection of promising hybrids for saline prone areas	Gazipur
315	Multiplication of released hybrid restorer lines	• To produce sufficient quantity of restorer line seeds	Gazipur
316	CMS lines multiplication of BRRI hybrid dhan3, BRRI hybrid dhan4, BRRI hybrid dhan5, BRRI hybrid dhan6 and BRRI hybrid dhan7	• To produce pure and good quality seed of released all BRRI hybrid varieties for subsequent use.	Gazipur
317	CMS lines multiplication of upcoming BRRI hybrid dhan8	• To produce pure and good quality seed of upcoming BRRI hybrid dhan8 for subsequent use.	Gazipur
318	Multiplication of promising CMS lines	• Production of sufficient quantity quality seeds of CMS lines for subsequent use	Gazipur
319	F ₁ seed production of BRRI hybrid dhan5 BRRI hybrid dhan3, BRRI hybrid dhan4, BRRI hybrid dhan5, BRRI hybrid dhan6 and BRRI hybrid dhan7	• Production of sufficient quantity quality seeds of BRRI released hybrids for farmers and other stake holder use	Gazipur
320	SCA trial Boro (2021-22)	• To identify promising hybrids from home and abroad	Gazipur
GRAIN QUALITY AND NUTRITION DIVISION			
321	Determination of physicochemical and cooking properties of advanced breeding lines (Continue)	• To help to develop data base on physicochemical, cooking and eating qualities of grain for newly developed breeding lines	Gazipur
322	Determination of physicochemical and cooking properties of transforming rice breeding lines (Continue)	• To find out the physicochemical and eating quality of promising lines for identifying better grain quality	Gazipur
323	Evaluation of physicochemical properties of newly released BRRI varieties (Continue)	• To determine physicochemical and cooking qualities of BRRI developed rice varieties for updating the database	Gazipur
324	Nutraceutical Characterization of newly released BRRI varieties (Continue)	• To determine nutraceutical properties including antioxidants, minerals, fatty acid and amino acid profiling's of BRRI released HYVs from BR1 to BRRI dhan100 and BRRI hybrid1 to BRRI hybrid dhan7 along with their physicochemical and cooking properties	Gazipur
325	Calibration of NIR to predict proximate composition of rice varieties (Continue)	• To calibrate a near accurate prediction model for proximate composition of rice • To characterizing the proximate composition (moisture, carbohydrate, protein, lipids, ash and Dietary fiber) of BRRI varieties as an index of nutritional worth	Gazipur
326	To Screening, Selection, and Training of Sensory Panelists (Continue)	• To determine impairment of primary senses (color, vision, ageusia and anosmia) • To matching test for taste and odor substances • To ability to detect basic taste and odor	Gazipur

Sl.	Research Title	Objectives	Location
		acuity • To determine ability to characterize texture • To performance in comparison with other candidates • To increase sensory acuity of panelists and provide them with rudimentary knowledge of procedures used in sensory evaluation	
327	A survey of rice grain quality in Bangladesh: Consumer preference (Continue)	• To identify scientific reasons of preferring local varieties over HYV in terms of grain quality and nutrition	All over the country
328	Analysis of ferulic acid (FA) in RBO of Bangladeshi rice varieties in association of biochemical evaluation on burning effects of RBO in vivo rat experiment (Continue)	• To evaluate on appropriate analysis methodology and study amount of FA and their relation to nutrition properties in rice To evaluate the burning effects of RBO	Gazipur
329	A study on the different components of rice in relation to the palatability (Continue)	• To identify the components of rice grain through comparison of different parameters of rice samples that are responsible for palatability	Gazipur
330	Fatty acid profiles and nutritional quality of rice bran oil (RBO) in BRRI high yielding varieties (Continue)	• To identify the varieties containing higher amount of oil content • To analyze the fatty acid profile, heavy metal and nutritional value of rice bran oil	Gazipur
331	The effect of fermentation on the nutritional and microbial changes in Pantha bhat (New)	• To evaluate the nutritional properties of Pantha bhat • To determine the starch digestibility and bioavailability of mineral content • To evaluate the microbial properties and beneficial effect of pantha bhat	Gazipur
332	Study on anti-oxidative and anti-cancer properties of pigmented (black, red, purple) rice varieties in Bangladesh (Continue)	• Anti-diabetic effects by measuring serum glucose and insulin levels in type 2 diabetic rats • Anti-inflammatory effects by estimating serum levels of IL-4, IL-6 and TGF-beta	Gazipur
333	Development and validation of an HPLC methods for detection of bioactive compounds and residues of common herbicides and pesticide in rice grain (Continue)	• To detect bioactive compounds and residues of common herbicides and pesticide in rice grain	GQN Lab
334	Effect of Zn and phytate activities on Zn enriched rice varieties at different locations in T. Aman season (Continue)	• To determine the Zn and phytate activities with physicochemical properties of Zn enriched rice varieties at different locations in T. Aman season	BRRI rice field/GQN Lab
335	Assessment of heavy metals (Cd, Zn, Pb, Cr, As) in soil, water, and rice grain from industrial area (Dhaka, Gazipur, Narayanganj, Mymensingh, Narshindi etc.)	• To quantify heavy metals in soil, water, and rice grain • To identify area of rice field contaminated by industrial effluent water	Gazipur
336	Proximate analysis of Swietenia Mahagoni, Neem, and Bishkatali oil and its efficacy on insect pest of rice. (continue)	• To extract crude-extract and isolate Alkaloid from Mahagoni, Neem and Bishkatali as well as their efficacy on rice insect pest. • To determine and quantify the active	Gazipur

Sl.	Research Title	Objectives	Location
		ingredients in Mahagoni, Neem and Bishkatali oil.	
337	Determination of physicochemical properties and nutritional quality of puffed, popped and flattened rice from newly released BRRI varieties (Continue)	• To identify the physical quality of puffed, popped and flattened rice • To determine the nutritional value and heavy metals in puffed, popped and flattened rice	Gazipur
338	Survey on indigenous rice products of BRRI modern varieties (Continue)	• To find out the popular BRRI varieties are used for producing puffed popped and flattened rice	All over the country
339	Application of remote sensing in rice agriculture (Continue)	• To monitor crops at different growth stages • To ensure effective crop management • To validate precision agriculture in rice cultivation	BRRI rice field/GQN Lab
AGRONOMY DIVISION			
Soil Science (Crop-Soil-Water Management)			
340	Alleviation of salt stress in rice by exogenous phytoprotectants: regulation of Na^+/K^+ homeostasis and oxidative metabolism	• To identify the effective phytoprotectant in mitigating salt stress of rice • To explore the effect of exogenous phytoprotectants on plant phenotype under salt stress • To assess the regulatory mechanisms of phytoprotectants in alleviating salt stress	Gazipur
341	Determination of optimum seedling age for maximize grain yield of BRRI hybrid dhan7	• To find out optimum seedling age of BRRI hybrid dhan7	Gazipur
342	Enhancing rice yield by optimizing planting time of newly released transplanted Aman varieties	• To determine the effect of variable planting time on the phenology, growth and yield of newly released transplanted Aman varieties. • To find out optimum time of planting for newly released transplanted Aman varieties.	Gazipur
343	Effect of time of planting on growth, yield and yield contributing factors of BRRI released varieties in Boro season at Haor region of Bangladesh	• To identify the suitable time of planting and variety for Haor area. • To recommend appropriate high yielding variety for Haor area.	Hobigong, BRRI
344	Effect of time of planting on growth and yield of ALART, RLR lines in Aman season	• To determine suitable time of planting and selection of genotypes having high yield potential for ALART, RLR materials.	Gazipur
345	Effect of time of planting on growth and yield of ALART, ZER lines in T. Aman season	• To determine suitable time of planting and selection of genotypes having high yield potential for ALART, ZER materials.	Gazipur
346	Effect of time of planting on growth and yield of ALART, PQR in Boro season	• To determine suitable time of planting and selection of genotypes having high yield potential.	Gazipur
347	Effect of time of planting on growth and yield of ALART, ZER in Boro season	• To determine suitable time of planting and selection of genotypes having high yield potential.	Gazipur
348	Effect of time of planting on growth and grain yield of popular Aus varieties	• To determine optimum time of planting of BR26, BRRI dhan48 and BRRI dhan82 at Gazipur.	Gazipur
349	Growth, yield, nutrient use	• To determine Growth, yield, nutrient use	Gazipur

Sl.	Research Title	Objectives	Location
	efficiencies and economics of rice transplanter cum fertilizer deep placement machine	efficiencies and economics of rice transplanter cum fertilizer deep placement machine. • To compare rice yield and profitability of rice transplanter cum fertilizer deep placement machine with traditional transplanting and fertilizer management.	
350	Effect of N levels and growth stage based N application on growth, yield and nitrogen use efficiency of BRRI dhan92 and BRRI dhan96	• To find out the influence of growth stage based nitrogen application on growth and yield of rice. • To find out optimum N rate and N uptake in grain and straw.	Gazipur
351	Influence of organic source of nutrients on Nitrogen mineralization, microbial population and grain yield of rice	• To investigate the effect of integrated nutrient management in N mineralization. • To determine the microbial population in different nutrient management. • To find out the best organic material management practice to improve soil health and rice yield.	Gazipur
352	Application of Nano-Zinc Oxide to Improve Salt Tolerance in Rice	• To develop an eco-friendly protocol to synthesize Nano-Zinc Oxide. • To investigate the effect of Nano-Zinc Oxide on growth, yield and mineral status of rice under salinity stress.	Gazipur
353	Improving nutrient uptake, nitrogen-use efficiency and yield of rice through application of neem coated urea (On going)	• To determine the Nitrogen use efficiency as influenced by neem coated urea compared to prilled urea. • To find out the influence of neem coated urea on the grain nutrient (NPK) uptake, growth and yield of transplanted rice.	Gazipur
354	Nitrogen management and scheduling for BRRI hybrid dhan7	• To find out the amount of N needed for maximum grain yield and to determine economic fertilizer rate of BRRI hybrid dhan7. • To find out the best N scheduling for BRRI hybrid dhan7.	Gazipur
355	Growth and yield improvement of transplanted Aman rice in Charland ecosystem through integrated nutrient management	• To determine an economically suitable fertilizer management option for better growth and yield of rice in Charland ecosystem.	Gazipur
356	Mitigation of waterlogging stress in Boro rice through application of plant protectant along with balanced fertilization	• To determine the effect of combined application of fertilizer and plant protectants on the growth, yield and nutrient uptake of waterlogging Boro rice.	Gazipur
357	Nitrogen application to maximize grain yield of swarna type varieties in T. Aman season	• To find out optimum nitrogen rate for swarna type varieties. • To find out the influence of nitrogen application on the grain N uptake, growth and yield of swarna type varieties.	Gazipur
358	Determination of optimum Nitrogen rate for popular transplanted Aus rice varieties	• To determine optimum fertilizer rate for maximum grain yield of popular Aus varieties of BR26, BRRI dhan48 and BRRI dhan82 and to establish the relationship of N uptake in grain and grain yield of Aus rice.	Gazipur
359	Reduce Weed Seed Bank by	• To assess the total number of weed seeds	Gazipur

Sl.	Research Title	Objectives	Location
	long-term fellow management and herbicide uses in Rice- rice Cropping System	- reserve, species composition and dominant weed species present as well as to compare the floristic diversity of soil weed seedbank in rice field. • To reduce weed seed reservoir through fellow management in different soil depth.	
360	Qualitative and quantitate measurement of allelochemicals by HPLC or LCMS/MS method	• To isolate, identify and measurement of allelochemicals from rice. • To identify suitable rice varieties with allelopathic potentiality for anenhancing agricultural productivity and income for farmers. • To reduce the use of herbicide for ensuring safer climate.	Gazipur
361	Study on biodegradation of soil-applied herbicides in soil using selected microbial strain	• To investigate the effect of herbicide on bacterial survivability in soil. • To investigate the role of bacteria on degradation of soil applied pesticides.	Gazipur
362	Residue analysis of widely used herbicides in the irrigated rice ecosystem	• To validate of high-performance liquid chromatographic protocol for the determination of herbicide residues. • To determine the residue of pre- emergence and post-emergence herbicides in the irrigation water, soil, rice straw and grain.	Gazipur
363	Screening of rice varieties for weed competitiveness	• To select weed competitive rice variety.	Gazipur
364	Evaluation of candidate herbicides	• To find out the efficacy of new herbicides.	Gazipur
365	Allelopathic effect of rice varieties for weed management	• To screen out highly allelopathic variety of rice.	Gazipur
366	Residue analysis of widely used herbicides in the irrigated rice ecosystem	• To determine the residue of pre-emergence and post-emergence herbicides in the irrigation water, soil, rice straw and grain.	Gazipur
367	Herbicide Application: Shifts in soil microbial community structure	• To characterize the herbicide-induced responses of microorganisms in transplanted rice. • To evaluate the herbicide-induced tolerance of soil microbes.	Gazipur
368	Yield maximization of Boro rice through good agricultural practices (GAPs)	• To observe growth and yield of Boro rice to reduce production cost, by minimum use of inputs.	Gazipur
369	Yield Maximization of BRRI developed rice varieties through influencing some Agronomic Critical Factors in Boro seasons	• To study the effect of Agronomic most critical factors for yield maximization of newly BRRI developed varieties. • To find out and recommended the most appropriate Agronomic critical factors packages for yield maximization of newly BRRI developed varieties.	Gazipur
370	Maximizing yield and quality of some local fine aromatic cultivars through influencing some Agronomic management in Aman seasons	• To study the effect of some Agronomic managements for yield maximization of some local fine aromatic popular varieties. • To find out and recommended the most appropriate Agronomic management packages for yield maximization and quality	Gazipur

Sl.	Research Title	Objectives	Location
		improvement of some local fine aromatic popular varieties.	
371	Toxic heavy metal bioaccumulation in rice cultivated in soil and water contaminated with industrial waste	• To quantify the physico-chemical parameters of soil and water contaminated with industrial waste. • To determine the transfer of toxic heavy metals from contaminated soils and water into rice straw and grain.	Gazipur
372	Improvement of soil health in four crops pattern through agronomic management	• To improve the soil health. • To increase the cropping intensity and productivity.	Gazipur
373	Effect of some agronomic factors for maximizing yield (10t/ha) of long duration BRRI variety (BRRI dhan92) through developing production management protocol	• To study some agronomic factors for high yield contribution of long duration BRRI variety (BRRI dhan92) in Boro season • To find out the best production management protocol for sustainable higher yield of long duration BRRI variety (BRRI dhan92).	Gazipur
374	Effect of some agronomic factors for maximizing yield (7 t/ha) of medium long duration BRRI variety (BRRI dhan94) through developing production management protocol	• To study some agronomic factors for high yield contribution of long duration BRRI variety (BRRI dhan94) in T Aman season • To find out the best production management protocol for sustainable higher yield of medium duration T Aman BRRI variety (BRRI dhan94).	Gazipur
375	Increase N use efficiency through nanotechnology and zeolite amendment	• To assess N use efficiency by urea-HA nanohybrid and urea plus natural zeolite over prilled urea	BRRI Gazipur
376	Nutrient management for growing four crops in a year	• To increase crop production • To maintain soil fertility and improve nutrient use-efficiency. • To determine nutrient depletion/mining	BRRI Gazipur
377	Management interventions to improve NUE and reduce N losses in typical rice cropping system of Bangladesh	• To quantify the fate of N fertiliser (crop, soil and losses) and NUE under various N managements for double rice cropping. • To develop locally based mitigation options that can be compared with in plot-based experiments.	BRRI Gazipur
378	Determination of N fertilizer doses for ZER-ALART materials	• To determine optimum N doses for ZER-ALART materials	BRRI Gazipur
379	Fertilizer determination of PQR-ALART materials	• To determine optimum N doses for PQR-ALART materials	BRRI Gazipur
380	Nitrogen response to ALART materials of Disease Resistant Rice (DRR) of Bacterial Blight (BB)	• To find out the optimum doses of N for Bacterial Blight ALART materials	Gazipur
381	Determination of N fertilizer doses for new BRRI varieties	• To determine optimum N doses newly released BRRI varieties.	BRRI Gazipur
382	Effect of nitrogen and potassium rates on modern rice cultivation	• To find out the suitable combination of N and K for MV rice cultivation • To study the N and K dynamics in soil and plant.	BRRI Gazipur
383	Screening of N use efficient rice genotypes	• To find the N use efficient genotypes • To find the agronomic traits related to	BRRI Gazipur

Sl.	Research Title	Objectives	Location
		efficient N management • GWA mapping of selected NUE lines	
384	Effect of long-term rice farming on the changes of soil nutrient status of BRRI Farm soil	• To determine the changes occurred in soil carbon and plant nutrient status in BRRI farm soil due to long-term rice farming • To develop a fertility map of the soils of the study area • To devise a nutrient dynamics model to estimate the nutrient status on long-term basis	BRRI Gazipur
385	Regional Yield Maximization Trial under Recommended Management Practices	• To validate integrated improved management practices (IIMP) compared with BRRI recommendation practices • To maximize proper filling of grains in a panicle under IIMP	Gazipur
386	Response of Rice to Potassium in Rice-based Cropping Pattern in Old Himalayan Piedmont Soil	• To maximize yield of rice-based cropping pattern • To identify nutrient mining of soil (especially K) • To maintain soil fertility	HSTU farm, Dinajpur
387	Soil profile study of the research farms of different BRRI Regional stations	• To characterize the soils of the research fields of the BRRI Regional stations • To classify the soils according to the world soil classification system. • To identify the soil fertility capability classification	Gazipur and Barisal
388	Long-term effect of organic and inorganic nutrients on yield and yield trend of lowland rice	• To evaluate changes in soil physical, chemical and biological properties • To determine management options for solution of soil problem(s)	Gazipur
389	Long-term missing element trial at BRRI regional stations	• To determine nutrient mining problem on soil fertility and its influence on rice yield • To find out nutrient management options for correcting soil problems	Rangpur, Rajshahi, Cumilla, Habiganj, Barisal & Satkhira
390	Evaluation of BRRI rice varieties under P deficient soil	• To evaluate the rice varieties under P deficient soil	Gazipur
391	Phosphorus response study of newly released rice varieties	• To investigate the performance of MV rice under deficient soil P levels • To develop P response curve for respective rice variety	Gazipur
392	Consequences of continuous wetland rice cropping on rice yield and soil health	• To evaluate soil fertility and rice yield changes over time • To find out mitigation options of soil health	Gazipur
393	Determination of Critical Limit of Nutrients for Major Soils and Crops	• To delineate of the present status of different nutrients in soils of AEZ 18, 19 and 20 • To determine the critical limit of P, K, S and Zn for different soils and rice crop	BRRI Gazipur and AEZ 18, 19 & 20
394	Integrated nutrient management for double and triple rice cropping for maximizing productivity	• To improve land productivity and soil health under intensive cropping system.	Gazipur
395	Increase rice yield through organic and inorganic amendment	• To study the effect of vermicompost and silicon on rice grain yield while maintaining soil health	Gazipur

Sl.	Research Title	Objectives	Location
396	Soil management to maximize the yield of newly released rice varieties	• To maximize rice yield through organic and inorganic amendments while maintaining soil health in BRRI farm	Gazipur and all R/S, BRRI.
397	Effects of long-term rice cultivation with organic amendments on soil quality	• To observe the changes in soil quality indicators due to rice cultivation for long term rice cultivation with organic manure • To assess the potential of the amended soils to sustain the yield level of rice	Gazipur
398	Nutrient management under conservation agriculture in double rice cropping system at AEZ 26	• To identify the nutrient requirement of crop and to improve soil health under CA practice in Boro-Fallow-T. Aman cropping pattern.	Rajshahi
399	Increase Rice Yield through Vermicompost in Coastal Land	• To assess the impact of vermicompost on the yield of rice in coastal saline soil	Khulna and Barguna
400	Effect of biochar on rice yield and soil health on problem soils	• Optimum rate of biochar for rice cultivation in charland soil • Increased rice yield and improved soil health	Sirajganj
401	Effects of different sources of fertilizer and variety on rice production in saline soil	• To develop suitable integrated nutrient management package utilizing local resources that could help sustaining rice production with maintaining soil fertility.	Satkhira
402	Evaluation of bio-organic fertilizer for the improvement of rice yield and soil health	• To evaluate the efficacy bio-organic fertilizer for growth and yield of rice. • To assess the impact of bio-organic fertilizer on soil health	Gazipur,
403	Microbial characterization of different AEZs soil and formulation of biofertilizer for rice cultivation in acid and saline soil	• To assess soil bio-physico-chemical properties of different AEZ's of Bangladesh and characterize potential plant growth promoting bacteria (PGPB) • To develop bio-fertilizer using potential microbes for rice cultivation in acid and saline soil	Gazipur
404	Effect of Nitrobenzene (Flora) of Growth and Yield Parameters of Rice	• To evaluate nitrobenzene of Growth and Yield Parameters of Rice	Gazipur and Sonagazi
405	Effect of NPK Combo Fertilizer on the Growth and Yield Parameters of Rice	• To evaluate NPK Combo Fertilizer on the Growth and Yield Parameters of Rice	Gazipur and Sonagazi
406	Effects of potassium split fertilization at different growth stages on growth and yield of rice	• To find out the best suited timing of potassium fertilizer application for rice crop.	Khulna and Barguna
407	Effects of Potassium Fertilization at Different Growth Stages on growth and yield of rice	• To find out the effect of potassium fertilization at different growth stages of Rice	Paba, Rajshahi
408	Effect of selenium on growth and yield of rice	• To identify optimum Selenium doses for rice. • To study the effect of Selenium on growth and yield of rice. • To observe the interactions among the different nutrients and Selenium on nutrient uptake and rice yield • To study the effect of Selenium on soil biochemical properties	Gazipur

Sl.	Research Title	Objectives	Location
409	Effect of silicon on growth and yield of rice	• To identify optimum Silicon doses for rice • To study the effect of Silicon on growth and yield of rice • To observe the interactions among the different nutrients and Silicon on nutrient uptake and rice yield • To study the effect of Silicon on soil biochemical properties	Gazipur
410	Effects of fertilizer and varietal management on mitigating greenhouse gas emissions from rice cultivation in South-western coastal ecosystems	• To quantify GHG emissions from rice field under different fertilizer and varietal management • To develop a technology for increased crop productivity with reduced negative environmental impacts. • To develop country specific Emission Factor and national GHG inventory	RS Satkhira
IRRIGATION AND WATER MANAGEMENT DIVISION			
Crop-Soil-Water Management			
411	Change in surface water bodies and its impact on groundwater recharge in Barind region of Bangladesh	• To find out the relationship between surface water storage and groundwater recharge • To figure out the options increasing surface water storage for enhancing GW recharge and sustainable crop production	Northwest region of Bangladesh Duration: 2021-2025
412	Surface water receding pattern in relation to Boro rice establishment in Haor region of Bangladesh	• To determine weekly/fortnight water receding pattern and a contour map showing the water receding area • To determine suitable establishment period for escaping flash flood damage of Boro rice	Haor region Duration: 2021-2025
413	Irrigation water requirement and rainfall utilization for delayed transplanting of Boro rice in different locations of Bangladesh	• To find out the variation of irrigation water requirement in relation to the delayed transplanting. • To maximize the rainfall utilization and to reduce the groundwater withdrawal.	Gazipur, Rangpur and Kushtia. Duration: 2021-2024
414	Feasibility assessment of solar pump utilization for irrigation purpose in Chattogram region	• To evaluate the present status of solar pumps at field conditions in Chattogram region • To assess the suitability of solar pump system at Chattogram region	Chattogram region Duration: 2021-2022
415	Optimization of water use efficiency through subirrigation and mini-sprinkler	• To increase water use efficiency in crop cultivation • To evaluate the performance of sub-irrigation and sprinkler irrigation system in transplanted rice field	Sirajganj Duration: 2021-2024
416	Saline water irrigation strategies for Boro rice cultivation in the coastal saline area	• To find out the saline water irrigation management options for Boro rice cultivation • To quantify the ionic stress on plant shoot and root under saline water treatments	Dacope, Khulna Duration: 2021-2024
417	Effect of irrigation suspension on mitigating greenhouse gas emission in irrigated rice cultivation	• To determine irrigation requirement and yield of Boro rice under varying practices • To assess irrigation suspension practices on reducing global warming potential	BRRi farm, Gazipur. Duration: 2021-2024
418	Reuse of domestic household water for crop production at BRRi farm, Gazipur	• To find out the quality of domestic wastewater for irrigation • To assess the opportunities of domestic wastewater for irrigation	Gazipur Duration: 2021-2025

Sl.	Research Title	Objectives	Location
419	Assessing on-farm water-use efficiency of BRRI research farm, Gazipur	- To find out present irrigation management status of BRRI farm - To suggest plan for efficient irrigation management plan for BRRI farm	Gazipur Duration: 2021-2025
420	Present status and potentiality for increasing rice cultivation in surface water irrigation projects of Bangladesh	- To determine the present efficiency of major irrigation projects - To figure out the improvement options for surface water utilization	G-K, Teesta, Muhuri, Chandpur, M-D and Pabna irrigation projects area: 2021-2024
421	Farm level irrigation efficiency determination by ODK software	- To assess the present level of irrigation efficiency (IE) and water productivity (WP) of minor irrigation system - To assess the techno-socio-economic opportunity for improving irrigation efficiency.	Mymensingh Duration: 2021-2024
422	Determination of physical and hydraulic properties in different soil types	- To document the important soil physical properties in different soil profiles - To develop a soil moisture characteristics curve	All Regional Station Duration: 2015-To be continued
423	Automated Alternate Wetting and Drying Irrigation System for Rice production	- To use water efficiently for improving water productivity - To introduce digital irrigation system in rice cultivation	BRRI farm Gazipur. Duration: 2018-2022
424	Technique for Using Basin Water for Elevated Land Rice Cultivation during Dry Season in Haor Area	- To bring elevated land under boro cultivation - To develop a technique for using basin water of haor during dry season	Habiganj, Netrokona, Kishoreganj Duration: 2018-2022
425	Study on the problems and potentials for productivity improvement through Agricultural water management in the Hilly areas	- To identify potentials of water resources development for agriculture and livelihood improvement in the Hilly area - To recommend suitable water management options for productivity and livelihood improvement in the area.	Chittagong Hill Tracts Duration: 2015-2022
426	Study on water stress tolerance capacity for different advanced rice genotype of BRRI	- To quantify the tolerance capacity of soil moisture deficit for different varieties that plant suffers during its growing period through Towfique's drought model. - To determine yield of varieties under different water stress condition	BRRI farm, Gazipur Duration: 2015-To be continued
427	Performance Evaluation of the Proposed Rice Varieties Under Different Water Regimes	- To study performance of the proposed rice varieties under different water regimes - To evaluate suitable water regimes for proposed lines/varieties of rice	BRRI farm, Gazipur Duration: 2019-2023
428	Improving Soil-Water Availability for Crop Production in Char Land by Amendment Practices	- To determine soil physical properties of root zone soil layers - To determine water holding capacity of root zone soil layers - To measure soil-water retention curves of the soil layers and determine their parameters	BRRI R/S, Sirajgonj. Duration: 2019-22
429	Determining Minimum Irrigation Water Requirement of Rice at Different Regions of	To measure yield response of rice to irrigation application base on on-farm demand and simulated irrigation requirement	Gazipur, Kushtia, Rangpur Duration: 2020-

Sl.	Research Title	Objectives	Location
	Bangladesh through Water Balance from On-Farm Demand and Model Simulation	• To figure out variation in irrigation water requirements among different treatments	23
430	Agricultural drought forecasting for mitigating drought in T. Aman rice	• To determine drought using forecasted rainfall and evaporation • To determine suitability of drought model for forecasting, and	BRRI farm Gazipur. Duration: 2017-2022
431	Irrigation Scheduling of Rice (<i>Oryza sativa</i> L.) Based on Weather Forecasting in Gazipur	• To predict water demand through water balance simulation model for rice cultivation • To recommend the better method for irrigation scheduling of rice	BRRI Gazipur Duration: 2019-2022
432	Feasibility evaluation of the use of subsurface drainage system for rice-based cropping pattern in Bangladesh	• To identify post-monsoon waterlogged crop field under rice-based cropping pattern • To evaluate potential benefit due to installation of subsurface drainage system	Coastal zone (tidal and saline) Duration: 2020-2025
433	Assessment of suitable water resources availability for irrigation to increase crop production in tidal areas of Barisal region	• To monitor the dynamics of surface water salinity in the dry season at different locations of Barisal region • To assess the suitability of water for irrigated crop cultivation.	Barisal, Jhalokhati, Pirojpur, Patuakhali and Barguna. Duration: 2015-To be continued
434	Water resources assessment during dry season crop cultivation in selected polders of coastal region	• To delineate suitable water resources during dry season. • To assess the cultivated area by different cropping pattern based on water resources	Khulna, Barishal Duration: 2017-2022
435	Use of less saline water resources for increasing cropping intensity in Barisal region.	• To bring fallow land under Boro cultivation • To improve crop and land productivity in the region	Barisal. Duration: 2017-2023
436	Monitoring of groundwater fluctuation and safe utilization in different geo-hydrological regions	• To determine the fluctuation of groundwater level over time and its relationships with rainfall, and • To determine water quality for assessing suitability for irrigation.	All Regional Station. Duration: 1979-To be continued.
437	Conjunctive use of waste22water and fresh water for irrigatio23n in Boro rice cultivation24	• To determine suitability of different types of wastewater for boro rice cultivation. • To analyze rice grain sample for heavy metal uptake.	BRRI farm, Gazipur Duration: 2020-2022
438	Ef25fect on percolation losses and grou26ndwater recharge due to weak ploug27h-pan formed under long term cons28ervation agriculture29	• To determine amount of irrigation water contributed through deep percolation to ground water recharge under SP and CT. • To determine the depth and vicinity of the nearest aquifer.	Rangpur Duration: 2020-2021
439	Assessment of groundwater level depletion dynamics, recharge estimation and sustainable use pattern in the selected locations of Bangladesh	• To evaluate fluctuation pattern of GWL • To determine the GWL depletion trend	Northwest hydrological region and whole country Duration: 2019-23
440	Assessment of Surface and Groundwater Quality for Irrigation in Selected Locations of Bangladesh	• To determine the surface and groundwater quality parameters • To determine the suitability of groundwater for irrigation	Gazipur, Rangpur, Comilla, Hobigonj, Rajshahi, Kushtia

Sl.	Research Title	Objectives	Location
			and Sonagazi Duration: 2019-22
441	Development of A Low-Cost Dc Solar Water Pump for Irrigation in Bangladesh	• To use a permanent magnet brushless DC motor for operating solar water pump • To determine economic feasibility of the pump for rice cultivation	Gazipur Duration: 2019-22
442	Evaluation of smallholder surface water solar irrigation system for crop production	• To evaluate the technical and economic performance of a small capacity solar powered low lift centrifugal and submersible pumps • To assess the value addition for versatile use of solar panels (Solar home system/Paddy thresher)	BRRI farm, Gazipur Duration: 2017-2020
PLANT PHYSIOLOGY DIVISION			
443	Exploring new sources of salinity tolerance from BRRI Gene Bank germplasm at the seedling stage	• To identify salt-tolerant advanced breeding lines/genotypes at the seedling stage	Gazipur
444	Screening of advanced breeding lines for salinity tolerance at the seedling stage during T. Aman and Boro season	• To identify salt-tolerant advanced breeding lines/genotypes at the seedling stage	Gazipur
445	Characterization of advanced breeding lines at salinity stress for the whole growth period during Aman and Boro season	• To identify salt-tolerant advanced breeding lines/genotypes at the whole growth period	Gazipur
446	Characterization of salt-tolerant varieties in artificial saline conditions for the whole growth period during Aman season.	• To know the level of salinity tolerance of newly released BRRI varieties	Gazipur
447	CRISPR-Cas9 mutagenesis of the OsRR22 gene for improving salinity tolerance of rice	• To increase salinity tolerance via CRISPR-Cas9-targeted mutagenesis of the transcription factor gene <i>OsRR22</i> .	Plant Physiology Division/Biotechnology Division, Gazipur
448	Identification of rice germplasm /advanced breeding lines for two weeks flash flood submergence tolerance	• To identify tolerant germplasm/advanced breeding line for two weeks of complete submergence at vegetative stage	Gazipur
449	Confirmation of submergence tolerance of previously screened rice germplasm	• To confirm the submergence tolerance of previously screened rice germplasm.	Gazipur
450	Screening for stagnant flooding tolerance of Germplasm/advanced breeding lines at whole growth period during T. Aman season	• To identify tolerant germplasm for water stagnation condition • To observe tillering ability under water stagnation conditions	Gazipur
451	Evaluation of elongation ability of BRRI dhan91 under deep flooding condition	• To observe the elongation ability of BRRI dhan91 under deep flooding condition	Gazipur
452	Effect of 2-3 times consecutive flash flood submergence at certain days interval on rice genotypes	• To determine the degree of survivability and yield loss of submergence tolerant varieties as affected by 2-3 times consecutive flash flood submergence at different stage of vegetative phase	Submergence Tank, BRRI Gazipur

Sl.	Research Title	Objectives	Location
453	Confirmation of performance for ALART/ RYT /AYT materials under drought stress at reproductive stage (TRB-Project)	• To evaluate of ALART/ RYT /AYT materials under control drought condition in the net house.	Rain-out shelter, BRRI Gazipur
454	Screening germplasm for drought tolerance at reproductive phase (TRB-Project)	• To identify rice germplasm tolerant to drought stress at reproductive phase.	Farmers field, Alimganj, Paba, Rajshahi
455	Evaluation of previously selected germplasm under drought stress at reproductive phase in the rain-out shelter	• To find out the correlation of field performance of tested genotypes with the performance under control drought condition in the rain-out shelter.	Rain-out shelter, Gazipur
456	Physiological and biochemical characterization of advanced breeding lines under drought stress at reproductive phase	• To assess the effect of drought stress on growth and yield of the tested genotypes • To identify the physiological traits associated with drought tolerance.	Gazipur
457	Characterization of rice germplasms under drought stress at reproductive phase using SSR marker	• To study the genetic diversity of the germplasms.	Net house (Plant Physiology Division) Gazipur
458	Exploring new sources of heat tolerance from Bangladeshi rice germplasm	• To identify new sources of heat tolerance from Bangladeshi rice germplasm	Gazipur
459	Screening for high temperature tolerance of spikelet fertility QTL introgression lines	• To identify high temperature tolerant lines under controlled condition	Gazipur
460	Observational trial of high temperature induced spikelet fertility introgression lines in the background BRRI dhan28 and BRRI dhan29	• To identify high yielding and homogeneous lines having phenotypic similarity with respective recipient parents	Gazipur
461	Marker assisted introgression of high temperature induced spikelet fertility QTL (qHTSF4.1) in the background of BRRI dhan48 and BRRI dhan62	• To develop heat tolerant Aus and T. Aman (short duration) lines.	Gazipur
462	Exploring new sources of cold tolerance from BRRI Gene Bank collections at seedling stage	• To identify rice genotypes that can tolerate low temperature at seedling stage.	Gazipur
463	Screening of advanced breeding lines for seedling stage cold tolerance (TRB-Project)	• To identify advanced breeding lines which can tolerate low temperature at seedling stage.	Gazipur
464	Characterization and evaluation of some selected rice genotypes for cold tolerance	• To characterize rice genotypes at natural cold condition.	BRRI Gazipur
465	Screening of advanced breeding lines for cold tolerance (SDCTR-Project)	• To identify cold tolerant advanced breeding lines for whole growth period.	BRRI Gazipur
466	Effect of polythene covering on seedling raising in Boro season	• To identify the most suitable technique for protecting Boro rice seedling from cold injury	Gazipur, Rajshahi, Cumilla, Habiganj, Barisal, Sonagazi, Bhanga, Rangpur

Sl.	Research Title	Objectives	Location
			,Kushtia,Satkhira, Gopalganj, Sirajgonj
467	Investigation of photosensitivity of advanced breeding lines and varieties	•To know the photosensitivity of advanced breeding lines and recently released T. Aman varieties	Gazipur
468	Study of phenological development of newly released BRRI varieties	•To observe the phenological development at different growing season •To estimate the genetic co-efficient for crop simulation	Gazipur
469	Determination of growth stages of some rice varieties as affected by sowing time during Aman season	•To determine the duration of the different growth phases of rice varieties at various transplanting dates. •To detect appropriate degree days to initiate panicle in different transplanting dates.	Gazipur
470	Determination of growth stages of some rice varieties as affected by sowing time during Boro Season	•To determine the duration of the different growth phases of rice varieties at various transplanting dates. •To detect appropriate digree days to initiate panicle in different transplanting dates.	Gazipur
471	Identification of regeneration ability Aus rice varieties	•To determine the regeneration ability of Aus rice varieties	Gazipur
472	Determination of growth phase of short duration (60 days in India) Aus rice varieties	•To determine the duration of the different growth phases and yield potential of Indian Aus rice varieties	Gazipur
473	Generation of male sterile rice line for two-line hybrid system by editing TMS5 gene using CRISPR/Cas9 system	•To generate a novel thermo-sensitive genetic male sterile line by editing <i>TMS5</i> gene via CRISPR/Cas9 for two-line hybrid system, •To evaluate the suitability of the TGMS line in two-line hybrid breeding program	Plant Physiology Division/Biotechnology Division, BRRI Gazipur
474	Lodging tendency in BRRI developed T Aman varieties	•To determine the lodging characters of four BRRI varieties at different nitrogen levels.	Gazipur
475	Investigation of anatomical and photosynthetic differences in rice leaves and C4 species	•To identify leaf anatomical differences between rice and C4 species. •To explore differences of photosynthetic related parameters between rice and C4 species	BRRI Gazipur
476	Optimizing chlorophyll fluorescence imaging system for photosynthetic efficiencies of C3 and C4 species in different stress condition	•To identify photosynthetic efficiencies of C3 and C4 species under low CO ₂ stress. •To explore photosynthetic differences of rice under salinity, submergence and drought stress	BRRI Gazipur
477	Automatic weather station data collection and storage	•To collect, transfer and storage of automatic weather station data	Gazipur,Rangpur, Rajshahi,Bhanga, Habiganj,Satkhira, Sirajgang
478	Manual weather station data collection and maintenance	•To collect, transfer and storage of different weather variables.	Gazipur,Rangpur, Rajshahi,Cumilla ,Bhanga, Barisal, Habiganj, Sonagazi,
ENTOMOLOGY DIVISION			
479	Pest monitoring in BRRI farm.	•To study the insect pest and their natural enemy incidence at BRRI farm and create a	Gazipur

Sl.	Research Title	Objectives	Location
		database to develop a forecasting system.	
480	Insect pests and natural enemy in light trap.	• To study the pest and their natural enemy incidence patterns in rice fields and to create a database to develop a forecasting system.	Gazipur and all R/S
481	Survey and monitoring of rice arthropods and yield loss estimation.	• To know the present status of insecticide application. • To reduce insecticide application in rice production. • To assess the yield loss due to infestation of rice insect pests.	Barisal, Rangpur, Habiganj, Sirajganj
482	Fall Army worm (FAW) monitoring in rice.	• To determine the incidence pattern of FAW in rice.	Gazipur, Barishal, Chuadanga, Rangpur
483	Impact of lighting period on the trapping of insect.	• To find out the effective lighting period for maximum insect trapping. • To find out the suitable insect catching time. • To reduce the trapping of natural enemies.	Gazipur, Barishal, Rajshahi
484	Behavioral adaptation of RLR in different weather condition.	• To identify the effects of temperature elevation on life cycle of rice leaf roller.	Gazipur
485	Behaviour and biological parameters of Fall Armyworm when feeding rice.	• To find out the impact of non-host rice food on the demographic parameters of fall armyworm • To understand the management strategy of fall army worm in rice field	Gazipur
486	Conservation of natural enemies through eco-engineering	• To conserve natural enemies through ecological engineering approaches.	Gazipur, Barisal, Rangpur
487	Study on entomogenous fungi to control BPH.	• To isolate the fungi from naturally infected insects. • To explore suitable media for mass production of the entomogenous fungi and its use in BPH management.	Gazipur
488	Effect of deadheart and whitehead on rice grain yield caused by stem borer (DHB, YSB).	• To determine the compensation abilities of different rice varieties against yellow stem borer damage. • To know the relationship between YSB damage and yield loss.	Gazipur, Rajshahi
489	Test of different insecticides against major insect pests.	• To evaluate the effectiveness of commercial formulation of different insecticides against major insect pests of rice.	Gazipur
490	Use of nanoparticle to control rice insect pests.	• To develop nano-particle based pest management in rice • To reduce chemical pesticide load in environment.	Gazipur
491	Effect of insecticides on natural enemies of rice insect pests.	• To identify relatively safer insecticides for using (if needed) in IPM program.	Gazipur
492	Residue analysis of different insecticide in rice.	• To detect insecticide residues in rice hull, bran and polished rice. • To establish monitoring and guidance on safe use of insecticide in rice field.	Gazipur
493	Evaluation of pesticide residue in candidate rice samples.	• To detect insecticide residues (if any) in candidate rice samples.	Gazipur
494	Screening of rice germplasm, advance line against BPH, WBPH, GLH.	• To identify resistant rice germplasm against major insect pests.	Gazipur

Sl.	Research Title	Objectives	Location
495	Development of BPH resistance rice introgression lines through marker assisted selection.	• Development of elite donor for BPH resistance breeding program. • Development of new breeding lines for BPH resistance.	Gazipur
496	Identification of BPH resistant sources from rice germplasm.	• To characterize BPH resistant germplasms using BPH resistant linked markers.	Gazipur
497	Suppression of serotonin synthesis in rice using CRISPR Cas9 for insect control.	• To develop insect resistant rice variety • To reduce insecticide dependency.	Gazipur
498	7.5 Resistance mechanism in BRRI dhan33 to gall midge	• Identify the gall midge resistance gene in BRRI dhan33. • Identify polymorphisms in parental lines, BRRI dhan33 and BRRI dhan49 and isolate the responsible gene by genetic linkage analysis.	Gazipur
499	Pyramiding three BPH resistance genes (Bph2, Bph20, & Bph32) using marker-assisted selection in BRRI dhan89	• Develop three/two gene pyramiding lines using marker assisted breeding. • Evaluate the effects of BPH-resistant lines carrying different R genes after infestation with BPH.	Gazipur
500	Genome sequencing of yellow stemborer.	• To provide a complete and accurate genome sequence of rice hispa.	Gazipur
501	Molecular characterization of <i>Nilaparvata lugens</i> in Bangladesh based on COI analysis	• To assess a gene diversity of BPH in Bangladesh. • To know the impact of geographic location in BPH genomic structure.	Gazipur
502	Gene drive to control <i>Nilaparvata lugens</i> .	• To assess a gene drive strategy to control the insect pest that threatens the staple food production in Bangladesh.	Gazipur
503	Use of sex pheromone to control rice leafroller and yellow stemborer.	• To test the efficacy of sex-pheromone against leafroller in rice field. • To control rice leaf roller without insecticide.	Gazipur, Rajshahi, Barishal, Habiganj
504	10.1 Evaluation of different rodenticide against rice field rats.	• To find out effective rodenticide to control rat.	Gazipur, Barishal, Rajshahi
PATHOLOGY DIVISION			
505	Survey and monitoring of rice diseases in selected areas	• To investigate the present status of different rice diseases in different climatic environments and to update disease crop calendar	Rajshahi, Rangpur, Satkhira, Barishal, Habiganj & Cumilla
506	Monitoring of rice diseases in HIZR and healthier rice under confined condition	• To determine the incidence and severity of rice diseases on the genotypes	Gazipur
507	Estimation of production loss due to rice disease	• To estimate the yield loss in selected areas	Satkhira, Rangpur & Cumilla
508	Pathotypic and genetic diversity of <i>Rhizoctonia solani</i> AG1-IA	• To estimate the genetic diversity of <i>R. solani</i> AG1-IA using ITS region sequences	Gazipur & Japan
509	Molecular characterization of bakanae causing fungi in Bangladesh	• To find out the fungi associated with bakanae disease of rice in Bangladesh	Gazipur
510	Development of differential system of <i>Xanthomonas oryzae</i> pv. <i>oryzae</i> and study on its	• To identify a standard differential set of isolates of <i>X. oryzae</i> pv. <i>oryzae</i>	Gazipur

Sl.	Research Title	Objectives	Location
	molecular diversity		
511	To study the microbial effect on expression of AQU, DHN and DREB genes in rice under drought stress	• To identify potential microbes for drought tolerance in rice. • To find out the efficacy of microbes as drought tolerance in rice	Gazipur
512	Determination of toxins from infected seeds by seed borne pathogens	• To determine the level of major toxins in contaminated seeds. • To identify deterioration of antioxidant properties in infected seeds	Gazipur
513	Studies on entomopathogenic fungi (<i>Metarhizium anisopliae</i>) to control BPH	• To identify the pathogenicity of entomopathogenic fungi against BPH	Gazipur
514	Development of an inoculation technique for mass screening of sheath rot disease	• To find out an effective and efficient inoculation method for mass screening	Gazipur
515	Development of a new scale for scoring of sheath rot disease	• To develop an easy and accurate scale for sheath rot disease scoring	Gazipur
516	Identification of the source of infection of rice false smut disease	• To disclose whether the spores of <i>Ustilaginoidea virens</i> are in the air or not	Gazipur
517	Improvement of differential system for rice blast disease in Bangladesh using differential system and molecular marker	• To select new differential blast isolates	Gazipur
518	Isolation of potential fungi for controlling major weeds of rice	• To identify potential fungi for controlling major weeds of rice	Gazipur
519	Production of afla toxin by storage fungi at different moisture level in storage condition	• To determine the population of different storage fungi	Gazipur
520	Etiology, Epidemiology and Management of Bacterial Panicle Blight (BPB): An emerging and climate sensitive rice disease in Bangladesh	• To conduct a details study on bacterial panicle blight (BPB) disease in Bangladesh	Gazipur
521	Determination of variability of rice tungro virus strain of Bangladesh	• To check the variability of rice tungro virus of Bangladesh	Gazipur
522	Comparative study of mass inoculation technique for sheath blight in rice caused by <i>Rhizoctonia solani</i> under field condition	• To determine the effective method for inoculation	Gazipur
523	Studies on population structure of seedling blight pathogens of rice	• To know the population structure of seedling blight pathogen	Gazipur
524	Exploring new sources of resistance and pyramiding blast resistant gene in Boro rice	• To find out new source of major resistant gene(s) against blast disease in the native land races	Gazipur
525	Screening of advanced breeding lines and land races against blast, bacterial blight and sheath blight diseases	• To identify the source of resistance against blast, bacterial blight and sheath blight diseases of rice	Gazipur
526	Introgression of blast resistant genes into BRRI dhan47	• To develop durable blast resistant variety harboring <i>Pi40</i> and <i>Pi9</i> genes	Gazipur

Sl.	Research Title	Objectives	Location
527	Identification of major blast resistant genes in jhum rice	• To find out blast resistant source(s) of <i>Pi</i> genes	Gazipur
528	Exploring new source of blast resistance in native rice germplasms	• To identify new sources of resistance from upland rice germplasm	Gazipur
529	Improvement of BRRI varieties for resistance to blast and bacterial blight diseases using marker assisted backcross breeding	• To develop durable resistant cultivars through pyramiding of both BB and blast genes (broad spectrum resistance)	Gazipur
530	Identification of resistant sources and gene pyramiding of bacterial blight and blast resistance into the background of BRRI dhan29 through MAS	• To identify bacterial blight and blast resistant sources	Gazipur
531	Pyramiding of major BB resistant gene(s) in susceptible rice varieties/lines	• To introgress major BB resistant gene(s) into the selected cultivar for durable resistance	Gazipur
532	Observational trial of blast resistant advanced lines	• To evaluate the blast resistance and yield	Gazipur
533	Gene detection of bacterial blight (BB) resistance in local rice cultivars using phenotypic and molecular studies	• To identify BB resistant genes in native cultivars	Gazipur
534	Screening of LST against BB and blast	• To identify resistant source(s) against BB and blast	Gazipur
535	Screening of rice germplasm against bakanae disease	• To identify the resistant sources against bakanae disease of rice	Gazipur
536	Screening of land races against Sheath blight disease	• To identify the resistant source against sheath blight disease of rice	Gazipur
537	Linkage and QTL mapping of tungro resistance in rice	• To identify significant QTLs with linked marker for tungro resistance in rice land race Kumragoir	Gazipur
538	Development of prebreeding materials for tungro resistance	• To develop tungro resistant advanc lines	Gazipur
539	Development of blast resistant varieties using differential system and molecular markers	• To develop blast resistant varieties for Bangladesh	Gazipur
540	Studies on the genetic mechanism of rice blast resistance in BRRI dhan33	• To know the genetic mechanism of rice blast and gall midge resistance in BRRI dhan33	Gazipur
541	Linkage and QTL mapping of blast resistance in BR16	• To identify significant QTLs with linked marker for blast resistance in BR16	Gazipur
542	Disease reactions and characterization of upland rice germplasms	• To know the different disease status of germplasm	Gazipur
543	Studies on host range of the rice blast pathogen	• To determine the pathogenicity of all the isolates to rice and the pathogenicity of rice isolates to foxtail millet and barely	Gazipur
544	Detection of novel loci underlying rice blast resistance by integrating a genome-wide association study	• To detect the new sources/loci/genes of blast resistance from native germplasm	Gazipur
545	Diversity of blast resistance gene(s) in rice germplasm	• To find out resistance gene(s) among the germplasm through phenotypic reaction and	Gazipur

Sl.	Research Title	Objectives	Location
		molecular marker	
546	Development of Rice Blast Resistance by CRISPR/Cas9-Targeted Mutagenesis of the <i>OsERF922</i>	• To develop durable blast resistant variety or line against the major races by targeted mutagenesis (CRISPR/Cas9)	Gazipur
547	Screening and observational yield trial of tungro resistant materials in green house and tungro hotspot area	• To evaluate the performance of tungro resistant advanced lines	Gazipur
548	Phenotypic and genetic characterization of local aromatic germplasms	• To characterize their resistance pattern for developing blast resistant aromatic pre breeding materials	Gazipur
549	Transcriptome analysis for the detection of novel bacterial blight and sheath blight resistant gene in Gunshee, landrace	• To identify novel resistant gene of bacterial and sheath blight disease.	Gazipur
550	Introgression of blast resistance gene(s) into BRRI dhan58 using marker assisted backcross breeding	• To introgress blast resistant genes (both Pi9 and Pb1) in high yielding BRRI dhan58	Gazipur
551	Development of inoculation technique for false smut disease	• To develop artificial inoculation technique of rice false smut disease	Gazipur
552	Effects of rice false smut contaminated seeds on quality	• To see the effects of seed contamination on the attributes of seed quality	Gazipur
553	Investigation of grain quality and nutritional status of rice infected by major diseases	• To determine the grain quality in terms of seed health, nutritional value and physicochemical properties	Gazipur
554	Yield loss due to sheath rot disease in rice	• To find out the relationship between sheath rot disease severity and yield reduction in rice	Gazipur
555	Crop loss assessment of rice caused by bacterial blight and sheath blight	• To estimate yield loss due to bacterial blight and sheath blight	Gazipur
556	Development of a yield loss app	• To estimate yield loss due to diseases instantly	Gazipur
557	Development of Early Warning System of rice blast disease	• To build up awareness among the rice growers at least 5 days earlier of blast disease infection	Cumilla & Gazipur
558	Crop Loss Assessment of rice due to major diseases in Bangladesh	• To calculate the actual crop loss due to major diseases in Bangladesh.	Cumilla & Gazipur
559	Determination of Aflatoxin B1 and B2 by <i>Aspergillus flavus</i> strains isolated from rice samples	• To determine the efficacy of aflatoxin production by <i>A. flavus</i> isolates.	Cumilla & Gazipur
560	Determination of toxins from infected seeds by seed borne pathogens	• To find out losses of antioxidant properties in infected seeds	Cumilla & Gazipur
561	Development of a yield loss app	• Instant estimation of yield loss due to major rice disease	Cumilla & Gazipur
562	Yield loss assessment of bacterial blight disease and its effect on yield in some popular boro varieties	• To determine the yield loss due to BB	Cumilla & Gazipur

Sl.	Research Title	Objectives	Location
563	Up-scaling of the management of rice seedling blight disease in farmers seed bed during boro	• To test the efficacy of seedling blight disease management technology under field condition	Rangpur and Rajshahi
564	Isolation of effective bacterial isolate for management of sheath blight disease	• To isolate and identify the effective isolates against sheath blight disease	Gazipur
565	Management of sheath blight disease using <i>Trichoderma hertzian</i>	• To investigate the efficacy of <i>Trichoderma harzianum</i>	Gazipur
566	Bakanae disease control with integrated approach	• To find organic amendments and chemicals for controlling bakanae disease	Gazipur
567	Formulation of nano particles from plant parts against bakanae disease	• To formulate nano particles from organic sources for controlling bakanae disease	Gazipur
568	Identification of potential bio-control agents and formulation of biopesticides against bakanae disease of rice	• To identify and confirm effective microbes through (<i>Bacillus</i> spp, <i>Pseudomonas</i> spp., <i>Trichoderma</i> spp.) <i>in vitro</i> and molecular approach for controlling bakanae disease	Gazipur
569	Chemical control of sheath rot and false smut disease of rice under different planting time	• To find out effective fungicide/s against Sheath rot and fungicide.	Gazipur
570	Development of nano particle mediated fungicide for rice blast disease management in Bangladesh	• To develop nano particle mediated fungicide for neck blast disease management as curative measure.	Gazipur
571	Factors affecting recent outbreak of rice tungro disease and its management in Cumilla region	• To identify the causes to increase the incidence of rice tungro disease	Cumilla
572	Determination of residual effect in fungicides treated rice	• To find out the pesticide residue in pesticides sprayed rice	Gazipur
573	Digitalization of Pesticide Resister	• To provide the pesticide evaluation report in mobile phone	Gazipur
574	Performance of Ankuri as a seed treating device	• To examine the efficacy of Ankuri in controlling seed borne diseases using Ankuri	Gazipur
575	Sustainable Management of Blast, Sheath Blight and Bacterial Blight Diseases of Rice through Nano-particles (NPs)	• To prepare effective nano-particles from organic and inorganic sources in Bangladesh	Gazipur
576	Bio-synthesis and characterization of silver nano-particles from available organic sources in Bangladesh	• To bio-synthesize of nano-particles from available sources in Bangladesh	Gazipur
577	Efficacy of nanoparticles against bacterial blight disease management in rice	• To determine efficacy of nanoparticles against bacterial blight disease	Gazipur
578	Residual Effect of Amistar Top 325 SC on Microbial Community in Phylloplane and Phyllosphere	• To determine the impact of Amistar Top application on microbial colony	Gazipur
579	Determination of residual effect of trifloxystrobin, tebuconazole and tricyclazole in rice grain under field conditions	• To find out the pesticide residue in pesticides sprayed rice	Gazipur

Sl.	Research Title	Objectives	Location
580	Digitalization of Pesticide Register Notebook	• To provide the pesticide evaluation report in mobile phone.	Gazipur
581	Validation of Tungro disease management technology in Cumilla region	• To build up awareness and make the confidence about the technology to the farmers	Gazipur
582	Efficacy of New Chemicals in Controlling Grain Spot, Brown Spot and Narrow Brown Spot of BRRI dhan52	• To select appropriate chemical(s) against diseases	Gazipur
583	Integrated Approaches in reducing Sheath blight diseases in T Aman 2021-22	• To minimize chemical use	Gazipur
584	Efficacy of drought tolerant Trichoderma in field condition	• To find out the efficacy of microbes as drought tolerance in rice	Gazipur
585	Evaluation of new chemicals against blast, bacterial blight, sheath blight, false smut, Sheath rot and bakanae diseases of rice	• To find out the effective chemicals suitable for Blast, ShB, False smut, bakanae and Bacterial blight diseases	Gazipur, Rajshahi, Barishal & Cumilla
586	Training on integrated management of blast, bacterial blight and tungro diseases in changing climate	• To build up farmer's awareness on integrated rice disease management	Regional Stations
RICE FARMING SYSTEMS DIVISION			
587	Survey on tobacco-based cropping system	• To characterize and generate information on tobacco-based cropping system and identify the drivers of adoption of tobacco cultivation and possibilities of replacing tobacco by other high value crops	Kushtia, Nilphamari, Lalmonirhat, Bandarban and Cox's bazar
588	Characterization of farming system of Charlands in Gangatic Floodplain region	• To characterize and generate information on the existing farming system and identify problem and prospects of Charland agriculture in the Gangatic Floodplain regions for exploring its opportunities of improvement	Char Bhandrashion, Faridpur, Shibchar, Madaripur, Goalanda, Rajbari
589	Cropping pattern intervention for farmer's livelihood improvement on community basis	• To analyze land suitability of profitable cropping patterns and to intervene all existing cropping patterns of the selected site for improvement and increased production	Kaliganj, Gazipur
590	Integration of mustard and pulses in the rice-based cropping system under different rice growing environments	• To increase the system productivity by inclusion of mustard and pulses in the existing cropping systems	Rajshahi, Kushtia, Bhanga, Satkhira, Gopalganj and Kaliganj, Gazipur
591	Evaluation of different cropping patterns in Charland	• To identify improved cropping patterns for charland with high yield potential and economic return • To identify existing cropping pattern with the possibilities of intervention for improvement • To disseminate improved cropping patterns in extrapolation domain	Char Bhandrashion, Faridpur, Shibchar, Madaripur and Goalanda, Rajbari
592	Synchronization of transplanting of Boro rice in different elevations of haor by double transplanting method	• To avoid the use of old seedlings and reduce the life span of Boro varieties at lower elevation by practicing DT and thereby create scope to avoid flash flood and increase yield	Kotiadi, Kishoreganj

Sl.	Research Title	Objectives	Location
		in haor areas	
593	Study of traditional and eco-friendly cropping systems with different ecological indicators.	- To assess the performance of indicators of eco-farming. - To explore the safe and secured crop (food) production system.	Gazipur
594	Impact evaluation of temperature and precipitation changes on promising rice cultivars in Bangladesh using crop simulation model ORYZA	To evaluate the yield performance of promising Boro and Aman rice cultivars in the major rice ecosystems and generated information be used for identify management options under future climate change environment for sustaining productivity	Gazipur
595	Effect of incorporation of moringa (<i>Moringa oleifera</i> Lam.) leaves and stem on healthier rice production in Rice-Watermelon-Dhaincha cropping pattern	- To assess the effect of moringa pruning materials on growth and yield of crops. - To ascertain the efficacy of moringa leaf extract on disease-pest management in crop production	Gazipur
596	Productivity evaluation of different cropping patterns	- To fit the suitable rice genotypes in different cropping patterns - To quantify the total NSC from tested cropping pattern aiming to find healthier cropping pattern (based on nutritional value)	Gazipur
597	Fertilizer management in HYV Aus rice in Jhum cultivation	- To develop a suitable method of fertilizer application in HYV Aus under jhum cultivation - To increase fertilizer using efficiency through proper management	Khagrachori, Rangamati and Bandarban
598	Performance evaluation of HYV Aus rice along with local cultivars under Jhum cultivation system	To determine comparative productivity and suitability of HYVs in respect to local Jhum cultivars	Rangamati, Khagrachori and Bandarban
599	Effect of sowing date on ratooning ability of local Jhum rice under Jhum cultivation	To determine the feasibility of ratooning of jhum rice and evaluate jhum cultivars for ratooning ability	Rangamati, Khagrachori, Bandarban and Gazipur
600	Feasibility study of relay cropping of felon/blackgram with jhum crops	To increase the system productivity by incorporation of a relay crop	Rangamati, Khagrachori and Bandarban
601	Development of integrated farming system at farm level with high value crops maintaining contour system, alley cropping and hedge row in hill slope	To develop orchard with cheshunt, coffee, dragon fruit, other fruits and horticultural crops for system productivity increase	Rangamati, Khagrachori and Bandarban
602	Long term cropping patterns trial	To determine the long-term implications of one, two, three, four and five cropped cropping patterns on system productivity, economics, energy use and produce, water and other input use, nutritional output, weed infestation and soil health	Gazipur
603	Determination of the effects of rice sowing date and seedling age on yield of popular premium quality rice varieties	To determine the effects of sowing dates, transplanting dates and seedling age for popular premium quality rice varieties in different locations and to generate data for simulation by <i>ORYZA</i> to determine optimum	Gazipur

Sl.	Research Title	Objectives	Location
		transplanting window, management practices for increased yield	
604	Development of four-crop cropping patterns for favorable irrigated ecosystem in medium highland	- To increase total productivity of unit area per year by increasing cropping intensity - To compare the sustainability of four-crop cropping patterns with that of three-crop cropping pattern in terms of soil health and profit.	Gazipur
605	Evaluation of organic farming on yield of rice-based cropping patterns	To find out the performance HYV rice in organic cultivation	Gazipur
606	Improvement of Jhum cultivation through the replacement of local rice with the modern Aus rice in hilly areas	To increase the system productivity	Khagrachori, Rangamati, Bandarban
607	Intensification of single T. Aman area through the inclusion of modern Aus rice in the valley in hilly areas	To increase the system productivity	Khagrachori, Rangamati, Bandarban
608	Inclusion of Mustard after T. Aman in Boro-Fallow -T. Aman cropping pattern in piedmont plain soil	- To increase the total system productivity - To increase oil seed production	Khagrachori, Rangamati and Bandarban
609	Piloting of cropping pattern technologies to increase the productivity	To increase the productivity of cropping systems at farm level	Pakundia, Kotiadi Kishoreganj and Kaliganj, Gazipur
610	On-farm evaluation of newly released Boro varieties as late Boro in Potato-Boro-T. Aman cropping pattern	To assess the performance of newly released Boro variety after potato in order to increase system productivity	Rajshahi, Rangpur and Bogura
611	Development of vegetables, fish and fruit system in mini pond	To develop mixed farming system technology in mini pond for diversifying and maximizing yield	Gazipur
612	Performance of exotic date palm (<i>Phoenix dactylifera</i>) in homestead and agro-forestry systems	To develop agro-forestry system with exotic date palm to increase the system productivity and income of the farmers	Gazipur
613	Year-round vegetables and spices production in homestead	- To utilize the fallow land under orchard - To increase the total productivity of orchard	Sreepur
614	Improvement of the existing Boro-Fallow-T. Aman cropping pattern through inclusion of oil seed and pulse crops	To increase the system productivity	Sreepur
615	On-farm evaluation of Aus and T. Aman rice varieties in T. Aus-T. Aman-Rabi cropping system impartially irrigated ecosystem	To investigate the suitability of Aus and T. Aman rice varieties in Rabi-T. Aus-T. Aman cropping system	Sreepur
FARM MECHINERY & POST HARVEST TECHNOLOGY DIVISION and WORKSHOP MACHINERY & MAINTENANCE DIVISION			
616	Development of Agricultural Machines	Development of farm machinery adaptable to rice eco-system and reduction of human drudgery	Gazipur

Sl.	Research Title	Objectives	Location
617	Evaluating and modifying of BRRI developed machines	- To verify the quality of BRRI machines - To identify the functional problems of farm machines - To improve the performance of farm machines	FMPHT divisional research workshop and BRRI farm
618	Design and development of a head feed power thresher	- To design and develop a head feed thresher - To conduct test of the thresher for its performance and capacity - To compare the performance with the existing threshers	FMPHT divisional lab
619	Design and development of whole feed mini combine harvester	- To assess combine harvester field performance, general condition, durability, repair and maintenance requirements - To check the fuel consumption and hourly production of the combine harvester under different working conditions - To obtain operator views regarding the suitability of combine harvester.	FMPHT divisional lab
620	Design and development of head feed mini combine harvester	- To design a head feed combine harvester - To manufacture the designed combine harvester prototype - To carry out field performance test of the developed combine harvester prototype	FMPHT divisional lab and Janata Engineering
621	Design and development of remote-control seed sower machine for raising mat-type seedling	- To improve the existing manual seeds sower machine using an electronic device - To evaluate the performance of the seed's sower machine	FMPHT divisional lab
622	Development of a forward motion manual rice transplanter	- Design and fabrication of a manual operated forward motion rice transplanter - Performance evaluation of the developed rice transplanter	FMPHT divisional lab and field
623	Development, validation and adoption of power weeder for wet land rice cultivation	- To develop and multiplication of the power weeder - To demonstration, validation and adaptation the weeder in different location under different rice seasons - To reduce the rice production cost	Gazipur, Mymensigh, Netrokona, Habigonj, Rangpur and Comilla
624	Design and development of walking type power operated rice transplanter	- To design and develop a power-operated rice transplanter - To test the performance of the developed rice transplanter	Gazipur, Mymensigh, Netrokona, Habigonj, Rangpur and Comilla
625	Design and development of a medium type head feed type combine harvester	- To design and development a head feed paddy combines harvester (medium/small type) - To fabricate the machine based on the design consideration in Bangladesh condition - To evaluate the field performance in different crop seasons and soil condition - To build the capacity of local manufacturers to fabricate the newly designed machine	Gazipur and Farmers' field
626	Design and development of a	To design a variable power transmission	Gazipur and

Sl.	Research Title	Objectives	Location
	diesel engine operated high-speed hydro-tiller for marshy land	mechanism of the diesel engine operated hydro-tiller • To design a rotary casing of hydro tiller suitable for marshy land • To develop a prototype based on engineering design • To evaluate the prototype in different soil condition	Farmers' field
627	Postharvest loss assessment of whole and head feed combine harvester under different soil condition	• To assess the loss of grain. • To identify the suitable operation system to minimize the loss.	Gazipur and Farmers' field
628	Design and development of inclined plate hill dispensing seeder for direct seeding of rice	• To design and development of hill dispensing type direct seeder of rice • To design simple metering device for different graded of rice varieties • To design simple and easy power transmission mechanism for furrow making, covering, uniform and hill dispensing of seeds. • To test, evaluate and validate the technology in laboratory, research field and farmers' field	Gazipur and Farmers' field
629	Determination of optimum seed rate for Hybrid rice variety for mechanical transplanting in Bangladesh	• To identify the optimum seed rate for different hybrid rice variety to produce quality seedlings and minimize the missing hills of mechanical transplanting. • To identify suitable seedling adjustment options to dispense optimum number seedling per stroke (seedlings hill-1) of the rotary picker of rice transplanter.	Gazipur and Farmers' field
630	Development of mat type seedling using hydroponic technique	• To develop a mat type seedling using hydroponic technique • Performance test of developed seedling for rice transplanter	Gazipur and Farmers' field
631	Attachment of binding facility in BRRI self-propelled reaper	• To evaluate the existing binding facility & improve the binding facility • To attach binding unit in existing BRRI self-propelled reaper	Gazipur and Farmers' field
632	Design and development of solar dryer (Milling and Processing Technology)	• To design, fabricate and develop solar dryer • To compare with traditional sun drying of paddy	FMPHT divisional lab
633	Test, evaluation and modification rubber roll de-husker for commercial use	• To modify and development of a rubber roll de-husker • To evaluate the performance of paddy de-husker	FMPHT division milling laboratory
634	Effect of drying and tempering on milling recovery of BRRI Variety under different moisture content	• To find out optimum moisture content for maximum milling yield and head rice recovery	FMPHT division milling laboratory
635	Design and development of a small-scale recirculating type dryer	• To design and fabricate of small-scale recirculating type dryer • To study spatial distribution of air temperature and moisture content in and	FMPHT division milling laboratory

Sl.	Research Title	Objectives	Location
		outside of small-scale recirculating type dryer; • To investigate technical and financial performance of small-scale recirculating type dryer; and • To study the effect of drying on germination rate and milling quality.	
636	Study the effect of polishing on rice grain quality	• To find out the suitable levels of polishing on rice • To investigation the weight loss during milling • To evaluate the Zn and Fe concentration of selected rice varieties • To observe the head rice recovery of different DOM	FMPHT division milling laboratory
637	Effect of ageing on milling performance of premium quality rice (Development of stores and storage technology)	• To observe the milling performance of BRRI dhan50 at different aging	FMPHT division milling laboratory
638	Validation and adaptation of hermetic storage structure in household level of Bangladesh	• To compare the performance of traditional and hermetic storage technologies in rice storage	FMPHT division milling laboratory
639	Effect of different storage structure of milled rice in long-term storage	• To find out the suitable storage structure • To investigation the influence of moisture content of storage time • To observe the prevalence of insect/ diseases infestation of storage time • To determine the effect of length of storage time on the quality of milled rice	FMPHT division milling laboratory
640	Study the briquette production from rice byproduct (Renewable Energy Technology)	• To prepare briquettes from rice straw and husk • Characterization of different briquettes originated from agricultural residue • To measure the calorific value of the briquettes	FMPHT Lab and Gazipur
641	Study on solar energy utilization for small agricultural machinery	• To design mechanism of solar energy utilization • To evaluate the performance of the developed machine	FMPHT Lab and Gazipur
642	Identification of agricultural residues for maximizing biogas production	• To identify the potential biogas material from agricultural residues • To find out the best mixing ratio for maximum biogas production	FMPHT Lab and Gazipur
643	Design and development of low-cost Biochar production technology using different agricultural by product	• To develop an energy efficient biochar production technology & produce biochar using different agricultural by product • To evaluate the quality of produced biochar & select the optimum biochar production technology	FMPHT Lab and Gazipur
644	Feasibility study of solar energy use in agricultural machinery	• To study the suitability of solar energy use in agricultural machinery • To evaluate the aptness of solar energy use in	FMPHT Lab and Gazipur

Sl.	Research Title	Objectives	Location
		agricultural machinery	
645	Design, development and performance evaluation of briquetting machine using rice husk with different ration of maize steam	• To design and develop a briquetting machine using rice husk with different ratio of maize steam. • To determine the physical and combustion properties of the final product. • To evaluate the performance of the briquetting machine.	FMPHT Lab and Gazipur
646	Industrial and farm level extension of BRRI machinery and Postharvest technology (Popularization of BRRI developed farm machinery and Postharvest technology)	• To create awareness and demonstrate the benefit of using BRRI machines among the farmers • To motivate the local entrepreneurs to manufacture BRRI developed machinery	All over the country
647	Survey the status and constraint of farm machinery used in farmer's field at selected areas	• To investigate the capacity of engineering workshop in agricultural machinery manufacturing; • To study the production and existing use level of agricultural machinery at different farm operations • To identify the limitations and prospects of engineering workshop at farm level.	All over the country
648	Feasibility of combine harvester in different eco-condition in Bangladesh	• To determine the technical and business model of combine harvester in different regions of Bangladesh.	Sonagazi, Borishal, Satkhira
649	Development of machine vision approach in determination of paddy varieties (Precision Agriculture)	• To develop machine vision algorithm in determination of particular paddy variety • To identify the variety analyzing image of paddy	All over the country
AGRICULTURAL ECONOMICS DIVISION			
650	Farm Level Adoption of Modern Rice Varieties in Bangladesh	• Determine the region-wise adoption rate of different rice varieties in different seasons; and • Estimate the yield of different modern and local rice varieties.	14 agricultural regions
651	Determinants of Adoption Decision of Aromatic Rice Varieties in Some Selected Areas of Bangladesh: An Econometric Approach	• To delineate adoption status and yield of aromatic rice; • To estimate profitability of aromatic and coarse rice varieties; • To identify factors influencing adoption decision of aromatic rice varieties.	Jashore and Naogaon
652	Estimation of Costs and Return of MV Rice Cultivation at the Farm Level	• Delineate input use pattern in modern Aus, T. Aman and Boro rice cultivation; • Estimate the profitability of modern Aus, T. Aman and Boro rice cultivation at farm level.	14 Agricultural regions
653	An Economic Investigation of Rice Seed Production Status in a Selected Area of Bangladesh	• To examine the economics of TLS production of rice; • To analyze the factors responsible for farmer's decision to adopt commercial seed production; and • To document the constraints of TLS production of rice.	Jessore
654	Spatial Price Dynamics of Rice in Bangladesh: An Evidence	• To analyze short-run and long-run price relationships including market integration,	Secondary data of 12 major

Sl.	Research Title	Objectives	Location
	from Time Series Analysis (Rice Marketing and Price Policy)	price transmission and volatility among 12 major rice markets,	wholesale rice markets.
655	Tracking rice varietal authentication: A pathway from farm to market	• To identify different types of rice varieties available in the market and enlist those under different clusters • To sketch the logistic network of each cluster from origin to consumer • To identify the reasons of deviated names of rice varieties in the local market.	8 Upazila markets and Two city markets (Dhaka and Gazipur)
656	Resilience of Rice Value Chain: Recent Transformation and Vulnerabilities	• Revisiting rice value chains in the face of recent transformations and disturbances • Scrutinizing the resilience and vulnerabilities of the rice value chain actors.	Jessore region
657	Understanding Climate Variability and Market Insight of rice in Haor Ecosystem (Agricultural Policy and Development)	• To assess the impact of climate variability on rice cultivation • To figure out farmers' coping and adaptation strategies to climate change • To estimate marketable and marketed surplus of rice and identify factors responsible for marketable surplus and • To derive policy implication.	Sunamgonj and Netrakona
658	Comparative Advantage of Export Potential Aromatic Rice Varieties in Bangladesh: The Case of BRRI dhan50	• To examine the prospect of production of import and export potential aromatic rice (BRRI dhan50) variety in terms of export parity basis; • To review of international standard for rice export and way-out the link to export policy; • To draw some policy guidelines.	Jessore district
659	Socio-economic vulnerability of climate change and adaptation strategies of the rice farm households in the flood prone areas of Bangladesh	• Assessing perception of the rice farm households about climate change and variability; • Identification of adaptation strategies and barriers to adaptation of the vulnerable households in the face of climate change issues; and • Assessment of livelihood vulnerability of households in hazards-prone areas.	Kurigram and Gaibandha
660	Adoption determinants, profitability and resource use efficiency of stress tolerant rice in Selected Areas of Bangladesh: An Econometric Approach	• To delineate adoption status and yield of stress tolerant rice varieties; • To estimate profitability and resource use efficiency of stress tolerant rice varieties; and • To identify factors influencing adoption decision of stress tolerant rice varieties.	Satkhira and Kurigram
AGRICULTURAL STATISTICS DIVISION			
661	Stability analysis of BRRI Varieties	• To determine the stability index of BRRI varieties • To estimate location-wise stability index of BRRI varieties • To determine the stability index of BRRI varieties according to the growth duration • To find out the location-wise yield performance of BRRI varieties at different years	Gazipur and all regional stations

Sl.	Research Title	Objectives	Location
		• To find out the overall yield performance of BRRI varieties at different locations and year. • Season, year and location wise database on BRRI varieties	
662	Improvement of BRRI Stability model by incorporate multiple factors	• To improve BRRI stability model • To incorporate multiple factors into stability model • To estimate location-wise stability index of BRRI varieties • To assess the trend of stability index for BRRI varieties. • To estimate the effect of weather parameter on stability index of BRRI varieties • To compare BRRI stability model with other stability models (Eberhart and Russel model, AMMI model and Fuzzy log model etc.).	Gazipur and all regional stations
663	Develop analytical skills on the scopes of Bioinformatics in Rice Research	• Review the application of bioinformatics in rice research. • Develop analytical skills on the application of bioinformatics in rice research.	Gazipur
664	Statistical Modeling and RNA-seq data Analysis	• To develop algorithms for quantification of the gene expression level. • To identify the differential expression genes (DEGs). • To identify which DEGs were significantly involved in each Gene ontology (GO).	Gazipur
665	Comparative study for rice yield estimation by adjusting moisture content	• To determine the adjustment factors for rice yield estimation. • To develop a criterion for performing a reliable estimation.	Gazipur
666	Genotype x Environment interaction of BRRI varieties	• To Identify BRRI released rice genotypes that have both high mean yield and stable yield performance across different environments for different ecosystem of Bangladesh	Gazipur and all regional stations
667	CV for estimating yield and yield contributing characters of BRRI varieties	• To determine the acceptable limit of CV for biometric characters of rice varieties • To determine the relative contribution of phenotypic characters/yield contributing characters to rice yield • To review the existing experimental data	All over the country
668	Rice database and analysis system (RDAS)	• To develop a web based integrated framework on 'Rice Database and Analysis System (RDAS) • To create map and graph based on rice data.	All over the country
669	Maintenance of Rice and related Database	• To maintain up-to-date computerized information on rice and related crops • To determine year wise GR of Rice Production in Bangladesh • To maintain up-to-date computerized information on climatic factors both BRRI regional stations and BMD stations data. • To make comparison between BRRI stations	All over the country

Sl.	Research Title	Objectives	Location
		and BMD stations data. • To produce various maps from these data	
670	Integrated weather forecasting and rice advisory system (IWFRAS) for sustainable productivity in Bangladesh	• To develop an ‘integrated weather forecasting and rice advisory system (IWFRAS)’ for processing, assessing and validating forecast data, advisory generation and dissemination for operational service to the stakeholders. • To examine the forecast-based rice crop management system through dissemination of IWFRAS activities. • To validate forecast based rice crop management research findings through farmers’ participation using IWFRAS. • To assess the economic benefits of forecast based rice crop management system for wide dissemination to the farmer’s field.	Gazipur and all regional stations
671	Suitability mapping of BRRI released varieties	• To construct suitability map of BRRI released rice varieties (BRRI dhan93-98)	All over the country
672	Climate mapping of temperature and rainfall of Bangladesh	• To determine expected maximum and minimum temperature and rainfall in different region for rice in Bangladesh • To determine areas of critical maximum and minimum temperature and rainfall map of Bangladesh for rice during the period and • To determine the changing trend of extreme climatic zone. .	All over the country
673	Zoning of BRRI released rice varieties	• To construct upazila wise zonal map of BRRI released rice varieties	All over the country
674	Season wise rice area mapping of Bangladesh	• To construct season wise rice area map of Bangladesh. • To estimate season wise rice area of Bangladesh • To validate and compare the rice database from various sources • To find out the best source of rice area data.	All over the country
675	Favorable and Unfavorable Rice Cultivation Area Mapping of Bangladesh	• To construct favorable and unfavorable rice cultivation area map of Bangladesh. • To estimate favorable and unfavorable rice cultivation area of Bangladesh.	All over the country
676	“BRRI Rice Doctor” Apps for BRRI	• To diagnosis insect and pest through rice doctor Apps for BRRI. • To manage and maintain rice doctor apps. • To host rice doctor Apps at server.	All over the country
677	Strengthen and dissemination of modern rice technology and its management information at the farmer door step through RKB Mobile Apps	• To develop and modify the design of RKB. • To manage and maintain RKB through regular updating of the information and documents.	All over the country
678	Rice Pest Corner	• To develop Rice Pest Corner for BRRI Website. • To develop a Web Application for Rice Pest Corner.	All over the country

Sl.	Research Title	Objectives	Location
		• To manage and maintain Rice Pest Corner.	
679	Heritage of BRRI	• To develop “Heritage” for all scientists, all officers, all clerks, and all workers of BRRI. • To develop “Heritage” for research and administration works. • To create and stimulate awareness amongst the present employees of BRRI about ex. Scientists and officer’s great activity.	All over the country
FARM MANAGEMENT DIVISION			
680	Yield maximization of rice through integrated nutrient management.	• To find out the suitable management practice for yield maximization of rice and soil health.	Gazipur
681	Efficacy of mechanical deep placement of mixed fertilizer and seedling transplanting on rice yield.	• To evaluate the efficacy of newly developed mechanical rice transplanter cum fertilizer applicator.	Gazipur
682	Effect of foliar application of silicon on yield of aromatic rice.	• To investigate the effect of foliar application of silicon’s aqueous solution (sodium silicate) on yield of aromatic rice.	Gazipur
683	Effect of land size and condition on the performance of BRRI hydro-tiller at BRRI farm, Gazipur.	• To identify the land-machine relation and recommend the machine for suitable land.	Gazipur
684	Performance of BRRI released rice varieties at BRRI farm, Gazipur.	• To find out the maximum yield of specific variety.	Gazipur
685	Assessment of Health issues of laborers at BRRI farm.	• To examine the biological, psychological, and social health of labors in BRRI farm. • To determine the factors that might affect the health of labors at BRRI. • To suggest the policy recommendations for ensuring safety measures in terms of health hazards.	Gazipur
686	Evaluation of laborer’s efficiency according to their age at GAZIPUR Gazipur.	• To identify age-based laborer's efficiency for better management of rice cultivation.	Gazipur
687	Documentation of laborers’ wage for efficient management and planning for rice Cultivation.	• To find out the laborers’ wage for rice cultivation throughout Bangladesh with food and without food.	Districts around GAZIPUR and Regional stations.
688	TLS and Breeder seed production	• To supply quality seed for seed demand of breeder seed and TLS	Gazipur
689	Management and utilization of land, labor and other resources (Management of land, labor, farm implements, flower garden, irrigation and drainage etc.).	• Better utilization of farm land, labor and other resources for smooth running of research activities of BRRI.	Gazipur
ADAPTIVE RESEARCH DIVISION			
690	Technology Validation	• To validate the technologies in different agro-ecological zone	Throughout Bangladesh
691	Advanced Line Adaptive Research Trial (ALART)	• To evaluate the yield potential and adaptability of advanced breeding lines at farmers’ field in different agro-ecological	

Sl.	Research Title	Objectives	Location
		conditions. • To get feedback information about the advantages and disadvantages of the advanced lines from farmers and DAE personnel.	
692	ALART Stagnant Water (SW), Early T. Aman 2021	• To evaluate the yield potential and adaptability of advanced breeding lines at farmers' field in different agro-ecological conditions. • To get feedback information about the advantages and disadvantages of the advanced lines from farmers and DAE personnel.	Gazipur, Cumilla, Jashore, Gopalganj, Barishal, Satkhira (Sadar), Chandpur (Kachua), Rangpur (Kaunia), Kurigram (Rajarhat), Gazipur (Sreepur)
693	ALART, Insect Resistant Rice-Brown Plant Hopper (IRR-BPH), T. Aman 2021	• To evaluate the yield potential and adaptability of advanced breeding lines at farmers' field in different agro-ecological conditions. • To get feedback information about the advantages and disadvantages of the advanced lines from farmers and DAE personnel.	Satkhira (Sadar), Sirajganj (Raiganj), Kurigram, Kurigram, Gaibandha, Rangpur, Lalmanirhat, Khulna, Gazipur.
694	ALART, Salt tolerant rice (STR), T. Aman 2021	• To evaluate the yield potential and adaptability of advanced breeding lines at farmers' field in different agro-ecological conditions. • To get feedback information about the advantages and disadvantages of the advanced lines from farmers and DAE personnel.	Gazipur, Satkhira (Sadar and Kaliganj), Khulna (Dumuria and Batiaghata), Patuakhali, Feni, Noakhali and Bagerhat.
695	ALART for submergence tolerance rice; Short duration (SubTR-SD), T. Aman 2021	• To evaluate the yield potential and adaptability of advanced breeding lines at farmers' field in different agro-ecological conditions. • To get feedback information about the advantages and disadvantages of the advanced lines from farmers and DAE personnel.	Chattogram Lalmonirhat, Kurigram Gaibandha, Rangpur Gazipur
696	ALART for submergence tolerance rice, T. Aman 2021,	• To evaluate the yield potential and adaptability of advanced breeding lines at farmers' field in different agro-ecological conditions. • To get feedback information about the advantages and disadvantages of the advanced lines from farmers and DAE personnel.	Chattogram, Lalmonirhat, Kurigram, Gaibandha, Rangpur, Gazipur
697	ALART, Zinc enriched rice (ZER); T. Aman 2021,	• To evaluate the yield potential and adaptability of advanced breeding lines at farmers' field in different agro-ecological conditions.	Kushtia (Sadar), Habiganj (Bahubol), Rajshahi (Paba),

Sl.	Research Title	Objectives	Location
		To get feedback information about the advantages and disadvantages of the advanced lines from farmers and DAE personnel.	Cumilla (Debidwar), Jhalkathi (Nalchiti), Faridpur, Rangpur, Feni, Satkhira and Gazipur
698	ALART, Premium Quality Rice (PQR), Boro 2022	- To evaluate the yield potential and adaptability of advanced breeding lines at farmers' field in different agro-ecological conditions. - To get feedback information about the advantages and disadvantages of the advanced lines from farmers and DAE personnel.	Gazipur, Rangpur, Rajshahi (Paba), Rajshahi (Godagari), Sirajganj (Sadar), Cumilla (Debiddar), Feni (Sadar), Kushtia (Sadar) and Habiganj (Sadar).
699	ALART, Salt tolerant rice (STR-1), Boro 2022	- To evaluate the yield potential and adaptability of advanced breeding lines at farmers' field in different agro-ecological conditions. - To get feedback information about the advantages and disadvantages of the advanced lines from farmers and DAE personnel.	Gazipur, Satkhira, Patuakhali (Kalapara), Barguna (Amtali), Feni (Sonagazi), Noakhali, Bagerhat (Rampal) and Gopalganj
700	ALART, Salt tolerant rice (STR-2), Boro 2022	- To evaluate the yield potential and adaptability of advanced breeding lines at farmers' field in different agro-ecological conditions. - To get feedback information about the advantages and disadvantages of the advanced lines from farmers and DAE personnel.	Gazipur, Satkhira, Patuakhali, Barguna (Amtali), Feni (Sonagazi), Noakhali and Bagerhat (Rampal) and Gopalganj (Tongipara).
701	ALART, Cold Tolerant Rice (CTR), Boro 2022	- To evaluate the yield potential and adaptability of advanced breeding lines at farmers' field in different agro-ecological conditions. - To get feedback information about the advantages and disadvantages of the advanced lines from farmers and DAE personnel.	Gazipur, Kishoreganj, Netrokona (Mohonganj, Modon); Habiganj and Sunamganj (Taherpur).
702	Favorable Boro Rice-Barishal (FBR-Barishal); Boro 2022	- To evaluate the yield potential and adaptability of advanced breeding lines at farmers' field in different agro-ecological conditions. - To get feedback information about the advantages and disadvantages of the	Gopalganj, Faridpur, Barishal, Natore, Sirajganj, Brahmonbaria, Feni, Kushtia, Habiganj,

Sl.	Research Title	Objectives	Location
		advanced lines from farmers and DAE personnel.	Mymensingh Gazipur
703	ALART, Blast Resistant Rice (BRR), Boro 2022	- To evaluate the yield potential and adaptability of advanced breeding lines at farmers' field in different agro-ecological conditions. - To get feedback information about the advantages and disadvantages of the advanced lines from farmers and DAE personnel.	Faridpur, Barishal, Rajshahi, Rangpur, Dinajpur, Sirajganj, Cumilla, Kushtia, Habiganj, Satkhira and Gazipur
704	Boro 2022, ALART Superior High Yielding Rice (SHR	- To evaluate the yield potential and adaptability of advanced breeding lines at farmers' field in different agro-ecological conditions. - To get feedback information about the advantages and disadvantages of the advanced lines from farmers and DAE personnel.	Gopalganj, Sirajganj, Gazipur, Rajshahi, Habiganj, Satkhira, Kushtia, Rangpur, Cumilla, Barishal, Bhanga and Feni
705	Seed Production and Dissemination Program (SPDP) during B. Aus, 2021 under GoB	- To motivate farmers to produce quality seeds of the BRRI varieties and exchange among other farmers for rapid dissemination of varieties. - To collect feedback information about BRRI varieties and other technologies	Twelve (12) demonstrations were conducted on SPDP during B. Aus 2021 at 6 upazilas of Bhola districts under GoB
706	Seed Production and Dissemination Program (SPDP) during T. Aus, 2021 under GoB	- To motivate farmers to produce quality seeds of the BRRI varieties and exchange among other farmers for rapid dissemination of varieties. - To collect feedback information about BRRI varieties and other technologies	87 SPDPs were conducted in different agro-ecological regions of the country covering in 25 upazilas of 12 districts
707	Dissemination of BRRI Hybrid dhan7 during T. Aus, 2021	- To motivate farmers to produce quality seeds of the BRRI varieties and exchange among other farmers for rapid dissemination of varieties. - To collect feedback information about BRRI varieties and other technologies	28 Demonstrations were conducted during T. aus 2021 at 14 upazilas of 5 districts (Chuadanga, Bhola, Borguna, Manikganj, Gaibandha)
708	Performance of BRRI dhan98 during T. Aus, 2021	- To motivate farmers to produce quality seeds of the BRRI varieties and exchange among other farmers for rapid dissemination of varieties. - To collect feedback information about BRRI varieties and other technologies	Three special-SPDPs were conducted in Sylhet (S. Surma), Manikganj (Harirampur) and

Sl.	Research Title	Objectives	Location
			Gaibandha (Palashbari)
709	SPDP in Jhum cultivation during Aus 2021	• To motivate farmers to produce quality seeds of the BRRI varieties and exchange among other farmers for rapid dissemination of varieties. • To collect feedback information about BRRI varieties and other technologies	9 SPDPs were conducted in Jhum cultivation in three upazilas of three districts of hill tracts during T. Aus 2021
710	SPDP in valley of hills during T. Aus 2021	• To motivate farmers to produce quality seeds of the BRRI varieties and exchange among other farmers for rapid dissemination of varieties. • To collect feedback information about BRRI varieties and other technologies	9 SPDPs were conducted in Valley cultivation in three upazilas of three districts of hill tracts during T. Aus 2021
711	SPDP during T. Aman, 2021 under GoB	• To motivate farmers to produce quality seeds of the BRRI varieties and exchange among other farmers for rapid dissemination of varieties. • To collect feedback information about BRRI varieties and other technologies	803 SPDPs of modern rice varieties in T. Aman 2021 under GoB were conducted in different agro-ecological regions of the country covering in 68 upazilas of 26.
712	Performance of BRRI dhan71 and BRRI dhan75 in T. Aman-Potato-Boro cropping pattern during T. Aman 2021	• To motivate farmers to produce quality seeds of the BRRI varieties and exchange among other farmers for rapid dissemination of varieties. • To collect feedback information about BRRI varieties and other technologies	16 SPDPs in 8 upazilas of 4 districts (Nilphamari, Thakurgaon, Joypurhat and Bagura)
713	Performance of BRRI hybrid dhan4 and BRRI hybrid dhan6 in different locations during T. Aman 2021	• To motivate farmers to produce quality seeds of the BRRI varieties and exchange among other farmers for rapid dissemination of varieties. • To collect feedback information about BRRI varieties and other technologies	34 Demonstrations were conducted during T. Aman 2021 at 17 upazilas of 9 districts
714	Performance of BRRI dhan80 and BRRI dhan87 in hill tracts during T. Aman 2021	• To motivate farmers to produce quality seeds of the BRRI varieties and exchange among other farmers for rapid dissemination of varieties. • To collect feedback information about BRRI varieties and other technologies	6 upazilas of 3 districts
715	Special SPDP (Muzibborsho) in T. Aman, 2021	• To motivate farmers to produce quality seeds of the BRRI varieties and exchange among other farmers for rapid dissemination of varieties. • To collect feedback information about BRRI	84 Special SPDPs were conducted in 14 upazilas of 11 of Bangladesh

Sl.	Research Title	Objectives	Location
		varieties and other technologies	
716	Performance of BRRI dhan91 in different locations during Early T. Aman 2021	- To motivate farmers to produce quality seeds of the BRRI varieties and exchange among other farmers for rapid dissemination of varieties. - To collect feedback information about BRRI varieties and other technologies	39 SPDPs were conducted in low land areas of Manikganj, Narayanganj, Munsiganj, Pabna and B. Baria districts
717	Program (SPDP) during T. Aman, 2021 under TRB	- To motivate farmers to produce quality seeds of the BRRI varieties and exchange among other farmers for rapid dissemination of varieties. - To collect feedback information about BRRI varieties and other technologies	60 SPDPs were conducted in 16 upazila of 13 districts
718	SPDPs in Boro 2022	- To motivate farmers to produce quality seeds of the BRRI varieties and exchange among other farmers for rapid dissemination of varieties. - To collect feedback information about BRRI varieties and other technologies	703 demonstrations (Tangail, Gazipur, Narshingdi, Manikganj, Kishoreganj, Mymensingh, Netrokona, Sherpur, Bagerhat, Gaibandha, Khagrachari, Bandarban, Rangamati)
719	SPDP in Boro 2022 under TRB	- To motivate farmers to produce quality seeds of the BRRI varieties and exchange among other farmers for rapid dissemination of varieties. - To collect feedback information about BRRI varieties and other technologies	Gazipur, Netrakona, Mymensingh, Khulna, Chuadanga, Narsingdhi, Kishoreganj, Baguraand, Bandarban
720	Head-to-Head Adaptive Trial (HHAT) during T. Aman 2021 under TRB:	- to validate the adaptability of modern rice varieties in different environments at farmers' field - To investigate the performance of promising varieties compared to popular mega variety - To select suitable variety(s) for target environments - Rapid dissemination of promising rice varieties	200 Head-to-Head Adaptive Trials (HHAT) were conducted in Aman (wet season) 2021 throughout the country
721	Head-to-Head Adaptive Trial (HHAT) during Boro 2022 under TRB:	- to validate the adaptability of modern rice varieties in different environments at farmers' field - To investigate the performance of promising varieties compared to popular mega variety - To select suitable variety(s) for target environments	200 Head-to-Head Adaptive Trials (HHAT) were conducted in Boro 2022 throughout the country

Sl.	Research Title	Objectives	Location
		• Rapid dissemination of promising rice varieties	
722	SEED production at BRRI farm (Enrichment of own seed stock)	• To produce quality seeds of BRRI released promising rice varieties for conducting adaptive research trials throughout the country during 3 seasons.	A total of 5230 kg and 2550 kg quality seeds of different BRRI varieties were produced at BRRI farms during T. Aman 2021 and Boro 2022 respectively
REGIONAL STATION: CUMILLA			
723	Hybridization	• Introgression of genes from diverged genetic background into rice varieties/lines for the improvement of standard T. Aman varieties	Cumilla
724	Confirmation of F ₁	• To confirm the crosses as true hybrid	Cumilla
725	Growing of F ₂ population	• Selection of progenies with emphasis on earliness, plant type, grain type and high yield potential compared to standard check varieties	Cumilla
726	Pedigree nursery	• Selection of progenies with improved plant type, earliness, acceptable grain quality and high yield potential compared to standard varieties	Cumilla
727	Observational Yield Trial (OYT)	• Initial yield evaluation of advanced lines compared to standard checks	Cumilla
728	Preliminary Yield Trial (PYT)	• Preliminary yield evaluation of advanced lines compared to standard checks	Cumilla
729	Advanced Yield Trial-1 (AYT-1)	• Evaluation of advanced breeding lines compared to standard checks	Cumilla
730	Advanced Yield Trial-2 (AYT-2)	• Evaluation of advanced breeding lines compared to standard checks	Cumilla
731	Advanced Yield Trial-3 (AYT-3) (Water Stagn)	• Evaluation of advanced breeding lines compared to standard checks	Cumilla, Gazipur
732	Maintenance breeding	• Conservation of advanced lines and pre-breeding materials	Cumilla
733	Survey and yield loss assessment of rice blast disease in Cumilla district	• To know the prevalence of Major rice disease blast • To assume the rice yield losses due to rice diseases	Cumilla
734	Validation of rice neck blast disease management technology under farmer's field condition	• To minimize yield loss due to blast disease • To build up farmers awareness on blast disease management	Cumilla
735	Varietal reaction and recovering ability of BRRI released rice varieties	• To know the varietal reaction against tungro disease of rice	Cumilla
736	Factors affecting rice tungro disease and validation of the management technology in Cumilla region	• To find out the factors and validate the management technology of rice tungro disease in Cumilla region	Nangalkot, Laksam, Chandina, Debidwar in Cumilla; Kasba in B Baria
737	Tracking the infection source(s)	• To identify whether the seed/soil and/ or the	Cumilla

Sl.	Research Title	Objectives	Location
	of rice false smut disease	air is/are the carrier of the pathogen or not	
738	Effectiveness of formulated biopesticides to control bakanae disease of rice in field condition	• To evaluate field efficacy of formulated biopesticides against bakanae disease of rice	Debidwar, Cumilla
739	Evaluation of new chemicals against Blast, Sheath blight diseases of rice	• To find out the effective chemicals suitable for Blast, ShB diseases of rice.	Cumilla
740	Multi-Location Trial (MLT) of blast resistant advanced lines	• To evaluate specific and general adaptability of the advance breeding lines as compared with standard checks	Debidwar, Cumilla
741	Evaluation of blast resistant lines	• To find out the blast resistant lines in blast hot-spot area in Cumilla region	Debidwar, Cumilla
742	Advisory services to the farmers	• To assist farmers for rice production;	Cumilla, Chadpur & B. Baria
743	Effect of polythene covering on seedling raising in Boro season	• To identify the suitable techniques for protecting rice seedlings from cold injury	Cumilla
744	Study on physico-chemical properties and microbial population in soil of different rice growing areas of Cumilla region	• To determine the physico-chemical properties of soil. • To determine the microbial status in soil	Cumilla & Agronomy division, BRRI Gazipur
745	Influence of planting spacing and seedling age on dry matter partitioning of rice in boro season	• To observe the effect of planting spacing on dry matter partitioning of BRRI dhan96 • To observe the effect of seedling age on dry matter partitioning of BRRI dhan96	Cumilla
746	Effect of time of planting on growth and yield of BRRI developed newly T. Aman and Boro varieties (new)	• To find out the appropriate time of planting for yield optimization	Cumilla
747	Effects of Potassium Fertilization at Different Growth Stages on growth and yield of rice	• To find out the effect of potassium fertilization at different growth stages of Rice	Cumilla
748	Long-term missing element trials for diagnosing the limiting nutrient in soil in BRRI R/S Cumilla	• To determine nutrient deficiency problems in soil. • To observe long-term yield trend of rice. • To evaluate the changes in soil properties under long-term rice culture	Cumilla
749	Effects of P rates on the yield of BRRI released new varieties/ advanced lines in BRRI Farm Cumilla	• To update the P rates of BRRI released new varieties/ advanced lines in BRRI Farm Cumilla	Cumilla
750	Determination of appropriate time of DAP application to control Algal growth	• To find out the appropriate time of DAP application • To control the algal growth in the rice field.	Cumilla
751	Stability analysis of BRRI released rice varieties	• To demonstrate the suitability of BRRI varieties in greater Cumilla region	Cumilla
752	Multilocation trial of different BRRI varieties in major cropping patterns	• To demonstrate and disseminate BRRI varieties in greater Cumilla region	Cumilla, B. Baria, Chandpur
753	Farmer's and SAAOs training on modern rice cultivation and disease management technology	• To increase farmers knowledge	Cumilla, B. Baria, Chandpur

Sl.	Research Title	Objectives	Location
754	Field day on modern rice cultivation	• To increase farmers knowledge	Cumilla, B. Baria, Chandpur
REGIONAL STATION: BARISHAL			
755	Hybridization (T. Aman 2021)	• Variety development	Barishal
756	F ₁ confirmation	• Variety development	Barishal
757	Growing of F ₂ population during T. Aman 2021	• To select suitable progenies	Barishal
758	Growing of F ₆ generation, T. Aman 2021	• To select suitable fixed lines for further process (OYT)	Barishal
759	Observational Yield Trial (OYT), T. Aman 2021	• To select suitable fixed lines for Aman season with dense & erect panicle, strong culm, high yield potential and disease & insect resistant at field condition for further process (PYT).	Sagordi +Barishal
760	Preliminary Yield Trial-1	• To evaluate the specific and general adaptability of the advanced lines as compared with standard checks in on-station condition at Barishal.	Barishal
761	Preliminary Yield Trial-2	• To evaluate the specific and general adaptability of the advanced lines as compared with standard checks in on-station condition at Barishal.	Barishal
762	Advanced Yield Trial	• To evaluate the specific and general adaptability of the advanced lines as compared with standard checks in on-station condition at Barishal.	Barishal
763	Hybridization (Boro)	• Variety development	Barishal
764	F ₁ confirmation	• Variety development	Barishal
765	Generation Advancement of Pedigree nursery	• Variety development	Barishal
766	New Generation Rice	• Variety development	Barishal
767	New Generation Rice (Extra-bulk)	• Variety development	Barishal
768	New Generation Rice (Hill selection)	• Variety development	Barishal
769	Growing hybrids in advanced generation	• Variety development	Barishal
770	Observational Yield Trial (OYT)	• Variety development	Barishal
771	Preliminary Yield Trial (PYT)	• Variety development	Barishal
772	Advance Yield Trial (AYT) Favourable Boro (Early)	• Variety development	Barishal
773	Advance Yield Trial (AYT) Favourable Boro (Late)	• Variety development	Barishal
774	New Generation Rice (Barishal)	• Variety development	Barishal
775	Regional Yield Trial (RYT) RYT-AGGRInet	• Variety development	Barishal
776	Regional Yield Trial (RYT) RYT FBR(SD)	• Variety development	Barishal
777	Regional Yield Trial (RYT) RYT FBR(MD)	• Variety development	Barishal
778	Regional Yield Trial (RYT) RYT FBR(LD)	• Variety development	Barishal

Sl.	Research Title	Objectives	Location
779	RYT STR-1	• Variety development	Patuakhali
780	RYT STR-2	• Variety development	Patuakhali
781	RYT DRR-(BB)	• Variety development	Barishal
782	RYT DRR-2	• Variety development	Barishal
783	RYT IRR (BPH)	• Variety development	Barishal
784	RYT (FB)	• Variety development	Barishal
785	RYT-SHYR-1 (SS)	• Variety development	Barishal
786	RYT-SHYR-2 (LS)	• Variety development	Barishal
787	RYT(FB-Bio)	• Variety development	Barishal
788	RYT (ZER)	• Variety development	Barishal
789	ALART STR-1 (two locations)	• Variety development	Kolapara, Kuakata
790	ALART STR-2(two locations)	• Variety development	Kolapara, Kuakata
791	Bacterial Blight Resistant	• Variety development	Sadar, Barishal
792	Superior High Yielding Rice	• Variety development	Sadar, Barishal
793	ALART-Barishal (FB)	• Variety development	Sadar, Barishal
794	National Hybrid Rice Yield Trial	• Variety development	Barishal
795	Confined Field Trail (CFT-HIZR)	• Variety development	Bbarishal
796	IIRON	• Variety development	Barishal
797	Breeder Seed Production	• To produce genetically purified seeds of released varieties	Barishal
798	Truthful Level Seed (TLS)	• To produce bulk number of seeds to supply to the farmers.	Barishal
799	Pest monitoring at BRRI Barishal Farms	• To know the existing and new pest species	Sagordi & Barishal
800	Insect pests and natural enemies in light trap	• To quantify the population of insects and natural enemies	Barishal
801	Survey of rice insect pest in Seedbed	• To find the incidence patterns of major insects and natural enemies	Sagordi & Barishal
802	Developed a Rectangular hand net for insecticide free rice seedbed	• To develop high insect pest caught efficiency hand net for insecticide free rice seedlings production in seedbed.	Sagordi & Barishal
803	Performance of Rectangular Hand Net in seedbed	• To compare insect caught efficiency with round hand net	Barishal
804	Rat caught efficiency of different Rodenticides	• To find out the effective rodenticide among market available for rat control	Sagordi & Barishal
805	Insecticide free rice production in Barishal	• To find out effectiveness of cultural practices in absence of insecticide use to manage insects in rice fields.	Sagordi & Barishal
806	Yellow stem borer pheromone lure performance of different variety	• To check yellow stem borer pheromone trap efficacy of different Aus variety	Charbadna farm Barishal
807	Demonstration of BRRI varieties	• Popularization of BRRI released varieties.	Patukhali, Jhalkathi, Pirojpur, Borguna, Bhola, Barishal sadar
808	Head-to-Head Adaptive Trial	• Popularization of newly released BRRI varieties	Kalapara, Amtoli

Sl.	Research Title	Objectives	Location
REGIONAL STATION: RAJSHAHI			
809	OYT (Under TRB Project) (T. Aus 2021)	• To understand and select the best performing breeding lines with highest genetic merits.	Rajshahi
810	PYT (Under TRB Project)	• Initial yield evaluation and selection of desirable lines compared to standard checks.	Rajshahi
811	Hybridization (T. Aman 2021)	• To develop drought tolerance high yielding genotypes	Rajshahi
812	F1 Confirmation	• High yield, drought tolerant & acceptable grain type	Rajshahi
813	Growing Segregating Population (F2-F6)	• To develop drought and cold tolerant rice	Rajshahi
814	Germplasm Collection and Evaluation	• To characterize and maintain the local germplasm	Rajshahi
815	Maintenance Breeding Parents	• To use in crossing program.	Rajshahi
816	Multi location Trial (DRR-BB)	• Evaluation of genotypes for specific and general adaptability in on-station condition.	Rajshahi, Paba, Alimgonj, Rajshahi
817	RYT#1 (RLR-1)	• Evaluation of genotypes for specific and general adaptability in on-station condition.	Rajshahi
818	RYT#2 (RLR-2)	• Evaluation of genotypes for specific and general adaptability in on-station condition.	Rajshahi, Naogoan, Nachole
819	RYT#3 (ZER)	• Evaluation of genotypes for specific and general adaptability in on-station condition.	Rajshahi
820	RYT#4 (DTR)	• Evaluation of genotypes for specific and general adaptability in on-station condition.	Rajshahi, Paba, Alimgonj, Rajshahi
821	RYT#5 (STR-1)	• Evaluation of genotypes for specific and general adaptability in on-station condition.	Rajshahi
822	RYT#6 (STR-2)	• Evaluation of genotypes for specific and general adaptability in on-station condition.	Rajshahi
823	RYT#7 (Extra-long slender)	• Evaluation of genotypes for specific and general adaptability in on-station condition.	Rajshahi, Naogoan, Paba, Rajarbari
824	RYT#8 (Long slender)	• Evaluation of genotypes for specific and general adaptability in on-station condition.	Rajshahi, Naogoan, Paba, Rajarbari
825	RYT#9 (Short slender)	• Evaluation of genotypes for specific and general adaptability in on-station condition.	Rajshahi, Naogoan, Paba, Rajarbari
826	AYT#1 (DTR)	• To understand and select the best performing breeding lines with highest genetic merits.	Paba, Alimgonj, Rajshahi
827	AYT#2 (Drought and STRASA materials)	• To understand and select the best performing breeding lines with highest genetic merits.	Paba, Alimgonj, Rajshahi
828	OYT (DDR-BB) (under TRB Project)	• To understand and select the best performing breeding lines with highest genetic merits.	Rajshahi
829	PYT (DDR-BB) (under TRB Project)	• Initial yield evaluation and selection of desirable lines compared to standard checks.	Rajshahi
830	OYT#1 (DTR) (under TRB Project)	• To understand and select the best performing breeding lines with highest genetic merits.	Paba, Alimgonj, Rajshahi
831	OYT#2 (DTR) (under TRB Project)	• To understand and select the best performing breeding lines with highest genetic merits.	Paba, Alimgonj, Rajshahi
832	OYT#3 (DTR)	• To understand and select the best performing	Paba, Alimgonj,

Sl.	Research Title	Objectives	Location
	(under TRB Project)	breeding lines with highest genetic merits.	Rajshahi
833	OYT (Short duration) (undr AGGRiNet trial)	• To understand and select the best performing breeding lines with highest genetic merits.	Rajshahi
834	OYT (Medium duration) (undr AGGRiNet trial)	• To understand and select the best performing breeding lines with highest genetic merits.	Rajshahi
835	Hybridization Boro 2021-22	• To develop cold tolerance high yielding genotypes	Rajshahi
836	F1 Confirmation	• High yield, cold tolerant & acceptable grain type	Rajshahi
837	Growing Segregating Population (F2-F6)	• To develop drought and cold tolerant rice	Rajshahi
838	Germplasm Collection and Evaluation	• To characterize and maintain the local germplasm	Rajshahi
839	Maintenance Breeding Parents	• To use in crossing program.	Rajshahi
840	Pure line selection of Zira landraces	• To characterize Zira landraces from different region of Rajshahi	Rajshahi
841	RYT#1 (FBR_MD)	• Evaluation of genotypes for specific and general adaptability in on-station condition.	Rajshahi
842	RYT# 2 (FBR_LD)	• Evaluation of genotypes for specific and general adaptability in on-station condition.	Rajshahi
843	RYT# 3 (FBR_SD)	• Evaluation of genotypes for specific and general adaptability in on-station condition.	Rajshahi
844	RYT# 4 (CTR#1)	• Evaluation of genotypes for specific and general adaptability in on-station condition.	Rajshahi
845	RYT# 5 (CTR#2)	• Evaluation of genotypes for specific and general adaptability in on-station condition.	Rajshahi
846	RYT# 6 (AGGRiNET)	• Evaluation of genotypes for specific and general adaptability in on-station condition.	Rajshahi
847	RYT# 7 (STR#1)	• Evaluation of genotypes for specific and general adaptability in on-station condition.	Rajshahi
848	RYT# 8 (STR#2)	• Evaluation of genotypes for specific and general adaptability in on-station condition.	Rajshahi
849	RYT# 9 (DDR-1_BB)	• Evaluation of genotypes for specific and general adaptability in on-station condition.	Rajshahi
850	RYT# 10 (DDR-2_BB)	• Evaluation of genotypes for specific and general adaptability in on-station condition.	Rajshahi
851	RYT# 11 (DDR#3_Blast)	• Evaluation of genotypes for specific and general adaptability in on-station condition.	Rajshahi
852	RYT#12 (IRR_BPH)	• Evaluation of genotypes for specific and general adaptability in on-station condition.	Rajshahi
853	RYT#13 (Barishal)	• Evaluation of genotypes for specific and general adaptability in on-station condition.	Rajshahi
854	RYT#14 (Short Slender)	• Evaluation of genotypes for specific and general adaptability in on-station condition.	Rajshahi, Naogoan, Paba, Rajarbari
855	RYT#15 (Zira types)	• Evaluation of genotypes for specific and general adaptability in on-station condition.	Rajshahi, Naogoan, Paba, Rajarbari
856	RYT#16 (Long Slender)	• Evaluation of genotypes for specific and general adaptability in on-station condition.	Rajshahi, Naogoan, Paba, Rajarbari
857	RYT#17 (PQR)	• Evaluation of genotypes for specific and	Rajshahi

Sl.	Research Title	Objectives	Location
		general adaptability in on-station condition.	
858	RYT#18 (ZER)	• Evaluation of genotypes for specific and general adaptability in on-station condition.	Rajshahi
859	AYT	• To understand and select the best performing breeding lines with highest genetic merits.	Rajshahi
860	OYT (DDR_BB) (under TRB Project)	• To understand and select the best performing breeding lines with highest genetic merits	Rajshahi
861	AYT#1 (DDR_BB) (under TRB Project)	• To understand and select the best performing breeding lines with highest genetic merits.	Rajshahi
862	AYT#2 (DDR_BB) (under TRB Project)	• To understand and select the best performing breeding lines with highest genetic merits.	Rajshahi
863	AYT#3 (DDR_BB) (under TRB Project)	• To understand and select the best performing breeding lines with highest genetic merits.	Rajshahi
864	AYT (Favorable) (under AGGRiNet trial)	• To understand and select the best performing breeding lines with highest genetic merits.	Rajshahi
865	OYT (Short duration) (under AGGRiNet trial)	• To understand and select the best performing breeding lines with highest genetic merits	Rajshahi
866	Evaluation of crop productivity under four crops cropping patterns in farmer's field	• To identify the profitable cropping patterns in Rajshahi region.	Alimganj, Paba Rajshahi
867	Evaluation of crop productivity and soil health under conservation tillage system in maize-mungbean-rice cropping pattern	• To identify extent of resource conservation under conservation tillage system	Rajshahi
868	Evaluation of crop productivity and soil health under conservation tillage system in maize-mungbean-rice cropping pattern	• To identify soil health under intensive cropping patterns	Rajshahi
869	Effect of time of planting with seedling age on Boro rice varieties in Rajshahi Region	• To determine optimum plating time of Boro rice in Rajshahi Region	Rajshahi
870	Survey and monitoring of different rice diseases in T. Aman 21, Rajshahi	• To investigate the present status of different type of rice diseases in Gazipur	Paba, Godagari, Tanore, Rajshahi
871	Evaluation of effective chemical against Sheath Blight disease of rice, T. Aman 2021	• To find out new fungicide(s) against sheath blight disease	Rajshahi
872	Efficacy of New Chemicals in Controlling Grain Spot, Brown Spot and Narrow Brown Spot of BRRI dhan52	• To select appropriate chemical(s) against diseases • To reduce minor diseases	Rajshahi
873	Integrated Approaches in reducing Sheath blight diseases in T Aman 2021	• To minimize chemical use • To increase yield	Rajshahi
874	Assessment of yield loss due to disease in different BRRI varieties and local varieties in Rajshahi Region	• To find out yield loss due to disease infestation	Paba, Rajshahi
875	Effect of selected insecticide for stem borer management	• To find out effective insecticide for stem borer management	Rajshahi
REGIONAL STATION: HABIGANJ			
876	Growing of F ₄ population in	• To select progenies with emphasis on	Habiganj

Sl.	Research Title	Objectives	Location
	Field RGA	pigmentation, earliness, plant type, grain type and high yield potential compared to standard varieties.	
877	Hybridization	• To development of high yielding anti-oxidant enriched rice with aroma	Habiganj
878	Regional Yield Trial (Advanced Lines of Deep-Water Rice)	• To identify advanced lines of deep water rice	Habiganj
879	Advanced Yield Trial (Deep Water Rice)	• To identify advanced lines of deep water rice	Habiganj
880	Advanced Yield Trial (Deep Water Rice)	• To identify advanced lines of deep water rice	Habiganj
881	Long-term missing element trial for diagnosing the limiting nutrient in soil	• In order to find out the yield limiting nutrients, a long-term missing element trial	Habiganj
882	Influence of N & K on performance of modern rice in Habiganj	• To find out suitable ratio of N & K for modern rice • To study N & K dynamics in soil & plant	Habiganj
883	Comparison of AWD and continuous flooding on GHG emission and GWP but improving rice yield	• To assess the GHG and net carbon balance • To assess the water productivity (WP) • To EF and GHGI	Habiganj and Kushtia
884	Carbon footprint and net carbon balance with organic and inorganic amended rice soil	• To assess the carbon footprint and net carbon balance	Gazipur
885	Effect of time of planting on growth, yield and yield contributing factors of BRRI released varieties in Boro season at Haor region of Bangladesh.	• To identify the suitable time of planting and variety for Haor area. • To recommend appropriate high yielding variety for Haor area.	Habiganj
886	Screening of Pre-harvest sprouting of some newly released BRRI varieties	• To check the pre-harvesting sprouting resistance on newly released BRRI varieties	Habiganj
887	Screening of some deep water rice for facultative elongation ability.	• To find out the facultative elongation ability	Habiganj and Gazipur
888	Study the elongation variability of some deep-water rice at different age affected by flooding time	• To study the effect of initial flood on elongation rate	Habiganj and Gazipur
889	Development of an effective management tactics for rice (<i>Oryza sativa</i> L.)	• To development an effective pest management approach	Habiganj
890	Pesticidal effect of different botanicals and chemical against rice weevil (<i>Sitophilus Oryzae</i> L.) and anguimous moth (<i>sitotroga sp.</i>)	• To assess the effectiveness of some botanicals and chemical for the management of Rice Weevil and Anguimous moth.	Habiganj
891	Survey and monitoring of rice insect pest	• To know the status of insect incidence at farmer's field, their action of controlling insect pest and suggest suitable advice.	Habiganj
892	Stability Analysis of BRRI released Boro Varieties	• To observe the general and specific adaptability and stability of the BRRI released rice varieties at BRRI Regional	Habiganj

Sl.	Research Title	Objectives	Location
		Station, Habiganj.	
893	Demonstration of wet direct seeding crop establishment technique	• To reduce irrigation and labour cost. • To save irrigation water during transplanting. • Overcome the labor shortage problems in haor areas during transplanting time.	Habiganj
894	Determination of Optimum Time of Direct Seeding and Thinning for Achieving Higher Yield from Thinner seedling in Haor areas	• To determine optimum time of seeding and thinning for escaping flash flood and achieving higher yield from thinner seedling in haor areas	Habiganj
895	Breeders and TLS Seed production	• Production of breeder and TLS seed	Habiganj
896	Farmers' training and Field days, Boro, Aus and T. Aman 2020-21	• To deliver the knowledge about the modern rice cultivation techniques to farmers.	Habiganj, Sylhet, Moulovibazar and Sunamganj
REGIONAL STATION: SONAGAZI			
897	Stability Analysis of BRRI developed rice varieties in Aus 2021	• To investigate the stability of BRRI developed Aus rice varieties • To find out location specific suitable variety(s)	Sonagazi
898	Regional Yield Trial (RYT-1) in Aus 2021	• To evaluate specific and general adaptability of the advance breeding lines as compared with standard checks in on-station.	Sonagazi, Feni
899	Regional Yield Trial -2 in Aus 2021	• To evaluate specific and general adaptability of the advance breeding lines as compared with standard checks in on-station.	Sonagazi, Feni
900	Seed production and Dissemination Program (SPDP) Aus 2021	• Rapid dissemination of newly released rice varieties to the farmers • Motivate farmers to produce and preserve good quality seeds • Increase availability of quality seed of modern rice varieties at farm level • Exchange seeds from farmers to farmers • Collect feedback about the varieties from farmers and Extension personnel.	Twenty Upazila of eight districts (Feni, Noakhali, Laxmipur, Chattogram, Khagrachari, Rangamati, Bandarban and Cox's Bazar)
901	Demonstration of BRRI hybrid dhan7	• Rapid dissemination of BRRI hybrid dhan7 to the farmers • To increase food security producing more rice.	Chattogram and Rangamati regions
902	Stability Analysis of BRRI Developed Rice Varieties in T. Aman 2021	• To investigate the stability of BRRI developed Aman rice varieties. • To find out location specific suitable variety(s)	Sonagazi
903	Regional Yield Trial (RYT-1) STR in T. Aman 2021	• To evaluate specific and general adaptability of the advance salinity tolerant breeding lines as compared with standard checks in on-station.	Sonagazi
904	Regional Yield Trial (RYT-2) STR in T. Aman 2021	• To evaluate specific and general adaptability of the advance salinity tolerant breeding lines as compared with standard checks in on-station.	Sonagazi
905	Regional Yield Trial (RYT) RLR in T. Aman 2021		
906	Regional Yield Trial (RYT)	• To evaluate specific and general adaptability	Sonagazi

Sl.	Research Title	Objectives	Location
	ZER in T. Aman 2021	of the advance salinity tolerant breeding lines as compared with standard checks in on-station.	
907	Advanced Lines Adaptive Research Trial (SubTR-SD) in T. Aman 2021	• To evaluate the yield potential and adaptability of the rice genotypes at farmers' field as submergence tolerance short duration during T. Aman season. • To get feedback information about the advantages and disadvantages of the selected materials from farmers and Extension personnel. • To select suitable material(s) for proposed variety trial (PVT).	Sonagazi, Feni Mirsarai, Chattogram
908	Advanced Lines Adaptive Research Trial (SubTR-LD) in T. Aman 2021	• To evaluate the yield potential and adaptability of the rice genotypes at farmers' field as submergence tolerance short duration during T. Aman season. • To get feedback information about the advantages and disadvantages of the selected materials from farmers and Extension personnel. • To select suitable material(s) for proposed variety trial (PVT).	Rangunia and Mirsarai, Chattogram
909	Advanced Lines Adaptive Research Trial (PQR) in T. Aman 2021	• To evaluate the yield potential and adaptability of the rice genotypes at farmers' field as submergence tolerance short duration during T. Aman season. • To get feedback information about the advantages and disadvantages of the selected materials from farmers and Extension personnel. • To select suitable material(s) for proposed variety trial (PVT).	Hajirmur, Charchandia, Sonagazi
910	Truthfully labeled Seed (TLS) Production in Boro 2021-22 and Aman 2021	• Utilize quality seed for conducting Research (HHAT) and Demonstration (SPDP) • Provide seeds to different stakeholders to enhance dissemination of modern rice varieties.	BRRI Sonagazi farm
911	Head-to-Head Adaptive Trial (LD, SD, CE & FFS) under TRB, Aman 2021	• Validate the adaptability of modern rice varieties in different environments at farmers' field. • Investigate the performance of promising varieties compared to popular mega variety. • Select suitable variety(s) for target environments.	Feni, Chattogram, Cox'sbazar, Bandarban
912	Head-to-Head Adaptive Trial (LD, SD & CE) under TRB, Aman 2021	• Validate the adaptability of modern rice varieties in different environments at farmers' field. • Investigate the performance of promising varieties compared to popular mega variety. • Select suitable variety(s) for target environments.	Feni, Noakhali, Laxmipur, Cox'sbazar
913	Seed Production and Dissemination Program (SPDP) during T. Aman 2021,	• Validate the adaptability of modern rice varieties in different environments at farmers' field.	Forty-five Upazila of eight districts (Feni,

Sl.	Research Title	Objectives	Location
	under GOB	- Investigate the performance of promising varieties compared to popular mega variety. - Select suitable variety(s) for target environments.	Noakhali, Laxipur, Chattogram, Khagrachari, Rangamati, Bandarban and Cox's Bazar)
914	Breeder seed production of BRRI dhan34, 49, 82 & 87 in T. Aman 2021	To guarantee that the subsequent generation seed class (foundation seed) shall conform to the prescribed standards of genetic purity	Sonagazi, Feni
915	Truthfully Labeled Seed (TLS) Production (Variety: BRRI dhan34, 48, 49, 52, 70, 71, 73, 75, 76, 78, 79, 80, 82, 83, 85, 87, 90, 93, 94, 95, 97, 98, 99, 100) in T. Aman 2021	- Utilize quality seed for conducting Research (HHAT) and Demonstration (SPDP) - Provide seeds to different stakeholders to enhance dissemination of modern rice varieties.	Sonagazi, Feni
916	RYT Zinc Enriched Rice (ZER) in Boro 2021-22	- Utilize quality seed for conducting Research (HHAT) and Demonstration (SPDP) - Provide seeds to different stakeholders to enhance dissemination of modern rice varieties.	Sonagazi, Feni
917	RYT Favorable Boro Rice Medium Duration (FBR-MD) in Boro 2021-22	- Utilize quality seed for conducting Research (HHAT) and Demonstration (SPDP) - Provide seeds to different stakeholders to enhance dissemination of modern rice varieties.	Sonagazi, Feni
918	RYT Favorable Boro Rice Biotechnology	- Utilize quality seed for conducting Research (HHAT) and Demonstration (SPDP) - Provide seeds to different stakeholders to enhance dissemination of modern rice varieties.	Sonagazi, Feni
919	Effect of micronutrient Zinc in Boro 2021-22	To investigate the effect of Zinc on Boro rice varieties.	Sonagazi, Feni
920	Screening of Insect pest and Diseases	- To investigate pest and disease incidence and tolerance of the modern rice varieties - To select resistant rice varieties against major rice insect pest and disease	Sonagazi, Feni
921	Yield maximization in Boro 2021-22	To maximize the yield of rice through integrated use of manures and fertilizers	Sonagazi, Feni
922	Evaluation of NPK Combo in Boro 2021-22	To see the effect of NPK combo fertilizer on yield of rice production	Sonagazi, Feni
923	Evaluation of Flora Boro 2021	To see the effect of Flora on better growth of rice plant	On-station
924	MLT Plant Pathology Boro 021-22	To Evaluate specific and general adaptability of disease resistant advance lines	On-station and on-farm
925	Screening of modern rice against Stem Borer & Leaf Folder	To evaluate pest incidence and tolerance on modern rice varieties	On-station
926	OYT Plant Pathology Boro 2021-22	To evaluate disease tolerance and yield potential of advance breeding lines	On-station
927	Effect of Nitrogen on Modern varieties of Boro rice 2021-22	- To evaluate the responses of Bangabandhu dhan100 under a range of nitrogen supplies - To find out optimum nitrogen requirement for maximum yield of Bangabandhu	Sonagazi, Feni

Sl.	Research Title	Objectives	Location
		dhan100.	
928	Advanced Lines Adaptive Research Trial (STR-1) in Boro 2021-22	• To evaluate the yield potential and adaptability of the advanced rice genotypes at farmer's field as salinity tolerance Boro rice in the real salinity prone area. To get feedback information about the advantages and disadvantages of the selected materials from farmers and Extension personnel. • To select suitable material(s) for proposed variety trial (PVT).	Sonagazi
929	Advanced Lines Adaptive Research Trial (STR-2) in Boro 2021-22	• To evaluate the yield potential and adaptability of the advanced rice genotypes at farmer's field as salinity tolerance Boro rice in the real salinity prone area. To get feedback information about the advantages and disadvantages of the selected materials from farmers and Extension personnel. • To select suitable material(s) for proposed variety trial (PVT).	Sonagazi
930	Advanced Lines Adaptive Research Trial (STR-1) in Boro 2021-22	• To evaluate the yield potential and adaptability of the advanced rice genotypes at farmer's field as salinity tolerance Boro rice in the real salinity prone area. To get feedback information about the advantages and disadvantages of the selected materials from farmers and Extension personnel. • To select suitable material(s) for proposed variety trial (PVT).	Companiganj
931	Advanced Lines Adaptive Research Trial (STR-2) in Boro 2021-22	• To evaluate the yield potential and adaptability of the advanced rice genotypes at farmer's field as salinity tolerance Boro rice in the real salinity prone area. To get feedback information about the advantages and disadvantages of the selected materials from farmers and Extension personnel. • To select suitable material(s) for proposed variety trial (PVT).	Companiganj
932	Advanced Lines Adaptive Research Trial (Superior High Yielding Rice- SHR) in Boro 2021-22	• To evaluate the yield potential and adaptability of the advanced rice genotypes at farmer's field as salinity tolerance Boro rice in the real salinity prone area. To get feedback information about the advantages and disadvantages of the selected materials from farmers and Extension personnel. • To select suitable material(s) for proposed variety trial (PVT).	Sonagazi
933	Advanced Lines Adaptive Research Trial (FBR Barishal) in Boro 2021-22	• To evaluate the yield potential and adaptability of the advanced rice genotypes at farmer's field as salinity tolerance Boro rice in the real salinity prone area. To get feedback information about the advantages and disadvantages of the selected materials from farmers and Extension personnel. • To select suitable material(s) for proposed variety trial (PVT).	Sonagazi

Sl.	Research Title	Objectives	Location
934	Advanced Lines Adaptive Research Trial (PQR) in Boro 2021-22	- To evaluate the yield potential and adaptability of the advanced rice genotypes at farmer's field as salinity tolerance Boro rice in the real salinity prone area. To get feedback information about the advantages and disadvantages of the selected materials from farmers and Extension personnel. - To select suitable material(s) for proposed variety trial (PVT).	Sonagazi
935	Optimizing Planting Geometry of BD100 in Boro2021-22	- To investigate the responses of Bangabandhu dhan100 to varying plant spacings - To determine the optimum spacing for better performance of Bangabandhu dhan100	On- station
936	Effect of micronutrient Zinc on the performance of modern rice varieties in Boro2021-22	To investigate the effect of Zinc on the performance of the rice varieties.	Sonagazi, Feni
937	Stability Analysis of BRRI Developed Rice Varieties in Boro 2021-22	- To investigate the stability of BRRI developed Boro rice varieties - To find out location specific suitable variety(s)	Research farm of BRRI Sonagazi
938	Survey and monitoring of rice diseases in Boro2021-22	To monitor the disease prevalence at Chattogram and Rangamati region.	Farmers' fields of Chattogram and Rangamati regions
939	F ₁ Seed Production of BRRI hybrid dhan5 in Boro 2021-22	To produce F₁ hybrid seed of BRRI hybrid dhan5	Sonagazi, Feni
940	Breeder Seed Production	To guarantee that the subsequent generation seed class (foundation seed) shall conform to the prescribed standards of genetic purity	Sonagazi, Feni
941	Seed Production and Dissemination Program (SPDP) during Boro2021-22, under GOB	- Rapid dissemination of newly released rice varieties to the farmers - Motivate farmers to produce and preserve good quality seeds - Increase availability of quality seed of modern rice varieties at farm level - Exchange seeds from farmers to farmers - Collect feedback about the varieties from farmers and Extension personnel.	38 Upazila of 8 districts (Feni, Noakhali, Laxipur, Chattogram, Khagrachari, Rangamati, Bandarban and Cox's Bazar)
942	Seed Production and Dissemination Program (SPDP) during Boro2021-22, under TRB	- Rapid dissemination of newly released rice varieties to the farmers. - Motivate farmers to produce and preserve good quality seeds - Increase availability of quality seed of modern rice varieties at farm level - Exchange seeds from farmers to farmers - Collect feedback about the varieties from farmers and Extension personnel.	Twenty Upazila of eight districts (Feni, Noakhali, Laxipur, Chattogram, Khagrachari, Rangamati, Bandarban and Cox's Bazar)
943	Seed Production and Dissemination Program (SPDP) during Boro2021-22, under HHAT	- Rapid dissemination of newly released rice varieties to the farmers - Motivate farmers to produce and preserve good quality seeds - Increase availability of quality seed of modern rice varieties at farm level - Exchange seeds from farmers to farmers	Twenty Upazila of eight districts (Feni, Noakhali, Laxipur, Chattogram, Khagrachari, Rangamati,

Sl.	Research Title	Objectives	Location
		Collect feedback about the varieties from farmers and Extension personnel.	Bandarban and Cox's Bazar)
944	Farmers Training on Rice Technologies 2021-22	- To update knowledge and skills of farmers and extension personnel on modern rice production technologies. - To enhance dissemination of new technologies among the farmers.	Noakhali, Feni, Chattogram, Cox'sbazar and Khagrachari districts
945	Field Day 2021-22	Awareness building and create interest among the farmers and concerned extension agents about the modern rice production technologies.	Eight districts of Chattogram and Rangamati regions
REGIONAL STATION: SATKHIRA			
946	Hybridization	To develop breeding lines with high yield potential along with desirable growth duration, acceptable grain quality and resistance to insect pests and salt tolerance	On-farm
947	Morphological and molecular characterization of newly collected rice germplasm	To characterize newly collected rice germplasm using morphological traits	On-farm
948	Regional Yield Trial (RYT)	To evaluate specific and general adaptability of the advance breeding lines with respective check-in on-station condition	Satkhiria
949	Multi-location Trial of blast resistance breeding lines (MLT-Blast)	To evaluate blast resistance breeding lines at different location.	On-farm
950	Confined Field Trial (CFT) for High Zinc and Iron (CFT-HIZR)	To evaluate phenotypic characteristics and agronomic performance under field conditions of advanced breeding lines containing high iron and zinc rice events (IRS1030-031, IRS1030-039 and IRS1027-059)	Satkhiria
951	Advanced Line Adaptive Research Trial (ALART)	- To evaluate the yield potential and adaptability of the advanced rice genotypes at farmers' field - To get feedback information about the advantages and disadvantages of the selected materials from farmers and Extension personnel - To select suitable material(s) for Proposed Variety Trial (PVT)	On-farm
952	Selection of suitable hybrid rice genotypes at farmers field under saline prone areas for Boro season	To find out hybrid rice genotypes suitable for saline prone areas for Boro Season	On-farm
953	Line Stage Trial (LST)	To assess FRGA/RGA derived advanced breeding lines for uniformity at heading and desirable agronomic and grain type traits	Satkhiria and On-farm
954	Observational Yield Trial (OYT)	Identification of genetically fixed advanced lines suitable for saline areas	Satkhiria and On-farm
955	Preliminary Yield Trial (PYT)	Initial evaluation of breeding lines for yield and other agronomic characteristics in replicated trial	Satkhiria and On-farm
956	Advanced Yield Trial (AYT)	Confirmatory evaluation of selected genotypes for yield and other agronomic	Satkhiria and On-farm

Sl.	Research Title	Objectives	Location
		characteristics	
957	Regional Yield Trial (RYT)	• To evaluate specific and general adaptability of the advance breeding lines with respective check-in on-station condition	Satkhira and On-farm
958	International Rice Soil Stress Tolerant Nursery (IRSSTN)		Satkhira and On-farm
959	Asian Food and Agriculture Cooperation Initiative (AFACI) program	• Initial evaluation of yield, salt tolerance and other agronomic characteristics of selected materials in replicated trial.	Satkhira and On-farm
960	AGGRi Network trial	• To select the superior breeding lines in salinity stress environment of Bangladesh	On-farm
961	Effects of long-term missing nutrients on rice yield	• To identify yield limiting nutrients of rice	Satkhira
962	Effect of zinc fertilization on zinc enriched rice in saline soil	• To study the effect of Zn fertilization on Zn accumulation and uptake by Zn enriched rice varieties in saline soil	Satkhira
963	Effects of fertilizer and varietal management on greenhouse gas emissions in the South-Western coastal ecosystem		Satkhira
964	Effects of bio-organic fertilizer on rice yield in Boro season in the south-western coastal ecosystem	• To evaluate the impact of bio-organic fertilizer on rice yield. • To determine the effect of bio-organic fertilizer on saline soil properties	Satkhira
965	Judicial N management in Boro rice for increasing yield		Satkhira
966	Cost-effective hybrid rice production by optimizing seedling age and number	• To find out the appropriate seedling age and number for transplanting of hybrid rice for optimum yield • Adjustment of seed rate for hybrid rice production from seed germination	On-farm
967	Development of four-cropped cropping pattern under irrigated ecosystem	• To increase the total productivity of unit area per year by increasing cropping intensity • To compare the sustainability of four cropped cropping patterns in terms of soil health and economic profit	On-farm
968	Integration of mustard in the rice growing environments	• To improve system productivity by introducing mustard in the existing rice-based cropping pattern	On-farm
969	Introducing B. Aus rice in the Watermelon-Fallow-T. Aman pattern	• To find out the scope of utilizing fallow land after watermelon cultivation by cultivating B. Aus rice under rainfed condition	On-farm
970	Stability Analysis of BRRI Varieties at Satkhira	• To find out the suitability and adaptability of the particular variety	Satkhira
971	Estimation of rice yield in different seasons of Bangladesh: Crop cuts method	• To find out the on-farm yield of BRRI released rice varieties in Satkhira and Jashore regions • To analyze the performance of BRRI released rice varieties with other varieties	On-farm
972	Raising Boro seedling for energy-efficient land use	• Identification of healthy seedling raising technique of rice during cool temperature • Reduction of field duration of Boro rice cultivation by early transplanting	Satkhira
973	Monitoring Soil-Water Salinity	• To know the salinity status of BRRI-RS,	Satkhira

Sl.	Research Title	Objectives	Location
	of BRRI Farm, Satkhira	Satkhira	
974	Monitoring Weather Status of BRRI Farm, Satkhira	• To know the weather status of BRRI-RS, Satkhira	Satkhira
975	Head-to-head adaptive trial (HHAT) of Modern Rice Varieties	• To find out the adaptability of BRRI released rice varieties in various regions of Bangladesh • To compare modern rice varieties with popular local varieties • Selection of rice variety/varieties suitable for a particular region • To analyze farmers' response to modern rice varieties and take necessary actions accordingly	On-farm
976	Seed production and dissemination program (SPDP)	• To disseminate BRRI varieties rapidly among the farmers of Khulna and Satkhira region	On-farm
977	Production program of BRRI released rice varieties in the southern coastal gher-ecosystem of Bangladesh	• To find out the yield performance of BRRI released saline tolerant rice varieties in gher system	On-farm
REGIONAL STATION: RANGPUR			
978	Development of rice varieties suitable for Rangpur region	• High yielding (≥ 8 t/ha) rice varieties will be developed with tolerance to drought, resistance to major biotic stresses (insect and diseases) and acceptable grain quality	Rangpur
979	Breeding for Second Generation Rice (SGR)	• Super high yielding (≥ 8 t/ha for T. Aman and ≥ 10 t/ha for Boro) rice varieties will be developed with improved modified plant type giving the thrust is to develop short duration varieties accompanied with tolerance to biotic and abiotic stresses and acceptable grain quality	Rangpur
980	Breeding for Antioxidant Rice (Black/ Red/Purple)	• To develop high yielding (≥ 6 t/ha for T. Aman and ≥ 8 t/ha for Boro) rice varieties with improved plant type and acceptable grain quality	Rangpur
981	Breeding for Photoperiod-sensitive rice varieties (PSR) for lowland and Charland ecosystem	• To develop photoperiod-sensitive high yielding climate smart rice varieties with yield potential (≥ 7 t/ha)	Rangpur
982	Development of Medium stagnation and submergence Tolerant Rice (MSSTR)	• To develop multiple stress tolerant rice varieties like stagnant flood and flash flood submergence with high yield potential (≥ 8 t/ha) under stress condition	Rangpur
983	Development of disease resistant hybrid rice against multi-resistant (BB, BLAST and TUNGRO)	• To identification of maintainers and restorers against multi-resistant. • To make a test cross for identification of heterotic hybrid rice combinations with multi-resistant.	Rangpur
984	Regional Yield Maximization Trial (RYMT) under recommended management practices	• Suitable genotypes with higher yield potential will be identified	Rangpur
985	Protection of Boro Rice Seedling from Cold Injury using Polythene Shed	• The most suitable technique for protecting Boro rice seedling from cold injury will be	Rangpur

Sl.	Research Title	Objectives	Location
		developed.	
986	Influence of Dates of Transplanting and seedling age on the Yields of Rice	• The optimum seedling age and best planting time of BRRI developed latest rice varieties for higher yield levels will be identified	Rangpur
987	Determining Minimum Irrigation Water Requirement of Rice at Different Regions of Bangladesh through Water Balance from On-Farm and Model Simulation	• The water requirement and yield response of rice to irrigation application will be measured.	Rangpur
988	Long term missing element trial at BRRI regional station Rangpur (Long-term)	• Yield limiting nutrient will be identified.	Rangpur
REGIONAL STATION: BHANGA			
989	Breeding for developing high yielding Transplanting Aman rice varieties (Hybridization)	• To develop breeding population with desirable characters with emphasis on water stagnation tolerance, anaerobic tillering, earliness and good grain quality	Bhanga, Faridpur
990	Breeding for developing high yielding shallow flooded Deep water rice varieties (Hybridization)	• To develop breeding population with desirable characters of deep-water Aman rice	Bhanga, Faridpur
991	Breeding for developing high yielding Aus rice varieties (Hybridization)	• To develop breeding population with introgression of heat tolerance, short duration and good grain properties	Bhanga, Faridpur
992	Confirmation of F ₁ s	• To confirm the crosses as true hybrid	Bhanga, Faridpur
993	FRGA	• Quick generation Advance	Bhanga, Faridpur
994	Preliminary yield trial of deep-water rice germplasm	• To evaluate the yield performance of five deep water rice germplasm for comparing with standard check	Bhanga, Faridpur
995	RYT: DWR	• To evaluate specific and general adaptability of the genotypes at Bhanga, Faridpur	Bhanga, Faridpur
996	Development of Anoxia Tolerant Rice	• To develop high yielding anoxia and water stagnation tolerant rice varieties for direct seeding condition to fit on T. Aman pattern (onion/wheat-Jute-Relay)	Bhanga, Faridpur
997	Collection of local rice landraces	• To collect local rice landraces for breeding purpose and conserve in the Genebank of BRRI	Bhanga, Faridpur
998	Characterization of local rice landraces from Faridpur region	• To maintain seed and characterize rice landraces as per 'Germplasm Descriptors and Evaluation Form' of GRSD, BRRI.	Bhanga, Faridpur
999	Identification of anaerobic germination (AG) tolerance of selected rice germplasm of Bangladesh	• To identify local donor for anaerobic germination tolerance in selected rice germplasm of Bangladesh.	Bhanga, Faridpur
1000	Head-to-Head Trial: VRS (Variety-Replacement Strategy)	• To evaluate the adaptation of BRRI released rice varieties in different region of the country. • To compare the modern rice variety with local variety. • To select appropriate variety for specific region. • To disseminate the modern varieties	Different upazilas of Faridpur Region

Sl.	Research Title	Objectives	Location
		throughout the country.	
1001	Demonstration trial of BRRI developed HYVs and Hybrids varieties	• To disseminate the modern HYVs and Hybrids varieties in Faridpur region	Different upazilas of Faridpur Region
1002	Effects of planting time on <i>Aus</i> rice in char land area of Faridpur region	• To achieve sustainable rice production at char land environment. • To adjust planting time for saving/protect <i>Aus</i> crop from early flood.	Char land area of Faridpur region
1003	Development of weed control techniques in Boro-Fallow-Fallow cropping pattern	• To develop cost-effective weed control practices for sustainable weed management in Boro-Fallow-Fallow cropping systems	Bhanga, Faridpur
1004	Introduction of intercropping system in different cropping pattern for medium high land area in Faridpur region (On-going)	• To increase cropping intensity and productivity in Faridpur region	Different upazilas of Faridpur Region
1005	Rice farming components could be an option for biological weed control at transplanted <i>Boro</i> rice field in Faridpur region	• To reduce the weed infestation along with cost of labour • To find out the effective way for controlling the aquatic weed in irrigated wetland rice field To increase the productivity and reduce the cost of production of rice in Faridpur region	Different upazilas of Faridpur Region
1006	Mulching technique of zero tillage garlic production in Garlic-Jute-Fallow cropping pattern at Faridpur region	• To reduce the weed infestation along with requirement of irrigation • To increase the yield of garlic at Faridpur region	Different upazilas of Faridpur Region
1007	A survey on crops and cropping of char areas in Faridpur region	• To delineate socio economic profiles of the farmers, their land utilization pattern, existing cropping patterns, crops and crop production practices. • To know about soil properties and organic matter content.	Different upazilas of Faridpur Region
REGIONAL STATION: KUSHTIA			
1008	ALART for Zinc Enriched Rice (ZER) (Including 1 entries against 3 standard checks)	• To evaluate the yield potential and adaptability of the advanced lines at farmers' field in different agro-ecological zones.	Kushtia
1009	Regional Yield Trial Saline tolerant Rice (STR-1) (Including 8 entries against 2 standard checks)	• Evaluation of agronomic performance, specific and general adaptability under on station condition	Kushtia
1010	Regional Yield Trial Saline Tolerant Rice (STR-2) (Including 8 entries against 2 standard checks)	• Evaluation of agronomic performance, specific and general adaptability under on station condition	Kushtia
1011	Multi Location Trial (MLT-1) (Including 3 entries against 3 standard checks)	• Evaluation of agronomic performance, specific and general adaptability under on station condition	Kushtia
1012	Multi Location Trial (MLT-2) (Including 3 entries against 3 standard checks)	• Evaluation of agronomic performance, specific and general adaptability under on station condition	Kushtia
1013	Regional Yield Trial Extra Long Slender (ELS-1) (Including 3 entries against 2 standard checks)	• Evaluation of agronomic performance, specific and general adaptability under on station condition	Kushtia

Sl.	Research Title	Objectives	Location
1014	Regional Yield Trial Extra Long Slender (ELS-2) (Including 3 entries against 2 standard checks)	• Evaluation of agronomic performance, specific and general adaptability under on station condition	Kushtia
1015	Regional Yield Trial Long Slender (LS-1) (Including 5 entries against 2 standard checks)	• Evaluation of agronomic performance, specific and general adaptability under on station condition	Kushtia
1016	Regional Yield Trial Long Slender (LS-2) (Including 5 entries against 2 standard checks)	• Evaluation of agronomic performance, specific and general adaptability under on station condition	Kushtia
1017	Regional Yield Trial Short Slender (SS-1) (Including 4 entries against 3 standard checks)	• Evaluation of agronomic performance, specific and general adaptability under on station condition	Kushtia
1018	Short Slender (SS-2) (Including 4 entries against 3 standard checks)	• Evaluation of agronomic performance, specific and general adaptability under on station condition	Kushtia
1019	Identification and screening of prospective aerobic rice from local and BRRI developed rice varieties, Boro, 2020-21 (Including 10 entries against 3 standard checks)	• Evaluation of agronomic performance, specific and general adaptability under on station condition	Kushtia
1020	Regional Yield Trial Disease Resistant Rice for Blast (DRR-Blast) (Including 7 entries against 2 standard checks)	• Evaluation of agronomic performance, specific and general adaptability under on station condition	Kushtia
1021	Regional Yield Trial Disease Resistant Rice (DRR-BB-1) (Including 12 entries against 2 standard checks)	• Evaluation of agronomic performance, specific and general adaptability under on station condition	Kushtia
1022	Regional Yield Trial Disease Resistant Rice (DRR-BB-2) (Including 12 entries against 3 standard checks)	• Evaluation of agronomic performance, specific and general adaptability under on station condition	Kushtia
1023	Regional Yield Trial Premium Quality Rice (PQR) (Including 2 entries against 3 standard checks)	• Evaluation of agronomic performance, specific and general adaptability under on station condition	Kushtia
1024	Regional Yield Trial Long Slender (LS) (Including 3 entries against 1 standard checks)	• Evaluation of agronomic performance, specific and general adaptability under on station condition	Kushtia
1025	Regional Yield Trial Insect Resistant Rice (IRR-BPH) (Including 7 entries against 3 standard checks)	• Evaluation of agronomic performance, specific and general adaptability under on station condition	Kushtia
1026	Regional Yield Trial Favorable Boro Rice (FBR-MD) (Including 13 entries against 2 standard checks)	• Evaluation of agronomic performance, specific and general adaptability under on station condition	Kushtia
1027	Regional Yield Trial Favorable	• Evaluation of agronomic performance,	Kushtia

Sl.	Research Title	Objectives	Location
	Boro Rice (FBR-LD) (Including 9 entries against 2 standard checks)	specific and general adaptability under on station condition	
1028	Regional Yield Trial Favorable Boro Rice (FBR-SD) (Including 4 entries against 2 standard checks)	• Evaluation of agronomic performance, specific and general adaptability under on station condition	Kushtia
1029	Regional Yield Trial AGGRiNET (Including 7 entries against 4 standard checks)	• Evaluation of agronomic performance, specific and general adaptability under on station condition	Kushtia
1030	ALART for Premium Quality Rice (PQR) (Including 2 entries against 3 standard checks)	• To evaluate the yield potential and adaptability of the advanced lines at farmers' field in different agro-ecological zones.	Baradi Kushtia Sadar, Kushtia
1031	ALART for Faavorable Boro Rice (FBR-Barishal) (Including 4 entries against 2 standard checks)	• To evaluate the yield potential and adaptability of the advanced lines at farmers' field in different agro-ecological zones.	Baradi Kushtia Sadar, Kushtia
1032	ALART for Blast Resistant Rice (Including 4 entries against 2 standard checks)	• To evaluate the yield potential and adaptability of the advanced lines at farmers' field in different agro-ecological zones.	Baradi Kushtia Sadar, Kushtia
1033	ALART for Superior High Yielding Rice (SHR) (Including 3 entries against 2 standard checks)	• To evaluate the yield potential and adaptability of the advanced lines at farmers' field in different agro-ecological zones.	Baradi Kushtia Sadar, Kushtia
1034	Demonstrations of newly released BRRI varieties for Aus, T. Aman and Boro seasons	• To disseminate and popularize the varieties among the farmers in Kushtia	On farm, Kushtia Region
1035	Stability analysis of BRRI varieties, T. Aus, 2021 (Including 13 varieties)	• To maintain season, year and location-wise data base on the yield performance of BRRI varieties.	Kushtia
1036	Stability analysis of BRRI varieties, T. Aman, 2021 (Including 47 varieties)	• To maintain season, year and location-wise data base on the yield performance of BRRI varieties.	Kushtia
1037	Stability analysis of BRRI varieties, Boro, 2021-22 (Including 47 varieties)	• To maintain season, year and location-wise data base on the yield performance of BRRI varieties.	Kushtia
1038	Determining minimum irrigation water requirement of rice in different regions through water balance from on-farm demand and model simulation	• To measure minimum rice irrigation water requirement for different regions • To measure rice yield response to on-farm demand based and simulated irrigation application • To figure out the variation in irrigation water requirement quantification among the treatments	Kushtia
1039	Yield and water productivity affected by transplanting time and water management in Kushtia region	• To determine the effect of transplanting date on grain yield • To determine the yield response to water management on BRRI dhan96 • To find out the combine effect of transplanting date and irrigation management on the cultivar	Kushtia
1040	Evaluation of drought tolerance ability of newly released BRRI	• To evaluate drought response under different water stress conditions	Kushtia

Sl.	Research Title	Objectives	Location
	variety (Aman) in drought prone area	• To figure out the effect of supplemental irrigation on yield and yield contributing parameters • To identify the suitability of newly released BRRI variety in drought prone area	
1041	Determination of optimum time of planting and seedling age for yield maximization of BRRI dhan87 at Kushtia region	• To find out optimum time of planting and seedling age for BRRI dhan87	Kushtia
1042	Improvement of Mustard- T. Aus - T. Aman cropping pattern with variety replacement for sustainable productivity in Kushtia region	• To identify the best variety in Mustard - T. Aus – T. Aman cropping pattern • To introduce new BRRI varieties in the pattern • To maintain a sustainable productivity of the mentioned pattern	Kushtia
1043	Yield response of rice to different rates of Nitrogen and Potash fertilizer in Boro-Fallow-T. Aman cropping pattern in Kushtia (continue).	• To find out the best dose combination of Urea and MoP	Kushtia
1044	Increasing the system productivity of the dominant cropping pattern in Kushtia region (Boro-Fallow-T. Aman) (New)	• To increase the whole systems productivity through inclusion of modern varieties and advanced agronomic management practices • To increase farmer's income through adding high value oil seed crops (mustard) in the existing pattern	On farm, Kushtia Region
REGIONAL STATION: SIRAJGONJ			
1045	Response of latest BRRI varieties in Char land areas of Sirajganj.	• Response of latest BRRI varieties in Char land areas of Sirajganj.	Sirajganj
1046	Effect of transplanting date and spacing on the yield of different short duration rice varieties.	• To find out the suitable transplanting date of different short duration rice variety in terms of maximum benefit.	Sirajganj
1047	Survey of existing char land cropping pattern in Sirajganj / Characterization of cropping system in charland	• To identify the existing cropping pattern of char land in Sirajganj. and • To improve/modify the present cropping pattern for rice cultivation.	Kazipur & Sirajganj
1048	Monitoring of fall armyworm moth using pheromone trap	• To record the present status of Fall armyworm, <i>S. frugiperda</i> in rice-based ecosystem.	Tarash, Sirajganj, and Sherpur, Bogura
1049	Effects of soil amendment practices on grain yield and yield components of modern variety at BRRI farm, Sirajganj.	• To improved soil physical properties that will improve soil water retention capacity of the root zone.	Sirajganj
1050	Integrated Nutrient Management on Growth and Yield of Boro Rice in Charland.	• To identify proper nutrient management practice through organic and inorganic amendments in Charland area.	Sirajganj
1051	Effect of biochar on rice yield and soil health on problem soils	• To study the effect of biochar on rice yield, nutrient use efficiency and soil health of charland soils	Sirajganj
1052	Light trap collection of rice insect pests and natural enemies	• To study the pest and their natural enemy incidence patterns in rice fields and to create a database to develop a forecasting system	Sirajganj

Sl.	Research Title	Objectives	Location
1053	Use of Sex pheromone to control stem borer	• To study the efficacy of sex pheromone • To control rice stem borer in rice field	Sirajganj
REGIONAL STATION: GOPALGANJ			
1054	Collection of local rice landraces	• To collect local rice landraces for breeding purpose and conserve in the Genebank of BRRI	Gopalganj, Bagerhat and Narail
1055	Characterization of local rice landraces from Gopalganj region	• To maintain seed and characterize rice landraces as per 'Germplasm Descriptors and Evaluation Form' of GRSD, BRRI.	Gopalganj
1056	Preliminary yield trial of deep-water rice germplasm	• To evaluate the yield performance of five deep water rice germplasm for comparing with standard check	Gopalganj
1057	Secondary yield trial of Jhum rice genotypes	• To evaluate the yield performance of two <i>Jhum</i> rice genotypes for comparing with standard check	Gopalganj
1058	Effects of N Rates on the Yield of BRRI dhan87	• To update the N rates of BRRI dhan87 in BRRI Farm Gopalganj	Gopalganj
1059	Breeder seed production	• To produce breeder seed of BRRI developed rice varieties	Gopalganj
1060	Hybrid seed production (BRRI hybrid dhan5)	• To produce F1 seed of BRRI hybrid dhan5	Gopalganj
1061	Truthfully Label Seed (TLS) Production	• To produce TLS seed of BRRI developed rice varieties as per indent of local demand	Gopalganj
1062	Head-to-Head Trial: VRS (Variety Replacement Strategy)	• To evaluate the adaptation of BRRI released Rice varieties in different region of the country. • To compare the modern rice variety with local variety. • To select appropriate variety for specific region. • To disseminate the modern varieties throughout the country.	Gopalganj, Bagerhat and Narail
1063	Demonstration of newly released T. Aus, T. Aman and Boro varieties	• To disseminate and popularize the newly released rice varieties in the Gopalganj, Narail and Bagerhat District	Gopalganj, Bagerhat and Narail
1064	Intensification of Boro-Fallow-Fallow cropping pattern through of floating vegetable in deep water ecosystem of Gopalganj	• To identify the suitable BRRI varieties of low land area of Gopalganj • To increase the cropping intensity	Gopalganj



BANGLADESH JUTE RESEARCH INSTITUTE

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Sl.	Research Title	Objectives	Location
GENETIC RESOURCES AND SEED DIVISION			
Cytogenetics Department			
1	Molecular characterization of jute germplasm through DNA finger printing	• To develop genetic fingerprints and to estimate genetic relatedness of jute germplasm using SSR markers.	Dhaka (Genetic Resources and Seed Division, BJRI)
2	Assessment of molecular level variation among kenaf (<i>H. cannabinus</i>) germplasm using molecular markers	• To study the variations of kenaf germplasm at molecular level using molecular markers.	Dhaka (Genetic Resources and Seed Division, BJRI)
3	Optimization of plant regeneration system for <i>C. olitorius</i> for establishing tissue culture plants into the field, 2nd year	• To improve the culture system for <i>C. olitorius</i> .	Dhaka (Genetic Resources and Seed Division, BJRI)
4	Optimization of plant regeneration protocol from the explants of kenaf, 2nd year	• To observe the performance of kenaf cotyledon explants in shooting and rooting media along with different surfactants.	Dhaka (Genetic Resources and Seed Division, BJRI)
Gene Bank Department			
5	Collection of jute, kenaf, mesta and allied fibre germplasm for conservation in BJRI Gene Bank	• To collect jute, kenaf, mesta and allied fibre germplasm for conservation in the BJRI Gene Bank.	Gazipur, Mymensingh, Sherpur, Netrokona and Kishoreganj
6	Characterization of deshi jute (<i>Corchorus capsularis</i> L.) germplasm.	• To characterize jute, kenaf and mesta germplasm for their morpho-agronomic attributes.	Manikganj and Patuakhali.
7	Characterization of tossa jute (<i>Corchorus olitorius</i> L.) germplasm	• To characterize tossa jute germplasm for their morpho-agronomic attributes.	Manikganj and Monirampur, Jessore.
8	Characterization of kenaf (<i>Hibiscus cannabinus</i> L.) germplasm	• To characterize kenaf germplasm for their morpho-agronomic attributes.	Manikganj and Kishoreganj.
9	Characterization of mesta (<i>Hibiscus sabdariffa</i>) germplasm	• To characterize mesta germplasm for their morpho-agronomic attributes.	Manikganj and Dinajpur.
10	Characterization of deshi jute (<i>Corchorus capsularis</i> L.) germplasm.	• To characterize jute, kenaf and mesta germplasm for their morpho-agronomic attributes.	Manikganj and Patuakhali.
11	Evaluation for morpho-agronomic attributes, disease and pest status of selected kenaf (<i>Hibiscus cannabinus</i> L.) germplasm	• To evaluate morpho-agronomic attributes, disease and pest status of Kenaf germplasm.	Chandina and Patuakhali.
12	Evaluation for morpho-agronomic attributes, disease and pest status of selected mesta (<i>Hibiscus sabdariffa</i>) germplasm	• To evaluate morpho-agronomic attributes, disease and pest status of mesta germplasm.	Dinajpur and Monirampur, Jashore.

Sl.	Research Title	Objectives	Location
13	Regeneration of jute, Kenaf, mesta and allied fibre germplasm for conservation	• To regenerate of jute, kenaf, mesta and allied fibre germplasm for conservation.	Dhaka and Manikganj
Breeder Seed Department			
14	Production of nucleus seed stock of jute and kenaf.	• To maintain nucleus seed stock of released varieties of jute and kenaf for breeder seed production in the next year.	Dhaka, Manikganj, Monirampur and Nasipur.
15	Production of breeder seed of deshi jute, tossa jute and kenaf	• To supply breeder seed of jute, kenaf & mesta in different seed producing organizations for the production of foundation as well as certified seed.	Manikganj, Rangpur, Kishoreganj, Chandina, Monirampur, Faridpur and Nasipur.
16	Supervision of breeder and foundation seed produced at different farms.	• To ensure the quality of the produced seed and to provide advises to the seed producing agencies for improving the quality of the seed.	Meherpur, Dinajpur, Karimganj & Kishoreganj.
17	Breeder seed yield and quality of tossa jute produced by two regions of Bangladesh.	• To find out the comparative seed yield performance of BJRI Tossa Pat-8, BJRI Tossa Pat-5, O-9897 and JRO-524 by three seed producing techniques	Kishoreganj and Patuakhali research station.
BREEDING DIVISION			
Capsularis Department			
18	Hybridization among the selected genotypes of white jute (<i>C. capsularis</i>).	• To create genetic variability having desirable traits. • To select jute as vegetables that contain high minerals and vitamins.	Dhaka.
19	Confirmation of F ₁ s and estimation of heterosis of white jute.	• Identification of true F ₁ s and selection of good hybrid(s).	Dhaka.
20	Development of protocol for Rapid Generation Advance (RGA) of white jute.	• Speed up the breeding cycle and reduction of breeding costs.	Dhaka.
21	Evaluation of some genotypes of white jute for vegetable purpose.	• To develop variety as vegetable type jute.	Dhaka and JAES, Manikganj.
22	Anatomical studies of some advanced lines of white jute.	• To identify the germplasm with higher fiber content.	Dhaka.
23	Preliminary yield trial of advanced lines of white jute for short day and low temperature tolerance.	• To isolate short day and low temperature tolerant line(s) coupled with higher yield.	JAES, Manikganj; JRRS, Rangpur & Kishoreganj.
24	Preliminary yield trial of high yielding white jute strains.	• To develop new varieties of white jute suitable for higher yield potential.	Manikganj; Faridpur, Rangpur, Kishoreganj, Chandina and Monirampur
25	Advanced yield trial of early seeding breeding lines of white jute.	• To develop new varieties of white jute suitable for early sowing and higher yield.	Manikganj; Faridpur, Rangpur, Kishoreganj, Chandina and Monirampur

Sl.	Research Title	Objectives	Location
26	Zonal yield trial of high yielding breeding lines of white jute.	• To test higher yield and adaptability of three potential breeding lines at different agro-ecological zones.	Manikganj; Faridpur, Rangpur, Kishoreganj and Monirampur
27	Maintenance of nucleus seed stocks of white jute.	• To maintain new nucleus seed stock of released varieties of white jute.	Manikganj and Monirampur
28	Maintenance of advanced lines of white jute.	• To maintain different strains already in use and to be used as parents for improvement of white jute varieties.	Manikganj and Monirampur.
29	Maintenance of nucleus seed stocks of white jute.	• To maintain new nucleus seed stock of released varieties of white jute.	Manikganj and Monirampur
Olitorius Department			
30	Hybridization among the selected genotypes of tossa jute.	• To create variability.	Dhaka.
31	Confirmation of F ₁ s.	• To ensure the true hybrids.	Dhaka.
32	Evaluation of segregating materials and selection of superior lines of tossa jute.	• To select superior plant(s) based on their desirable traits.	Dhaka.
33	Evaluation of tossa jute mutants at M ₅ generation.	• To select stress tolerant mutant lines.	Monirampur.
34	Rapid Generation Advance (RGA) in tossa jute for developing breeding lines within short period of time.	• To speed up the breeding cycle.	Dhaka.
35	Creation of variability through physical mutagen (Gamma ray and X-Ray) on jute, kenaf and mesta.	• Creation of variability.	Dhaka and JAES, Manikganj.
36	Creation of variability through chemical mutagen (EMS and Colchicines) on jute.	• To create genetic variability.	Dhaka.
37	Searching for CMS line in tossa jute to develop hybrid.	• To identify the male sterile line for hybrid jute.	Dhaka.
38	Anatomical studies in tossa jute for quality fibers.	• To identify germplasm with higher fiber content.	Dhaka and Manikganj.
39	Screening of tossa jute genotypes against salt using petri plate method.	• To screen out genotypes for salt tolerance.	JRSS, Monirampur.
40	Screening of tossa jute germplasm against waterlogged condition.	• To screen out waterlogging tolerant tossa jute genotypes.	Dhaka.
41	Screening of tossa jute germplasm for higher yield.	• To identify genotypes with higher fiber content.	Dhaka. JAES, Manikganj.
42	Advancement of tossa jute lines for short day and low temperature tolerance.	• To identify short day and low temperature tolerant genotypes.	Dhaka
43	Preliminary yield trial of selected lines tolerant to water logged condition.	• To develop waterlog tolerant tossa jute variety.	Manikganj and Faridpur.
44	Preliminary yield trial of promising lines of tossa jute.	• To develop tossa jute varieties with higher yield and other desirable attributes.	Manikganj; Rangpur, Faridpur, Kishoreganj and Monirampur.

Sl.	Research Title	Objectives	Location
45	Advanced yield trial of three breeding lines of tossa jute.	• To develop new varieties of tossa jute for higher fibre yield.	Manikganj; Rangpur, Faridpur, Kishoreganj and Monirampur.
46	On farm yield trial of an advanced breeding line of tossa jute.	• To evaluate the performance of a selected line.	Manikganj; Rangpur, Faridpur, Kishoreganj and Monirampur.
Kenaf - Mesta Department			
47	Hybridization in Kenaf and Mesta.	• To create variability and to isolate desirable progenies.	Dhaka.
48	Confirmation of F1s.	• To ensure true hybrids.	Dhaka.
49	Evaluation of segregating lines of kenaf and mesta.	• To select desirable lines/ plants from the segregating generation.	Dhaka.
50	Screening of kenaf and mesta germplasm for higher fibre yield.	• To isolate superior genotypes with desired characters for future breeding purposes.	Dhaka.
51	Preliminary yield trial (PYT) of kenaf breeding lines.	• To develop new variety of Kenaf with higher fibre yield than the existing cultivars.	Dhaka and JRSS, Monirampur.
52	On farm yield trial of kenaf breeding lines.	• To develop quick growing, early maturing and high yielding kenaf variety.	Farmer's field and six stations of BJRI
53	On farm yield trial of two promising lines of mesta, SM-2 and SM-5.	• To develop Mesta variety with higher yield and other desirable attributes.	Farmer's field and six stations of BJRI
54	Maintenance of nucleus seed stock of kenaf and mesta.	• To maintain the genetic purity of the varieties.	Manikganj and Rangpur
AGRONOMY DIVISION			
Soil Science Department			
55	Nutrient requirement for capsularis breeding line BJC-2236	• To determine the effects of N, P, K, and S fertilizers on the growth, yield, and quality of the breeding line BJC-2236, as well as the optimum requirement of all of these nutrients to achieve the full yield potential of this new advance breeding line.	Manikganj and Kishoreganj
56	Response of advanced <i>olitorius</i> breeding line of O-0512-6-2 to NPK and S fertilization	• To observe the effects of N, P, K and S fertilizers on the growth, yield and quality of the advanced tossa jute breeding line O-0512-6-2.	Faridpur
57	Influence of plant nutrient management on BJRI newly developed tossa jute variety.	• To find out the appropriate nutrient management option for proper growth and higher yield of tossa jute; and • To find out the suitable interaction (if any) between variety and nutrient management in respect of growth and yield of tossa jute	Kishoreganj
58	Influence on nutrients of N, P, K and S on the advanced kenaf breeding line KBL-73	• To know the N, P, K and S fertilizer requirement of the advanced kenaf breeding line KBL-73 for fibre production.	Kishoreganj and Dinajpur

Sl.	Research Title	Objectives	Location
59	Study of the nutrient requirement of NPK S of advanced breeding line KBL-155 (1)	• To determine the nutritional requirement of the BJRI advanced kenaf breeding line KBL-155 for fibre production.	Manikganj and Kishoreganj
60	Optimization of nutrients N, P, K, S, Zn & B requirement of the advanced <i>Olorius</i> breeding line O-043-7-9 in relation to quality seed production	• To compare the different combined dose of nutrient and to find out the suitable dose of each nutrient for the optimum growth and seed yield of advanced <i>olitorius</i> breeding line.	Monirampur, Jessore
61	Influence of NPKS and Zn on advanced breeding line KBL-155 (1) for seed production.	• To determine the nutritional requirement of the BJRI advanced breeding line KBL-155 (1) for seed production	Manikganj and Kishoreganj
62	Salinity Management in Late Jute Seed Production of BJRI Tossa Pat-5	• To generate information together salinity management and jute seed production.	Kalapra, Patuakhali
Physiology Department			
63	Dry matter accretion with ages of advance <i>olitorius</i> breeding line O-043-7-9 (Red)	• To find out dry matter distribution of advance <i>olitorius</i> breeding line O-043-7-9 (Red) • To find out appropriate harvest time of advance <i>olitorius</i> breeding line O-043-7-9 (Red) • To find out crucial growth period for O-043-7-9 (Red) will be found out.	Faridpur Manikganj
64	Dry matter partitioning of advance line C- 2234	• To find out dry matter distribution of advance breeding line C- 2234	Kumilla Manikganj
65	Dry matter partitioning of KBL-73	• To find out dry matter distribution of KBL-73	Manikganj Kishoreganj
66	Growth analysis of some varieties of Tossa Jute (<i>Corchorus olitorius</i> L.) under different water-logged conditions	• To analyze growth performance at water logged condition	Rangpur
67	Screening and characterization of <i>C. olitorius</i> germplasm for drought tolerance	• To find out drought tolerant jute genotype	Manikganj Dhaka
68	Screening and characterization of <i>C. olitorius</i> germplasm for water logging tolerance	• To find out water logging tolerant jute genotype	Dhaka
69	Screening of <i>C. olitorius</i> germplasm for less photosensitivity	• To find out less photosensitive jute genotype	JAES, Manikganj
70	Jute seed priming with different exogenous chemicals for improving germination capacity at saline condition	• To find out suitable seed priming agent for improving jute germination at saline condition	Dhaka
71	Screening of <i>C. olitorius</i> germplasm with erect leaf for higher fibre yield	• To screen out jute germplasm with lower leaf angle	Manikganj
72	Study on reproductive stages of White jute seed crop at different sowing times and locations	• To find out location specific appropriate sowing time with basic information about white jute seed production	Manikganj, Rangpur, Jashore, Cumilla, Patuakhali

Sl.	Research Title	Objectives	Location
73	Study on reproductive stages of Tossa jute seed crop at different sowing times and locations	• To find out location specific appropriate sowing time with basic information about tossa jute seed production	Manikganj Rangpur Faridpur Jashore, Patuakhali
74	Study on reproductive stages of Kenaf seed crop at different sowing times and locations	• To find out location specific appropriate sowing time with basic information about kenaf seed production	Manikganj, Rangpur Jashore, Patuakhali, Kishoreganj
75	Study on effect of different containers available to farmers on shelf life of kenaf seed	• To find out suitable container available at farmers' level for kenaf seed storage	Dhaka
Crop Management Department			
76	Determination of appropriate sowing time on fiber yield and yield attributes of evolved variety BJRI TossaPat-8 (Robi-1)	• To generate information in respect of appropriate sowing time for higher fiber yield of BJRI Tossa Pat-8.	Manikganj; JRRS, Rangpur and JRSS, Jashore.
77	Effect of harvesting age on fiber yield and yield attributes of advanced breeding line O-0412-9-4 and O-043-7-9 of tossa jute	• To ascertain optimum time of harvesting for higher fiber yield.	Manikganj; Jashore and Faridpur.
78	Fiber yield and yield attributes of kenaf as affected by variety and planting method	• To determine suitable planting method for specific kenaf variety.	
79	Fiber yield of kenaf as affected by variety and stage of harvest	• To generate information on stage of harvest of different kenaf variety	Tarabo, Kishoreganj & Patuakhali.
80	Effect of seedling transplanting on fiber yield and yield attributes of BJRI Tossa jute as influenced by spacing	• To estimate the fiber yield and yield attributes of seedling transplanting of BJRI Tossa jute as influenced by spacing	JRRS, Kishoreganj.
81	Study on the effect of weedicide samples for weed control in jute cultivation	• To optimize weed management technique for cost effective jute production	Manikganj, Taraboat
82	Effect of weeding and herbicide management on fiber yield and yield attributes of Deshi jute	• To produce jute on a cost-effective manner through manipulation of weeding and herbicide regime	JAES, Manikganj and RS, Tarabo
83	Effect of date of sowing on seed yield and yield attributes of evolved variety BJRI TossaPat-8 (Robi-1) as influenced by spacing	• To determine the optimum sowing date and spacing for the seed yield of BJRI Tossa Pat-8.	Manikganj; Rangpur and Jessore
84	Effect of organic amendments (bio-char) for salinity mitigation on seed yield and yield attributes of BJRI Tossa Pat-8	• To improve seed production using organic amendments for higher fiber yield of tossa jute	Dhaka and JAES, Manikganj
85	Effect of different weed management technique on jute seed production	• To optimize weed management technique for cost effective jute seed production	JRRS, Rangpur
86	Seed yield and quality of bjri developed kenaf varieties as affected by sowing date	• To develop a technique for quality kenaf seed production	Tarabo, Manikganj & Kishoreganj

Sl.	Research Title	Objectives	Location
87	Effect of tillage on seed yield and yield attributes of kenaf crop	• to improve the fiber yield and yield attributes of jute and kenaf under tillage conditions as well as profitability	JRRS, Kishoreganj
88	Effect of Vermicompost on fiber yield and yield attributes of BJRI Tossa Pat-8	• To study the effect of Vermicompost on the growth and yield of jute	Rangpur
89	Effect of water logging and drainage on yield of kenaf	• to evaluate the yield of kenaf under water logged condition.	Rangpur.
90	Study on relay intercropping of jute and kenaf into vegetables and spices crops for seed production	• to evaluate the intercropping jute into the vegetables and spices	JRRS, Kishoreganj.
91	Determination of appropriate sowing time on fiber yield and yield attributes of evolved variety BJRI TossaPat-8 (Robi-1)	• To generate information in respect of appropriate sowing time for higher fiber yield of BJRI Tossa Pat-8.	JAES, Manikganj; JRRS, Rangpur and JRSS, Jashore.
92	Effect of harvesting age on fiber yield and yield attributes of advanced breeding line O-0412-9-4 and O-043-7-9 of tossa jute	• To ascertain optimum time of harvesting for higher fiber yield.	Manikganj, Jashore and Faridpur.
93	Fiber yield and yield attributes of kenaf as affected by variety and planting method	• To determine suitable planting method for specific kenaf variety.	
PEST MANAGEMENT DIVISION			
Entomology Department			
94	Study on the pest status of promising lines of jute and allied fiber crops in different locations	• To determine the pest status among the promising lines and existing standard variety • To help the breeders to evolve pest tolerant/ resistant varieties	Manikganj, Kishoreganj, Faridpur, Rangpur, Cumilla and Jashore
95	Screening of jute germplasm for resistance against yellow mite and jute apian	• To explore the sources of resistance against yellow mite and apian jute	Kishoreganj and Rangpur
96	Screening of Kenaf and Mesta germplasm for resistance against Spiral borer and Mealybug	• To find out the sources of resistance against spiral borer and mealybug of Kenaf and Mesta	Faridpur and Kishoreganj
97	Effectiveness of new acaricides on jute yellow mite under field condition	• To identify suitable insecticides for farmer's use to control Jute hairy caterpillar. • To recommend tested acaricides for registration to Sub-PTAC	Dhaka, Manikganj and Narayanganj
98	Effectiveness of new insecticides against jute hairy caterpillar under field condition	• To identify suitable insecticides for farmer's use to control Jute hairy caterpillar. • To recommend tested insecticides for registration to Sub-PTAC	Dhaka, Manikganj and Narayanganj
99	Effectiveness of some selected botanicals to control jute yellow mite	• To find out an alternate control measure of chemical pesticides and to reduce cost of production and keep environment friendly • Confirmation of developed technology for jute growers	Dhaka and Manikganj

Sl.	Research Title	Objectives	Location
100	Effect of sowing dates on yellow mite, <i>Polyphagotarsonemus latus</i> infestation in jute	- To find out the infestation of yellow mite at different sowing date - To monitor the abundance of yellow mite at different environmental condition	Manikganj, Rangpur and Faridpur
101	Effect of nitrogenous fertilizer on yellow mite infestation in <i>Corchorus spp.</i>	To study the infestation of yellow mites under variable regimes of nitrogenous fertilizers.	Manikganj and Dhaka
102	Survey on insect and mite pest of jute and allied fiber crops	- To survey on insect and mite pest infestation at different jute growing locations. - To know the nature of incidence, intensity and peak infestation period of insects and mite in JAF crops	All stations of BJRI and adjacent farmer's field
Plant Pathology Department			
103	Seed health study of Jute, Kenaf and Mesta collected from different sources for recommendation	To determine the status of different seed borne pathogens in seed samples of jute, kenaf and mesta collected from different stations of BJRI	Laboratory of Plant Pathology, BJRI
104	Screening of germplasms of jute against stem rot in sick bed.	To identify some selected advance lines against stem rot in artificially inoculated sick bed under field condition	JAES Manikgonj
105	Evaluation of new spraying fungicides against seed borne fungal pathogens of jute, kenaf and mesta	Some new fungicides to be evaluated against the fungal diseases of jute and allied fiber crops.	Manikgonj Kishoregonj
106	Effect of two important micronutrients on incidence of different diseases of Olitorius jute variety BJRI tossa pat-8	- To find out eco-friendly management of field diseases at natural conditions of olitorious (tossa) jute by using micronutrients. - To find out efficacy of yield contributing characters of two important micronutrients.	Faridpur
107	Survey on diseases of jute and allied fiber crops	To know the different disease incidences of jute and allied fibre crops in different agro-ecological zones of jute and allied fiber crops.	Dinajpur, Jessore, Manikganj, Dhaka, Potuakhali, Kishoregonj
FIBRE QUALITY IMPROVEMENT DIVISION			
108	Isolation and identification of jute retting bacterial strains from different natural sources and study their retting properties	- To isolate promising pectinolytic bacterial strains - To isolate promising pectinolytic bacterial strains - To isolate promising pectinolytic bacterial strains - To increase the retting performance	FQID Laboratory, BJRI, Dhaka
109	Influence of chemical extraction of kenaf fiber and study their physical properties	- To observe recovery percentage of fiber - To investigate effect of chemical on fiber quality	Dhaka
110	Retting period and fiber properties of different advanced breeding lines of jute and kenaf	To evaluate the retting and fiber properties of three advanced breeding lines of <i>C. capsularis</i> and <i>C. olitorius</i> jute and kenaf	JRSS, Monirampur and Patuakhali

Sl.	Research Title	Objectives	Location
111	Effect of conventional and ribbon retting technique on fiber quality of different varieties of jute	To observe the fiber quality among the different varieties of jute with different retting techniques at different harvesting time	JAES, Manikganj and JRRS, Rangpur
112	Comparative studies on retting time and physical and chemical properties of kenaf and mesta	- To screen proper harvesting and retting time - To determine fiber quality based on physical and chemical properties	JAES, Manikganj; JRRS, Rangpur and Kishoreganj
JUTE FARMING SYSTEM DIVISION			
113	Development of alternate cropping pattern Wheat–Jute–T. <i>Aman</i> against existing farmers’ pattern Fallow–Fallow–T. <i>Aman</i> in medium high land at Patuakhali (JFS-01/2022)	- To increase cropping intensity and income of the farmers, - To improve the existing practice, - To introduce improved technology and new crops, and - To engage workless people in the agricultural activities.	Patuakhali
114	Performance of alternate cropping pattern Maize–Jute– <i>Pat shak</i> –Okra against existing farmers’ pattern Maize–Red amaranth–Brinjal in medium high land at Manikganj (JFS-02/2022)	- To increased cropping intensity and farmers' benefit - To increase soil fertility	Manikganj
115	Development of jute based four crops pattern against existing farmers’ pattern Mustard–Fallow–Jute–T. <i>Aman</i> (JFS-03/2022)	- To undertake the study for economic feasibility of growing four crops in a year in a same piece of land by incorporating jute, rice, mustard, mungbean and jute <i>shak</i> - To adopt appropriate agronomic practices.	Manikganj
116	Development of kenaf containing four crops pattern at Char areas (JFS-04/2022)	- To develop a kenaf based four-crop pattern at char land by incorporating kenaf, rice, mungbean, jute <i>shak</i> and potato in the existing two or three crops containing pattern. - To increase cropping intensity and income of the farmers,	Rangpur
117	Performance of four crops pattern involving <i>Boro</i> –Jute–T. <i>Aman</i> –Mustard (JFS-05/2022)	- To evaluate the relay and sequential cropping of jute and mustard with <i>Boro</i> and T. <i>Aman</i> - To introduce improved technology and new crop. - To increase productivity and income of the farmers,	Monirampur
118	Development of jute seed containing cropping pattern at Manikganj and Faridpur areas (JFS-06/2022)	- To increase cropping intensity and income of the farmers, - To increase cropping intensity - To ensure our desired jute seed development.	Manikganj and Faridpur
119	Development of alternate cropping pattern Sunflower–Jute–T. <i>Aman</i> against existing farmers’ pattern	- To increase cropping intensity in their farming system - To introduce improved technology and new crop variety	Patuakhali

Sl.	Research Title	Objectives	Location
	Fallow–Fallow–T. <i>Aman</i> in medium high land at Patuakhali (JFS-07/2022)	• to engage non-working people in different agricultural practices and activities	
120	Development of alternate cropping pattern (ACP) Sweat gourd or Sunflower or Sweat potato–Kenaf–Fallow against existing farmers’ pattern (FCP) Fallow–Boro–Fallow in haor areas of Kishoreganj (JFS-08/2022)	• To improve technologies of Wheat-Jute-T. aman rice cropping pattern • To find out the agro-economic feasibility of an improve package of technologies over the existing farmers’ practices in haor area cropping pattern	JRRS, Kishoreganj
121	Development of alternate cropping pattern Chilli or Maize or Groundnut–Jute–Kenaf seed against the existing farmers’ pattern Chilli or Maize or Groundnut–Fallow–T. <i>Aman</i> in medium high land in Dinajpur (JFS-09/2022)	• To increase the crop intensity by incorporating kenaf, maize, groundnut, chili, brinjal etc. • To increase production efficiency of the individual crop by using optimum management practices	Nosipur, Dinajpur
122	Study on cost and return of tossa jute cultivation at farm level in different areas of Bangladesh (JFS-10/2022)	• To find out the area, cost and return of jute • To identify the socio-economic constraints for jute production.	Faridpur, Gopalganj, Pabna, Kushtia and Jamalpur
123	Study on cost and return of kenaf cultivation at farm level in different areas of Bangladesh (JFS-11/2022)	• To find out the area, cost and return of kenaf • To identify the situation of kenaf production at farm level • To identify the socio-economic constraints for kenaf production.	Kishoreganj, Rangpur, Shariatpur and Tangail
124	Cost and return study of JAF seed crop at contract growers of BADC and farmers (JFS-12/2022)	• To assess the performance of late jute seed production technologies at contract growers of BADC and farmers' level	Manikganj, Jashore, Chapai Nawabganj and Kushtia
125	Field days and farmers’ training on improved technologies for JAF crops (JFS-13/2022)	• To introduce proven research findings of jute and jute-based farming systems and techniques	Manikganj, Faridpur, Rangpur, Kishoreganj, Chandina, Dinajpur, Monirampur and Tarabo
126	Technology transfer through BJRI the villages and jute blocks (JFS-14/2022)	• To assess the suitability of released varieties and potential technologies in farmers' environment • To identify farmers' constraints for adoption of technologies and generate feedback for further development.	Manikganj, Faridpur, Rangpur, Kishoreganj, Chandina, Dinajpur, Monirampur and Tarabo
127	Popularization of BJRI JAF crop variety at farmers’ level (JFS-15/2022)	• To disseminate and popularize the variety among jute growers.	Farmer’s field nearby BJRI regional station and sub-station
128	On-farm trial of newly released JAF varieties (JFS-16/2022)	• To demonstrate newly released variety among <i>tossa</i> jute growing areas in Bangladesh.	

Sl.	Research Title	Objectives	Location
129	On-farm trial of jute seed production through inter-cropping systems (JFS-17/2022)	• To assess their agronomic suitability and economic viability of winter crops with late jute seed crop as intercropping system to make farmers self- sufficient in jute seed requirement.	Manikganj, Rangpur, Monirampur, Faridpur, Cumilla, Patuakhali and Kishoreganj
130	Growth and development analysis of jute for model simulation (JFS-18/2022)	• To develop a simulation model for jute crop	Manikganj, Jashore and Rangpur
TECHNOLOGY WING			
TEXTILE PHYSICS DIVISION			
131	Studies on the electrical properties of low temperature plasma treated jute	• To see the changes of electrical, optical and thermal properties of raw jute fiber by low temperature plasma treatment of jute in order to diversify the uses of jute	BUET AEC BCSIR
132	Effect of Nano-clay on Crystallinity index, Thermal and Mechanical properties of Jute composites	• To produce jute reinforced Polyester composite and to increase thermal and mechanical properties jute reinforced Polyester composite	BJRI DUET BCSIR BAEC
133	Effect of aloe vera gel incorporation in unsaturated polyester resin of jute-cotton union fabric reinforced composite	• To produce jute-cotton union fabric reinforced composites and reduce the thermal conductivity and the brittleness of jute-cotton union fabric reinforced composites	BJRI BCSIR
134	Study on the physico-mechanical properties of BJRI Tossa Pat-6and O-9897 varieties	• To determine the physico-mechanical properties of BJRI Tossa Pat-6 and O-9897 varieties and analysis the test results and select the proper raw jute for diversified uses	BJRI BCSIR
135	Effect of fiber loading and surface modification of jute fiber on the mechanical properties of jute fiber reinforced composites	• Fabrication of jute fiber reinforced composites with different weight proportion of fibers and using different matrices such as polypropylene, HDPE and PLA and finally, determination of the different mechanical properties of jute fiber reinforced composites for diversification of jute products	BJRI UK
136	Investigation on the working conditions of the workers involved in the yarn product	• Investigation of the working conditions of the workers involved in the yarn product	Jute mills of different districts
137	Study on the effect of UV radiation on the jute and jute-based products	• To analyze the UV blocking properties of jute and jute-based product and compare the UV blocking properties of jute with 100% cellulose and cotton	BJRI BUET
138	Effect of Hybridization (jute-sugarcane bagasse) on physico-mechanical and electrical properties of composites	• To evaluate the physico-mechanical properties of jute-sugarcane bagasse hybrid composites and evaluate the cost effectiveness of jute-sugarcane bagasse hybrid composites	BJRI Turkey
139	Development of different types of jute-based filaments for 3D printer	• To produce filaments using Jute-PLA for 3D printer.	BJRI BCSIR

Sl.	Research Title	Objectives	Location
			BUET
140	Up-gradation and digitalization of a Modified Lee's Disk thermal conductivity measuring instrument	• Digitalize the existing thermal conductivity meter to minimize errors and complex manual mathematical calculation with saves time also	BJRI BCSIR
141	Development of recycled PP-jute composite and their environmental performance estimation	• Development of recycle Jute-PP composite and effect of fatigue, thermal aging, water aging on the recycle PP-jute composite	BJRI BCSIR BUET
CHEMISTRY DIVISION			
142	Study for minimizing the cost of pulp and paper from jute.	• Development of an eco-friendly and economically viable pulp, paper, cellulose and viscose production methods from jute. Finding out suitable eco-friendly storage system for management of jute.	Industrial Chemistry Department
143	Extraction and synthetization of various useful chemical products from jute and allied fibrous materials to produce value added chemical products.	• To extract and produce of useful chemicals from jute fiber, jute sticks, jute wastages to verify those produced chemicals with commercial ones.	Fiber Chemistry Department
144	Chemical and physical studies on different samples of jute and allied fibers/sticks in order to increase diversified end uses of jute.	• The present program me will help to develop analytical aspects of fiber research in both agricultural and technological fields. The results will help to study and evaluate the properties of the fiber for their value-added diversified end uses.	Fiber Chemistry Department, Chemistry Division
145	Development of Jute Based Composite Materials	• To produce jute based composite materials for diverse use in construction, Housing and furniture purpose. It will create and improve the employment opportunity of rural area of Bangladesh.	Industrial Chemistry Department
146	Improvement of flameproof process with waterproof and fire retardant on jute and jute fabrics for diversified uses.	• To produce jute and jute blended products for textile uses such as wall covering, furnishing fabrics, tents and for various outer garments.	Industrial Chemistry Department
147	To investigate the physical and chemical properties of charcoal and activated carbon for various applications in several fields.	• Preparation of better-quality charcoal (increasing carbon percentage) and activated carbon for industrialization	Industrial Chemistry Department
148	Studies on the physico-chemical properties of various chemically modified jute fiber and blends with other natural and synthetic fiber for making fashionable clothes for widely textile uses	• Pilot scale production, industrialization and development of new and diversified fashionable products blending with other natural and synthetic fibers.	Industrial Chemistry Department
149	Synthesis and characterization of functional Jute Fiber treated with Chitosan-metal oxide composite	• Development of Functional jute products for medical uses.	Industrial Chemistry Department
Microbiology and Biochemistry Department			
150	Screening, isolation, characterization, and preservation of ligno-cellulolytic	• To improve softening quality of jute cuttings.	Jute Mills.

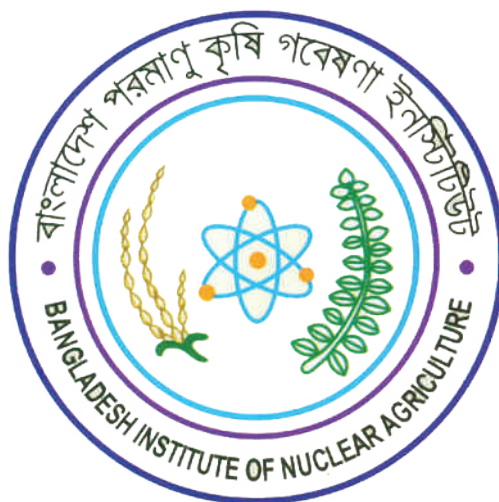
Sl.	Research Title	Objectives	Location
	enzyme producing fungi and bacteria collected from different jute mills	• To make the fiber production process more efficient in mills. • To reduce the production cost through improvement of batch economy in mills.	Microbiology & Biochemistry Department
151	Application of cellulase on jute fabric for bio-finishing and bio-polishing.	• To develop suitable enzyme technology for bio-finishing of jute fabrics. • To improve esthetic value of jute fabric. • To improve market potentiality of jute fabric through improvement of quality.	Microbiology & Biochemistry Department
152	Application of xylanase and pectinase on preserved jute ribbon for fiber extraction	• To develop enzyme technology for jute retting. • To reduce water requirement for jute retting. • To reduce time for jute retting. • To produce quality fiber through applying improved retting process.	Microbiology & Biochemistry Department
153	Formulation of microbial inoculums for jute retting based on their enzyme production potentiality.	• To formulate microbial inoculums for fiber extraction of preserved jute bark. • To develop method of retting in suitable time not to be following obligatory seasonal retting.	Microbiology & Biochemistry Department
154	To develop product by machine extracted jute fiber	• To make pulp and paper with machine extracted fiber • To test the utility of this mechanically separated fiber • To Improve technology for mechanization of fiber extraction process without undergoing traditional retting	Microbiology & Biochemistry Department
155	Estimation of α -tocopherol (vitamin-E) content of jute leaves of different <i>olitorius</i> and <i>capsularis</i> varieties of BJRI.	• To estimate the vitamin E content of jute leaves. • To provide information regarding to vitamin-E content of jute leaves for the common people who can consume <i>pat shak</i> knowing its' actual vitamin and nutrient level	Microbiology & Biochemistry Department
156	Study of the antibacterial properties of jute leaf tea.	• To investigate the prevention of bacterial growth by jute leaf tea liquor. • To improve the production process of jute leaf tea. • To give the information about health potentiality of jute leaf tea	Microbiology & Biochemistry Department
157	Production of bioplastic, paper and pulp from jute fiber	• To produce eco-friendly bioplastic from jute • To produce paper and pulp from jute • To improve quality and reduce cost of paper, pulp and bioplastic	Microbiology & Biochemistry Department
158	Application of enzymes and chemicals for modification of jute fiber, yarn, and fabrics	• To improve quality of jute fiber • To produce yarn and fabrics with improved fiber	Biochemistry Department

Sl.	Research Title	Objectives	Location
		• To use modified fiber in jute cotton blending.	
MECHANICAL PROCESSING DIVISION			
159	A study on the physical and mechanical properties of jute-banana blended yarn.	• Use of jute will be increased as well as the production cost of jute banana blended yarn will be reduced and produced yarn will be more attractive to fulfill the demand of buyers.	Spinning Department
160	Study on the spinning performance of jute-wool blended yarn	• Blended yarns can be used as raw materials for production of diversified and value-added jute products. Increase the dimensional stable of jute yarn and increase its extensibility. Encouragement of Eco-friendly products.	Spinning Department
161	Study on the spinning performance of Robi-1, JRO-524 & O9897 jute varieties at BJRI.	• Uses of BJRI developed variety will increase for specific jute product. Ensure the product quality by using appropriate jute fiber.	Spinning Department
162	Production of different types of bags with Jute-cotton irregular satin fabric.	• The importance of new jute-cotton irregular satin fabric will be increased. • Various products from jute are continued to be used all over the world. • Diversified use of jute products will be increased.	Weaving Department
163	Development of prayer mat from jute yarns/Jute-wool blended yarn	• New type of prayer mat will be produced. Reduce the use of synthetic prayer mat. Reduce the import of prayer mat from abroad. Using of jute yarns will be increased	Weaving Department
164	Studies on resin viscosity on the properties of jute fiber reinforced polyester composites.	• Improvement of jute fiber wetting by reducing resin viscosity and optimization of resin viscosity on the basis of mechanical properties of the fabricated composites	BJRI
165	Visit the different Jute mills and organizations for sharing scientific processing techniques and methods for jute and jute goods. (Activity A, Continuous program me)	• In this visit we will find the processing problem of existing jute mill physically. So, we can take research project for solving the problem of jute mills in scientific way.	Spinning and Weaving Department
166	Technical services to different entrepreneur and training to academic organizations to promote jute and jute goods.	• Different University/ organizations, entrepreneur comes to BJRI for making jute fabric of different design and structure. Some government and private universities opened textile-engineering department in their institution. But many of them have no laboratory facilities. So, they come to the BJRI and they visit the laboratory of this division. In this visit they learn operating principle and processing technique of each machine physically. This division serves their requirement. So, this project has	Spinning and Weaving Department

Sl.	Research Title	Objectives	Location
		undertaken for technical assistance to different organizations/institutions.	
PILOT PLANT AND PROCESSING DIVISION			
167	Cost minimization and process optimization for comfort properties assessment on single jersey & rib jute knitted fabrics.	• To introduce innovative jute cotton blended knit technical value-added fabric. • To produce different types of design & structured fabric of plain & rib knit method. • To assess the desired aesthetic and performance characteristics of those fabrics.	Wet Processing department, Pilot plant & Processing Division.
168	Study on dyeing properties of jute product by natural dyes.	• To produce innovative natural color for jute products to get desired aesthetic products. • To have best absorption and fixation of natural color on jute products so that it will be unique from others colors. • To producing hazardous free color for jute dyed product by natural dye extracting from jackfruit leaf's, teak leaf's.	Wet Processing department, Pilot plant & Processing Division.
169	Studies on salt free dyeing of jute with a view to reducing process cost and environment pollution	• To explore a novel dyeing procedure of jute. • To trim down the processing expenditure of jute coloration. • To shrink the pollution rate due to jute dyeing. • To promote diversification of jute commodities.	Jute Waste Processing department, Pilot plant & Processing Division.
170	Determination of physicochemical, mechanical and thermal properties of jute waste generated from jute processing industries and identification of economically viable diversified products.	• Characterization of jute waste produced in jute processing industry. • Identification of appropriate uses of jute waste by evaluation of its physicochemical, mechanical and thermal properties. • Development of diversified products such as activated carbon fiber, fuel cake, absorbent material, insulation materials from jute waste. • Studies on the characteristics of jute waste produced from jute processing industries with a view developing sustainable diversified products.	Jute Waste Processing department, Pilot plant & Processing Division.
171	Pilot scale production and market feasibility study of various jute products.	• To produce different types of rib fabrics. • Testing of different parameters of rib fabrics. • To produce eco- friendly jute fabrics.	Yarn & Fabric Production department
172	Manufacturing of dust resistant knitted jute fabric with different design and construction for	• To produce different designed jute knitted products. • To produce dust resistance jute fabrics.	Yarn & Fabric Production department

Sl.	Research Title	Objectives	Location
	improvement of jute knitted fabric uses.	• To produce environment friendly jute products.	
173	To develop a special oil stain removing reagent for jute-based fabrics and products to increase their diversified usage and market potentiality and also identify the characteristics of oil-stained treated fabric by different physical method.	• Identifying a special oil stain removing reagent for jute-based fabrics and products and also doing tests on the treated fabric for characterization.	Chemical Processing department
DYEING AND PRINTING DIVISION			
174	Economic dyeing process of Jute/Cotton blended fabrics for Apparel use	• To determine the dyeing properties of jute/cotton blended fabric • To investigate the effect of different dyestuff and softening agents on the dyed fabrics	Dyeing and Printing Division
175	Studies on the effect of pigment and indigo dye on jute and jute blended dyed fabrics	• To apply the pigment and indigo dyes on jute and jute blended fabrics • To investigate the effect of both dyes on jute and jute blended fabrics as well as their characterization.	Dyeing and Printing Division
176	Studies on the effect of reactive dye on jute and jute blended fabrics	• Application of reactive dye on jute and jute cotton blended fabrics • Study on the effect of reactive dyes on jute and jute blended fabrics with its parametric study	Dyeing and Printing Division
JUTE TEXTILE			
177	Study on different properties of woolenized jute yarns.	• To establish jute yarns as the substitute of wool yarns.	Technological Research Wing, Testing Dept. of Jute-Textile Wing, BJRI. AEC, BCSIR.
178	Study the effect of enzyme and silicon finish on blended jute goods.	• To develop appearance and sales appeal of blended fabrics through value addition.	Product Development Division, Jute-Textile Wing, BUTex, Textile Mills of BTMA.
179	Standardization of dyeing of jute-cotton blended fabric produced from various ratio of jute-cotton blended yarn with reactive dyes.	• To simplify the dyeing of jute-cotton blended fabric by optimizing process parameters with reactive dyes.	Jute Textile Research Wing, Technological Research Wing, BJRI.
180	Study on jute, cotton and viscose blended yarn.	• To promote the diversification of jute blended yarn.	Textile Physics Division, BJRI.
181	Study the development of finer count and increasing the strength of yarn produced in the cotton processing system by changing the parameters of the ring frame machine.	• To develop better properties of jute-cotton blended yarn.	Jute-Textile Research Wing, Technological Research Wing, BUTEX, IPE Dept., BUET.

Sl.	Research Title	Objectives	Location
182	Standardization of dyeing for jute blended fabric with non-conventional Technique.	To promote diversification of jute blended commodities.	Product Development Division, Jute-Textile Wing



BANGLADESH INSTITUTE OF NUCLEAR AGRICULTURE

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Sl.	Research Title	Objective(s)	Location(s)
PLANT BREEDING DIVISION			
1	On-farm and on-station trial of BLB resistant rice line for better grain quality and higher grain yield	• To evaluate the yield potential and BLB resistance at different locations	On-station: Mymensingh Sub-station: Ishurdi, Rangpur, Jamalpur, Sunamganj & Magura
2	On-farm and on-station trial of rice lines for earliness and higher grain yield in Haor areas	• To assess earliness and yield performance	On-station: Mymensingh Sub-station: Nalitabari, Ishurdi, Rangpur & Cumilla On-farm: Sunamganj, Netrokona, B. Baria & Kishoreganj
3	On-farm and on-station trial of rice lines for better grain quality and higher grain yield	• To select desirable lines having better grain quality and higher yield	On-station: Mymensingh Sub-station: Nalitabari On-farm: Cumilla, Jamalpur, Magura, & Rangpur
4	On-farm and on-station trial with some iron and zinc rich M ₁₀ rice mutant	• To select the lines with higher yield potential and iron and zinc content	On-station: Mymensingh Sub-station: Cumilla, Jamalpur, & Nalitabari, Cumilla and Rangpur
5	On-farm and on-station trial of promising M ₈ NERICA rice mutants for short duration and higher yield	• To assess earliness and yield performance	On-station: Mymensingh Sub-station: Nalitabari, Jamalpur, Magura & Chapainawabganj On-farm: Rajshahi & Chapainawabganj
6	Regional yield trial of selected salt tolerant M ₉ rice mutants with fine grain quality and earliness	• To identify salt tolerant rice lines with fine grain quality	On-station: Mymensingh Sub-station: Satkhira
7	Regional yield trial with some introgressed bacterial leaf blight resistant rice lines	• To identify BLB resistant rice lines	On-station: Mymensingh Sub-station: Rangpur, Ishurdi, Jamalpur, Nalitabari & Sunamganj On farm: Kishoreganj & Netrokona
8	Regional yield trial of MAGIC rice lines for better grain quality and higher yield	• To select desired lines having better grain quality and higher yield	On-station: Mymensingh Sub-station: Nalitabari, Sunamganj, Ishurdi & Rangpur
9	Regional yield trial of Brown Plant Hopper (BPH) resistant rice lines (Collaboration with Entomology Division)	• To identify brown plant hopper resistant rice lines	On-station: Mymensingh Sub-station: Ishurdi & Rangpur
10	Advanced yield trial of selected dual tolerant (salinity	• To identify dual tolerant (salinity & submergence) lines with better grain	On-station: Mymensingh, Nalitabari,

Sl.	Research Title	Objective(s)	Location(s)
	and submergence) rice mutants with better grain quality and earliness	quality and earliness	Satkhira and Jamalpur
11	Advanced yield trial for drought tolerance of M ₆ mutants (Collaboration with AED and CPD) (IAEA project)	• To identify rice mutants for drought tolerance	On-station: Mymensingh, Rangpur, Magura & Chapainawabganj
12	Advanced yield trial of blast resistant rice lines (Collaboration with Plant Pathology Division)	• To identify blast resistant rice lines	On-station: Mymensingh Sub-station: Rangpur, Cumilla, Jamalpur & Magura
13	Advance Yield trials of short duration rice lines for Haor areas	• To assess earliness and yield performance	On-station: Mymensingh Sub-station: Cumilla & Sunamgonj
14	Advance yield trial of blast resistant rice lines (Collaboration with Plant Pathology Division)	• To select desired lines for blast resistance	On-station: Mymensingh Sub-station: Jamalpur & Cumilla
15	Advance yield trial of brown plant hopper resistant rice lines (Collaboration with Entomology Division)	• To select the desired rice lines with BPH resistance and higher yield	On-station: Mymensingh Sub-station: Jamalpur
16	Preliminary Yield trial of elite rice lines for salt tolerance (AFACI Project)	• To identify salt tolerant high yielding lines	On-farm: Harodda, Sadar, Kamarkati & Asashuni of Satkhira
17	Preliminary Yield Trial of upland rice lines for hill area	• To select desired lines for upland ecosystems	On-station: Mymensingh Sub-station: Khagrachari
18	Preliminary yield trial of some blast resistant rice lines	• To select desirable lines having blast resistance, short duration, higher grain yield and quality grain	On-station: Mymensingh
19	Preliminary yield trial with high yielding rice lines	• To assess the yield performance of the rice lines at different locations	On-station: Mymensingh Sub-station: Sunamganj and Magura
20	Phenotypic and field screening of advanced rice mutants for higher salt tolerance	• To select desirable mutants for higher salt tolerance	On-farm: Satkhira Sadar and Shyamnagar
21	Phenotypic and field screening of dual tolerant rice lines	• To select desirable mutants for dual tolerance (salt & submergence)	On-farm: Barishal & Rangpur
22	Screening BLB tolerant rice lines	• To select desirable BLB tolerant lines	On-station: Mymensingh Sub-station: Satkhira
23	Accelerating the Genetic Gains in Rice (AGGRi) - IRRI Project: Breeding Zone Trials	• To identify the higher genetic advance and yield	Sub-station: Barishal
24	Screening ozone stress and differential tolerance of field	• To evaluate ozone tolerance and ozone sensitivity in rice varieties of	On-station: Mymensingh Sub-station: Rangpur,

Sl.	Research Title	Objective(s)	Location(s)
	grown rice (<i>Oryza sativa</i> L.) in Bangladesh with ethylenediurea (EDU)	Bangladesh	Sunamganj & Cumilla
25	Growing M ₅ generation of rice for drought tolerance	• To select drought tolerant rice lines	On-station: Mymensingh
26	Evaluation of M ₅ mutants of gamma ray irradiated local rice Tulsimala	• To select high yielding and lodging resistant mutants with short duration and grain aroma	On-station: Mymensingh
27	Growing M ₄ population of sticky rice for Hilly areas	• To select desirable mutant for stickiness	On-station: Mymensingh
28	Growing of M ₄ populations of Basmati rice for earliness and higher yield	• To select desirable mutants for earliness, grain quality and higher yield	On-station: Mymensingh
29	Screening of M ₄ population of gamma ray irradiated local rice Tulshimala	• To select high yielding and lodging resistant mutants with short duration and grain aroma	On-station: Mymensingh
30	Growing of M ₁ and M ₂ generation of Basmati rice for higher yield and earliness	• To identify high yielding and early maturing rice mutants suitable for Haor areas	On-station: Mymensingh
31	Growing M ₂ generation of rice for higher yield and earliness	• To identify high yielding and early maturing rice mutants	On-station: Mymensingh
32	Hybridization of MAGIC-62 with BRRI dhan-34/BRRI dhan-50	• To identify rice mutants for aroma	On-station: Mymensingh
33	Growing M ₂ and M ₃ generation of Kataribhog and Chinigura	• To select rice mutants with early maturity, semi-dwarf, higher yield and 'Kataribhog' & 'Chinigura' type grain quality	On-station: Mymensingh
34	Growing M ₃ generations of Black rice	• To select rice mutants having higher antioxidative activity with good phenotypic acceptability	On-station: Mymensingh
35	Growing of INGER rice lines	• Maintenance of germplasm	On-station: Mymensingh
36	Growing of M ₁ generation of Moinasail	• To developed short duration and high yielding Aman rice varieties	On-station: Mymensingh
37	Growing of M ₁ generation of Nepali Swarna	• To developed short duration and high yielding Aman rice varieties	On-station: Mymensingh
38	Growing of M ₁ generation of Kajalsail	• To developed short duration and high yielding Aman rice varieties	On-station: Mymensingh
39	Growing of M ₁ generation of Gutti Swarna	• To developed short duration and high yielding Aman rice varieties	On-station: Mymensingh
40	Evaluation of introgressed salt tolerant rice lines through phenotypic and marker-assisted selection for long slender grain	• To identify salt tolerant rice lines having long slender grain	On-station: Mymensingh
41	Evaluation of introgressed drought tolerant rice lines	• To identify drought tolerant rice lines	On-station: Mymensingh

Sl.	Research Title	Objective(s)	Location(s)
	through marker assisted selection		
42	Evaluation of introgressed dual (salinity and submergence) tolerant rice lines through marker assisted selection	• To identify dual tolerant rice lines	On-station: Mymensingh
43	Growing BC ₃ F ₅ population for drought tolerance	• To screen rice genotypes for drought tolerance and to develop abiotic stress tolerant rice varieties	On-station: Mymensingh
44	Growing of F ₁ generation rice lines for non-shattering trait (Cross Binadhan-14 with Binadhan-16)	• To introgress non-shattering trait in Binadhan-14	On-station: Mymensingh
45	Improvement of Binadhan-14 by backcrossing	• To select non-shattering grain trait and high yield performance from BC ₁ F ₁	On-station: Mymensingh
46	Screening of BC ₂ F ₂ population for rice blast resistance	• To select desirable lines having blast resistance, short duration, higher grain yield and quality grain	On-station: Mymensingh
47	Collection, isolation, identification, purification and preservation of different isolates of rice blast pathogens (Blast Kormosuchi)	• To identify the pure culture of <i>Magnaportheoryzae</i> pathotype	Hot spot area of rice blast epidemic in Bangladesh
48	Advanced yield trial of some mutants derived from Kasalath and NERICA-10	• To assess yield, duration and reactions to insect-pests and diseases over locations	On-station: Mymensingh Sub-station: Rangpur, Chapainawabganj, Magura and Ishurdi
49	Advanced yield trial of high yielding deep-water rice mutants (M ₉)	• To select higher yielding mutants with deep-water character	On-station: Gopalganj, Sunamganj On-farm: Natore, Netrokona, Habiganj and Sunamganj
50	Advanced yield trial of some mutants derives from Biroi (M ₆)	• To select mutants with lodging resistance, good grain quality and high yield potential	On-station: Mymensingh Sub-station: Nalitabari and Jamalpur
51	Screening F ₃ population derived from crossing between Binadhan-7 with Biroi	• To select high yielding, short duration, lodging resistant plant/progenies with Biroi type grains	On-station: Mymensingh
52	Growing M ₃ generations of some released varieties	• To create variability for longer seedling height, taller plants, short duration with bolder seeds and higher grain yield	On-station: Mymensingh
53	Development of Biroi type lodging resistant variety through hybridization techniques	• To introgress lodging resistant character to a lodging susceptible biotype mutant or vice-versa	On-station: Mymensingh

Sl.	Research Title	Objective(s)	Location(s)
54	Regional yield trial of high yielding NERICA mutants (M ₅)	• To assess performance over regions	Sub-station: Ishurdi, Chapainawabganj, Magura, Rangpur & Jamalpur On-station: Mymensingh, Ishurdi, Chapainawabganj, Magura, Rangpur & Jamalpur
55	Preliminary yield trial of short duration and cold tolerant rice lines suitable for Haor and Northern area	• To assess performance over regions	On-station: Mymensingh Sub-station: Rangpur & Sunamganj
56	Screening of short duration and cold tolerant rice lines	• To select desirable lines for earliness and cold tolerance	Sub-station: Sunamganj
57	Development of rice lines for higher yield short duration and cold tolerant	• To select desirable traits from crosses	On-station: Mymensingh
58	Growing of BC ₂ F ₁ generation	• To select desirable traits from BC ₁ F ₁ and cross to produce BC ₂ F ₁	On-station: Mymensingh
59	Evaluation of F ₄ & F ₅ generation	• To select desirable traits from the cross	On-station: Mymensingh
60	Evaluation of BC ₁ F ₃ generation	• To select desirable traits	On-station: Mymensingh
61	Evaluation of Jumli Mashi (M ₄) for cold tolerant	• To select and evaluate cold tolerant mutants of Boro rice	On-station: Mymensingh
62	Evaluation of M ₅ mutants of rice for salinity and drought responses through hydroponic system	• To identify salinity and drought response rice mutant suitable for saline and drought prone areas	On-station: Mymensingh
63	Evaluation of rice mutants (M ₅) for short duration, premium quality and higher yield	• To identify rice mutant suitable for short duration, premium quality and higher yield	On-station: Mymensingh Sub-station: Magura
64	Screening of F ₁ generation	• For early, high yielding boro rice variety with medium slender grains	On-station: Mymensingh
65	Growing M ₁ generation of some released rice varieties	• For early, high yielding boro rice variety with medium slender grains	On-station: Mymensingh
66	Evaluation and selection of NERICA-10 mutants (M ₄)	• To select mutants with tall plants, good grain quality and high yield potential	On-station: Mymensingh
67	Growing BC ₁ F ₄ generation derived from Kasalath and Binadhan-18	• To evaluate short duration and easy threshing characters in Kasalath mutant	On-station: Mymensingh
68	Growing of BC ₁ F ₄ generation derived from Laksmidigha and Binadhan-18 cross	• To evaluate for short duration and higher yield characters in Laksmidigha for growing in Boro season	On-station: Mymensingh
69	Growing M ₁ generation of	• To develop early, high yielding Aus	On-station: Mymensingh

Sl.	Research Title	Objective(s)	Location(s)
	some released Aus varieties	rice variety	
70	Estimation of breeding values and stability parameters of elite rice breeding lines for yield under favorable conditions	• To identify high yielding and stable genotypes under favorable conditions; and to estimate breeding values to make selection decisions as parents in breeding programs	Sub-station: Nalitabari and Jamalpur
71	Breeding for premium quality rice	• To develop early maturing and high yielding rice lines with • superior grain quality	On-station: Mymensingh
72	Development of favorable Boro Rice	• To develop with better plant type with major insect, disease resistance and high yielding rice lines	On-station: Mymensingh
73	Evaluation of elite rice genotypes for fertility restoring and maintaining behaviors using microsatellite markers and test crosses (Source nursery)	• To identify stable maintainers and restorer lines for CW-CMS lines	On-station: Mymensingh
74	Development of wild abortive type cytoplasmic male sterility system through wide hybridization	• To develop WA-CMS line in the genetic background of elite lines	On-station: Mymensingh
75	Preliminary yield trial of M ₇ rice mutants	• To develop variety with higher yield and heat tolerance	On-station: Mymensingh Sub-station: Magura & Chapainawabganj
76	Growing M ₂ population of Binadhan-17, HTM-1, HTM-3 and HTM-9	• To develop mutants with earliness, premium quality and higher yield	On-station: Mymensingh
77	Preliminary yield trial with one high yielding wheat mutants	• To assess performance over regions	On-station: Mymensingh Sub-station: Ishurdi, Chapainawabganj & Rangpur
78	Growing of BC ₁ F ₁ generation of Binagom-1 cross with BARI Gom-33	• To select desirable traits from F₁ and cross to produce BC₂F₁	On-station: Mymensingh
79	Growing of BC ₂ F ₁ generation of Binagom-1 cross with BARI Gom-33	• To select desirable traits from BC₁F₁ and cross to produce BC₂F₁	On-station: Mymensingh
80	On-station and on-farm yield trial with F ₈ generation of rapeseed (<i>B. rapa</i> var. <i>toria</i>)	• To select desirable mutants with early maturity	Sub-station: Ishurdi, Nalitabari, Rangpur, Magura, Jamalpur On-farm: Rangpur, Manikganj & Tangail
81	Regional yield trial with M ₇ rapeseed (<i>B. napus</i>) mutants	• To select desirable mutants with early maturity & higher seed yield	On-station: Mymensingh Sub-station: Nalitabari, Rangpur, Jamalpur and Magura
82	Preliminary yield trial with M ₆ rapeseed (<i>B. rapa</i> var. <i>toria</i>)	• To select desirable mutants with early maturity & higher seed yield	On-station: Mymensingh Sub-station: Nalitabari,

Sl.	Research Title	Objective(s)	Location(s)
	<i>toria</i>) mutants		Rangpur, Jamalpur and Magura
83	Screening mustard mutants for salinity tolerance at seedling and reproductive stages in hydroponic culture	• To identify mustard mutants for salinity tolerance	On-station: Mymensingh
84	Screening rapeseed (<i>B. napus</i>) mutants for water logging tolerance at seedling stage	• To identify rapeseed mutants for submergence tolerance	On-station: Mymensingh
85	Evaluation of rapeseed mutants/lines through phenotypic and biochemical analysis	• To identify mustard lines having high oil content and low erucic acid	On-station: Mymensingh
86	Screening of segregating population of RM-005	• To bring homogeneity of RM-005 mutant with desirable yield attributes	On-station: Mymensingh
87	Screening M5 population of rapeseed mutants	• To select early maturing lines with desirable yield attributes	On-station: Mymensingh
88	Screening F5 generation of rapeseed mutants	• To select early maturing lines with desirable yield attributes	On-station: Mymensingh
89	Screening F4 generation of rapeseed mutants	• To select early maturing lines with desirable yield attributes	On-station: Mymensingh
90	Screening M3 population of rapeseed mutants	• To select early maturing lines with desirable yield attributes	On-station: Mymensingh
91	Screening in F2 population of rapeseed mutants	• To select early maturing lines with desirable yield attributes	On-station: Mymensingh
92	Screening M2 population of rapeseed mutants	• To select early maturing lines with desirable yield attributes	On-station: Mymensingh
93	Growing M ₁ generation of rapeseed mutants	• To create genetic variability regarding earliness	On-station: Mymensingh
94	Growing M ₁ population of rapeseed mutants (Tori-7)	• To develop <i>Alternaria</i> blight disease tolerant and high yielding rapeseed lines	On-station: Mymensingh
95	Crossing Binasarisha-9 with BARI Sarisha-14, 17 & 18	• To develop early maturing and high yielding rapeseed lines	On-station: Mymensingh
96	Growing F ₁ population of rapeseed	• To develop yellow seeded, early maturing and high yielding rapeseed lines	On-station: Mymensingh
97	On-farm and on-station trial with some M ₈ mutants of groundnut	• To assess performance over location	Sub-station: Rangpur, Khagrachari & Ishurdi On-farm: Rangpur, Khagrachari and Ishurdi
98	Preliminary yield trial with some F ₇ mutants of groundnut	• To assess performance over location	On-station: Mymensingh Sub-station: Rangpur, Khagrachari & Ishurdi
99	Screening F ₆ & F ₄ populations for long and bigger pods with 3-4 kernels	• To select populations with long and bigger pods with 3-4 kernels	On-station: Mymensingh

Sl.	Research Title	Objective(s)	Location(s)
100	Screening F ₅ populations for long and bigger pods with 3-4 kernels	• To select populations with long and bigger pods with 3-4 kernels	On-station: Mymensingh
101	Maintenance of groundnut mutant germplasm	• To maintain the mutant germplasm	On-station: Mymensingh
102	On-station and on farm yield trial with promising M ₇ sesame mutants	• To select mutants for improved yield components, higher seed yield and earliness	Sub-station: Ishurdi, Magura & Chapainawabganj
103	Regional yield trial with promising M ₅ sesame mutants	• To select mutants for improved yield components, higher seed yield and earliness	Sub-station: Rangpur, Ishurdi, Magura, Satkhira & Chapainawabganj
104	Preliminary yield trial with promising M ₅ sesame mutants	• To select mutants for improved yield components, higher seed yield and earliness	Sub-station: Ishurdi & Jamalpur
105	Screening of sesame mutants for water logging tolerance at seedling and reproductive stages	• To identify sesame mutants for water logging tolerance	On-station: Mymensingh
106	Selection of sesame genotypes for water logging tolerance	• To identify water logging tolerant sesame lines	On-station: Mymensingh
107	Screening M ₄ and M ₅ population of sesame	• To select early maturing lines with desirable yield attributes	On-station: Mymensingh Sub-station: Ishurdi and Magura
108	Screening M ₃ population of sesame	• To select early maturing lines with desirable yield attributes	Sub-station: Ishurdi and Magura
109	Growing M ₁ generation of sesame	• To create genetic variability regarding earliness	On-station: Mymensingh Sub-station: Magura
110	Crossing Binatil-1 with Binatil-2 & 3	• To develop early maturing, signal husk and high yielding sesame lines	On-station: Mymensingh
111	On-station and on-farm yield trial with selected M ₇ soybean mutants	• To select early maturing and high yielding mutants with short plant height	On-station: Mymensingh Sub-station: Magura & Rangpur On-farm: Noakhali & Chandpur
112	Regional yield trial with selected M ₆ soybean mutants	• To select early maturing and high yielding mutants with short plant height	On-station: Mymensingh Sub-station: Magura & Rangpur On-farm: Noakhali, Laxmipur & Chandpur
113	Screening salt tolerant soybean genotypes under hydroponic culture	• To assess overall performance in respect of earliness, seed yield and salinity tolerance	On-station: Mymensingh
114	Screening drought tolerant soybean genotypes under hydroponic culture	• To assess overall performance in respect of earliness, seed yield and drought tolerance	On-station: Mymensingh
115	Molecular characterization of soybean genotypes for	• To identify drought tolerant soybean lines	On-station: Mymensingh (Lab work)

Sl.	Research Title	Objective(s)	Location(s)
	drought tolerance		
116	Screening M ₄ & M ₅ population of soybean	• To select desirable mutants in respect of early maturity	On-station: Mymensingh
117	Screening M ₃ population of soybean	• To select desirable mutants in respect of yield and maturity	On-station: Mymensingh
118	Screening M ₂ population of soybean	• To select desirable mutants in respect of yield and maturity	On-station: Mymensingh
119	Growing M ₁ population of soybean	• To create variability for selection of desirable mutants in respect of earliness and seed yield	On-station: Mymensingh
120	Maintenance germplasm of soybean	• To maintain breeding materials for future uses	On-station: Mymensingh
121	Evaluation of sunflower germplasm for desirable yield attributes	• To assess earliness, yield and other morpho-physiological attributes	On-station: Mymensingh Sub-station: Jamalpur
122	Preliminary yield trial with promising M ₄ sunflower mutants	• To select mutants for higher seed yield and earliness	On-station: Mymensingh, Nalitabari, & Satkhira
123	Screening M ₄ generation of sunflower	• To select early maturing lines with shorter plants having droopy heads and desirable yield attributes	On-station: Mymensingh
124	Screening M ₂ generation of sunflower	• To select early maturing lines with shorter plants having droopy heads and desirable yield attributes	On-station: Mymensingh
125	Growing M ₁ populations of sunflower	• To create genetic variability for dwarf plant type with higher seed yield potential	On-station: Mymensingh
126	Evaluation of sunflower germplasm under salinity stress	• To assess level of tolerances under high salinity stresses	On-station: Mymensingh
127	Maintenance of sunflower germplasm	• To maintain breeding materials for future uses	On-station: Mymensingh
	On farm trial of promising summer mungbean mutants	• To assess overall performance of the mutants for earliness, disease tolerance and seed yield	Sub-station: Ishurdi, Magura & Natore
	Preliminary yield trial of M ₅ population of mungbean	• To select desirable mutants for earliness, higher seed yield and disease tolerance	Sub-station: Ishurdi and Magura
	Growing of M ₃ generation of mungbean for synchronous pod maturity	• To select desirable mutants	On-station: Mymensingh Sub-station: Ishurdi
	Growing of M ₁ generation of mungbean	• To select desirable mutants for earliness, higher seed yield and disease tolerance	Sub-station: Ishurdi
	Screening of some mungbean genotypes in hydroponic culture for salt tolerance	• To identify salt tolerant mungbean lines	On-station: Mymensingh
	Evaluation of summer	• To confirm the synchronous pod	Sub-station: Magura

Sl.	Research Title	Objective(s)	Location(s)
	mungbean lines for synchronous pod maturity with yield	maturity with yield	and Barishal
	On-farm and on-station yield trial with some promising mutants	• To assess the yield potential of the lines on farmer's field condition	Sub-station: Ishurdi, Chapainawabganj, Magura On-farm: Magura, Chapainawabganj, Faridpur and Natore
	Advanced yield trial of some promising mutants of lentil	• To assess the yield potential of the mutants	Sub-stations: Ishurdi, Magura and Chapainawabganj
	Preliminary yield trial of some promising mutants of lentil	• To assess the yield potential of the accessions	Sub-station: Ishurdi, Magura and Chapainawabganj
	Evaluation of lentil mutants for root and shoot traits using hydroponic and pot culture	• To identify early vigours mutants for using in drought screening	On-station: Mymensingh
	Screening of drought tolerance using polyethylene glycol in hydroponic system and pot culture (Collaboration with Agri. Eng. Division)	• To identify drought tolerant mutant lines	On-station: Mymensingh
	Screening of nutrient use efficient lentil genotypes in hydroponic system for Mo, Zn and B (Collaboration with Soil Sci. Div.)	• To identify nutrient use efficient genotypes	On-station: Mymensingh
128	Molecular characterization of lentil mutants	• To characterize the selected mutants	On-station: Mymensingh
129	Screening of some lentil genotypes for nutritional quality	• To characterize the selected mutants	On-station: Mymensingh
130	Screening of lentil mutants for foot rot/collar rot (Collaboration with Plant Pathology Division)	• To select tolerant line(s) for collar rot/foot rot	On-station: Mymensingh
131	Screening of M ₂ /M ₃ /M ₄ population of lentil	• To select early maturing, high yielding lentil mutant lines	On-station: Mymensingh Sub-station: Magura and Ishurdi
132	Growing of M ₁ population of lentil	• To select early maturing, high yielding lentil mutant lines	On-station: Mymensingh
133	Maintenance of germplasm	• To maintain the lentil germplasm	Sub-station: Magura and Ishurdi
134	On-farm and on-station yield trial with some mutants	• To assess the yield potential of the accessions	Sub-station: Chapainawabganj, Magura, Ishurdi, Barishal On-farm: Magura, Natore
135	Screening of M ₂ /M ₃ /M ₄	• Selection of high yielding early	Sub-station, Magura

Sl.	Research Title	Objective(s)	Location(s)
	population of grasspea	mutants	
136	Growing of M ₁ generation of grasspea	• To create variability for selection of earliness with higher yield and low ODAP	On-station: Mymensingh
137	Screening of grasspea mutant lines for salt tolerance in hydroponic culture	• To assess overall performance of the mutants in respect of earliness, seed yield and salt tolerance	On-station: Mymensingh
138	On-station and on-farm yield trial with some mutants of blackgram	• To assess the yield potential of the lines on farmer's field condition	On-station: Mymensingh, Chapainwabgonj, Gopalganj, Magura
139	Advanced yield trial of some promising mutants of blackgram	• To assess the yield potential of the accessions	Sub-station: Chapainwabgonj, Magura and Ishurdi
140	Screening of M ₂ / M ₃ / M ₄ population of blackgram	• Selection of high yielding mutants with earliness	On-station: Mymensingh
141	Growing of M ₁ generation of blackgram for winter and summer type	• To create variability for selection of earliness and higher yield	On-station: Mymensingh and Magura
142	Screening of M ₂ generation of blackgram for summer type	• To select high yielding, early maturing with synchronous maturity and erect plant type	On-station: Mymensingh
143	Advanced yield trial of chickpea mutants	• To assess yield and yield contributing characters and select the promising mutant(s)	Sub-station: Ishurdi, Chapainwabgonj and Magura
144	Growing of M ₄ population of chickpea	• To select desirable mutants for bolder seed size, higher seed yield and disease tolerance	Sub-station: Magura and Ishurdi
145	Screening of M ₃ population of chickpea	• To select desirable mutants for bolder seed size, higher seed yield and disease tolerance	Sub-station: Magura and Ishurdi
146	Growing of M ₁ generation of Chickpea	• To create variability for selection of desirable mutants	Sub-station: Magura and Ishurdi
147	Germplasm collection and evaluation of pigeon pea	• To assess yield potential and other morpho-physiological attributes	On-station: Mymensingh
148	Growing of M ₂ generation of pigeon pea	• To select desirable mutants for shorter plant height, higher yield and disease tolerance	On-station: Mymensingh
149	Germplasm collection and evaluation of garden pea	• To assess yield potential and other morpho-physiological attributes	On-station: Mymensingh
150	Growing of M ₃ generation of garden pea	• To select desirable mutants for higher yield and disease tolerance	On-station: Mymensingh
151	Growing of M ₂ generation of garden pea	• To select desirable mutants for higher yield and disease tolerance	On-station: Mymensingh
152	Regional yield trial with some M ₈ mutants of JRO-524	• To assess maturity, fiber and stick yield over locations	On-station: Mymensingh Sub-station: Magura and Rangpur
153	Growing of M ₁ generation of	• To create genetic variability in the hill	On-station: Mymensingh

Sl.	Research Title	Objective(s)	Location(s)
	gamma ray irradiated hill cottons	cottons for earliness and higher yield	Regional research station: Sreepur, Gazipur.
154	Collection of rice, pulse, oil seed, vegetables, spices germplasm	• To enrich the number of germplasms of BINA Gene Bank	Rice and other crop germplasm from char area (Sirajganj, Lalmonirhat, Chandpur, Jamalpur, Cumilla) Rice other crop germplasm from hill area (Khagrachari, Bandarban, Rangamati) Rice other crop germplasm from haor area (Sunamganj, Netrokona, Cumilla)
155	Growing of collected and preserved germplasm for seed multiplication and conservations	• To preserve PGR material	On-station: Mymensingh
156	Morphological characterization of Okra germplasm	• To characterize the selected germplasm	On-station: Mymensingh
157	Agro morphological characterization of Bangladeshi aromatic rice germplasm	• To characterize the aromatic rice germplasm	On-station: Mymensingh
158	Hydroponic Screening of exotic and local germplasm at seedling and reproductive stage for salinity stress	• To identify rice germplasm for salinity tolerance	On-station: Mymensingh
BIOTECHNOLOGY DIVISION			
159	Expression and detection of salinity and drought induced genes through RT-PCR (Reverse transcriptase polymerase chain reaction)	• To identify salinity and drought induced novel genes of rice	Biotech/Tissue culture Lab
160	Cloning of two salinity and drought tolerant genes <i>OsMGD</i> and <i>OsGGT</i> gene from FR13A through Gateway cloning technology	• To prepare gene constructs of <i>OsMGD</i> and <i>OsGGT</i> genes	Biotech/Tissue culture Lab
161	Transfer of <i>OsDREB</i> and <i>OsMST6</i> genes in HYV rice	• To develop salinity and drought tolerant transgenic rice lines	Biotech Lab
162	Transfer of <i>OsDREB</i> , <i>OsNHX1/OsNHX2</i> and <i>OsMST6</i> genes in elite tomato cultivars through <i>Agrobacterium</i> mediated gene	• To develop salinity and drought tolerant tomato lines	Biotech Lab

Sl.	Research Title	Objective(s)	Location(s)
	transformation		
163	Transfer of <i>OsNHX1/OsNHX2</i> genes in elite mustard cultivars through <i>Agrobacterium</i> mediated gene transformation	• To develop salinity tolerant mustard lines	Biotech lab
164	Transfer of salinity and drought tolerant genes into rice through <i>Agrobacterium</i> mediated gene transformation	• To develop salinity and drought tolerant transgenic rice lines	Biotech lab
165	Production of doubled haploids line through anthers culture from rice F ₁ hybrids	• To develop homozygous double haploid line with stress tolerant, high yield, earliness, fine grain and aroma through anthers culture	Biotech Lab
166	Development of lodging resistance and high yield Premium quality rice variety through irradiation and somaclonal variation on embryogenic callus	• To investigate the extent of variability in embryogenic Katarivogh rice calli	Biotech lab
167	Mutation induced by ethylmethanesulphonate (EMS) from embryogenic calli for the development of stress tolerant and high yielding rice lines	• To investigate the extent of variability on embryogenic rice calli and subsequent plant regeneration	Biotech Lab
168	Development of stress (Salt and drought) tolerant and high yield rice variety through irradiation and somaclonal variation on embryogenic callus	• To investigate the extent of variability in embryogenic rice calli stress tolerant rice lines	Biotech Lab
169	Improvement of high value Sweet pepper (<i>Capsicum annum L.</i>) through <i>in vitro</i> culture and nuclear technique	• To develop year round, attractive sweet pepper variety	Biotech/Tissue culture Lab
170	Preliminary yield trials of some selected tidal tolerant high yielding rice line	• To evaluate rice lines for tidal submergence tolerant for tidal flood prone areas	Sub-station: Barishal On-station: Mymensingh
171	Preliminary yield trials of some selected tidal tolerant high yielding rice line	• To evaluate high yield and short duration rice variety	On-station: Mymensingh
172	Screening of some selected rice lines for salt tolerance and high yield	• To evaluate salt tolerant, high yield, early maturing rice line for coastal region.	On-station: Mymensingh
173	Improvement of lodging resistance and high yield premium quality rice variety through marker assisted	• To develop premium quality fine grain rice variety	On-station: Mymensingh

Sl.	Research Title	Objective(s)	Location(s)
	selection		
174	On farm yield trial of a high yielding elite rice mutants in Boro season.	• Development of high yielding elite early matures rice variety	On-station: Mymensingh.
175	Evaluation of tissue culture generated rice line for yield and duration	• To evaluate rice line for yield and yield contributed character	On-station: Mymensingh
176	Production of F ₁ materials For future anther cultures and high yield stress tolerant, diseases free premium quality rice variety development through MAS/MABC techniques	• To making F ₁ materials	On-station: Mymensingh
177	Evaluation of early maturing and high yielding elite rice mutants	• To assess yield potentiality and growth duration in different regions of Bangladesh for releasing as variety.	On-station: Mymensingh, Jamalpur, Rangpur, Cumilla and Ishurdi
178	Genotype Screening and selection of using interconnected breeding population (F ₃ & BC ₁ F ₃) through Flash flood and water stagnant	• To develop Submergence tolerant mutant line and crossing materials	On-station: Mymensingh
179	Introgression of major <i>SUB1</i> QTL into HYV rice varieties for submergence tolerance genotypes (BC ₁ F ₃)	• To introgress <i>qSUB1</i> QTL to HYV genotypes	On-station: Mymensingh.
180	Marker analysis and confirmation of BC ₁ F ₂ using <i>qSUB1A</i> based primers	• To confirmation of BC ₁ F ₂ at molecular level	Biotech lab, BINA
181	Screening of cold tolerance at seedling stage in <i>Indica</i> rice under control cold environments	• To develop cold tolerant rice line	On-station: Mymensingh
182	Introgression of major cold tolerant QTL through marker-assisted backcrossing	• To introgress cold tolerant genes/QTL	On-station: Mymensingh.
183	Marker assay with confirmation of cold tolerant using <i>qCT</i> based primers	• To confirmation of F ₁ at molecular level	Biotech Lab
184	Regional yield trails on submergence tolerant rice and cold tolerant rice	• Evaluation of genotypes in the cold prone environments under the management practices of researchers • To validate the yield performance of short duration varieties	On-station: Mymensingh Sub-station: Ishurdi (On-farm & On-station), On farm: Rangpur region and Jamalpur
185	Screening and selection of	• To develop heat tolerant mutant line	On-station: Mymensingh

Sl.	Research Title	Objective(s)	Location(s)
	heat tolerant wheat genotypes		
186	Characterization of BINA developed groundnut	• To characterize and to detect the extent of diversity of BINA developed crop varieties	Biotech lab
187	Evaluation of PGPR bacterial strains for enhancing growth and yield of rice	• To find effective bacterial strains to use them as PGPR for enhancing growth and yield of rice	Research field, BINA
188	Evaluation of probiotics bacterial strains against wheat blast	• To find effective bacterial strains to use as bio control agent	Potted soil, BINA, Mymensingh
189	Evaluation of As (Arsenic) tolerant bacteria for reduction of As uptake in rice in As contaminated soil	• To select most effective As tolerant strains for reducing As uptake in rice in As contaminated soil	Research field, BINA
190	Evaluation of common bio-fertilizers in different locations	• To evaluate the performance of common bio-fertilizers on growth and yield of lentil, grass pea and pea	Magura, Ishurdi and Gopalganj sub-stations
HORTICULTURE DIVISION			
191	On-farm and on-station trial of Bottle gourd (M ₈) mutants	• To select desirable mutants of bottle gourd for desirable size, shape, color with improved nutritional quality and high yield potential	On-station: Mymensingh Sub-stations: Cumilla, Ishurdi, Jamalpur and BRRC, Gazipur
192	On-farm and on-station trial of M ₈ mutants of eggplant	• To select shoot and fruit borer tolerant genotypes and phomopsis blight tolerant genotypes with high yield potential & also increase the nutritional quality	On-station: Mymensingh Sub-stations: Cumilla, Ishurdi, Jamalpur and BRRC, Gazipur
193	Advanced yield trial of elite M ₆ mutants of Carrot	• To select desirable mutants of carrot for yield potential, desirable size (deep rooted), shape and color • To select desirable mutants of carrot for quality seed production	On-station: Mymensingh Sub-stations: Ishurdi, Khagrachari, Rangpur and BRRC, Gazipur
194	Observational yield trial of promising cherry Tomato lines	• To identify the suitable lines based on yield potentiality, size, shape and nutritional quality	On-station: Mymensingh Sub-stations: Rangpur, Magura and BRRC, Gazipur
195	Screening of M ₃ generation of Okra	• To screen okra mutants on the basis of soft fibreness and tolerant to yellow mosaic virus • To observe the off-season potentiality of okra mutants	On-station: Mymensingh and BRRC, Gazipur
196	Screening of M ₃ generation of Country Bean (cultivar - sitakundo)	• To select desirable mutants for earliness, yield potentiality, tolerant to insects and diseases	On-station: Mymensingh and BRRC, Gazipur
197	Growing of M ₂ generation of Aroids (Mukhikachu)	• To create genetic variability for desirable characters	On-station: Mymensingh

Sl.	Research Title	Objective(s)	Location(s)
198	Growing of M ₂ generation of Cucumber	• To select mutants with desirable size, shape and color with improved nutritional quality and high yield potential	On-station: Mymensingh
199	Growing of M ₁ generation of Tomato	• To create genetic variability for desirable characters	On-station: Mymensingh
200	Performance of grafted tomato with BINA released varieties in submergence condition	• To see the performance of released varieties through vegetable grafting at submergence level	On-station: Mymensingh
201	Growing of M ₂ generation of Eggplant	• To create genetic variability for desirable characters	On-station: Mymensingh and BRRC, Gazipur
202	Growing of M ₁ generation of Eggplant (Green color)	• To create genetic variability for high yield potential and improve nutritional quality	On-station: Mymensingh
203	Radio-sensitivity test and growing of M ₁ generation of Bitter gourd	• To create genetic variability for desirable characters (yield, shape, size and lower number of seeds)	On-station: Mymensingh
204	Radio-sensitivity test and growing of M ₁ generation of off-season pointed gourd	• To create genetic variability for high yield potential, desirable size, shape and seedless character	On-station: Mymensingh
205	Growing of M ₁ generation of cucurbits through pollen irradiation techniques	• To create variability through pollen irradiation	On-station: Mymensingh
206	Maintenance of BINA released Tomato varieties	• To maintain the varietal purity and produce breeder seeds	On-station: Mymensingh Sub-station: Magura, Rangpur and BRRC, Gazipur (Binatomato-11 and Binatomato-12); On-station: Mymensingh Sub-station: Cumilla, Magura, Rangpur, Khagrachari, Nalitabari and BRRC, Gazipur (Binatomato-10)
207	Collection and screening of high value and minor spices from home and abroad	• To collect, screening and evaluate the germplasm (Capsicum, cumin, black pepper, clove, cardamom, fennel, dill, mint, saffron and plum) for generating mutants and creating advanced lines with high yield and other desirable characters	On-station: Mymensingh and BRRC, Gazipur
208	Advanced yield trial of M ₆ mutants of Onion	• To observe the performance of different onion mutants • To select promising mutant(s) for desirable characters	On-station: Mymensingh Sub-station: Magura, Ishurdi and Rangpur
209	Advanced yield trial of M ₆ mutants of Garlic	• To assess the performances of garlic mutants for high yield potential and shelf life	On-station: Mymensingh Sub-station: Magura and Rangpur

Sl.	Research Title	Objective(s)	Location(s)
210	Preliminary yield trial of Ginger mutants (M ₁ V ₅)	• To select rhizome rot tolerant mutants with high yield potential	On-station: Mymensingh Sub-station: Khagrachari
211	Observational yield trial of M ₄ mutants of black cumin	• To select desirable mutants based on high yield potential and short duration	On-station: Mymensingh Sub-station: Nalitabari, Sherpur
212	Observational trial of two exotic chili germplasm	• To select the promising chili line	On-station: Mymensingh Sub-station: Magura, Rangpur and Cumilla
213	Growing of M ₃ generation of Sweet pepper	• To select the high yielding, nutritionally improved desirable mutants of Sweet pepper • To standardize the production technology of sweet pepper	On-station: Mymensingh
214	Growing of M ₁ V ₂ generation of Turmeric	• To screen the desirable lines based on high yield potentiality, flesh color, and cooking qualities	On-station: Mymensingh
215	Growing of M ₁ generation of onion through gamma radiation and EMS	• To create variability for development of abiotic and biotic stress tolerant mutants of onion with better storage quality	On-station: Mymensingh
216	Improvement of onion genotypes through hybridization with bumble bee/honey bee for high yield potentiality and better storability	• To create diverse source of population for high yield potential with better storage capacity	On-station: Mymensingh
217	Screening of some chili genotypes against waterlogging condition	• To identify the chili genotype for waterlogging tolerance	On-station: Mymensingh
218	Crossing of Binamorich-1 with BARI Morich-1, Bindumorich and Jamalpur local	• To improve Binamorich-1 in respect of pungency level	On-station: Mymensingh
219	Growing of M ₁ generation of Black pepper	• To create variability of black pepper for high yield potential, good aroma and flavor	On-station: Mymensingh
220	Growing of M ₁ generation of Cumin	• To create variability for the development of high yielding mutants with disease tolerance	On-station: Mymensingh
221	Radio-sensitivity test and growing of M ₁ generation of chili	• To create genetic variability for desirable characters	On-station: Mymensingh
222	Radio-sensitivity test and growing of M ₁ generation of Coriander	• To create desirable mutants with high yield (leaves), year round cultivation and delay flowering	On-station: Mymensingh
223	Growing of M ₁ generation of chili (local cultivar khalkhulia)	• To create variability for high yield potential & good pungency	On-station: Mymensingh

Sl.	Research Title	Objective(s)	Location(s)
224	Boron application using optimizing dose and time of foliar application for increasing yield of Chili	To find out the effect of different dose of boron and time of application and recommended one(s)	On-station: Mymensingh
225	Maintenance of Binamorich-1, Binarashun-1 Binahalud-1 and Binamorich-2	To produce breeder seeds of these varieties	Binamorich-1 and Binamorich-2: On-station: Mymensingh, Sub-station: Magura, Barisal, Rangpur, Nalitabari, Jamalpur and BRRC, Gazipur Binarashun-1: On-station: Mymensingh, Sub-station: Magura, Chalanbil (Natore), Rangpur and BRRC, Gazipur Binahalud-1: On-station: Mymensingh Sub-station: Magura, Rangpur, Nalitabari, Jamalpur, Satkhira, Barisal, Khagrachari and BRRC, Gazipur
226	Collection and screening of fruits germplasm	- Collection of seeds/ propagating materials of different germplasm of fruits from different regions of the country - Screening the fruits germplasm based on high yield potential, adaptability, shape, size, color, taste	On-station: Mymensingh and BRRC, Gazipur
227	Screening of M ₁ V ₁ population of Sweet orange, Sapota, Jamun and Pomegranate suitable for drought and saline areas of Bangladesh	To screen and evaluate the desirable mutants for developing varieties with high yield potential suitable for saline and drought	On-station: Mymensingh and BRRC, Gazipur
228	Management practices for high yield in offseason production of BINA lemon (Binalebu-1, Binalebu-2 & Binalebu-3) and guava varieties	To optimize the suitable management practices for offseason production with high yield of lemon and guava	On-station: Mymensingh and BRRC, Gazipur
229	Propagation practices under poly-tunnel for off-season sapling production of fruits (Mango, guava, litchi and ber)	To select the suitable propagating methods and sapling management practices under poly-tunnel for successful sapling production of fruits	On-station: Mymensingh and BRRC, Gazipur
230	Standardization of propagating methods of	To standardize the suitable propagation techniques of Litchi,	On-station: Mymensingh and BRRC, Gazipur

Sl.	Research Title	Objective(s)	Location(s)
	Sapindaceae family fruits	Rambutan, Longan and Langsat	
231	Radio-sensitivity test and growing of M ₁ generation of Cashewnut and Coffee (<i>Coffea arabica</i> and <i>Coffea robusta</i>)	• To create genetic variability through induced mutation with gamma irradiation and EMS	On-station: Mymensingh and BRRC, Gazipur
232	Standardization of propagating methods of Cashew nut and Coffee (<i>Coffea arabica</i> and <i>Coffea robusta</i>)	• To standardize the suitable propagation techniques for Cashew nut and Coffee	BRRC, Gazipur
233	Effects of leaf retention and distance of air layering in branch for three cultivars of Guava	• To validate the optimum distance of air layering in branch as well as with or without leaves for successful air layering of guava • To evaluate the successful layered plants with high yield potential, sweetness and color	On-station: Mymensingh and BRRC, Gazipur
234	Collection and evaluation of high value exotic fruits germplasm	• Collection and screening of seeds/ propagating materials of different germplasm of high-value exotic fruits (Avocado, persimmon, longan, coffee, tropical apple, g-9 banana, md-2 pineapple, temperate cherry, soft seeded pomegranate, cashew nut, grape, peach, chinese mandarin, rambutan, dragon fruits, langsat, pumello (yellow), mulberry, date palm, mango (alfonso, arwin, zinhong), seedless litchi, Thai jackfruit etc) based on sweetness, size, shape, color, dwarfness and high yield potential	On-station: Mymensingh and BRRC, Gazipur
235	Effect of bagging on quality fruit production of guava and pomegranate	• To identify the suitable bagging method for quality fruit production	On-station: Mymensingh
236	Integrated approach of bagging and 'color win' (Color bringing hormone) on color development and quality fruits of Sweet orange	• To identify the best approach for color development and quality fruit production of sweet orange	On-station: Mymensingh
237	Growing of M ₁ generation of Dragon fruit	• To create genetic variability and develop desirable mutants' suitable off-season production and salinity tolerance	On-station: Mymensingh and BRRC, Gazipur
238	Assessing propagating methods and multiplication of Binalebu-1, Binalebu-2 and Binalebu-3	• To see the suitable method for propagation of Binalebu-1, Binalebu-2 and Binalebu-3 as well as multiplication for extend the varieties	On-station: Mymensingh Sub-station: Cumilla, Magura, Sherpur, Jamalpur, Barishal,

Sl.	Research Title	Objective(s)	Location(s)
		all over the country	Khagrachari and BRRC, Gazipur
239	Collection, evaluation and improvement of indigenous Ber (<i>Zyzyphus mauritiana</i>) germplasm	To select germplasm with desirable traits like high yield, short duration, early fruit bearing, higher edible portion, best pickling quality and longer shelf life	On-station: Mymensingh; Sub-station: Nalitabari, Sherpur
240	Performance of fruits, flowers, vegetables, spices and medicinal plants for roof top gardening	To select suitable fruits, flowers, vegetables, spices and medicinal plants for rooftop gardening for year round supply of fresh produce and effective utilization of space	Roof top, Horticulture Divisions, Mymensingh
241	Growing of M ₁ V ₂ and M ₁ V ₃ generation of the collected Gladiolus germplasm	To develop gladiolus variety with various floret colours, long spikes with higher number of florets and longer vase life	On-station: Mymensingh and BRRC, Gazipur
242	Growing of M ₁ V ₂ generation of Rose	To develop rose variety with attractive flower colours, flower yield and longer vase life	On-station: Mymensingh
243	Rapid propagation of Chrysanthemum using plant growth regulators	- To standardize the planting materials for rapid propagation using herbaceous cutting, - To study the influence of different media and growth regulators on rooting of chrysanthemum	On-station: Mymensingh
244	Radio sensitivity test and growing of M ₁ seedlings of Chrysanthemum	To develop mutant chrysanthemum variety with various attractive flower colors and longer vase life	On-station: Mymensingh
245	Collection and screening of Rose, China-rose, Chrysanthemum, Gladiolus, Adenium, Lilium, Tulip, Marigold, Tube-rose and Gerbera germplasm from home and abroad	To develop suitable flower varieties with attractive flower colours, flower yield and longer vase life	On-station: Mymensingh
246	Shelf-life extension of export quality 'Himsagar' mango using gamma irradiation	To determine optimum dose of gamma irradiation for extension shelf life and quality of mango cv. Himsagar	Postharvest Laboratory, Horticulture Divisions
247	Vase life extension of Gladiolus and Rose using different vase solutions	To find out a suitable preservative for longer vase lives of gladiolus and rose	Postharvest Laboratory, Horticulture Divisions
248	Effect of gamma radiation on postharvest storage life and quality of onion bulbs under ambient condition	To determine optimum dose of gamma irradiation to prolong shelf life of onion bulbs under ambient condition	Postharvest Laboratory, Horticulture Divisions
249	Shelf life extension of banana cv. 'Amritosagar' using gamma irradiation	To determine optimum dose of gamma irradiation for extension of shelf life and quality of banana cv. 'Amritosagar'	Postharvest Laboratory, Horticulture Divisions

Sl.	Research Title	Objective(s)	Location(s)
250	Enhancing postharvest storage life of export quality pointed gourd using gamma irradiation	• To determine optimum dose of gamma irradiation for extension storage life and quality of pointed gourd	Postharvest Laboratory, Horticulture Divisions
251	Extending the shelf life of litchi (<i>Litchi chinensis</i>) fruit through integrated approach of surface coating and gamma irradiation	• To extend the shelf life of litchi fruit with integrated treatments of NaCl solution, wax coating and gamma radiation	Postharvest Laboratory, Horticulture Divisions
252	Shelf life enhancement of Mango through integrated approach of hot water treatment, gamma irradiation and surface edible coating	• To enhance shelf life of mango using in combination with hot water treatment, gamma irradiation and edible coating	Postharvest Laboratory, Horticulture Divisions
253	Effect of gamma radiation to prevent enzymatic browning of Burmese grape (Lotkon) at postharvest	• To see the effect gamma radiation for preventing enzymatic browning of Burmese grape • To identify the optimum dose of gamma irradiation	Postharvest Laboratory, Horticulture Divisions
254	Microproragation of Ginger	• To produce disease free plantlets • To produce rhizome rot tolerant variety of ginger	Tissue culture laboratory, Horticulture divisions
255	<i>In Vitro</i> regeneration of Gladiolus from the callus through the culture of corm slice	• To study the effects of growth regulators for <i>in vitro</i> propagation of gladiolus and mass production of disease-free plantlets	Tissue culture laboratory, Horticulture divisions
256	<i>In vitro</i> propagation of Tomato from the callus through the culture of cotyledon	• To develop the regeneration protocol of BINA released varieties for use in gene transfer technology	Tissue culture laboratory, Horticulture divisions
257	<i>In vitro</i> regeneration of Mint and Guava using different growth regulators from shoot tip	• To study the suitable concentration of growth regulators for <i>in vitro</i> regeneration of mint	Tissue culture laboratory, Horticulture divisions
258	Development of hybrid variety of Sweet gourd and Tomato	• To develop high yielding hybrid variety	On-station: Mymensingh
CROP PHYSIOLOGY DIVISION			
259	Individual and combined effects of high temperature and drought on yield of boro rice varieties	• To assess the effect of high temperature at flowering stage under different moisture regimes and • To find out proper soil moisture level at flowering stage of boro rice varieties to reduce high temperature effect	On-station: Mymensingh
260	Effect of different soil moisture levels at flowering stage of boro rice varieties in field	• To find out proper soil moisture level at flowering stage of boro rice varieties to reduce high temperature effect	On-station: Mymensingh

Sl.	Research Title	Objective(s)	Location(s)
261	Effect of high temperature at different growth stages of short duration aman rice varieties	• To assess the effect of high temperature at booting and flowering stage of rice genotypes	On-station: Mymensingh
262	Effect of temperature on germination, flowering and pod filling stages of mungbean genotypes	• To assess the effect of temperature on germination, flowering and pod filling stages and • To identify temperature tolerant mungbean genotypes	On-station: Mymensingh
263	Effect of water logging period on morpho-physiological parameters and yield of sesame genotypes	• To assess the effect of water logging period on sesame genotypes and • To identify waterlog tolerant genotypes	On-station: Mymensingh
264	Effect of foliar application of chitosan on tomato genotypes	• To assess the effect of chitosan on growth and yield of tomato	On-station: Mymensingh
265	Physico-chemical properties of rice genotypes	• To know physico-chemical properties and to identify superior rice genotypes	On-station: Mymensingh
266	Growth analysis, morpho-physiological parameters and yield of mungbean genotypes	• To find out the morpho-physiological superiority and nitrogen efficiency for higher yield in mungbean genotypes	Sub-stations Ishurdi and Magura
267	Growth analysis, morpho-physiological parameters and yield of sesame genotypes	• To find out the morpho-physiological superiority for higher yield in sesame genotypes	Sub-stations Ishurdi, Magura and Chapainawabganj
268	Growth analysis, morpho-physiological parameters and yield of lentil genotypes	• To find out the morpho-physiological superiority and nitrogen efficiency for higher yield in lentil genotypes	Sub-stations Ishurdi and Chapainawabganj
SOIL SCIENCE DIVISION			
269	Determination of critical limit of sulphur for mustard (Pot expt.)	• To determine critical limit of S for different soils using mustard crop	On-station: Mymensingh
270	Effect of different sources and rates organic manures for vegetable and fruit production in rooftop gardening	• To find out suitable inorganic and organic fertilizer management practices for higher vegetable yield. • To popularize rooftop gardening in urban area and ensure family nutrition	Roof of Soil Science Division, BINA
271	Soil Health Services to farmers for increased crop production	• To find out and characterized detailed soil nutrient status of collected soil samples. • To find out the maximum fertilizer requirement and popularize soil test for maximized crop yield at farmer's level.	Sadar & Muktaghacha upazillas of Mymensingh and Madhupur & Dhonbari upazillas of Tangail, Sripur upazilla of Gazipur (From each upzilla 20 health card will be distributed among the selected farmers).
272	Validation of "Khamari mobile apps" of fertilizer requirements of crops for	• -To find out the appropriate fertilizer requirement and popularize Khamari mobile apps for maximized crop yield	Sadar & Muktaghacha upazillas of Mymensingh and

Sl.	Research Title	Objective(s)	Location(s)
	increased crop production	at farmer's level.	Nalitabari & Nokla of Sherpur
273	Effect of different concentration of magic growth on rice- production by using ¹⁵ N Tracer	• To evaluate the performance of magic growth on rice. • To find out the economic benefit on use of magic growth on rice cultivation	On-station: Mymensingh
274	Physico-chemical characterization of soils at BINA regional station, Sripur Gazipur	• To determine physico-chemical characters of the soils under study. • To delineation the studied soils based on the fertility status • To analyze collected information for finding out whether the land have any constraint for crop production.	On-station: Mymensingh
275	Assessment of Soil erosion and crop management in some selected hill areas	• To determine the effect of Soil erosion on the yield and yield contributing parameters of crops.	Khagrachory and Banderban
276	Baseline survey and delineation of nutrients status in selected sites	• To determine the effect of Silica fertilizer on the yield and yield contributing parameters of rice.	AEZs 1. Old Himalayan Piedmont Plain, 26. High Barind Tract, 28. Madhupur Tract
277	Effect of silica fertilizer on yield and yield contributing parameters of rice	• To know the effect of silicate fertilizer application on soil acidity management	Atwari, Panchagarh, Godagari, Rajshahi and Madhupur, Tangail.
278	Integrated nutrient management for increased rice production in Mustard-Boro-T. Aman rice cropping pattern using isotopic techniques	• Identification of suitable combination of organic and inorganic fertilizer for maximized crop yield.	On-station: Mymensingh Sub-station, Nalitabari
279	Developing a new easy methods of compost preparation from kitchen waste.	• To develop a easy method of compost preparation in a short period of time for the farmer.	On-station: Mymensingh
280	Evaluation of the prepared compost in different vegetable crop to increase yield and soil health	• To evaluate the prepared compost in vegetable production and change in soil fertility	On-station: Mymensingh
281	Regulating soil nitrogen loss by the type of nitrogen fertilizer and its application strategy by nuclear technique	• To find suitable nitrogen type fertilizer for the vegetables, mustard and rice crop	On-farm: Mymensingh
282	Improve nitrogen use efficiency in some vegetable using urea briquette fertilizer.	• To reduce the loss of nitrogen fertilizer and improve its efficiency. • To minimize fertilizer cost and increase crop yield at farmer's level.	On-station: Mymensingh, Jamalpur and Sherpur
283	Fertilizer Evaluation and Crop Biofortification to improve the nutrient output through Crop	• To determine the effect of different fertilizer on the yield and yield contributing parameters of rice.	On-farm: Dinajpur and Nilphamari

Sl.	Research Title	Objective(s)	Location(s)
	Diversification and Intensification.	• To evaluate the different types of fertilizer and their effect on the crop yield and soil properties.	
284	Effect of biostimulant and organic amendment on soil properties and nutrient status in saline areas	• To determine the effect of organic amendment on soil properties and soil fertility situation in saline areas.	Satkhira
285	Resource conservation technology for mustard in rice based cropping pattern.	• To observed the response of organic compost/materials in mustard yield.	On-station: Mymensingh
286	Fertilizer recommendation for lentil in relay cropping system under zero tillage condition (Dr. Md. Azizul Haque, PSO) Fruit crop phase effect on soil fertility restoration with integrated organic and chemical fertilizer approach	• To maintain depth and health of existing fertile soils and restore degraded soils through organic incorporation and integrated systems approaches. • To restore soil fertility and improve soil health • To increase fruit yield all the year round	Madhupur, Tangail
287	Effects of different organic wastes for the production of vermicompost.	• To select the suitable organic wastes for production of nutrient rich vermicompost	Cowdung shed, BINA
288	Effect of integrated use of different vermicompost with inorganic fertilizer on rice – rice cropping sequence (Long term experiment)	• To investigate the integrated effects of different vermicompost on T. Aman and Boro rice • To reduce the usage of chemical fertilizers • To investigate the effect of different manures on soil fertility using ¹³C and ¹⁵N isotope tracer techniques.	On-station: Mymensingh.
289	Integrated effect of manures and inorganic fertilizers on banana plantation and seasonal inter crops and soil fertility.	• To see the effect of manures on banana plantation and intercrops and soil fertility • To see the effect of banana residue and intercrops yields	On-station: Mymensingh Sub-station: Chapinawabgonj
290	Effect of various fertilizer doses on relay crops with mustard under zero tillage in Mustard-T.Aus-T.aman cropping pattern	• To find out the optimum fertilizer rates for mustard in relay cropping system under zero tillage practices • -To recommend the fertilizer for whole cropping systems and findout the cost-benefit ratio due to treatments.	Sub-station: Ishurdi, Barishal and Satkhira
291	Experimental demonstration of mustard under zero tillage with selected fertilizer doses in farmers' field in different AEZ. (With the collaboration of ARED)	• To investigate the effect of selected fertilizer doses on mustard under zero tillage in various AEZ • To disseminate the mustard cultivation technologies under zero tillage among	On-farm: Ishurdi, Barishal, Satkhira, Chapainawabgonj, Sunamgonj, Noakhali and Gopalganj

Sl.	Research Title	Objective(s)	Location(s)
		the farmers	
292	Fertilizer recommendation for wheat in relay cropping system under zero tillage	To determine the optimum fertilizer requirement for BINA developed wheat variety under zero tillage condition	Sub-station: Ishurdi, Gopalgonj Satkhira.
293	Carbon sequestration in soils using stable tracer techniques	To determine carbon and nitrogen sequestration in different management practices	On-station: Mymensingh
294	Benchmark survey to characterize bio-physicochemical properties of soil in the selected study areas	Characterize the bio-physico-chemical properties of soil in the drought prone areas of Nachole, Chapai Nawabganj	Nachole, Chapainwabganj
295	Study on the mineralization rate of commonly used organic materials in Bangladesh under field capacity and CSW conditions (Laboratory study)	Mineralization study of organic materials and assess the effect of organic materials on carbon sequestration	On-station: Mymensingh
296	Improvement of soil health in unfavorable eco-systems with organic amendments for sustainable crop production	Evaluate the effect of tillage methods, amendment and mulch practices of organic residues on soil and crops	Nachole, Chapainwabganj
297	Development of information/technologies for sustaining soil fertility and crop productivity	- Use of lime and other organic residues for sustaining soil fertility and crop productivity in acid soil - Development of liquid fertilizers for sustaining soil fertility and crop productivity - Improvement of mango fruit quality through foliar applications of chemicals in hilly area of Khagrachari - Nutrient priming to seedling before plantation for sustainable crop production - Increase cropping intensity in drought prone and other areas of Bangladesh - Soil, water, plant quality test from floating vegetables production areas of Bangladesh - Effect of magic growth on rice production	Different locations (hill, drought prone, Barisal, acid soil)
298	Identification and establishment of reference site for reference inventories.	To determine the reference inventories of ^{137}Cs, ^{210}Pb and ^7Be.	Chittagong Hill Tracts (CHT), Chittagong and Cox's Bazar, Sylhet, Comilla and Netrokona
299	Development of national database of soil erosion-deposition and nutrient loss/gain.	To develop national soil erosion-deposition database in different places in Bangladesh.	Chittagong Hill Tracts (CHT), Chittagong and Cox's Bazar, Sylhet, Comilla and Netrokona

Sl.	Research Title	Objective(s)	Location(s)
300	Measurement of soil and nutrient loss due to tillage practices by FRN techniques.	• To determine the loss of soil and nutrients due to soil erosion on cultivated slope.	Khagrachari.
301	Assessment of soil and nutrient loss affected by different land use.	• To determine soil and nutrient loss due to different land use.	Nalitabari, Rangpur & Ishurdi
302	Measurement of soil and nutrient loss/gain in different land use on a cultivated slope by Fallout Radionuclide (FRN) method	• To reduce soil and nutrient loss	SRDI, Banderban
303	Management of soil and nutrient loss by different hedge plant on a cultivated slope by Fallout Radionuclide (FRN) method	• To reduce soil and nutrient loss	SRDI, Banderban
304	Impact of arsenic contamination in soil, water and plant samples from contaminated STW & DTW areas	• To determine the as level in soil, water and plant samples in the selected area. • To determine soil and water properties (pH, texture, OM, P, K, S, FeO, and Mn, etc.).	Contaminated sites from Faridpur, Gopalganj, Jessore, Satkhira and Netrokona will be selected for collecting soil, water and plant samples. Soil and water samples will be collected from contaminated STW command area during irrigated Boro season following standard sampling protocol, and plant samples will be collected in both Boro and T. aman seasons. Soils will be collected from different depth (0-15, 15-30, 30-45cm) of a soil profile from the selected site. Physico-chemical parameter of soil will be determined to evaluate the magnitude of arsenic contamination.
305	Assessing the amount of micro nutrients & heavy metal content in rice and vegetable grown in industrial polluted areas of Mymensingh	• To identify amount of heavy metal concentration in agricultural soil • To determine amount of heavy metal uptake by vegetable • To determine heavy metal toxicity in vegetable	On-station: Mymensingh
306	Biofortification of Zn and Fe	• To improve yield and biofortification	On-farm: Jamalpur,

Sl.	Research Title	Objective(s)	Location(s)
	in rice, wheat and lentil by Zn and Fe fertilization and variety selection	of Zn & Fe in rice, wheat and lentil by Zn and Fe application and variety selection.	Mymensingh (AEZ 9) Sub-station: Nalitabari
307	Evaluation of the methods of fertilization (seed, soil & foliar) for improvement of yield and Zn and Fe enrichment of grains	• Evaluation of methods of fertilization (seed, soil and foliar) to improve yield and Zn & Fe enrichment in grains.	On-farm: Jamalpur, Mymensingh Sub-station: Nalitabari
308	Delineation of soil micronutrients status in selected AEZs and crop response studies on the yield of crops	• To determine the micronutrients status in different AEZs (Active Tista Floodplains, Madhupur Tract etc.) soils by chemical analysis and identification of micronutrient(s) deficient soils and their deficiency level based on analytical values.	Madhupur Tract Soil (28), Active Tista Floodplains (AEZ 2)
309	Response of micronutrient application on the yield of crops and cropping pattern	• Effects of Zn, B, Cu, Fe, Mn & Mo application on the yield of crops and cropping pattern.	AEZ 2 and AEZ 3
310	Requirement of zinc and boron application for Mustard-Boro-T. Aman Cropping Patterns	• To determine the requirement of zinc and boron application for Mustard-Boro-T. Aman cropping pattern • To assess nutrient uptake by 1 year crop cycle.	Farmer's Field, Modhupur Sadar
311	Requirement of zinc and boron application for Rice-Rice Cropping Patterns	• To determine the requirement of zinc and boron application for T. Aman-Boro rice cropping pattern • To assess nutrient uptake by 1 year crop cycle	BINA HQ
312	Assessment and Monitoring the water quality of polluted Balu, Sitalakkh and Isamoti river using Nuclear and Advance Techniques.	• Identification of possible sources of contamination in the water resources and contamination percentage of individual pollutants per unit of water.	Balu and Sitalakkh river: Kayetpara Union, Rupganj, Narayangonj district Isamoti river: Nimtoli, Munsiganj, Dhaka
313	Assessment and Monitoring the water quality of polluted Surma river using Nuclear and Advance Techniques.	• Identification of possible sources of contamination in the water resources and contamination percentage of individual pollutants per unit of water..	Surma river: Sunamganj sadar, and Chatak upazila, Sunamganj
314	Assessment and Monitoring the water quality of polluted Karnaphuli and Naf river using Nuclear and Advance Techniques.	• Identification of possible sources of contamination in the water resources and contamination percentage of individual pollutants per unit of water.	Karnafuli river: Kaptai, Chatragram and Kaf river: Technaf
315	Study on the accumulation of heavy metals in soils and crops irrigated with polluted river water	• To estimate the heavy metal deposition in soil from polluted water. • To estimate accumulated heavy metal concentration in different parts of plants.	Rupgonj, Narayangonj

Sl.	Research Title	Objective(s)	Location(s)
316	Impact assessment of river water irrigation on crop productivity at the catchment area of Rupgonj, Narayanganj	• To determine the effects of irrigation water on growth and development of crops at the sampling area	Rupgonj, Narayanganj
317	Physico-chemical characteristics of river surface water of Shitolakha to determine spatial trend of water quality index (WQI)	• Physico-chemical characterization of river water to study its suitability for irrigation and household use. • Water quality index will be measured to determine their spatial trend for determining the locations of major pollutants sources	Sitalakkha river at Kayetpara Uion, Rupgonj, narayanganj
318	Effect of integrated nutrient management and AMF association on Yield of wheat in saline soils	• To find a suitable combination of organic and inorganic fertilizer in association with AMF for reducing soil salinity and maximization of wheat yield. • To make a fertilizer recommendation for wheat in coastal saline soil.	Satkhira in 3 different locations
319	Isolation and characterization of plant growth promoting N-fixing rhizobacteria strains for different oil seed crops.	• To Isolate, highly efficient N-fixing and growth hormone producing rhizobacteria strains from soils and roots of rice, wheat, mustard, soybean, groundnut and vegetable crops from different AEZs of Bangladesh. • To find most effective strains for better biofertilizer production. • To determine the germination rate, growth, yield, oil content and nitrogen percentage of the crops in pot and field condition.	Laboratory of Soil Science Division, BINA Headquarter , On-station:Mymensingh
320	Effect of plant growth promoting rhizobacteria (<i>Azotobacter</i> and <i>Azospirillum</i>) as biofertilizer for mustard, soybean and groundnut (pot study)	• To evaluate the effect of plant growth promoting rhizobacteria on germination rate, growth and yield.	Glasshouse, Soil Science Division and field, BINA Headquarter farm, Mymensingh
321	Effect of plant growth promoting rhizobacteria (<i>Rhizobium</i> , <i>Azotobacter</i> and <i>Azospirillum</i>) as biofertilizer for mustard, soybean and groundnut (field study)	• To evaluate the effect of plant growth promoting rhizobacteria on germination rate, growth and yield.	On-station: Mymensingh
322	Response of soybean and groundnut to plant growth promoting rhizobacteria.	• To assess the influence of different plant growth promoting rhizobacteria on nodulation, nitrogen content and yield of soybean and groundnut.	On-station: Mymensingh
323	Effect of PGPR strains on growth and yield of mustard	• To study the effect of biofertilizers strains on growth and yield of	On-farm: Mymensingh, On-station: Mymensingh

Sl.	Research Title	Objective(s)	Location(s)
	(<i>Brassica juncea</i> L.) under different nutrient management.	mustard.	
324	Effect of PGPR strains on growth and yield of Soybean and Groundnut under different nutrient management.	To study the effect of biofertilizers strains on growth and yield of soybean and groundnut.	On-station: Mymensingh
325	Study on the yield and quality of Bangladeshi mustard (<i>Brassica juncea</i> L.) varieties as influenced by organic manures and biofertilizers.	To study the effect of chemical fertilizers, organic manure and biofertilizers on the protein and oil content and yield, fatty acid composition and biochemical characters like total chlorophyll content, total soluble sugars and proline content in the fresh leaves of Bangladeshi mustard (<i>Brassica juncea</i> L.) varieties.	On-station: Mymensingh
326	Effect of rhizobia strains on growth, nodulation and yield of country bean in pot condition	- To see the effect of Bradyrhizobium inoculation on growth, nodulation and drimatter yield of country bean and/french bean in pot condition. - To determine the nitrogen fixing ability of rhizobia strain in pot condition.	On-station: Mymensingh
327	Effect of rhizobia strains on growth, nodulation and yield of country bean in field condition	- To see the effect of Bradyrhizobium inoculation on growth, nodulation and yield of country bean in field condition at different locations. - To determine the nitrogen fixing ability of rhizobia strains in different locations	On-station: Mymensingh, Magura, Noakhali, Gazipur
328	Microbial Characterization of soils of different agro-ecological regions of Bangladesh.	- To determine the population of micro-organisms in soils of different AEZs of Bangladesh. - To isolate effective N-fixing rhizobia/other strains from root nodules of different pulse and oil seed crops.	AEZ-3, 7, 9, 12, 14, 17, 25, and 26 will be considered for soil collecting area. Soil will be analysed in Soil Microbiology Laboratory of BINA, Mymensingh, and root nodules will be collected from soils of different agro-ecological regions of country.
329	Effect of rhizobia inoculants on growth and yield of soybean and residual benefits on subsequent rice crop	- To see the effect of Bradyrhizobium inoculation on growth, nodulation and seed yield of soybean and residual benefits on subsequent rice - To determine the nitrogen fixing	On-station: Mymensingh, Satkhira and Noakhali

Sl.	Research Title	Objective(s)	Location(s)
		ability of rhizobia inoculants.	
330	Production of biofertilizer for lentil, chickpea, cowpea (barboti), felon, mungbean, soybean, black gram and groundnut (Amount 2000 kg)	• N/A	On-station: Mymensingh
331	Training of farmers and extension personnel on benefits and application of biofertilizer	• To create awareness about benefits and application method of biofertilizer to the farmers.	BINA HQ and substations of Noakhali, Khagrachari, Satkhira and district of Lalmonirhat
ENTOMOLOGY DIVISION			
332	Effectiveness of different management approaches against flower thrips of mungbean	• To find out the appropriate management approaches for controlling flower thrips of mungbean	On-station: Mymensingh
333	Evaluation of different IPM treatments against leaf roller of soybean	• To find out the appropriate management approach for controlling leaf roller of soybean	On-station: Mymensingh
334	Evaluation of different management approaches against red mites of chili	• To develop suitable insect management technology against red mites of chili	On-station: Mymensingh
335	Effectiveness of different management approaches against stem borer of rice	• To find out the appropriate management approaches against stem borer of rice	On-station: Mymensingh
336	Evaluation of different management approaches against fall armyworm (<i>Spodoptera frugiperda</i>) of maize	• To evaluate environment friendly management approach against maize fall armyworm	On-station: Mymensingh
337	Effectiveness of different management approaches for the control of spotted bollworm of cotton	• To find out the appropriate management approaches against spotted bollworm of cotton	Gazipur
338	Screening different rice varieties/mutants against yellow stem borer of rice	• To find out the yellow stem borer resistant cultivar	On-station: Mymensingh
339	Screening drought tolerant rice lines against brown plant hopper under artificial infested condition	• To find out brown plant hopper resistant cultivar	On-station: Mymensingh
340	Effect of gamma radiation for controlling fruit fly (<i>Bactrocera cucurbitae</i>) of cucurbit vegetables	• To control the cucurbit fruit fly by applying Sterile Insect Technique (SIT)	On-station: Mymensingh
341	Determination of radiation dose to control pulse beetle (<i>Callosobruchus chinensis</i>) of chickpea in storage	• To control the pulse beetle by applying low radiation dose	On-station: Mymensingh

Sl.	Research Title	Objective(s)	Location(s)
PLANT PATHOLOGY DIVISION			
342	Evaluation of mustard-rape seed mutants against alternaria blight and Sclerotinia stem rot	• To identify the sources of resistance to alternaria blight and Sclerotinia stem rot in induced mutants of mustard.	On-station: Mymensingh and Rangpur
343	Evaluation of different fungicides against <i>Sclerotiniasclerotium</i> , <i>Sclerotium</i> sp. of pulse, oil and vegetable crops	• To find out effective fungicide/fungicides against white rot of mustard.	On-station: Mymensingh
344	Evaluation of advanced mutants of rice against BLB, sheath blight, blast, false smut and tungro	• To evaluate the level of field resistance/tolerance of advanced mutants/lines of rice against the diseases under inoculated/natural condition.	On-station: Mymensingh
345	Evaluation of groundnut mutants against tikka, collar rot and rust	• To identify the sources of resistance in induced mutants/varieties of groundnut against the diseases.	On-station: Mymensingh, Ishurdi and Sunamgonj
346	Evaluation of sesame mutants against foot rot, stem rot, yellow mosaic and phyllody disease	• To identify the sources of resistance in induced mutants of sesame against foot rot, stem rot, yellow mosaic and phyllody disease.	On-station: Mymensingh, Ishurdi and Magura
347	Evaluation of mungbean mutants against root rot, cercospora leaf spot and yellow mosaic	• To identify the sources of resistance in induced mutants of mungbean to the diseases under inoculated condition.	On-station: Mymensingh, Ishurdi, Magura and Barishal
348	Evaluation of soybean mutants for resistance against collar rot, cercospora leaf spot and yellow mosaic	• To evaluate the level of field resistance of soybean mutants against collar rot, cercospora leaf spot and yellow mosaic.	On-station: Mymensingh and Noakhali
349	Evaluation of lentil mutants against root rot, collar rot and stemphylium blight	• To identify the sources of resistance in induced mutants of lentil to major diseases under inoculated condition.	Magura, Chapainowabganj and Ishurdi
350	Evaluation of chickpea mutants against botrytis gray mold and foot and root rot	• To identify the sources of resistance in induced mutants of chickpea against botrytis gray mold and foot and root rot under inoculated conditions.	Ishurdi and Magura
351	Evaluation of blackgram mutants against cercospora leaf spot, yellow mosaic and powdery mildew	• To identify the sources of resistance in mutants of blackgram to cercospora leaf spot, yellow mosaic and powdery mildew.	On-station: Mymensingh
352	Management of seed borne fungal diseases of pulse with low dose radiation	• To reduce the prevalence of seed associated fungi in pulse (lentil, chickpea, mungbean, blackgram, grasspea).	On-station: Mymensingh
353	Management of Damping-off diseases of onion seedlings	• To develop suitable disease management for onion seedlings.	On-station: Mymensingh
354	Management of storage disease of onion bulb with	• To control storage disease of onion bulb.	On-station: Mymensingh

Sl.	Research Title	Objective(s)	Location(s)
	low dose radiation		
355	Integrated management of foot and root rot of groundnut	• To develop effective management technology for foot and root rot of groundnut.	On-station: Mymensingh and Magura
356	Integrated management of yellow mosaic of mungbean	• To develop effective yellow mosaic management technology for controlling yellow mosaic of mungbean.	On-station: Mymensingh, Ishurdi and Barishal
357	Ecofriendly management of collar rot of soybean	• To develop eco-friendly disease management technology for collar root rot of Soybean.	On-station: Mymensingh and Magura
358	Effect of Salicylic acid, Copper sulphate (CuSO ₄), Chitosan and thiovit for controlling powdery mildew and root rot of blackgram	• To develop suitable disease management technology.	On-station: Mymensingh
359	Evaluation of different fungicides against blast of rice	• To find out effective fungicide/fungicides against blast of rice.	On-station: Mymensingh
360	Management of storage diseases of potato with low dose radiation	• To reduce the prevalence of storage diseases incidence in potato.	On-station: Mymensingh
361	Management of rice blast diseases with low dose radiation	• To reduce the prevalence of soft rot diseases incidence in storage.	On-station: Mymensingh
362	Comparison of vermicompost, biofertilizer, biopesticides and their integration against root rot of lentil	• To develop suitable disease management technology.	On-station: Mymensingh
363	Evaluation of different fungicides against false smut of rice	• To find out effective fungicide/fungicides against false smut of rice.	On-station: Mymensingh
364	Development of yellow mosaic resistant mutants of okra	• To induce yellow mosaic resistance in okra.	On-station: Mymensingh
365	Development of chili mutants (M ₁) against leaf curl resistance	• To induce leaf curl resistance in chili.	On-station: Mymensingh
366	Identify the source of novel resistant gene against rice blast through molecular markers & pathogenicity test.	• To identify the target resistance gene for wheat blast.	On-station: Mymensingh
367	Studies on Development of wheat Blast Resistant Materials	• To develop blast resistant varieties for Bangladesh.	On-station: Mymensingh, Ishurdi, Pabna, Chapaina wabganj and Magura
368	Confirmation of resistant genes of BB through gene	• To identify the bacterial blight resistance genes in land race.	On-station: Mymensingh

Sl.	Research Title	Objective(s)	Location(s)
	base SSR markers and pathogenicity test		
369	Screening of rice germplasm against bacterial blight (BB) disease during T. aman 2021 & Boro 2022	• To identify the bacterial blight resistance genes in land race.	On-station: Mymensingh, Ishurdi and Pabna
370	Identification of plant growth promoting antagonistic bacteria against blast and BB diseases of rice.	• To isolate and identify the plant growth promoting bacteria from rice seed, phylloplane and rhizosphere that antagonistic to blast and BB pathogens. • To find effective probiotic strains against major diseases • Characterization of prominent probiotics for research and commercial use.	On-station: Mymensingh
371	Efficacy of silver nanoparticles against wheat blast disease	• To investigate the efficacy of silver nanoparticles against wheat blast disease.	On-station: Mymensingh
AGRONOMY DIVISION			
372	Determination of optimum transplanting time and spacing for maximizing yield of Aman rice mutants/variety	• To find out optimum transplanting time and spacing for maximizing yield of Aman rice mutants/variety.	On-station: Mymensingh
373	Effect of seed rate on grain yield of deep-water rice mutants under broadcast condition in different agro-ecological zones of Bangladesh	• To find out optimum seed rate/plant populations m ² for maximizing yield of deep-water rice mutants.	Sub-station at Gopalganj & Sub-station at Sunamganj and farmers field at Singra, Natore.
374	Effect of plant spacing on grain yield of deep-water Aman rice mutants in different agro-ecological zones of Bangladesh	• To find out optimum spacing for maximizing yield of deep-water rice mutants.	Sub-station at Gopalganj & Sub-station at Sunamganj and farmers field at Singra, Natore.
375	Study of Boro rice mutant/variety on transplanting time, spacing and seedling age in different AEZs	• To find out optimum transplanting time, spacing, seedling age for maximizing yield of boro rice mutants.	Sub-station: Rangpur, Ishurdi & Mymensingh.
376	Determination of optimum seed rate through dibbling methods for zoom cultivation (Aus) in Hill Tracts	• To find out optimum seed rate for maximizing yield in zoom cultivation (Aus rice) in Hill Tracts.	Khagrachari.
377	Development of cropping patterns using BINA released varieties in drought prone zones	• To study the economy of water use efficiency, land use potentials with BINA released varieties and modified cropping pattern.	On-Farm: Godagari Rajshahi, Nachole (Chapainawabganj)
378	Development of cropping	• To study the economic and increase	Sathia, Pabna

Sl.	Research Title	Objective(s)	Location(s)
	pattern for 400% cropping intensity for Pabna region	the land use potentials with BINA released varieties and modified the cropping pattern.	
379	Land preparation by using ridger and it's influence on yield of boro rice under furrow transplanting method in saline zone	• To find out the suitable management of transplanting arrangement for productivity improvement of rice under salinity condition.	Farmer's field, Shyamnagar, Satkhira
380	Effect of sea weed (<i>Caulerpa racemose</i>) on yield and yield contributing characters of rice in saline soil	• To find out suitable dose of sea weed (<i>Caulerpa racemose</i>) on yield of rice.	Sub-station, Satkhira
381	Improvement of nutrient management on growth and yield of aromatic rice against lodging	• To find out suitable agronomic management for maximizing yield of aromatic rice.	On-station: Mymensingh and Dinajpur.
382	Effect of transplanting date on the yield and yield contributing characters of boro rice varieties in Haor areas	• To find out the optimum transplanting date of boro rice varieties for Haor areas.	Sub-station: Sunamganj.
383	Development of cropping pattern with BINA released Pulses (chickpea, Grass pea) varieties in Sunamganj	• To study the adaptability of BINA released chickpea / Grass pea varieties in developing cropping pattern.	Farmer's Field of Sadar Upazilla, Sunamganj.
384	Development of cropping pattern with BINA released Mustard varieties in hoar areas of Sunamganj	• To increase cropping intensity and farmers income. • To adopt mustard cultivation in Haor areas as well as increase its production.	Farmer's Field of Dakwar haor, Sadar, Sunamganj.
385	Development of cropping pattern with improved technologies in Char land ecosystem	• To increase cropping intensity, soil health and farmer's income.	Kurigram, Rangpur, Nilphamari.
386	Improvement of cropping pattern with Slopping Agricultural Land Technology (SALT) in Hill Tracts	• To increase cropping intensity, soil health and farmer's income.	Khagrachari
387	Reclamation of saline soil using chemical and organic amendments	• To find out optimum dose of chemical and organic fertilizer.	Satkhira, Khulna, Bagerhat.
388	Determination of seedling dressing effect with micronutrient on yield and yield contributing characters of Boro rice in saline area	• To find out optimum seedling dressing with micronutrient for maximizing yield of Boro rice.	On-Farm: Satkhira and Tangail.
389	Development of cropping	• To study the economic and increase	On-Farm: Rangpur,

Sl.	Research Title	Objective(s)	Location(s)
	pattern with BINA released variety uses for Synchronized agriculture	the land use potentials with BINA released varieties and modified the cropping pattern.	Bogura, and Kushtia.
390	Assessing the yield gap of Boro/ Aman/ Aus rice different farming systems under scenario of climate change & resource scarcity	• To assess the yield limiting factor.	Kurigram, Rangpur, Nilphamari, Gopalganj, Satkhira
391	Estimation of yield gap limiting factors for pulse and oil seed crops at different AEZs	• To know the yield gap limiting factors.	Tangail, Sirajgonj, Lakshmipur, Rangpur and Cumilla.
392	Assessment of yield gap relation and yield prediction of BINA newly released varieties of rice, oil seed and pulse varieties in different AEZs through crop modeling	• To find out yield gap relation and yield prediction of BINA newly released varieties.	Shyamnagar, Satkhira.
393	Comparative yield advantages of Binamasur-8, Binamasur-10 & BARImasur-8 in different AEZs.	• To find out suitable location for maximizing yield of Binamasur-8, Binamasur-10 & BARImasur-8.	Magura, Ishurdi, Chapainawabgonj.
394	Validity of BINA developed technology in different AEZs.	• To assess the performance and soundness of BINA developed technology in different AEZs.	Khulna, Bagerhat, Rajshahi, Magura, Ishurdi
395	Determination of efficiency and residual effect of different herbicide on rice in different AEZ	• To select suitable herbicides for Boro/Aus and also identify residues in soils and plants.	BINA HQ Farm.
396	Evaluation of mulching techniques in the context of weed management in crop cultivation on hills	• To determine the effect of selected mulching techniques on weed management of the crop. • To evaluate the yield performance of crop as affected by mulching techniques	Khagrachari.
397	Detection surveillance & management of weeds that threatens the agro ecosystem in different AEZs	• To find out suitable management of noxious weeds	On-Farm: Barishal, Jashore, Magura, Rajshahi, Chapainawabgonj and Cumilla.
398	Study on the effect of natural and chemical herbicides in weed management for Boro rice / Aus in CHT of Bangladesh	• To determine the effect of different herbicides on weed management.	Khagrachari.
399	Development of weed management options in Aus rice cultivation (Binadhan-19) on the hill slope of CHT	• To select suitable weed management techniques.	Khagrachari.

Sl.	Research Title	Objective(s)	Location(s)
400	Measuring and quantifying greenhouse gas emission and carbon sequestration from agricultural activities in different agro-ecosystem	To find out the status of emissions of greenhouse gases from agricultural activities.	On-station: Mymensingh, Rangpur.
401	Improving environmentally sustainable cropping pattern for efficient nutrient utilization, recycling and mitigating greenhouse gas emissions	To improve environmentally sustainable cropping scheme.	On-farm: Satkhira, Pabna and Cumilla.
402	Germination response of mungbean under changing weather parameters in different AEZs	To find out optimum sowing time for maximum germination percentage	Barishal, Magura and Ishurdi.
403	Determination of the sequence of cropping scheme for improving soil quality and carbon sequestration status of soil	To find out suitable sequence of jute and cover crops for improving soil health status.	Rangpur, Gaibandha, Kurigram.
404	Evaluation of the yield performance of intercropping combinations between sesame and mungbean in Hill Tracts	- To evaluate the performance of intercropping combinations in regard to cultural practices. - To determine suitable intercropping on growth and development Sesame and Mungbean cultivation.	On-farm: Khagrachari.
405	Improvement of rain water harvesting technique for crop production in hill tracts of Bangladesh	To develop the continuous supply of irrigation facility for crop production on hill in dry season (Nov-March).	On-farm: Khagrachari
406	Determination of latitudinal effect on crop cultivation on slope in hill tracts	To select better slope site for profitable crop production	On-Farm: Khagrachari
407	Development of 'Jhum' ecosystem production technology using BINA released rice, oil seed and pulse crop.	To find out maximizing yield of rice, oil seed and pulse crop.	On-Farm: Khagrachari
408	Determination of the effects of different mulches in the context of soil moisture, fertility and weed management in turmeric cultivation	To determine the effects of mulches on soil moisture soil fertility, weed management for proper growth and development of crop	Farmer's field of Khagrachari.
409	Development of multilayer cropping system on hill slope in CHT	To determine the extent of soil erosion, plant spacing and planting arrangement in CHT	Khagrachari.
410	Development of cropping pattern on hill area in	To study the economy of land use potentiality in CHT.	On-Farm: Khagrachari.

Sl.	Research Title	Objective(s)	Location(s)
	Bangladesh		
411	Evaluation of slope effect on crop arrangement in CHT	• To determine the suitable slopes for crop production at CHT	On-Farm: Khagrachari.
412	Development of better seed production and storage techniques at farm level in different AEZs.	• To furnish Truthfully labeled Seed (TLS) requirements of different BINA released crop mutants/varieties for promoting and expanding them towards farmers, GOs and NGOs.	On-station: Mymensingh, Rangpur, Khagrachari, Magura
413	Improvement of onion storage methodology to reduce post-harvest losses	• To find out better onion storage methodology reduce post-harvest losses	Rangpur.
414	Truthfully labeled seed production of released crop varieties of BINA	• To supply seeds for demonstration trials DAE, ARED, BINA village program, GOs and NGOs, farmers and other research purposes and to meet special requirement for environmental calamities	13 Sub-stations
AGRICULTURAL ENGINEERING DIVISION			
415	Evaluation of Binadhan-22 and Binadhan-24 under different 'soil moisture stress/drought tolerance level' (in Lysimeter and Field)	• To study the response of the cultivars to different level of soil moisture stress	On-station: Mymensingh
416	Automatic irrigation management system for Rice Production	• To assess water savings under automated irrigation system compared to normal practice • To evaluate performance of automatic irrigation management system through wireless pump control device for rice production.	On-station: Mymensingh
417	Optimization of soil moisture for direct seeded (No tillage) mustard sowing	• To determine optimum soil moisture condition for higher yield of mustard under no tillage condition	On-station: Mymensingh (HQ & Char-land), Jamalpur (Char-land)
418	Response of Rapeseed mutants to irrigation regimes	• To determine optimum irrigation requirement for higher yield of Rapeseed	Sub-station: Ishurdi
419	Irrigation management of Garlic cultivars for higher yield and water productivity under no/zero tillage condition.	• To develop appropriate irrigation management practice for higher yield of garlic	Natore
420	Solute transport study in Boro rice cultivation (in Lysimeter) and simulation modeling using one-dimensional model HYDRUS	• To study the movement of solute under different irrigation practices • To suggest optimum fertilizer application under different irrigation practices	On-station: Mymensingh
421	Irrigation management for sunflower mutants	• To determine optimum irrigation requirement for higher yield and water productivity of sunflower mutants	On-station: Mymensingh

Sl.	Research Title	Objective(s)	Location(s)
422	Effect of different tillage practices and irrigation management on mung bean production	• To study the effect of different tillage practices and water use in Mungbean cultivation	Magura & Jessore/Jhenaidah
423	Irrigation management and soil moisture conservation practices for Chilly	• To determine optimum irrigation requirement for higher yield of Chilly	On-station: Mymensingh (HQ & Char-land), sub-station Magura, Jamalpur
424	Optimization of irrigation schedule for different sizes of pot for roof-top garden	• To identify suitable irrigation management strategies of tomato for successful pot culture.	On-station: Mymensingh
425	Automatic irrigation management system for roof-top garden	• To evaluate performance of automatic irrigation management system through automated pump control device for roof-top garden • To assess water savings under automated irrigation system compared to normal practice	On-station: Mymensingh
426	Effectiveness of Irrigation regimes on the yield and water productivity of crops (in cropping pattern) in the Char-land of Rangpur region	• To determine optimum irrigation management strategy for higher yield and water productivity of cropping system	Rangpur
427	Irrigation management for hybrid Maize for higher yield and water productivity	• To determine optimum irrigation requirement for higher yield and water productivity of hybrid Maize	Jamalpur (Char Nawbhangha), Sunamgonj (Sadar), Sherpur (Nakla), HQ (Lysimeter)
428	Monitoring groundwater table fluctuation at BINA HQ and its substations (for long-term sustainability study)	• To gather long-term Water table data • To observe seasonal and long-term trend for its sustainability	BINA HQ and its substations
429	Effects of Irrigation Management and amendments in Boro rice under Saline condition (Field study, Satkhira)	• To identify appropriate irrigation and other management practices for higher yield in saline area	Satkhira
430	Effect of irrigation regimes and other management practices on water-melon	• To determine optimum irrigation management strategy for higher yield and water productivity of water-melon	Batiaghata, Khulna
431	Irrigation management and chemical amendment for higher yield of vegetables at gher embankment and homestead area under saline condition	• To develop appropriate irrigation management and chemical amendment practice for higher yield of vegetables. • To utilize fallow land of homestead and Gher embankment of saline prone area	Satkhira
432	Development of Bio-char preparation machine	• To develop Bio-char preparation machine. • Utilization of hays and leafs etc as soil	On-station: Mymensingh

Sl.	Research Title	Objective(s)	Location(s)
		fertilizing element	
433	Development of low-cost solar power operated garden/field mower	• To develop low cost solar power operated garden/field mower • Utilization of solar energy in field activity to reduce noise and environment pollution.	On-station: Mymensingh
434	Development of efficient irrigation practice for BINA developed citrus crops for hilly area of Bangladesh	• To ensure efficient use rainwater and maximize water productivity for Binalebu-1 • To develop of efficient irrigation practice for BINA developed citrus crop	Hill track Khagrachori, Hill site Cumilla
435	Development of Power Sprayer based sprinkler irrigation system/practice for vegetable crops	• To ensure efficient use of rainwater/jhiri-water and maximize water productivity for leafy crops/vegetables • To develop of efficient irrigation practice for vegetables in hill area	Hill track Khagrachori, Hill site Cumilla
ADAPTIVE RESEARCH & EXTENSION DIVISION			
436	Adaptive trials with two T. Aman mutants (Kas-80-C-1 and RM-16-N-8) of rice	• To assess the overall performance of T. Aman mutant line in farmers' field of different areas • To provide feedback information to concerned scientist about the mutant lines	Pabna and Satkhira
437	Farmers' observation trials of short duration T. Aman rice, Binadhan-22	• To demonstrate the performance of Binadhan-22 to farmers field in different areas of Bangladesh • To identify suitable areas for extensive promotional work • To encourage the farmers for cultivation of Binadhan-22	Joypurhat, Naogaon, Dinajpur, Rajshahi, Bogura, Pabna
438	Block farming with T. Aman rice (Binadhan-11, Binadhan-16, Binadhan-17, Binadhan-20)	• To demonstrate the performance of Binadhan-11, 16, 17, 20 in selected suitable areas • To encourage the farmers for extensive cultivation of Binadhan-11, -16, -17, -20	Sirajganj, Gaibandha, Kurigram, Jamalpur, Tangail, Mymensingh, Rajshahi, Dinajpur, Jashore, Naogaon, Habiganj, Sylhet, Thakurgoan, Gopalganj, Rangpur
439	Adaptive trials with Boro mutants RM-16 (N)-8 & RM-16(N)-10 of rice	• To assess the overall performance of Boro mutant line in On-Farm: different area • To provide feedback information to concerned scientist about the mutant lines	Jamalpur, Kishoreganj, Natore, Joypurhat, Netrokona
440	Farmers' observation trials of Binadhan-17 in Boro season	• To assess the overall performance of Binadhan-17 at farmers' field in Boro season especially in Haor areas	On-station: Mymensingh, Netrokona, Jamalpur,

Sl.	Research Title	Objective(s)	Location(s)
		To provide feedback information to concerned scientist about the said variety.	Natore
441	Farmers' observation trials with newly released Boro rice, Binadhan-24	- To demonstrate the performance of Binadhan-24 to farmers field in different areas of Bangladesh - To identify suitable areas for extensive promotional work - To encourage the farmers for cultivation of Binadhan-24	On-station: Mymensingh, Barishal, Netrokona, Gopalganj, Narsindhi, Tangail
442	Block farming with Boro rice variety, Binadhan-10	- To demonstrate the performance of Binadhan- 10 in selected suitable areas - To encourage the farmers for extensive cultivation of Binadhan- 10	On-station: Mymensingh, Bhola, Pirojpur, Bagerhat, Satkhira, Chattagram, Khulna
443	Block farming with Aus rice (Binadhan-19 & Binadhan-21)	- To demonstrate the performance of Binadhan-19, 21 to farmers in different areas of Bangladesh - To encourage the farmers for extensive cultivation of Binadhan-19, 21	On-station: Mymensingh, Jhenaidah, Kushtia, Naogaon, , Bogura, Rajshahi, Hobiganj, Netrakona, Rangpur, Maulovibazar, Tangail, Natore,
444	Adaptive trials with Rape mutants (RL-11, RL-13, RL-14 and RL-17)	- To assess the overall performance of mustard mutant lines in On-Farm: different areas - To provide feedback information to concerned scientist about the mutant lines	On-station: Mymensingh, Tangail, Faridpur, Jamalpur
445	Adaptive trials with sesame mutant (SM-025 and SM-026) line	- To assess the overall performance of mustard mutant line in On-Farm: different areas - To provide feedback information to concerned scientist about the mutant lines	Faridpur, Jhenaidah, Rajbari and Kushtia
446	Adaptive trials with groundnut (B-6/282/80 and B-6/282/64) mutants	- To assess the overall performance of groundnut mutant line in On-Farm: different areas - To provide feedback information to concerned scientist about the mutant lines	On-station: Mymensingh, Panchagour, Nopakhali, Kishoreganj
447	Adaptive trials with soybean (SBM-12, SMB-15 and SMB-17) mutants	- To demonstrate performance of soybean mutants (SBM-12, 15, 17) in different areas of Bangladesh - To provide feedback information to concerned scientist about the mutant	Noakhali, Chandpur, Bhola and Laxmipur
448	Farmers' observation trials with newly released mustard variety	- To demonstrate performance of Binasarisha-11 in different areas of Bangladesh - To identify the suitable areas for large	Tangail, Sirajganj, Bogura, Rajshahi, Manikganj, Faridpur, Jamalpur, Mymensingh

Sl.	Research Title	Objective(s)	Location(s)
		scale dissemination • To encourage farmers for cultivation of Binasarisha-11	
449	Farmers' observation trials with Binasarisha-9 as relay crop with T. Aman rice under zero tillage condition	• To demonstrate performance of Binasarisha-9 in different areas as relay crop with T. Aman rice under zero tillage condition • To identify the suitable areas for large scale cultivation • To encourage farmers for cultivation of Binasarisha-9 as relay crop with T. Aman in low land areas	Natore, Barishal, Satkhira, Tangail, Naogaon, Sirajganj, Kishoreganj, Netrokona
450	Farmers' observation trials with newly released groundnut varieties	• To demonstrate performance of Binachinabadam-10 in different areas of Bangladesh • To identify the suitable areas for large scale demonstration • To encourage farmers for cultivation of Binachinabadam-10	Bhola, Panchagar, Mymensingh, Kishoreganj, Cumilla
451	Block farming with mustard and groundnut varieties	• To demonstrate performance of Binasarisha-9, Binachinabadam-4, 6, 8, 9 in different areas of Bangladesh • To identify the suitable areas for large scale demonstration • To encourage farmers for cultivation of Binasarisha-9, Binachinabadam-4, 6, 8, 9	Bhola, Sunamganj, Khagrachari, Banderban, Mymensingh, Panchagar, Barguna, Kishoreganj, Noakhali, Feni, Laxmipur, Manikganj, Sirajganj, Bogura, Pabna, Tangail, Faridpur, Jamalpur, Rajshahi
452	Block farming with sesame and soybean varieties	• To demonstrate performance of Binatil-2, 3, 4 and Binasoybean-2, 3, 5, 6 in different areas of Bangladesh • To encourage farmers for cultivation of Binatil-2, 3, 4 and Binasoybean-2, 3, 5, 6	Jashore, Manikganj, Rajbari, Jhenaidah, Pabna, Panchagar, Tangail, Noakhali, Chandpur, Laxmipur, Bhola, Barishal
453	Adaptive trials with Blackgram (BM-108, BM-404 & BM-412) mutants	• To assess the overall performance of blackgram mutants in On-Farm: different areas • To provide feedback information to concerned scientist about the mutant rice lines	Chapainawabganj, Faridpur, Magura, Mymensingh
454	Adaptive trials with grasspea (GM-102, GM-105 & GM-250) mutants	• To assess the overall performance of grasspea mutants in On-Farm: different areas • To provide feedback information to concerned scientist about the mutant rice lines	Barishal, Gopalganj, Kishoreganj
455	Farmers' observation trials with lentil variety	• To demonstrate performance of Binamasur-10, 11, 12 in different	Rajbari, Jashore, Natore and Chapainawabganj

Sl.	Research Title	Objective(s)	Location(s)
		areas of Bangladesh • To identify the suitable areas for large scale demonstration • To encourage farmers for cultivation of Binamasur-10, Binamasur-11 and Binamasur-12	
456	Farmers' observation trials with newly released mungbean variety	• To observe the performance of Binamoog-9 in different areas of Bangladesh • To identify the suitable areas for large scale demonstration • To encourage farmers for cultivation of Binamoog-9	Natore, Barishal, Barguna, Patuakhali, Rajshahi, Jhalokathi
457	Farmers' observation trials with newly released blackgram variety (Binamash-2)	• To demonstrate performance of Binamash-2 in different areas • To identify the suitable areas for large scale dissemination • To encourage farmers for extensive cultivation of Binamash-2	Chapainawabganj, Faridpur, Magura, Mymensingh
458	Block farming with lentil variety	• To demonstrate performance of Binamasur- 8 in different areas of Bangladesh • To encourage farmers for cultivation of this newly developed varieties	Faridpur, Madaripur, Natore, Magura, Chapainawabganj and Jashore
459	Block farming with mungbean variety	• To demonstrate performance of Binamoog-8 in different areas of Bangladesh • To encourage farmers in adopting this variety at large scale	Natore, Pabna, Bhola, Rajshahi, Barguna, Jhalokathi, Patuakhali, & Barishal
460	Block farming of chickpea, blackgram and grasspea varieties	• To demonstrate performance of Binasola-4, 6, 10; Binamash-1 and Binakhesari-1 in different areas of Bangladesh • To encourage farmers in adopting this variety at large scale	Magura, Chapainababganj, Rajshahi, Madaripur, Jhenaidah, Rajbari, Faridpur, Mymensingh, Gopalganj, Barishal
461	Farmers' observation trials with newly released garlic variety, Binarasun-1	• To demonstrate performance of Binarasun-1 in different areas of Bangladesh • To identify the suitable areas for large scale demonstration • To encourage farmers for cultivation of Binarasun-1	Pabna, Faridpur, Rajshahi, Khagrasari
462	Farmers' observation trials with onion variety, Binapiaj-1	• To demonstrate performance of Binapiaj-1 in different areas of Bangladesh • To identify the suitable areas for large scale demonstration • To encourage farmers for cultivation	Faridpur, Rajshahi, Gopalganj

Sl.	Research Title	Objective(s)	Location(s)
		of Binapiaj-1	
463	Farmers' observation trials with newly released Turmeric variety, Binahalud-1	• To demonstrate performance of Binahalud-1 in different areas of Bangladesh • To identify the suitable areas for large scale demonstration • To encourage farmers for cultivation of Binahalud-1	On-station: Mymensingh, Khagrachari, Tangail, Nilphamari, Pabna
464	Establish lemon garden with the varieties, Binalabu-1 and Binalebu-2	• To demonstrate performance of Binalebu-1 & 2 in different areas • To identify the suitable areas for large scale dissemination • To encourage farmers for cultivation of Binalebu-1 & 2.	Pabna, Mymensingh, Naogaon
465	Cropping pattern-1 with short duration T. Aman (Binadhan-11/16/17) → Mustard (Binasarisha-9/11) → Boro rice (Binadhan-10/24)	• To demonstrate the performance of Binadhan-11/16/17 Binasarisha-9/11 and Binadhan-10/24 in some selected areas • To encourage the farmers for extensive cultivation of Binadhan-7/17, Binasarisha-4/9 and Binadhan-14/19 • To encourage the farmers for cultivation of following T. aman → Mustard → Boro cropping pattern for increased cropping intensity and profitability.	54 districts
466	Cropping pattern-2 with Fallow- Binasarisha-9 – (Boro) Binadhan-24	• To demonstrate the performance of Binasarisha-9 and Binadhan-24 in some selected areas • To encourage the farmers for extensive cultivation of Binasarisha-9 and Binadhan-24 • To encourage the farmers for cultivation of following Fallow → Mustard → Boro cropping pattern for increased cropping intensity and productivity	Tangail, Manikganj, Pabna, Sirajganj, Naogaon, Netrokona
467	Cropping pattern-3 with Binadhan-17→Binasarisha-9→ Binatil-2/4→ Binadhan-19	• To demonstrate the performance of Binadhan-17, Binasarisha-9, Binatil-2/4 and Binadhan-19 in some selected areas • To encourage the farmers for extensive cultivation of Binadhan-17, Binasarisha-9, Binatil-2/4 and Binadhan-19 • To encourage the farmers for cultivation of following Binadhan-17→Binasarisha-9→ Binatil-2/4→	Faridpur, Rajbari, Pabna, Rajshahi

Sl.	Research Title	Objective(s)	Location(s)
		Binadhan-19 cropping pattern for increased cropping intensity and productivity	
468	Cropping pattern-4 with Binadhan-16→Binasoybean-3/5→ Binadhan-19/21	• To demonstrate the performance of Binadhan-16, Binasoybean-3/5 and Binadhan-19/21 in some selected areas • To encourage the farmers for extensive cultivation of Binadhan-16, Binasoybean-3/5 and Binadhan-19/21 • To encourage the farmers for cultivation of following Binadhan-16→Binasoybean-3/5→ Binadhan-19/21 cropping pattern for increased cropping intensity and productivity	Noakhali, Chandpur, Laxmipur
469	Cropping pattern-5 with Binasarisha-9→Binapiaj-1	• To demonstrate the performance of Binasarisha-9 and Binapiaj-1 in some selected areas • To encourage the farmers for extensive cultivation of Binasarisha-9 and Binapiaj-1 • To encourage the farmers for cultivation of following Binasarisha9→ • Binapiaj-1 cropping pattern for increased cropping intensity and productivity	Pabna
470	Farmers' observation trials with Bina-biofungicide for controlling soil borne diseases of pulses	• To assess the performance of Bina-biofungicide against foot rot disease of lentil in different areas • To provide feedback information to the concern scientist	Faridpur, Magura
471	Farmers' observation trials with Biofertilizers developed at BINA for increasing yield of legume crops (Binasoybean-3, 6; Binamoog-8, 9; Binamasur-8; Binasola-6, 10 and Binamash-2)	• To assess performance of Biofertilizers in legume crops • To encourage farmers using Biofertilizer for cultivation of legume crops	Barishal, Magura, Natore, Pabna Faridpur,
472	BINA-technology villages in surrounding areas of BINA HQ	• To establish BINA-Technology pilot area in surrounding villages of BINA HQ for extension of BINA developed technologies • To improve farmers socio-economic status by motivating adoption of BINA technologies • To include BINA technologies in the existing cropping pattern	On-station: Mymensingh

Sl.	Research Title	Objective(s)	Location(s)
		• To demonstrate field performance of BINA technologies to the visitors	
473	Factors affecting adoption of Binadhan-11 in some selected areas	• To ascertain the adoption of Binadhan-11 in some selected areas • To analyze the causes of adoption or rejection of Binadhan-11 by the farmers • To suggest policy guidelines or recommendations	On-station: Mymensingh, Jamalpur, Sherpur, Tangail
474	Factors affecting adoption of Binadhan-10 in some selected areas	• To ascertain the adoption of Binadhan-10 in some selected areas • To analyze the causes of adoption or rejection of Binadhan-10 by the farmers • To suggest policy guidelines or recommendations	Cox's bazar, Chattagram, Jhalokathi, Bagerhat, Khulna and Satkhira
475	Factors affecting adoption of Binasarisha-9 in some selected areas	• To ascertain the adoption of Binasarisha-9 in some selected areas • To analyze the causes of adoption or rejection of Binasarisha-9 by the farmer • To suggest policy guidelines or recommendations	Bramhanbaria, Cumilla, Mymensingh, Manikganj, Tangail, Jamalpur, Pabna
476	Organize farmers training on BINA developed varieties/technologies	• To improved farmers knowledge about BINA developed varieties/technologies. • To publicize BINA generated technologies to its end users	On-station: Mymensingh, Netrokona, Kishorganj, Tangail, Manikganj, Bogura, Joypurhat, Magura, Rangpur, Sunamganj, Gopalganj, Sherpur
477	Organize field days on BINA developed varieties/technologies	• To improved farmers knowledge about BINA developed varieties/technologies • To encourage farmers to adopt BINA generated technologies through field days	On-station: Mymensingh, Netrakona, Bogura, Kishoreganj, Patuakhali, Borguna, Naogaon, Joypurhat, Habiganj, Norail, Sirajganj, Munsiganj and Manikganj
478	Organize training workshop on BINA developed varieties/technologies to DAE, BADC, Seed dealer and NGO personnel	• To improved farmers knowledge about BINA developed varieties/technologies. • To publicize BINA generated technologies to its end users	22 districts
AGRICULTURAL ECONOMICS DIVISION			
479	Economic study of Binadhan-20 cultivation in some selected areas of Bangladesh.	• To determine the profitability of Binadhan-20 growers; • To assess the factors affecting	On-station: Mymensingh, Jamalpur, and Rangpur

Sl.	Research Title	Objective(s)	Location(s)
		production of Binadhan-20; and • To identify the major constraints to Binadhan-20 production.	
480	Yield gap analysis of Binasoybean-3 in some selected areas of Bangladesh.	• To find out the yield gap of Binasoybean-3 at the farm level; • To identify the factors affecting the yield gap of Binasoybean-3; • To estimate the costs and return of Binasoybean-3 cultivation in the study areas; and • To suggest some policy guidelines to minimize the yield gap.	Noakhali, Lakshmipur and Barishal.
481	Profitability and Technical efficiency of Binadhan-17 production in selected haor areas of Bangladesh.	• To estimate the costs and return of Binadhan-17 cultivation in the study areas; • To determine the technical efficiency of Binadhan-17 growers; and • To identify the major constraints to Binadhan-17 cultivation at the farm level.	Sunamganj, Kishoreganj and Netrokona
482	Performance and supply chain analysis of Binalebu-1 in some selected areas of Bangladesh	• To estimate the costs and return of Binalebu-1 production in the study areas; • To find out the key players involved in the supply chain of Binalebu-1; and • To suggest some policy guidelines.	Cumilla, Mymensingh, Rangpur and Dhaka
SUB-STATION, RANGPUR			
483	Improvement of aromatic rice genotypes through hybridization	• To develop early maturing and high yielding aromatic rice • To create variability in Aromatic germplasm.	Sub-station: Rangpur
484	Growing of M1 generation of an aromatic Aman rice genotype.	• Early maturity and high yield • Less diseases and insect infestation	Sub-station: Rangpur
485	Evaluation of selected rice genotypes through field validation trial.	• To identify the high yielding rice genotypes against drought	Sub-station: Rangpur
486	Study of potash (K) application method on Binadhan-14 during reproductive stage	• To minimize the shattering tendency at maturity stage. •	Sub-station: Rangpur
487	Determination of optimum time for growth and yield of Binadhan-17 in northern area	• To find out the appropriate time of sowing/transplanting to get higher yield performance. • To avoid the disease reaction and insect infestation in Aman season.	Sub-station: Rangpur
488	Development of BINA Released varieties based on	• To increase cropping intensity and farmers income	Sub-station: Rangpur

Sl.	Research Title	Objective(s)	Location(s)
	cropping pattern in nothern area	•	
489	Comparative study of Binadhan-24 and BRRI dhan 74 at Boro season	• To evaluated the better yield growing variety in boro season.	Sub-station: Rangpur
490	Field performance of a new relesedAman variety, Binadhan-23	• To encourage the farmers for cultivation of Binadhan-23	Sub-station: Rangpur
491	Increase cropping intensity through profitable cropping pattern	• To enhance cropping intensity through intensive cultivaton.	On-farm: Rangpur & Kurigram
492	Effect of using dolochun in Binatil-2 at charland of Rangpur	• To observe the effect of dolochun in yield of seed (Sesame)	On-farm: Mithapukur, Rangpur
493	Increase farmers income in char land through modified cropping pattern using high yielding oil seed varieties	• To increase the cropping intensity in char land through profitable cropping pattern • To increase the crop yield in char land • To incorporate a profitable cropping pattern • To enhance the socio-economic condition of the farmers of char land	Kawnia, Pirgacha Gongachora, Rangpur and Hatibandha, Lalmonirhat
494	Establishment of BINA-technology village through block demonstration and quality seed dissemination	• To include BINA technologies/varieties in the existing cropping pattern • To demonstrate the field performance of BINA varieties/technologies	Srerampur, Sadar Rangpur
495	Seed production (Breeder seed and TLS)	• To produce quality seed and supply seeds to different organization.	BINA Farm, Rangpur and Farmers field
SUB-STATION, ISHURDI			
496	Growing of M ₂ generation of lentil.	• Early maturity and high yield	Sub-station: Ishurdi
497	Effect of integrated use of organic and inorganic fertilizer on Tomato-Mungbean-T. Aman cropping pattern.	• To investigate the effect of organic and inorganic fertilizer on the crops. • To determine the optimum fertilizer rate for whole cropping pattern.	Sub-station: Ishurdi
498	Effect of organic and inorganic fertilizer on productivity of Brinjal.	• To investigate the effect of vermicompost, organic and inorganic fertilizer on the crop.	Sub-station: Ishurdi
499	Increase cropping intensity through profitable cropping pattern.	• To enhance cropping intensity through intensive cultivation. •	Farmer's field Natore, Pabna
500	Establishment of BINA-technology village through block demonstration and quality seed dissemination	• To include BINA technologies/varieties in the existing cropping pattern • To demonstrate the field performance	Esta, Ishurdi, Pabna.

Sl.	Research Title	Objective(s)	Location(s)
		of BINA varieties/technologies.	
501	Seed production (Breeder seed and TLS)	• To produce quality seed and supply seeds to different organizations (DAE, BADC, BMDA, PKSf etc.)	Sub-station: Ishurdi and Farmer's field
SUB-STATION, MAGURA			
502	Effect of different management approaches against Chickpea pod borer (<i>Helicoverpa armigera</i> Hubner)	• To find out suitable approach(es) for the control of <i>H. armigera</i> Hubner	Sub-station: Magura.
503	Impact of different graded levels of NPK fertilizers on the incidence of Yellow Stem Borer (<i>Scirpophaga incertulas</i>), Leaf Folder (<i>Cnaphalocrocis medinalis</i>) and Brown Plant Hopper (<i>Nilaparvata lugens</i>) in Binadhan-15 & 16	• To determine the effect of doses of NPK fertilizers on the incidence of YSB, LF, BPH and grain yield of Binadhan-15 & 16	Sub-station: Magura.
504	Effect of NPK and seedling age on flowering of Binadhan-17	• To find out appropriate combination of NPK for proper flowering • To minimize grain sterility • To maximize final yield • To find out appropriate seedling age	Sub-station: Magura.
505	Growing M ₃ and M ₄ generation of rice for earliness and higher yield	• To select desirable mutants for earliness, higher yield and lodging tolerance	Sub-station: Magura.
506	Growing M ₁ generation of aromatic rice for higher yield and better grain quality	• To create variability for earliness, higher yield and better grain quality	Sub-station: Magura.
507	Collection and evaluation of Germplasm of different crops	• To assess yield potential and other morpho-physiological attributes	Sub-station, Magura
508	Effect of supplemental irrigation on rice for earliness and higher yield	• To study the effect of different water management on yield of Binadhan-16, 17 and 22	Sub-station, Magura
509	Effect of different durations of water-logging at different growth stages on seed yield of mustard	• To study the effect of different durations of water-logging on seed yield of mustard	Sub-station, Magura
510	Effect of source of irrigation water on yield performance of Boro rice	• To study the effect of irrigation water quality on yield of Boro rice	Sub-station, Magura
511	Performance of Binadhan-16 & 17 in Boro Season	• To find out the performance of Binadhan-16 & 17 in Boro Season	Sub-station, Magura
512	Performance of Binadhan-10 in T. Aman Season	• To find out the performance of Binadhan-10 in T. Aman Season	Sub-station, Magura
513	Farmers observation trials (FOT) with Binadhan-15	• To demonstrate the performance of Binadhan-15 to farmers	Farmers' field of Sadar, Magura

Sl.	Research Title	Objective(s)	Location(s)
		• To identify suitable areas for extensive promotional work • To encourage the farmers for cultivation of Binadhan-15	
514	Block farming with Binadhan-16	• To demonstrate performance of Binadhan-16 in different areas of Jashore region • To encourage farmers for cultivation of this variety	On-Farm: Jhenaidah, Rajbari, Chuadanga, Jashore, Magura
515	Block farming with Binadhan-17	• To demonstrate the performance of Binadhan-17 in different areas of Jashore region • To encourage farmers for cultivation of this variety	On-Farm: Jhenaidah, Rajbari, Chuadanga, Jashore, Magura
516	Block farming with Binadhan-20	• To demonstrate the performance of Binadhan-20 in different areas of Jashore region • To encourage farmers for cultivation of this variety	On-Farm: Jhenaidah, Rajbari, Chuadanga, Jashore, Magura
517	Block farming with Binadhan-22	• To demonstrate the performance of Binadhan-22 in different areas of Jashore region • To encourage farmers for cultivation of this variety	On-Farm: Jhenaidah, Rajbari, Chuadanga, Jashore, Magura
518	Block farming with Binasarisha-9	• To demonstrate the performance of Binasarisha-9 in different areas of Jashore region • To encourage farmers for cultivation of this variety	On-Farm: Magura, Jashore, Rajbari, Jhenaidah, Meherpur & Chuadanga
519	Block farming with Binamasur-8	• To demonstrate the performance of Binamasur-8 in different areas of Jashore region • To encourage farmers for cultivation of this variety	On-Farm: Magura, Jashore, Rajbari, Jhenaidah, Meherpur & Chuadanga districts
520	Block farming with Binamasur-9	• To demonstrate the performance of Binamasur-9 in different areas of Jashore region • To encourage farmers for cultivation of this variety	On-Farm: Magura, Jashore, Rajbari, Jhenaidah, Meherpur & Chuadanga districts
521	Block farming with Binamasur-10	• To demonstrate the performance of Binamasur-10 in different areas of Jashore region • To encourage farmers for cultivation of this variety	On-Farm: Magura, Jashore, Rajbari, Jhenaidah, Meherpur & Chuadanga districts
522	Block farming with Binachinabadam-4	• To demonstrate the performance of Binachinabadam-4 in different areas of Jashore region • To encourage farmers for cultivation	On-Farm: Magura, Jashore, Rajbari, Jhenaidah, Meherpur & Chuadanga districts

Sl.	Research Title	Objective(s)	Location(s)
		of this variety	
523	Block farming with Binachinabadam-7	• To demonstrate the performance of Binachinabadam-7 in different areas of Jashore region • To encourage farmers for cultivation of this variety	On-Farm: Magura, Jashore, Rajbari, Jhenaidah, Meherpur & Chuadanga districts
524	Block farming with Binadhan-14	• To demonstrate the performance of Binadhan-14 in different areas of Jashore region • To encourage farmers for cultivation of this variety	On-Farm: Magura
525	Block farming with Binadhan-24	• To demonstrate the performance of Binadhan-24 in different areas of Jashore region • To encourage farmers for cultivation of this variety	On-Farm: Magura, Jashore, Rajbari, Jhenaidah, Meherpur & Chuadanga districts
526	Block farming with Binamoog-8	• To demonstrate the performance of Binamoog-8 in different areas of Jashore region • To encourage farmers for cultivation of this variety	On-Farm: Magura, Jhenaidah & Chuadanga
527	Block farming with Binatil-2	• To demonstrate the performance of Binatil-2 in different areas of Jashore region • To encourage farmers for cultivation of this variety	On-Farm: Magura, Jashore, Rajbari, Jhenaidah, Meherpur & Chuadanga
528	Block farming with Binadhan-19	• To demonstrate the performance of Binadhan-19 in different areas of Jashore region • To encourage farmers for cultivation of this variety	On-Farm: Magura, Jashore, Rajbari, Jhenaidah, Meherpur & Chuadanga
529	Block farming with Binadhan-21	• To demonstrate the performance of Binadhan-21 in different areas of Jashore region • To encourage farmers for cultivation of this variety	Date of sowing, transplanting & maturity, grain yield, reactions of farmers and extension personnel.
530	Validation trial of Binatil-2, 3 & 4	• To demonstrate the varieties in special situations or sites for evaluating reactions of • farmers and extension personnel • To demonstrate specific advantages of crop varieties to the farmers • To encourage farmers for accelerated adoption of crop varieties • To provide feedback information • To establish better relationship between BINA and Extension Agencies	On-Farm: Magura

Sl.	Research Title	Objective(s)	Location(s)
531	Improvement of suitable and profitable cropping patterns with BINA released varieties/technologies	• To increase cropping intensity and crop yield through designing suitable cropping patterns • To improve knowledge and skills of farmers about improved production technologies of BINA released varieties • To improve farmers socio-economic status and achieve year round food security • To ensure proper utilization of land and time	On-Farm: Magura, sadar Jashore, sadar Rajbari & Kaliganj Jhenaidah
532	Development of BINA-technology village in surrounding areas of Sub-station, Magura	• To establish BINA Technology pilot area in surrounding village(s) of Sub-station, Magura for extension of BINA developed varieties/ technologies • To improve farmers socio-economic status by motivating adoption of BINA technologies • To include BINA technologies in the existing cropping pattern(s) • To demonstrate field performance of BINA developed varieties/ technologies to the visitors • To extend promising mutant varieties/technologies among the farmers through seed exchange programme	On-Farm: Magura
533	Dissemination of BINA-Varieties/technologies	• To demonstrate field performance of BINA varieties/technologies to the visitors • To extend promising mutant varieties/technologies among the farmers through seed exchange programme	On-Farm: Jashore and Faridpur region
534	Truthfully labeled seed production of BINA released crop varieties	• To supply seeds for demonstration of BINA-village programme, GOs, NGOs, farmers and other research purposes	Sub-station: Magura
535	Technology Dissemination (Promotional Activities)	• To improve farmers knowledge about BINA developed varieties/Technologies • To publicize BINA generated technologies/varieties through training and field days	Sub-station: Magura & Upazila Agriculture Office, Mohammadpur, Magura
SUB-STATION: CUMILLA			
536	Advance Yield trials of short duration rice lines for Haor areas	• To asses yield performance of short duration rice lines for haor areas	Sub-station: Cumilla, On-farm: haor area of B. Baria & Cumilla

Sl.	Research Title	Objective(s)	Location(s)
537	Advance yield trial of blast resistant rice lines	• To select desired rice lines for blast resistance with higher yield	On-station: Mymensingh Sub-station: Cumilla
538	Advance yield trial of brown plant hopper resistant rice lines	• To select desired rice lines with BPH resistance with higher yield	On-station: Mymensingh Sub-station: Cumilla
539	Growing of M5 populations of Basmati rice for earliness and higher yield	• To select desirable Basmati type rice mutants for earliness, grain quality and higher yield	Sub-station: Cumilla
540	Evaluation of some long-grained salt tolerant exotic rice germplasm at saline area	• To select salt tolerant rice lines with higher yield and fine grain	Sub-station: Satkhira, Cumilla
541	Growing of M2 generation of Basmati rice for higher yield and earliness	• To identify high yielding and early maturing fine grain rice mutant	Sub-station: Cumilla
542	Growing M ₁ generation of rice for premium grain quality and salinity tolerance with higher yield	• To create variability for premium quality grain and salinity tolerance with higher yield	Sub-station: Cumilla
543	Morphological Characterization and yield performance of four Black and red rice cultivars	• To assess the morphological character and yield performance of four black and red rice cultivar	Sub-station: Cumilla
544	Growing of M ₃ generation for development of high yielding ginger lines	• To select rhizome rot tolerant plants with desirable rhizome size, shape and flavor.	Sub-station: Cumilla
545	Growing of M ₃ generation for development of high yielding turmeric lines	• To select rhizome rot tolerant plants with desirable rhizome size, shape, colours (dye) and flavor of turmeric.	Sub-station: Cumilla
546	Collection of rice, pulse, oil seed, vegetables, spices germplasm	• To enrich the number of germplasms of BINA Gene Bank	Rice and other crop germplasm from char, hill and haor area of Cumilla, Brahmanbaria, Sunamganj and Khagrachari
547	Growing of collected germplasm for seed multiplication and conservations	• To preserve PGR material	Sub-station: Cumilla
548	Agro morphological characterization of Bangladeshi aromatic rice germplasm	• To characterize the aromatic rice germplasm	Sub-station: Cumilla
549	Field Evaluation of some exotic and local rice germplasm for salinity tolerance	• To identify rice germplasm for salinity tolerance	Sub-station: Cumilla
550	Agro morphological characterization of local rice germplasm collected from	• To characterize the rice germplasm collected from Cumilla	Sub-station: Cumilla

Sl.	Research Title	Objective(s)	Location(s)
	cumilla region		
551	Comparative study of BINA developed Aman varieties for different transplanting time in Cumilla region	• To investigate the comparison of yield and yield contributing characters of BINA developed Aman varieties and due to different transplanting time in Cumilla region	Sub-station: Cumilla
552	Effect of temperature during flowering time on the yield and yield contributing characters some Boro rice cultivars in Cumilla region	• To investigate the flowering time temperature effect on yield and yield contributing characters of some rice cultivars in Cumilla region.	Sub-station: Cumilla
553	Comparative study of some Boro rice varieties at upland of Cumilla region	• To assess the performance and duration of BINA developed some rice cultivars at Boro season at upland in Cumilla region.	BARD, Cumilla
554	Effect of stagnant water on the yield and yield contributing characters some rice cultivars during Aus season in Cumilla region	• To investigate the effects of stagnant water on yield and yield contributing characters of Aus varieties in Cumilla region	Sub-station: Cumilla
555	Develop appropriate management techniques of Zero tillage for mustard cultivation under different moisture regime in low land of Cumilla region.	• To develop the appropriate management techniques of Zero tillage for mustard cultivation under different moisture regime in low land of Cumilla region	Sub-station: Cumilla
556	Development of four crops cropping pattern including oil crop at upland area of Cumilla district	• To develop profitable four crops cropping pattern including oil crop at upland of cumilla district	On-farm: Cumilla and B.Barua
557	Development a cropping pattern including oil crop at haor area of B.barua district	• To increase cropping intensity & adopt mustard cultivation in haor areas	On-farm: Brahmanbaria.
558	Observation trails of Binadhan-24, Binadhan-16 and Binadhan-17 in Cumilla region	• To evaluate BINA released short duration rice variety for Cumilla region to save rice field from early and flash flood.	Cumilla & Brahmanbaria haor areas.
SUB-STATION, SATKHIRA			
559	Morphological evaluation of BINA released Aman rice varieties for higher grain yield	• To evaluate the performance of BINA released Aman rice variety	Sub-station: Satkhira
560	Combined effect of organic and inorganic fertilizers on yield and yield contributing characters of mustard	• To evaluate the response of combined application of organic and inorganic fertilizers on growth and yield contributing characteristics of mustard.	Sub-station: Satkhira
561	Varietal evaluation of different rapeseed varieties	• To select the best higher yielding rapeseed variety for late sowing with	Sub-station: Satkhira

Sl.	Research Title	Objective(s)	Location(s)
	for late sowing	higher temperatures in the flowering period in the Khulna region	
562	Comparative study of late maturity higher yielding mustard varieties in Satkhira	• To find out higher yielding late mature mustard varieties in Satkhira that cope with cropping pattern (Aman-Mustard-Jute/Sesame/Fallow)	On-farm: Tala, Satkhira
563	Effect of foliar application of zinc (Zn) and Boron (B) on mungbean yield and yield contributing characters	• To know the effect of foliar application of Zn and B and quantify the suitable doses for maximizing the mungbean yield production	Sub-station: Satkhira
564	Morphological evaluation of different sesame varieties in fallow land of Khulna	• To evaluate the performance of modern and local varieties of sesame for selecting the best performing varieties in saline soils of the Khulna region in the Kharif-1 season.	Sub-station: Satkhira
565	Improvement of summer mungbean through mutation breeding	• To develop higher-yielding synchronize pod bearing mungbean varieties	Sub-station: Satkhira
566	Varietal improvement of canola through hybridization	• To select the early maturing, high yielding with less erucic acid canola/rapeseed lines.	Sub-station: Satkhira
567	Comparative study of popular Aus rice varieties based on cultivation method in Satkhira	• To find out suitable variety and cost-effective rice cultivation method in Aus season in Satkhira	Sub-station: Satkhira
568	Development of profitable cropping patterns in Khulna region (non-saline/ low Saline)	• To increase the cropping intensity including BINA released varieties • To ensure maximum utilization of land and time.	On-Farm: Khulna region
569	Establishment of BINA technology in Khulna region through block demonstration and quality seed dissemination	• To encourage farmers in adopting BINA released crop varieties • To develop new cropping pattern using BINA developed varieties instead of existing cropping pattern. • To improve farmer's socio-economic status in Khulna region.	Satkhira Sadar, Tala, Satkhira
570	Seed production of BINA released crop varieties popular in Khulna region	• To produce quality seed and supply seeds to different organization.	Sub-station: Satkhira and Farmers field
SUB-STATION, JAMALPUR			
571	Advanced yield trial of eggplant mutant lines	• To select shoot and fruit borer tolerant genotypes and Phomopsis blight tolerant genotypes with high yield potential & also increase the nutritional quality.	Sub-station. Jamalpur.
572	Advanced yield trial of bottle gourd mutant lines for better quality and higher yield	• To select desirable mutants of bottle gourd for desirable size, shape, taste, color with improved nutritional quality and high yield potential for	Sub-station. Jamalpur.

Sl.	Research Title	Objective(s)	Location(s)
		early winter and summer season.	
573	Evaluation of eco-compost for vegetable (Cabbage) production and improve soil health	• To grow organic vegetables using organic fertilizer and no pesticides. • To improve soil health	Sub-station. Jamalpur.
574	Evaluation of improve cropping pattern in Jamalpur and Tangail region	• To increase cropping intensity of this region • To increase crop production as well as income of farmer's • To find out the performance of improved cropping pattern.	Jamalpur and Tangail region.
575	Production of quality seed of BINA released crop varieties popular in Jamalpur.	• To supply seed for demonstration trials, GOs and NGOs, farmers and other research purposes and to fulfill special requirement for environmental hazards.	Sub-station. Jamalpur.
SUB-STATION, NALITABARI			
576	Experiment related to development of new varieties in Aman season:		Sub-station: Nalitabari
577	Regional yield trial with some introgressed bacterial leaf blight resistant rice lines	• To develop introgressed bacterial leaf blight resistant rice lines	Sub-station: Nalitabari
578	On station trials of some rice lines with earliness and higher yield	• To develop variety with earliness and higher yield	Sub-station: Nalitabari
579	Regional yield trial of three rice lines for better grain quality and higher yield	• To develop variety for better grain quality and higher yield	Sub-station: Nalitabari
580	On station trials of two rice lines for for better grain quality and higher grain yield.	• To develop variety with earliness and higher yield	Sub-station: Nalitabari
581	Growing M ₁ generation of pajam and chinishail.	• To select mutants with premium grain quality and higher yield.	Sub-station: Nalitabari
582	Experiment related to development of new varieties of Mustard		Sub-station: Nalitabari
583	On-station and on-farm yield trial with M ₈ generation of rapeseed (B. rapa var. toria)	• To develop short duration and high yielding mustard variety.	Sub-station: Nalitabari
584	Regional yield trial with M ₆ rapeseed (B. napus) mutants.	• To develop short duration and high yielding mustard variety.	Sub-station: Nalitabari
585	Preliminary yield trial with M ₆ rapeseed (B. rapa var. toria) mutants.	• To develop short duration and high yielding mustard variety.	Sub-station: Nalitabari
586	Experiment related to development of new varieties in Boro season		Sub-station: Nalitabari
587	Regional yield trial with some	• To develop introgressed bacterial leaf	Sub-station: Nalitabari

Sl.	Research Title	Objective(s)	Location(s)
	introgressed bacterial leaf blight resistant rice lines	blight resistant rice lines	
588	On station trial of some rice lines for earliness and higher grain yield	• To develop variety with earliness and higher grain yield	BINA substation, Nalitabari.
589	Study of boro rice varieties on seedling age in different AEZs	• To determine the optimum seedling age of BINA released varieties.	Sub-station: Nalitabari
590	Evaluation of newer fungicides in managing the blast disease of rice in Bangladesh	• To evaluate the efficacy of newer fungicides.	Sub-station: Nalitabari
591	Observational trial with newly released variety Binadhan-24	• To observe the performance of Binadhan-24 in farmers' field.	Kodomtoli, Nalitabari
592	Adaptive trial with boro rice mutants	• To assess the performance of boro rice mutants in different boro growing region.	Kodomtoli, Nalitabari
593	Isotope aided studies on different levels of nitrogen in Mustard-Boro-T. aman rice cropping pattern	• To assess the nitrogen use efficiency using ¹⁵ N isotope.	Sub-station: Nalitabari
594	Observation yield trial of M ₄ generation of black cumin	• To develop high yielding and short duration variety.	Sub-station: Nalitabari
SUB-STATION, GOPALGANJ			
595	Characterization of local rice variety	• To identify the attributing character of those variety	Sub-station: Gopalganj
596	Characterization of local mungbean varieties.	• To identify the morphological characters.	Sub-station: Gopalganj
597	Development of a suitable cropping pattern in the farmers' field of Gopalganj&Faridpur	• To find out a profitable cropping pattern in the selected suitable areas	Sub-station: Gopalganj
598	Block farming with Binadhan-17 in collaboration with DAE	• To demonstrate the performance of Binadhan-17 in selected suitable areas • To encourage the farmers for extensive cultivation of Binadhan-17	Sub-station: Gopalganj
599	Block farming with Binadhan-19 in collaboration with DAE	• To demonstrate the performance of Binadhan-19 in selected suitable areas • To encourage the farmers for extensive cultivation of Binadhan-19	Sub-station: Gopalganj
600	Block farming with Binadhan-24 in collaboration with DAE	• To demonstrate the performance of Binadhan-24 in selected suitable areas • To encourage the farmers for extensive cultivation of Binadhan-24	Sub-station: Gopalganj
601	Development of BINA-	• To include BINA technologies in the	Sub-station: Gopalganj

Sl.	Research Title	Objective(s)	Location(s)
	technology village in Gopalganj	- existing cropping pattern - To demonstrate field performance of BINA technologies to the visitors - To extend promising mutant varieties among the farmers through seed - exchange programme	
602	Dissemination of BINA-Varieties/technologies	- To demonstrate field performance of BINA technologies to the visitors - To extend promising mutant varieties among the farmers through seed - exchange program	Sub-station: Gopalganj
603	Truthfully labeled seed production of BINA released crop varieties	To supply seeds for demonstrations, BINA village program, GOs & NGOs, farmers and other researcher purposes	Sub-station: Gopalganj
SUB-STATION, BARISHAL			
604	Irradiation of Sunflower for dwarfness and higher yield	To develop mutant lines having short plant height, higher seed yield and oil content	Sub-station: Barishal.
605	Irradiation of malta variety for improved color and sweetness (Collaboration with Horticulture Division)	To create variability for developing variety containing desired color and sweetness	Sub-station: Barishal.
606	Irradiation of local guava cultivar for desired shape with color (Collaboration with Horticulture Division)	To create variability for developing year round variety with desired shape and color	Sub-station: Barishal.
607	Effect of different level of chemical fertilizers and biofertilizer for increased crop yield in rice-soybean-vegetable cropping pattern	To assess the appropriate doses of fertilizers for crop yield and soil fertility	Sub-station: Barishal.
608	Effect of different moisture regime and nutrients on growth of mustard	- To see the effect of different water regime on seed germination of mustard. - To see the effect of different level of fertilizer on mustard growth at different water regime	Sub-station: Barishal.
609	Screening and evaluation of rice lines against two widely grown rice cultivar in boro season at barishal region	To select desired lines for higher yield	Sub-station: Barishal.
610	Evaluation of rice lines against four widely grown rice cultivar at barishal region	To analyze the performance, yield components and total grain yield of rice lines against four widely grown rice varieties in Barishal region of Bangladesh.	Sub-station: Barishal.
611	Yield and quality of soybean seed at different soil fertility condition	To investigate the impact of the soil fertility condition on the grain yield with nutritional and functional	Sub-station: Barishal.

Sl.	Research Title	Objective(s)	Location(s)
		properties of soybean	
612	Establishment of BINA technology village in Barishal region through block demonstration and quality seed dissemination.	• To encourage farmers in adopting BINA released crop varieties. • To develop new cropping pattern using BINA developed varieties instead of existing cropping pattern. • To improve farmer's socio-economic status in Barishal region.	Barishal, Patuakhali, Bhola, Jhalokati, Borguna and Pirojpur district
613	Seed production of BINA released crop varieties popular in Barishal region	• To produce and distribute the quality seed of BINA released crop varieties	Sub-station farm and farmer's field of Barishal.
SUB-STATION, NOAKHALI			
614	Growing M ₅ generation of rice landrace for higher grain yield	• To select desirable mutants for higher yield	Sub-station: Noakhali
615	Growing BC ₁ F ₂ population of rice	• To select desirable lines for higher yield	Sub-station: Noakhali
616	Growing BC ₂ F ₁ population of rice	• To select desirable lines for higher yield	Sub-station: Noakhali
617	Improvement of M ₆ mutant rice lines through hybridization	• To improve plant type of high yielding rice mutants	Sub-station: Noakhali
618	Collection and evaluation of local rice landraces	• To select potential landrace for future breeding programme	Chottogram region and Sub-station: Noakhali
619	Development of a suitable cropping pattern in the farmers' field of Noakhali	• To find out a profitable cropping pattern in the selected suitable area(s)	On-Farm: Noakhali
620	Block farming of Binadhan-19 in collaboration with DAE	• To demonstrate the performance of Binadhan-19 in selected suitable areas • To encourage the farmers for extensive cultivation of Binadhan-19	On-Farm: Noakhali, Feni and Chittagong
621	Block farming of Binachinabadam-4/9/10 in collaboration with DAE	• To demonstrate the performance of Binachinabadam-4/9/10 varieties in selected suitable areas • To encourage the farmers for extensive cultivation of Binachinabadam-4/9/10	On-Farm: Noakhali, Laxmipur, Feni, Chittagong and Cox's Bazar
622	Block farming of Binasarisha-4/9 in collaboration with DAE	• To demonstrate the performance of Binasarisha -4/9 varieties in selected suitable areas • To encourage the farmers for extensive cultivation of Binasarisha-4/9	On-Farm: Noakhali, Feni and Chittagong
623	Development of BINA technology village in Noakhali	• To include BINA technologies in the existing cropping pattern • To demonstrate field performance of BINA technologies to the visitors • To extend promising mutant varieties	Noakhali region

Sl.	Research Title	Objective(s)	Location(s)
		among the farmers through seed exchange programme	
SUB-STATION, KHAGRACHHARI			
624	Preliminary yield trial of upland rice lines for hill area	• To select desired line for upland ecosystem.	Sub-station: khagrachhari
625	Preliminary yield trial with M6 rapeseed (B.rapavar.toria) mutant	• To select desirable mutant with early maturity and higher seed yield.	Sub-station: khagrachhari
626	Preliminary yield trial with some F ₇ mutants of groundnut.	• To asses performance over location	Sub-station: khagrachhari
627	On farm and on-station trial with some M8 mutants of groundnuts.	• To asses performance over location	Sub-station: khagrachhari
628	Advance yield trial of elite M6 mutant of carrot	• To select desirable mutant of carrot for yield potential, desirable size (deep rooted) shape and colour. • To select desirable mutants of carrot for quality seed production.	Sub-station: khagrachhari
629	Maintenance of BINA released tomato varieties	• To maintain the varietal purity and produce breeder seed.	Sub-station: khagrachhari
630	Preliminary yield trial of zinger mutants(M1V5)	• To select rhizome rot tolerant mutants with high yield potential.	Sub-station: khagrachhari
631	Maintenance of Binamorich-1, binahalud-1, Binarosun-1, and Binamorich-2	• To produce breeder seed of this varieties,	Sub-station: khagrachhari
632	Assessing propagating methods and multiplication of Binalebu-1, Binalebu-2 and Binalebu-3.	• To see the suitable method for propagation of Binalebu-1, Binalebu-2 and Binalebu-3.as well as multiplication for extend the varieties all over the country.	Sub-station: khagrachhari
633	Assessment of soil erosion and crop management in some selected hill areas.	• To determine the effect of soil erosion on the yield and yield contributing parameters of crops.	Sub-station: khagrachhari and Bandorban
634	Measurement of soil and nutrient loss due to tillage practices by FRN techniques.	• To determine the loss of soil nutrient due to soil erosion on cultivable slop	Sub-station: khagrachhari
635	Effect of rhizobia strains on growth, nodulation and yield of country bean field condition	• To see the effect of bradyrhizobium inoculation on growth, nodulation and dry matter yield of country bean in pot condition. • To determine the nitrogen fixing ability of rhizobia strains in pot condition.	Sub-station: khagrachhari
636	Determination of optimum seed rate through dibbling methods for zoom cultivation (Aus) in hill tract.	• To find out optimum seed rate for maximizing yield in zoom cultivation (Aus rice) in hill tract	Sub-station: khagrachhari
637	Improvement of cropping	• To increase cropping intensity, soil	Sub-station:

Sl.	Research Title	Objective(s)	Location(s)
	pattern with slopping agricultural land technology (SALT) in hill tracts.	health and farmers income.	khagrachhari
638	Determination of the effect of mulching techniques in the context of weed management in crop cultivation on hills	• To determine the effect of selected mulching technique on weed management • To evaluate the yield performance of crop as affected by mulching technique.	Sub-station: khagrachhari
639	Study on the effect of natural and chemical herbicides in weed management for Boro rice / Aus in CHT of Bangladesh	• To determine the effect of different herbicides on weed management.	Sub-station: khagrachhari
640	Development of weed management options in Aus rice cultivation (Binadhan-19) on the hill slope of CHT	• To select suitable weed management techniques.	Sub-station: khagrachhari
641	Evaluation of the yield performance of intercropping combination between sesame and mungbean in hill tracts.	• To evaluate the performance of intercropping combination in regard to cultural practices. • To develop the suitable intercropping on growth and yield development sesame and mungbean cultivation.	Substation farm, Sub-station: khagrachhari.
642	Improvement of rain water harvesting technique for crop production in hill tracts of Bangladesh	• To develop the continuous supply of irrigation facility for crop production on hill in dry season. (Nov-march)	On-farm: Sub-station: khagrachhari
643	Determination of latitudinal effect on crop cultivation on slope in hill tracts	• To select better slope site for profitable crop production.	On-farm: Sub-station: khagrachhari.
644	Determination of the effect of different mulches in the context of soil moisture fertility and weed management in turmeric cultivation.	• To determine the effect of mulches on soil moisture soil fertility and weed management for proper growth and development of crops.	On-farm: Sub-station: khagrachhari.
645	Development of multilayer cropping system on hill slope in CHT	• To determine the context of soil erosion, plant spacing and planting arrangement in CHT.	Sub-station: khagrachhari
646	Development of cropping pattern on hill area in Bangladesh.	• To study the economy of land use potentiality in CHT.	On-farm: Sub-station: khagrachhari
647	Determination of slope effect on crop arrangement in CHT	• To determine the suitable slopes for crop production at CHT	On-farm: Sub-station: khagrachhari
648	Development of efficient irrigation practice for BINA develop citrus crop for hilly areas of Bangladesh	• To ensure efficient use rainwater and maximize water productivity for Binalebu-1 • To develop of efficient irrigation	On-farm: Sub-station: khagrachhari

Sl.	Research Title	Objective(s)	Location(s)
		practice for BINA developed citrus crop	
649	Development of power sprayer-based sprinkler irrigation system /practice for vegetable crops.	• To ensure efficient use rainwater and maximize water productivity for leafy crops/vegetables. • To develop of efficient irrigation practice for vegetables in hill area.	On-farm: Sub-station: khagrachhari
650	Farmer's observation trials with newly released groundnut varieties.	• To demonstrate performance of Binachinabadam-10 in different areas. • To identify the suitable areas for large scale demonstration.	On-farm: Sub-station: khagrachhari
651	Farmer's observation trials with newly released turmeric variety	• To demonstrate performance of Binahalud -1 in different areas. • To identify the suitable areas for large scale demonstration. • To encourage the farmers for cultivation of Binahalud -1.	On-farm: Sub-station: khagrachhari
652	Base line survey of char Northan part and hilly regions.....profitable cropping pattern Improvement project areas of Bangladesh	• To know the socio-economic and livelihood status of the selected farmers. • To identify the changing cropping pattern practiced in the study area.	Sub-station: khagrachhari, rangamati and bandorban,
653	Growing of M3 generation for drought tolerance and high yielding sticky rice	• To identify high yielding drought tolerant sticky rice lines	Substation farm, Sub-station: khagrachhari.
654	Observational yield trial of upland rice lines (International Upland Rice Observation Nursery)	• To select desired lines for upland ecosystems	Substation farm, Sub-station: khagrachhari.
655	Evaluating the yield performance of mustard varieties with and without (zero) tillage	• To observe the yield potentiality	Sub-station: Khagrachari
656	Effects of mechanical stress on plant at tillering capacity and yield of transplant boro rice.	• To find out the tillering capacity of selective Boro variety and their yield improvement.	Sub-station: Khagrachari
657	Growing of M3 generation for development of high yielding zinger lines	• To identify rhizome rot tolerant high yielding zinger lines	Sub-station: Khagrachari
658	Growing of M2 generation for development of high yielding turmeric lines	• To identify rhizome rot tolerant high turmeric lines	
659	Farmers observation trails with T. Aman rice	• To demonstrate the performance of Binadhan-12 to farmers field in different areas of Bangladesh • To identify suitable areas for expensive promotional work	Khagrachari (Sadar, Panchari and Manikchari)

Sl.	Research Title	Objective(s)	Location(s)
		• To encourage the farmers for cultivation of Binadhan-12	
660	Farmers observation trails with mustard	• To demonstrate the performance of Binashorisa-9 to farmers field in different areas of Bangladesh • To identify suitable areas for expensive promotional work • To encourage the farmers for cultivation of Binashorisa-9	Khagrachari (Sadar, Panchari and Manikchhari)
661	Observational trails of two turmeric varieties (Binaholud-1 and BARI holud-5)	• To observe the performance of Binaholud-1 compared to BARI holud-5 • To identify the promising characters in hill areas • To encourage the farmers for cultivation	Sub-station: Khagrachari
662	Observational trails of four mustard varieties	• To observe the performance • To identify the promising characters in hill areas • To encourage the farmers for cultivation	Sub-station: Khagrachari
663	Development of improved cropping pattern in six upazilas of Khagrachari	• To increase the cropping intensity (%) • To develop a profitable cropping pattern • To increase the land use efficiency • To conserve soil health	Khagrachari (Sadar, Panchari and Manikchhari, Dighinala, Matiranga, Naniarchor)
664	Establishment of BINA Technology village in surrounding area of Sub-station, Khagrachari	• To establish BINA technology pilot area in the surrounding village(s) of Khagrachari Sub-station • To include BINA technologies in the existing cropping pattern • To improve farmers socio-economic status through adoption of BINA released technologies • To demonstrate field performance of BINA technologies to the visitors	Sub-station: Khagrachari
665	Up-scaling of BINA developed varieties	• To demonstrate the performance of BINA released different varieties to the farmer's field. • To increase production and income of the farmers	Sub-station: Khagrachari
666	Quality seed production of promising BINA released varieties for hill tracts	• To supply quality seeds to the farmers and DAE for extension work • To meet the local demand of seed and supply during season for demonstration and research purposes • To sustain the cultivation of BINA released crop varieties	Sub-station: Khagrachari

Sl.	Research Title	Objective(s)	Location(s)
SUB-STATION: SUNAMGANJ			
667	Screening of F ₂ population of summer tomato	To select best line for summer season with tolerant to biotic and abiotic stress	Sub-station: Sunamganj
668	Growing of M ₁ generation of barshati sweet gourd	To develop variety with high yield potential, tolerant to fruit fly and suitable for summer and winter season	Sub-station: Sunamganj
669	Growing of M ₁ generation of Dhanimorich	To develop variety with high yield potential, Tolerant to anthracnose, foot rot and bacterial wilt and suitable for year round cultivation	Sub-station: Sunamganj
670	Generation of cropping pattern with BINA released mustard and groundnut varieties in Sunamganj region	- To study the adaptability of BINA released mustard and groundnut variety in developing cropping pattern - To developed BINA commodities based cropping pattern in Sunamganj region	On-farm: Sadarupazilla, Sunamganj
671	Generation of cropping pattern with BINA released Groundnut and Aus rice	- To increase cropping intensity and farmers income - To adopt groundnut cultivation in new cropping pattern for increasing its production	On-farm: Chatakupazilla, Sunamganj
672	Generation of cropping pattern with BINA released mustard and boro varieties	- To increase cropping intensity and farmers income - To adopt mustard cultivation in new cropping pattern for increasing its production	On-farm: Chatakupazilla, Sunamganj
SUB-STATION, CHAPAINAWABGANJ			
673	Studies on groundwater dynamics in Barind areas	To determine long-term trend of WT for sustainable management.	Sub-station: Chapainawabganj
674	Monitoring of groundwater table fluctuation at Chapainawabganj sub-stations.	- To gather long-term WT data - To observe seasonal and long-term trend for its sustainability	Sub-station: Chapainawabganj
675	The effect of supplemental irrigation for higher yield and water use efficiency of Aman rice.	To study the effect of different water management practices on the yield and water use efficiency in Aman season	Sub-station: Chapainawabganj
676	Water management practices Boro rice cultivation in raised bed lysimeter	To study the effect of different water management practices on the yield and water use efficiency in Boro season.	Sub-station: Chapainawabganj
677	Effect of potassium (K) fertilizer on the growth and yield of Binadhan-17 at Barind track area of Rajshahi region	To observe the effect of potassium (K) Fertilizer on Binadhan-17	Sub-station: Chapainawabganj

Sl.	Research Title	Objective(s)	Location(s)
678	Effect of different insecticides and IPM management practices for T Aman, Aus and Boro rice	• To observe the insecticides and IPM practices	Sub-station: Chapainawabganj



BANGLADESH SUGARCROP RESEARCH INSTITUTE

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Sl.	Title of Research	Objective(s)	Location(s)
BREEDING DIVISION (Varietal Improvement)			
1	Hybridization for high sugar high yield short duration and self detrash varieties of sugarcane	• Developing improved varieties of sugarcane in relation to higher cane (>100 t/ha) and sugar (pol% cane >13) yield • Selecting short duration (10 months) and lodging tolerant variety of sugarcane • Selecting self-detrashing variety of sugarcane	Ishurdi, Pabna
2	Evaluation of sugarcane clones as site specific gur variety	• Selecting promising clone(s) with high gur recovery for Barisal region	Bandarban and Patuakhali
3	Evaluation of sugarcane clones as site specific chewing variety	• Selecting sugarcane clone(s) with improved chewing attributes • Developing location specific chewing variety	Bandarban, Gazipur, Chuadanga, Pabna, Chapainawabganj and Kurigram
4	Development of salt tolerant varieties of sugarcane	• Developing salt tolerant (12-15 dS/m) clones for southern region • Selecting clones free from salt in juice	Ishurdi and Khulna
5	Development of drought tolerant varieties of sugarcane	• Developing sugarcane varieties tolerant to drought stress • Selecting high yield potential clones under rainfed condition	Ishurdi and Rajshahi
6	Genetic enhancement of sugarcane (<i>Saccharum</i> sp. Hybrids) for resistant to red rot disease	• Developing red rot resistant clones through interspecific hybridization • Selecting progenies resistant to red rot disease.	Ishurdi, Pabna
7	Collection characterization and conservation of indigenous and exotic germplasm of sugarcane	• Collecting, characterizing and evaluating indigenous and exotic germplasm for using as parent materials and commercial varieties • Assessing the genetic diversity • Identifying and documenting the accessions	Ishurdi, Pabna and Gazipur
8	Varietal improvement of sugarcane through induced mutation	• Developing sugarcane variety having high sucrose content and • Developing sugarcane varieties tolerant to red rot and smut diseases	Ishurdi, Pabna
9	Photoperiodic regulation of flowering in sugarcane	• Inducing flower at early in mid and late flowering genotypes; • Inducing flower at late in early flowering genotypes; • Inducing flower in sparse flowering genotypes and • Synchronizing the flowering time of different genotypes	Ishurdi, Pabna
10	Evaluation of promising	• Determining the performance of the	Ishurdi; Rajshahi;

Sl.	Title of Research	Objective(s)	Location(s)
	sugarcane clones under different yield trials at varying agro-climatic conditions	clones under varying agro-climatic conditions; • Selecting location specific variety • Determining the ratooning potential of the clones	RSRS, Thakurgaon; Carew & Co., Joypurhat and Jamalpur
11	Breeder seed multiplication of promising clones/ varieties of sugarcane	• Producing breeder seeds of potential varieties and clones • Maintaining purity of existing varieties • Distributing quality seeds to different stakeholders	Ishurdi, Pabna
12	Morphological characterization of stevia germplasm	• Determining the morphological diversity among stevia germplasm • Evaluating biomass accumulation, morphological characters and physiological indices for assessing its breeding potential	Ishurdi, Pabna and RSRS, Thakurgaon
13	Improvement of date palm using artificial pollination and molecular breeding	• Improving local date palm for quality juice and fruit yield • Optimizing tissue culture plant regeneration protocol for date palm	Ishurdi, Pabna
BIOTECHNOLOGY DIVISION (Biotechnology and Frontier Research)			
14	Characterization and Documentation of Sugarcane Using Molecular Markers	• Identification of sugarcane varieties, active germplasm and developed soma clones through DNA Fingerprinting; • Determination of genetic diversities among the sugarcane varieties, active germplasm and somaclones using molecular markers; • Tagging of marker against identified character; and • Developing Marker Assisted Selection (MAS) method for sugarcane.	BSRI Biotechnology Laboratory
15	Genetic Enhancement of Sugarcane through Development of Stress Tolerant Somaclones and their Field Evaluation	• Development of somaclones under selection pressure using NaCl, polyethylene glycol and mutagenic agents; and • Evaluation and selection of somaclones for salinity and drought as well as sugarcane somaclones with desirable traits.	BSRI Biotechnology Laboratory and BSRI Biotechnology Research Field
16	Genetic Transformation of Salt and Drought Tolerant Genes in Sugarcane	• Collection and maintenance of <i>Agrobacterium</i> strains with salt and drought tolerant genes. • Transformation of salt and drought tolerant genes in sugarcane; • Confirmation of transformation and expression of salt and drought tolerant genes in sugarcane; and • Transgenic sugarcane development.	BSRI Biotechnology Laboratory and BSRI Biotechnology Research Field
17	Micropropagation for	• Identifying the suitable sources of	BSRI

Sl.	Title of Research	Objective(s)	Location(s)
	Vegetative Seed Production of Sugarbeet	- explants for micropropagation; - Finding out the suitable media for micropropagation; - Developing tissue culture protocols for micropropagation of Sugarbeet; and - Hardening plantlets for transplanting.	Biotechnology Laboratory and BSRI Biotechnology Research Field
18	Micropropagation of Sugarcane Varieties for Rapid Multiplication and High-Quality Seeds (HQS) Production	- Optimizing variety specific media for micropropagation; - Production of micropropagated plants for high quality seed; - Evaluating field performances of micropropagated plants; and - Evaluating genetic stability in micropropagated plants using DNA Fingerprinting.	BSRI Biotechnology Laboratory and BSRI Biotechnology Research Field
19	Tissue Culture for Multiplication of Arabian Date Palm and Palmyra	- Identification of suitable sources of explants; - Finding out the suitable media; - Production of plantlets; and - Developing tissue culture protocols for Arabian Date Palm and Palmyra Palm.	BSRI Biotechnology Laboratory and BSRI Biotechnology Research Field
20	Development of Somaclones of Stevia Through Tissue Culture Techniques and Their Subsequent Molecular Diversity Analysis	- Identification of suitable sources of explants; - Finding out the suitable media; - Production of plantlets; - Production of plantlets; and - Developing desirable non flowering stevia plantlets and molecular diversity analysis.	BSRI Biotechnology Laboratory and BSRI Biotechnology Research Field
PHYSIOLOGY AND SUGAR CHEMISTRY DIVISION (Varietal Improvement)			
21	Screening Sugarcane Genotypes under ZYT- I, ZYT-II & III against Water-logging Stress	- Selecting sugarcane clones with superior tolerance to water-logging; - Finding out morphological and physiological basis for water-logging tolerance to sugarcane and - Identifying parents to use in further crossing programme to develop water-logging tolerant varieties.	BSRI (yard), BSRI (Farm), Ishurdi, Jamalpur
22	Screening Sugarcane Genotypes under ZYT- I, ZYT-II & III against Flood Stress	- Selecting sugarcane clones with superior tolerance to flood; - Finding out morphological and physiological basis for flood tolerance to sugarcane and - Identifying parents to use in further crossing - programme to develop water-logging tolerant varieties.	BSRI (Yard), Chunarughat, Paksey
23	Screening Sugarcane Genotypes under ZYT- I,	Selecting sugarcane clones with superior tolerance to drought;	BSRI (Yard), Rajshahi,

Sl.	Title of Research	Objective(s)	Location(s)
	ZYT-II & III against Drought Stress	- Finding out morphological and physiological basis for drought tolerance to sugarcane and - Identifying parents to use in further crossing programme to develop drought tolerant varieties.	Thakurgaon
24	Screening Sugarcane Genotypes under ZYT- I, ZYT-II & III against Salinity Stress	- Selecting sugarcane clones with superior tolerance to salinity; - Finding out morphological and physiological basis for salinity tolerance to sugarcane and - Identifying parents to use in further crossing programme to develop salinity tolerant varieties.	BSRI (Yard), Satkhira
25	Study on Growth and Development of Date Palm and Palmyra Palm	- To find out the germination and establishment of Date Palm and Palmyra Palm seedlings and - To observe the growth and development phase of Date Palm and Palmyra Palm trees	BSRI (Farm)
26	Germination Potentiality of Advanced Sugarcane Clones Under Low Temperature Stress Condition	Evaluating BSRI bred advanced sugarcane clones having inbuilt potential to germinate under lower ambient temperature.	BSRI (Yard)
27	Screening Sugarcane Clones Based On Maturity Behavior And Gur Manufacture	- Determining maturity behavior of sugarcane clones and find out peak maturity period. - Screening sugarcane clones suitable for gur production. - Determining the quality of gur after preparation.	BSRI (Farm)
28	Optimization Of Techniques for Sugarcane Juice Preparation and Preservation	- Optimizing the techniques for preservation of ready-to-serve bottled sugarcane juice of consumer acceptability and - Observing shelf life of preserved sugarcane juice.	BSRI (Lab)
29	Determination of the Glycemic Index of Sugarcane Juice	To determine the Glycemic Index (GI) from BSRI bred chewing varieties	BSRI Campus
AGRONOMY & FARMING SYSTEMS DIVISION			
(Crop and Soil Management)			
30	Sustainable Sugarcane Farming through Sequential Intercropping of Three Crops with Sugarcane	- To select the suitable sequences of intercrop in sugarcane - To lift up farmers' income through increase cropping intensity	BSRI Farm
31	Effect of Spacing on Yield and Quality of Chewing Cane Cultivation	To identify suitable line spacing for chewing cane.	BSRI Farm, Sirajgonj, Rajshahi, Gazipur, Khulna, Satkhira and Chunarughat

Sl.	Title of Research	Objective(s)	Location(s)
32	Weed Control Efficiency of Some Herbicide in Sugarcane	- To study the performance of herbicides in controlling weeds in sugarcane field; - To find out the economic advantage of weed control by herbicide.	BSRI Farm, BSRI Sub-station, Chuadanga and RSRS (Thakurgaon)
33	Ratooning Ability of Newly Released Sugarcane Varieties in Response to Planting Material in High Ganges River Floodplain Soils (AEZ 11)	- Selecting suitable cane variety(s) for ratoon in High Ganges River Floodplain Soil. - To find out highest production potential of planting materials from different source of setts/settlings for ratoon cane.	BSRI Farm
34	Effect of Variety and Planting Material on Yield and Quality of Chewing Cane	- To identify the appropriate planting material for chewing cane cultivation; - To find out the best sugarcane variety for chewing purpose.	BSRI Farm
Varietal Improvement			
35	Agronomic Evaluation of BSRI Developed Promising Sugarcane Clones at Different Planting Dates	- To study the comparative performance of different promising clones; - To find out the optimum date of planting for advanced promising clones of sugarcane; - To generate agronomic information to meet up the requirement of National Seed Board.	BSRI Farm
36	Performance of Different Tropical Sugarbeet Genotypes at BSRI Farm	- To evaluate the performance of different sugarbeet genotypes - To select the suitable genotypes of sugarbeet based on agronomic performance	BSRI Farm
SOILS & NUTRITION DIVISION (Soil Fertility)			
37	Nutrient Requirement for Sustainable Sugarcane Production under Different AEZs	Finding out the optimum and economic nutrient requirement for sustainable sugarcane production in different AEZs	Shibgonj, Chapainawabgonj (AEZ 26) & Chuadanga (AEZ 11)
38	Nutrient Management for Sugarcane Cultivation in Char Land of Bangladesh	To develop appropriate nutrient management practices for sustainable cultivation of sugarcane in char land soils of Bangladesh	Gangachara, Rangpur and Sariakandi, Bogra (AEZ 3)
39	Effects of Fertilizer Rate and Application time of Nitrogen on Growth, Yield and Quality of Chewing cane	- Determining the optimum dose of NPK for higher sugarcane yield. - To establish the effects of rates and split applications of N fertilizer. - Minimizing the cost of production and environmental pollution.	BSRI Farm (AEZ 11) and RSRS, Thakurgaon (AEZ 1)
40	Growth, Yield and Quality of Chewing Cane as influenced by organic source of nutrients	To determine the growth, yield and quality of chewing sugarcane as influenced by organic source of nutrient.	BSRI Farm, Ishurdi (AEZ 11) and RSRS Farm, Thakurgaon
Soil Microbiology			
41	Isolation and Characterization	Isolation of nitrogen-fixing bacteria	BSRI farm

Sl.	Title of Research	Objective(s)	Location(s)
	of Nitrogen-Fixing Bacteria from Sugarcane soil-plant system.	- from rhizosphere, rhizoplane, roots and stem of the sugarcane • Determination of biochemical and genetic characterization of bacteria • Investigation of nitrogen fixation capacity of the isolated bacteria	
42	Isolation and Characterization of Phosphate Solubilizing Bacteria from Sugarcane Rhizosphere	• Isolating phosphate solubilizing bacteria from sugarcane • Characterizing of promising phosphate solubilizing bacteria on the basis of morphological and biochemical characteristics for making biofertilizer	BNF Lab.,BSRI
43	Biological N ₂ -fixation by Free-living and Associative Bacteria in Sugarcane Genotypes of Bangladesh	• To identify / screen out suitable sugarcane genotypes favored with biological N₂-fixing system under N-stressed field condition. • To investigate the occurrence of diazotrophic bacteria in sugarcane genotypes. • To estimate the input of N, via BNF, into the sugarcane genotypes under study.	BSRI farm, Ishurdi (AEZ 11)
Soil Micronutrient			
44	Isolation and Characterization of Nitrogen-Fixing Bacteria from Sugarcane soil-plant system.	• Isolation of nitrogen-fixing bacteria from rhizosphere, rhizoplane, roots and stem of the sugarcane • Determination of biochemical and genetic characterization of bacteria • Investigation of nitrogen fixation capacity of the isolated bacteria	BSRI farm
ON-FARM RESEARCH DIVISION (Crop Production)			
45	On-farm Trial of Promising Sugarcane Clones at Different AEZs Under Farmers' Field	• To evaluate field level performance of advanced clones/lines in different AEZs. • To obtain farm reaction about the advanced clones/lines.	Thakurgaon [AEZ 1], Joypurhat [AEZ 3], Rajshahi (Barind Tract) [AEZ 26], Jamalpur [AEZ 9] and Chuadanga [AEZ 11]
46	Performance of Newly Released BSRI Sugarcane Varieties in Char land Ecosystem	• To identify suitable BSRI released varieties for Charlands • To assess the economic profitability of BSRI released varieties in the Charlands	Charland of Pabna
47	Adaptive Trial of Chewing Cane with Intercrops in Different Region of Bangladesh	• To find out of chewing varieties for higher yield and economic return for different agro-ecological zone • ii. Ensuring food and nutrition, employment opportunity of chewing cane growers	Rajshahi, Gaibandha, Khulna, Satkhira and BSRI Farm
48	Performance of Different	• To identify the weed infestation	Ishurdi, Pabna

Sl.	Title of Research	Objective(s)	Location(s)
	Weed Management Practices in Sugarcane Field	behavior in sugarcane field • To evaluate the performance of non-chemical and chemical methods for controlling weeds in sugarcane field	
49	Performance of Insecticides Against Sugarcane Stem Borer	• To evaluate the performance of selected insecticides against sugarcane stem borer • ii. To compare the effectiveness of new insecticides	Lalpur, Natore
50	Performance of Selected Cropping Patterns Under Date Palm Based (<i>Phoenix sylvestris</i>) Agro-Forestry Systems	• To evaluate the performance of selected crops in association with date palm trees throughout the year • To identify suitable cropping patterns to fit under date palm based agro-forestry systems • To increase the productivity of date palm-based cropping systems.	Chuadanga
AGRICULTURE ENGINEERING DIVISION (Farm power and Machinery)			
51	Design and development of a sugarcane detrasher	• Designing and development of a sugarcane detrasher; • To perform low cost and timeliness operation of sugarcane detrashing.	Ishurdi
52	Design and Development of a Mini Power Weeder for Sugarcane	• To design and develop a low-cost mini sugarcane power weeder; • To perform low cost and timeliness operation of sugarcane weeding which could be run all time between the two rows of sugarcane in the field.	Ishurdi
53	Developing a cost-effective cultivation system for sugarcane: approaching conservation agriculture	• To reduce cost of investment in cultivation of sugarcane; • To increase productivity through intercropping with suitable crops; • To develop ratooning practice for profitability.	Ishurdi, Walia, Lalpur, puratonIshurdi, Majdia, NBSM, KSM, carew& Co.bd ltd., MSM, ISM
54	Performance evaluation of different tillage machinery for sustainable sugarcane cultivation	• To evaluate the effect of different tillage machinery on yield and yield attribute characteristic of sugarcane • To find out the effect of tillage on soil physical property • To identify the economic tillage method for sugarcane production	Ishurdi
Transfer of Technology			
55	Demonstration of BSRI developed technologies for sugarcane in mill zone and non-mill zone areas	• Evaluating performance of BSRI power crusher for sugarcane in the farmer's place, • Evaluating performance of BSRI minimum tillage trencher for sugarcane in the farmer's field, • Evaluating performance of BSRI power	Sirajgonj, Pabna, Chunarughat, Bandarban, Rangamati, Khagrachari

Sl.	Title of Research	Objective(s)	Location(s)
		weeder for sugarcane in the farmer's field, • Creating interest among the farmers on the use of these machines and.	
PATHOLOGY DIVISION (Varietal Improvement)			
56	Screening of sugarcane genotypes under ZYT-III, ZYT-II, ZYT-I, AYT, PYT and tissue culture derived clones to red rot	- Identifying and selecting of the sugarcane genotypes having higher level of resistance against red rot disease - Recommending of new resistant varieties/tolerant clones for final release to the growers and to preserve in the gene bank for breeding purposes	Ishurdi and RSRS, Thakurgaon
57	Screening of sugarcane genotypes to wilt disease	- Identifying and selecting of the sugarcane genotypes having superior resistance to wilt disease - Recommending of new resistant varieties/tolerant clones for final release to the growers	Ishurdi and RSRS, Thakurgaon
58	Screening of sugarcane genotypes under ZYT-III, II, I and AYT to smut disease	- Identifying and selecting of the sugarcane germplasms having superior resistance to smut disease - Recommending of new resistant varieties/tolerant clones for variety development.	Ishurdi
59	Screening of sugarcane genotypes to pineapple disease	- Identifying and selecting of the sugarcane germplasms having superior resistance to pineapple disease - Recommending of resistant varieties/tolerant clones for variety development	Ishurdi
Disease Management			
60	Performance of different sett treating chemicals in controlling sett rot disease of sugarcane	- Determining the performance of new chemicals over existing recommended sett treating fungicides in controlling sett rot disease of sugarcane - Recommending more fungicides in controlling sett rot disease of sugarcane	Ishurdi and RSRS, Thakurgaon
61	Exploring the suitable soaking time of sugarcane setts for chemical treatment	- To Determination the suitable longer period of sett soaking with carbendazim fungicide. - To find out the toxic effects if any for longer period of sett soaking with carbendazim fungicide.	Ishurdi
Seed Technology			
62	Production and distribution of disease-free clean seed of sugarcane	- Supplying of disease-free clean seeds for the requirement of different divisions of BSRI and out-station experiments. - Distributing the disease-free clean seeds to the mills and non-mill zones for	BSRI Ishurdi, RSRS, Thakurgaon, Rajshahi, Chapainawabgang, Khagrachhari, Rangamati and

Sl.	Title of Research	Objective(s)	Location(s)
		further multiplication. • Minimizing the disease incidence of sugarcane throughout the country.	banderban, Barishal, Joypurhat, jamalpur and Sirajgang
ENTOMOLOGY DIVISION (Crop protection)			
63	Screening of selected sugarcane clones In ZYT I, II & III for resistance against some major insect pests in the field	• Screening advance clones for possible resistance to top shoot borer, early shoot borer, rootstock borer, stem borer, pyrilla leaf hopper, black leaf hopper, scale insect, mealy bug, termites and white grubs • Comparing selected clones with the standard varieties to fulfill the requirement of National Seed Board (NSB)	Patuadangi farm, TSM, Thakurgaon & BSRI Farm, Ishurdi, Pabna
64	Assessment of selected bio-agents against major insect pest of sugarcrop	• Production of mass quantity of bio-agents and ensuring their availability for field release • Maintaining bio-agents stock in the laboratory and • Evaluating their field performance against major insect pests of sugarcane and tropical sugarbeet	BSRI Entomolgy lab & BSRI Farm, Ishurdi, Pabna
65	Evaluation of new molecules for management of major insect pests of sugarcane	• Comparing the effectiveness of new insecticides • Documenting intensity of insect pests' infestation against different insecticides • Finding suitable and effective insecticides and • Getting more chemical control measure for the farmers	Top shoot borer: 1. Patuadangi farm, TSM, Thakurgaon 2. BSRI Farm, Ishurdi, Pabna Termite: 1. Bhabanipur, NBSM, Natore 2. Carew & Co. Ltd., Chuadanga White grub: 1. Patuadangi farm, TSM, Thakurgaon 2. Mohan farm, TSM, Thakurgaon Stem Borer: 1. Lalpur, NBSM, Natore 2. BSRI Farm, Ishurdi, Pabna
66	Integration of bio-intensive pest management (BIPM) components against sugarcane stem borer	• Finding the effective management practice(s) against stem borer • Assessing of different management options and • Monitoring of population abundance in different treatment regime	BSRI Farm, Ishurdi, Pabna
67	Bio-efficacy of insecticides against the incidence of	• Finding effective management practices for sugarcane scale insect and	1. Experimental Farm, Faridpur

Sl.	Title of Research	Objective(s)	Location(s)
	sugarcane scale insect	• Estimating the effects of scale insect on yield and sugar recovery	Sugarmills, Faridpur 2. BSRI Farm, Ishurdi, Pabna 3. Patuadangi farm, TSM, Thakurgaon
68	Observation trial on the effects of radiation and inherited sterility for control on sugarcane stem borer	• Managing of <i>Chilo tumidicostalis</i> through gamma radiation and • Monitoring the population of <i>Chilo tumidicostalis</i> in different treatments	1. BSRI Farm, Ishurdi, Pabna & 2. Bangladesh Atomic Energy Commission, Savar, Dhaka
69	Eco-friendly management practices in controlling sucking pests of sugarcane by using botanical products	• Finding the effective management practice(s) against different Sucking pests • Monitoring of population abundance in different treatment regime	BSRI Farm, Ishurdi, Pabna
70	Field validation of Bio-rational based management techniques in controlling Black leaf hopper of sugarcane	• Finding effective management practices against Black leaf hopper of sugarcane and • Finding effective dose of insecticides against Black leaf hopper of sugarcane.	BSRI Farm, Ishurdi, Pabna
71	Management of Varroa mite in honeybee, <i>Apis mellifera</i> colonies	• Development of effective management practice(s) against Varroa mite and • Assessing of different management options	BSRI Farm, Ishurdi, Pabna
72	Controlling Small hive beetle in honeybee, <i>Apis mellifera</i> colonies	• Development of effective management practice(s) against Small hive beetle and • Assessing of different management options	BSRI Farm, Ishurdi, Pabna
73	Effects of different approaches in controlling red palm weevil in date palm	• Finding the effective management practices and • Monitoring of population abundance in different treatments.	BSRI Farm, Ishurdi, Pabna
AGRICULTURAL ECONOMICS DIVISION			
Socio-Economic and Technology of Transfer			
74	A comparative profitability analysis of sugarcane cultivation with different cropping patterns in Bangladesh	• To estimate the cost and return of sugarcane-based cropping pattern; • To determine the comparative profitability of sugarcane and other cropping patterns in Bangladesh and • To identify constraints of sugarcane cultivation.	Carew and Co.; NBSM, Jamalpur and TSM
75	A socio-economic analysis of date palm cultivation in some selected areas of Bangladesh	• To identify the farmers' practice of date palm cultivation; • To determine the profitability of date palm cultivation. • To find out the present marketing systems of date palm juice and gur in	Natore and Rajshahi districts

Sl.	Title of Research	Objective(s)	Location(s)
		the country; • To identify the problems and constraints of date palm farmers of Bangladesh.	
TRAINING AND TECHNOLOGY TRANSFER DIVISION			
Socio-Economics & Technology Transfer			
76	Adoption of Modern Sugarcane Production Technologies in Selected Sugar Mills and Non-mill Zones	• To determine the extent of adoption of BSRI developed modern sugarcane production technologies in the sugar mills and non-mill zones; • To assess sugarcane farmers' knowledge on BSRI recommended sugarcane production technologies; • To identify the bottlenecks that retard adoption of modern sugarcane production technologies and • To ascertain the differences in adoption of modern sugarcane production technologies between the growers of sugar mills and non-sugar mills zones.	Mill Zone: Thakurgaon Sugar Mills Ltd. Thakurgaon North Bengal Sugar Mills Ltd. Lalpur, Natore & Zeal Bangla Sugar Mills Ltd. Jamalpur Non-Mill Zone : Chapai-Nawabganj, Gazipur and Manikganj
77	Status of Sugarcane Cultivation Coverage in Selected Sugar Mills	• To determine the actual acreage of sugarcane in different land type condition; • To identify the performance of BSRI released sugarcane varieties and local varieties; and • To find out the problems faced by the farmers in cultivating sugarcane in low lying areas.	Natore Sugar Mills Ltd, Natore, Mobarakganj Sugar Mills Ltd. Kaliganj, Jhenaidah and Zeal Bangla Sugar Mills Ltd. Jamalpur
78	Monitoring of Technology Based Subsidy Program in Sugarcane	• To monitor, review and identify the gaps (if any) in implementing the subsidy-based technology transfer program; • To identify the mid-term success to the govt./authority about the subsidy-based technology transfer program; and • To establish a linkage between program planner and implementers.	9 Sugar Mills
79	Demonstration of BSRI Bred Latest Sugarcane Varieties	• Showing the performances of newly released varieties; • Explaining the necessity of sugarcane new varieties and • Ensuring local and/or farmers participation in technology transfer activities of BSRI.	BSRI HQ, Jamalpur, Pabna, Sirajganj, Joypurhat, Kushtia, Rajshahi, Chuadanga, Sobarnochar, Gaibandha, Barishal, Chunarughat, Bandarban, Khagrachari, Rangamati
80	Demonstration of BSRI Sugarcane Varieties with Intercropping	• Showing the performances of sugarcane varieties with intercrops; • Explaining the necessity of intercropping with sugarcane and • Ensuring local and/or farmers	BSRI HQ, Jamalpur, Pabna, Sirajganj, Joypurhat, Kushtia, Rajshahi, Chuadanga, Sobarnochar,

Sl.	Title of Research	Objective(s)	Location(s)
		participation in technology transfer activities of BSRI.	Gaibandha, Barishal, Chunarughat, Bandarban, Khagrachari, Rangamati
81	Demonstration of Quality Gur Production Technique	- Studying the performance of BSRI developed sugarcane varieties for superior <i>gur</i> production in the non-mill zone - Determining the quality of prepared <i>gur</i> from different sugarcane varieties.	Khagrachari, Bandarban, Rangamati, Chunarughat, Sobarnochar, Gaibandha, Barishal, Sherpur, Sirajganj, Gazipur, Chapainawabganj,
82	Improved Sugarcane and Intercrops Production Technologies for Sugarcane Farmers of Mills and Non-mill Zones	- To update the model farmers on improved sugarcane and intercrops production technologies; and - To capacitate the farmers for guiding other neighbour sugarcane farmers on improved sugarcane and intercrops production technologies.	BSRI HQ, Chuadanga, Joypurhat, Jamalpur, Rahmatpur, Sirazganj, Chunarughat, Rajshahi, Gaibandha, Bandarban and Subornachor
REGIONAL SUGARCROP RESEARCH STATION (RSRS) AND QUARANTINE STATION, GAZIPUR			
Crop Protection			
83	Quarantine follow-up of imported germplasms	Maintaining the vigilant about the entry and introduction of new pathogens and insect pests carried along with the imported varieties/ clones brought from abroad.	Quarantine Station, Gazipur
84	Quarantine follow-up of local chewing germplasms	Maintaining the vigilant about the entry and introduction of new pathogens or insect pests carried from one location to other along with the varieties/clones during collection.	Quarantine Station, Gazipur
85	Maintenance of BSRI released promising sugarcane varieties in quarantine station	Conserving the BSRI released promising sugarcane varieties for producing disease free seed cane for local usage as well as foreign exchange.	Quarantine Station, Gazipur
REGIONAL SUGARCROP RESEARCH STATION (RSRS), GAZIPUR			
Crop Production			
86	IPNS based nutrient management for cultivation of chewing cane	- To determine IPNS based nutrient management packages for chewing sugarcane. - To study the impact of IPNS based nutrient management packages on soil fertility status.	RSRS Farm, Gazipur (AEZ 28)
87	Combined application of organic and inorganic fertilizer on the growth, biomass yield, quality and nutrient content of	Finding out the economically optimum level of nutrients for Stevia production in Bangladesh	RSRS Farm, Gazipur (AEZ 28)

Sl.	Title of Research	Objective(s)	Location(s)
	Stevia (<i>Stevia Rebaudiana</i> Ber.)		
88	Production of vermicompost as a source of organic manure.	- To produce quality vermicompost as a source of organic manure. - To Study the impact of vermicompost on soil fertility.	RSRS Farm, Gazipur (AEZ 28)
89	Performance of chewing cane varieties with intercrop onion under Madhupur Tract (AEZ 28)	- To select suitable chewing cane variety under AEZ 28. - To popularize chewing cane in Madhupur Tract. - To find out the best combination of onion with chewing cane.	RSRS farm, Gazipur
90	Yield performance of Arabian date palm at Gazipur.	- To find out the growth pattern of Arabian date palm year to year. - To find out the sequence of yield potential.	RSRS farm, Gazipur
Crop Protection			
91	Survey on pest status and incidence of Arabian date palm (<i>Phoneix dactylifera</i>) at Gazipur.	- To find out and document Arabian date palm insect pest status at Gazipur region - To monitor severity and populations in individual tree to inform grower treatment decisions	RSRS farm, Gazipur
TOT & Socio Economics			
92	DEMONSTRATION a. Demonstration of chewing sugarcane with intercrops b. Demonstration of BSRI released chewing sugarcane varieties	To Disseminate BSRI developed technologies	
93	TRAINING a. Farmer's Training b. SAAO Training	To Disseminate BSRI developed technologies	
94	OTHER ACTIVITIES a) Seed preparation of chewing sugarcane b) Preparation & maintenance Stevia seedlings c) Maintenance of tal khejur bagan d) Museum plot	- To ensure disease free seed cane for experiment and demonstration purpose to be used by BSRI and DAE for next season - Preparation of healthy Stevia seedling for experiment and other purpose	
REGIONAL SUGARCROP RESEARCH STATION (RSRS), THAKURGAON			
Varietal improvement			
95	Performance of BSRI Bred Sugarcane Varieties Under Water-logging and Flood Condition at Northern Region of Bangladesh	- To select sugarcane varieties with superior tolerance to water- logging and flood stress condition - To find out morphological and physiological basis for water-logging and flood tolerance to sugarcane	Himalayan Piedmont Plain Soil (AEZ -1)
Crop and soil management			

Sl.	Title of Research	Objective(s)	Location(s)
96	Performance of Latest Sugarcane Varieties Grown in Different Locations in Old Himalayan Piedmont Plan	- Selecting suitable latest varieties for increasing the yield and quality of sugarcane in AEZ I and AEZ II - Increasing farmers' earning through latest sugarcane cultivation.	Himalayan Piedmont Plain Soil (AEZ -1)
97	Ratooning Potentiality of BSRI Bred Newly Released Sugarcane Varieties in Old Himalayan Piedmont Plan	- To screen out the ratooning potentiality of BSRI released varieties for AEZ I and AEZ II - To popularize ratooning practice in AEZ I and AEZ II	Himalayan Piedmont Plain Soil (AEZ -1)
98	Productivity of Sugarcane with Winter Crops as First and Maize as Second Intercrop in Single and Paired Row Planting Systems	- to find out the suitable intercropping combination with maize in sugarcane - to increase productivity and interim economic benefit per unit area and time in sugarcane field.	Himalayan Piedmont Plain Soil (AEZ -1) (Patuadangi farm, Thakurgaon)
99	Effects of Liming and Plant Growth Regulators on Growth, Yield and Quality of Stevia	- to investigate growth dynamics and yield potential of stevia using lime and PGRs in acid piedmont soils at Northwest region of Bangladesh - to assess the soil nutrient content changes under different levels of liming and PGRs during stevia cultivation	Himalayan Piedmont Plain Soil AEZ -1 (RSRS, farm, Thakurgaon)
100	Productivity of Sequential Intercropping and Relay Cropping of Two Short Duration Crops with Sugarcane in Single Row Planting System	- To sustain sugarcane cultivation through producing more short duration crops from the same land - To increase economic return from sugarcane farming	Himalayan Piedmont Plain Soil (AEZ -1) (Patuadangi farm, Thakurgaon)
101	Maximization of Total Crop Production from Sugarcane Field with Some Short Duration Crops as Intercrop in Late Planting Season	- Maximizing total crop production and economic return from sugarcane field planted in late season. - To select suitable intercrops with sugarcane in late planting season.	Himalayan Piedmont Plain Soil (AEZ -1) (Patuadangi farm, Thakurgaon)
SUB-STATION: JOYPU RHAT			
Crop and soil management			
102	Performance of some BSRI recommended sugarcane varieties as plant and ratoon crop in Tista Meander Floodplain soil	- To select suitable sugarcane varieties in Tista Meander Floodplain Soil - To study the comparative performance of different latest sugarcane varieties	Vadsha and Chokpahunanda, Joypurhat sadar, Joypurhat
103	Sequential intercropping of potato-mungbean-taro with sugarcane	- Investigating the feasibility of taro as third intercrop with sugarcane in Joypurhat and - Developing triple intercropping package for higher crop yield with interim benefit to the farmers	Vadsha, Joypurhat sadar, Joypurhat
104	Effect of chemical fertilizers and poultry litter on growth and yield of sugarcane and soil chemical properties	- To find out the effects of chemical fertilizer and poultry litter on growth and yield of sugarcane and - To evaluate the effects of integrated use	Vadsha, Joypurhat sadar, Joypurhat

Sl.	Title of Research	Objective(s)	Location(s)
		of chemical fertilizers and poultry litter on soil chemical properties and plant nutrient content	
SUB-STATION: RAJSHAHI			
Crop production and Management			
105	Field Performance of Some Newly Released Sugarcane Varieties and their Ratooning Potentiality in Mill Zones	• To observe the suitability of BSRI recommended varieties in RJSM areas • To select the good ratooner varieties for this area • To study the comparative performance of different latest varieties	Rajshahi
106	Performance of Different Winter Crops with Single Row of Chewing Cane	• To find appropriate intercrop for higher crop yield with interim benefit for Rajshahi area • To study the suitability of Chewing cane with different winter crops • combination for higher economic benefit • To sustain sugarcane cultivation ensuring higher production and maximum • profit through cultivation of intercrops	Rajshahi
107	Performance of BSRI Newly Released Sugarcane Varieties in Char Lands of Rajshahi	• To find out the performance of BSRI released varieties in the Char land of Rajshahi. • To identify suitable BSRI released varieties for location specific recommendation. • To find out the economic profitability of BSRI released varieties in the Char land of Rajshahi.	Rajshahi char land
108	Selection of Suitable Varieties for Goor Production in Chapai Nawabganj District	• Evaluating the performance of BSRI released sugarcane varieties in non- mill zone • Recommending the location specific sugarcane varieties for goor production	Sibganj, Chapai Nawabganj
SUB-STATION: CHUADANGA			
Disease Survey			
109	Monitoring of Sugarcane Diseases in Sugarmill Areas	• Maintaining up to date knowledge for the incidence of existing and new diseases (if any) in selected sugar mills areas. • Applying suitable management practices in time for current and future outbreak of the disease.	Carew & Co. (BD) Ltd. Areas, Chuadanga
Crop Production			
110	Performance of Different Winter Crop as Intercrop with Sugarcane	• To find out appropriate intercrop for higher crop yield with sugarcane for Chuadanga areas. • Ensuring higher production and	Chuadanga

Sl.	Title of Research	Objective(s)	Location(s)
		maximum profit through cultivation of intercrops.	
Crop Production and Management			
111	Field Performance of some Sugarcane Varieties and their Ratooning Potentiality	• Observing the suitability of BSRI bred latest sugarcane varieties in sugarmill areas. • Selecting the best ratoon varieties for sugarmill areas.	Chuadanga
Seed Technology			
112	Production and Distribution of Disease-free Clean Seed of Sugarcane	• Producing disease free clean seed and supplying to meet up the requirement of mill areas. • Reducing the disease incidence throughout the mill zone.	Chuadanga (Jibonnagar & Damurhuda)
SUB-STATION: RAHMATPUR, BARISAL			
Varietal Improvement			
113	Selection of Sugarcane Varieties Suitable for Gur Production in Saline Belt under Southern Region	• To select suitable cane varieties with high yield and recovery for gur production in saline belt of southern region.	Kalapara, Patuakhali
114	Performance Of Chewing Varieties In Saline Belt Under Southern Region	• To select suitable cane varieties for chewing in saline area of southern region. • To popularize chewing varieties in saline area of southern region.	Kalapara, Patuakhali
115	Characterization and In Situ Conservation of Nipa Palm (Nypa Fruticans wurmb.)	• Exploring and characterizing the new genotype • Measuring the genetic diversity	Patuakhali, Barguna, Bagerhat
Crop Production and Management			
116	Effect Of Tidal Water on Growth and Yield Of Sugarcane In Southern Region Of Bangladesh	• Selecting the suitable cane varieties for tidal and disaster-prone area under southern region. • Popularizing the BSRI varieties in coastal belt under southern region	Dashmina, Patuakhali
117	Sugarcane Based Integrated Farming in Sorjon System Under Southern region	• Increasing sugarcane productivity through Sorjan system • To popularize sugarcane based Sorjan farming under southern region	BSRI, Rahmatpur, Barishal
Crop and Soil Management			
118	Efficacy of organic materials on sugarcane varieties in practicing organic farming	• 1. Selecting the suitable combination for better yield without use of chemical pesticides and fertilizer.	BSRI, Rahmatpur, Barishal
SUB-STATION: JAMALPUR			
Crop and Soil Management			
119	Efficacy of organic fertilizers on growth and yield of stevia in comparison with inorganic fertilizer	• to study the effect of organic fertilizers on growth and yield of stevia • to maintain the fertility status of soils	BSRI Jamalpur

Sl.	Title of Research	Objective(s)	Location(s)
120	Performance of different intercrops with sugarcane in paired row system	• to select suitable intercrops for sequential intercropping in paired row sugarcane. • to studying the effect of sequential intercropping on growth, yield and quality of sugarcane.	Jamalpur and Sherpur
121	Effect of vermicompost on sugarcane yield and carbon accumulation in soils	• to quantify the effect of vermicompost on sugarcane growth and yield. • to determine the carbon accumulation in soils from vermicompost application.	Jamalpur
SUB-STATION: CHUNARUGHAT, HOBIGONJ			
Varietal Improvement			
122	Performance of BSRI Newly Released Sugarcane varieties as plant and ratoon cane at Akhaura Terrace	• To exploring the production potential of BSRI Newly released sugarcane varieties and ratoon crop of sugarcane • To popularizing the ratooning practice at Akhaura Terrace.	Goargao Chunarughat
Crop and soil management			
123	Performance of winter crop as intercrops on Sugarcane cultivation in wider row system	• To find out suitable intercrops for sequential intercropping in wider system in this area • To identify the potentiality of sugarcane variety for yield as plant cane	Goargao Chunarughat
124	Performance of Different Chewing cane varieties with Sequential Intercropping System at Akhaura Terrace	• To Finding out the growth, yield and quality of suitable chewing cane varieties with intercrops • To maximizing the productivity and economic return from chewing can	Mithipur, Chunarughat
SUB-STATION: SIRAJGONJ			
Crop Production			
125	Performance of some newly released BSRI bred sugarcane varieties under AEZ 4	• Studying the performance of newly released BSRI sugarcane varieties at non mill zone. • Identifying the suitable newly released sugarcane varieties for specific location purposes	i . Dowlatpur, Hatboyra, Sirajgonj sadar, Sirajgonj. ii . Shoilabari, Khokshabari, Sirajgonj sadar, Sirajgonj.
126	Performance of BSRI bred sugarcane varieties with lentil as intercrop at char land in Sirajgonj	• Identifying the sugarcane varieties suitable for Jamuna char land in flood stress condition. • Popularizing the intercrops which can be practiced with sugarcane among the farmers at char land in Sirajgonj.	i . Gupirpara, Shahangacha, Sirajgonj sadar, Sirajgonj. ii . Ghorachara, Sirajgonj sadar, Sirajgonj.
127	Effect of detrashing on growth, yield and quality of sugarcane under AEZ 4	• Finding out the effects of detrashing on growth and yield of sugarcane • Identifying the appropriate time of detrashing for sugarcane cultivation • Determining the quality of cane	i . Parkhata, Chongacha, Sirajgonj sadar ii . Joynogor, Shahangacha, Sirajgonj sadar



BANGLADESH WHEAT AND MAIZE RESEARCH INSTITUTE

BANGLADESH WHEAT AND MAIZE RESEARCH INSTITUTE

Sl.	Research Title	Objective(s)	Location(s)
CENTRAL STATION, DINAJPUR			
WHEAT BREEDING DIVISION			
1	Hybridization	To create variability by combining and recombining desirable genes in the background of different adapted genotype.	Dinajpur, Joydebpur, and Jamalpur.
2	Confirmation and selection in F ₁ generation	To confirm F₁ hybrids in respect to their female parents and to obtain seed for growing F₂ generation in the next season from the selected F₁ population.	Dinajpur, Joydebpur, and Jamalpur.
3	Evaluation and selection in different filial generations	- To ensure fixation of desirable additive genes in the advancing filial generations - To select desirable families/individual plants in each filial generation following selected bulk method - To reach homozygosity/stability after hybridization	Dinajpur, Joydebpur, and Jamalpur.
4	Bangladesh wheat screening nursery-I (BWSN-I)	To select high yielding, disease resistance, short stature, and early maturing suitable genotypes for inclusion in preliminary yield trial.	Dinajpur, Gazipur and Jashore.
5	Bangladesh wheat screening nursery-II (BWSN-II)	To select high yielding, disease resistance, short stature, and early maturing suitable genotypes for inclusion in preliminary yield trial.	Dinajpur and Jamalpur.
6	Bangladesh wheat screening nursery-III (BWSN-III)	To select high yielding, disease resistance, short stature, and early maturing suitable genotypes for inclusion in preliminary yield trial.	Dinajpur
7	Preliminary yield trial (PYT)	To evaluate the performance of the selected advance lines from BWSN compared to the existing check varieties and select the promising lines for inclusion in the Advance Yield Trial (AYT) for next year.	Dinajpur, Gazipur, Jashore and Rajshahi
8	Advance yield trial (AYT)	To evaluate the performance of the advance lines compared to the existing varieties and select the promising lines for further evaluation in multi-location trials at farmers' field.	Dinajpur, Joydebpur, Jashore, Jamalpur and Rajshai.
9	Candidate variety demonstration (CVD)	To evaluate the performance of the advance lines in large plot for Farmers' Field Trial at MLT sites	Dinajpur.
10	Early heat tolerance wheat screening nursery (9 th EHTWSN)	Evaluating selected promising genotypes, lines from different national and international nurseries/trials for early heat tolerance and high yield potential in early seeding	Dinajpur.

Sl.	Research Title	Objective(s)	Location(s)
		Selecting promising lines for inclusion in preliminary yield trial and or using as parent	
11	Molecular screening of blast and leaf rust resistance wheat genotypes using molecular markers	- To screening of blast resistance wheat genotypes using 2NS markers. - To develop high yielding wheat varieties with resistance to blast through markers assisted selection	Dinajpur.
12	Development of blast resistant/tolerant variety	To develop wheat blast resistant varieties using locally adapted parents.	Dinajpur.
13	Accelerating wheat breeding program through cutting edge genomics and phenotypic	- Early generation selection for grain yield and quality using genomic prediction and high-throughput phenotyping in the wheat breeding program. - Improved prediction models for multi-environment predictions within national programs. - Increased breeding capacity of national wheat breeding programs.	Jamalpur, Jashore and Dinajpur,
	Elite spring wheat yield trial (42 th ESWYT)	To evaluate the advanced lines comparing with our local check variety for selecting the promising ones for Bangladesh environment.	Dinajpur.
14	International bread wheat screening nursery (54 th IBWSN)	To select promising heat tolerant lines that can be exploited in developing heat tolerant wheat variety.	Dinajpur.
15	High temperature wheat yield trial (20 th HTWYT)	To select promising heat tolerant lines that can be exploited in developing heat tolerant wheat variety.	Dinajpur, Joydebpur and Jashore.
16	Semi-arid wheat yield trial (29 th SAWYT)	To select superior germplasms with high grain yields under rain-fed condition.	Dinajpur and Rajshahi
17	Wheat yield consortium yield trial (9 th WYCYT)	To select genotypes having both higher yield and biomass compared to local checks.	Dinajpur, Joydebpur and Rajshahi
18	High zinc wheat yield trial (12 th HZWYT)	To evaluate the field performance of 49 elite wheat lines selected from international nursery and to select suitable high yielding Zn-enriched genotypes along with good agronomic background.	Dinajpur
19	High zinc advance nursery (13 th HZAN)	To evaluate some biofortified advanced lines and select the promising ones for Bangladesh environment.	Dinajpur and Joydebpur.
20	Stress adaptive traits yield nursery (11 th SATYN)	To find potential stress adaptive traits under heat stress and to select promising genotypes that perform better under the stress condition.	Dinajpur and Joydebpur.
21	International durum yield nursery (53 rd IDYN)	To select superior durum germplasm with higher grain yields under irrigated condition for inclusion in Yield Trial next year.	Dinajpur

Sl.	Research Title	Objective(s)	Location(s)
22	Maintenance of first- and second-year lines of recommended wheat varieties	To maintain purity as well as to produce standard quality of breeder seed of cultivated varieties in order to supply a handful quantity to BADC and some NGOs.	Dinajpur
23	Breeder seed production of recommended wheat varieties	To maintain purity as well as to produce standard quality of breeder seed of cultivated varieties in order to supply a handful quantity to BADC, NGOs & Private Seed Companies.	Dinajpur, Thakurgaon, Panchagarh
MAIZE BREEDING DIVISION			
24	Maintenance and characterization of locally developed inbred lines of maize (8 sets)	To characterize and maintain newly developed inbred lines	Dinajpur and Gazipur
25	Maintenance of exotic inbred lines of maize (2 Sets)	To characterize, maintain and evaluation of newly introduced inbred	Dinajpur
26	Advancing S ₂ to S ₃ generation of field corn	To extract elite/superior inbred lines of field corn locally for hybrid development.	Dinajpur
27	Advancing S ₃ to S ₄ generation of waxy maize (2 sets)	To extract elite/superior inbred lines of waxy maize locally for hybrid development.	Dinajpur
28	Advancing S ₄ to S ₅ generation of field corn	To extract superior inbred lines locally	Dinajpur
29	Advancing S ₆ to S ₇ generation of sweet corn and field corn (2 Sets)	To extract superior inbred lines locally	Gazipur
30	Study on combining ability and heterosis in fall army worm resistant hybrids over locations	- To study General Combining Ability (GCA) of parents, specific combining ability (sca) effects of the crosses; - To estimate standard heterosis and selection of better cross (es).	Dinajpur, Gazipur and Jalampur
31	Demonstration trial of released and promising hybrids and OPVs with commercial hybrids over locations	To test the performance of promising hybrids.	Dinajpur, Gazipur, Jashore and Jamalpur
32	Evaluation of single cross hybrids of field corn	To test the performance of locally developed single cross hybrids.	Gazipur
33	Evaluation of promising hybrids of field corn and popcorn hybrids at different agro-ecological regions (4 sets)	To test the performance of locally developed single cross hybrids at different agro-ecological regions and select widely adapted hybrids.	Dinajpur, Gazipur, Jashore and Jamalpur
34	Comparative yield trial of imported & local maize hybrids	- To observe the performance of imported & local hybrids and select better one(s). - To share the information of the better performing hybrids to the farmers	Dinajpur, Gazipur, Jamalpur and Jashore.
35	Phenotyping of the HTMA hybrids during rabi season (12 Sets)	To evaluate the performances of heat tolerant maize hybrids during rabi season	Dinajpur, Gazipur and Jashore

Sl.	Research Title	Objective(s)	Location(s)
36	Phenotyping of the HTMA hybrids under heat stress (9 Sets)	- To develop high-yielding and heat tolerant maize hybrids through managed stress screening. - To compare the performances of test crosses under optimal and heat stress condition.	Dinajpur and Jashore
37	Phenotyping of the HTMA hybrids under optimal temperature (5 Sets)	- To develop high-yielding and heat tolerant maize hybrids. - To compare the performances of test crosses under optimal and heat Stress condition.	Gazipur
38	Evaluation of released promising hybrids and OPVs of maize over locations for fodder purpose	- To observe the performance of hybrids and OPVs and select better one(s). - To share the information of the better performing hybrids/ OPVs to the farmers.	Dinajpur, Gazipur, Jamalpur and Jashore.
39	Production of single cross field corn hybrids through diallel mating design	- To estimate GCA of the inbreds & SCA of the cross combinations. - To determine heterotic effect of the crosses and select best one(s).	Gazipur
40	Production of single cross fall armyworm resistant hybrids	To increase the seed stock of the hybrids selected from the upcoming rabi season for further demonstration	Dinajpur
41	Seed production of promising maize hybrids of field corn and popcorn (4 Sets)	To increase the hybrid seeds stock of the promising maize hybrids for demonstration and distribution	Dinajpur and Gazipur
42	Seed Production of single cross maize hybrids though Line×Tester method in isolation (3 Sets)	- To produce test cross hybrids for evaluation of inbred lines; - To find out heterotic patterns and heterotic partners of inbred lines	Gazipur and Dinajpur
43	Maintenance and seed increase of the parental lines of different released maize hybrids	To maintain purity of the parental lines for further use.	Dinajpur and Gazipur
44	Seed production of the parental lines of different released maize hybrids (7 sets)	- To produce breeder seed of the parental lines for further use. - To distribute the increased seed to BADC and other private agencies.	Dinajpur, Panchagor, Jashore and Jamalpur
45	Seed production of BARI/WMRI hybrid maize (6 Sets)	To increase the hybrid seeds stock of the promising released maize hybrids for demonstration and distribution	Dinajpur, Panchagor, Thakurgoan and Rajshahi
46	Maintenance and seed production of composite maize varieties (2 Sets)	- To supply breeder's seed to BADC and other organization; - To maintain the purity of the popular composite varieties; - To supply seed directly to farmers.	Thakurgoan, Gazipur
47	Bangladesh Coordinated Maize (BCM) Trial	Generate robust data through multi location (on-farm/on-station) trials on best-bet/final stage hybrids selected from on-station and on-farm trials;	BWMRI (Dinajpur & Gazipur); BRAC (Nilphamari &

Sl.	Research Title	Objective(s)	Location(s)
		To join hands to widen testing network for maize hybrids in the country.	Kushtia); ACI (Bogura)
AGRONOMY DIVISION			
48	Long-term bed planting trial for improving crops productivity and soil fertility in wheat-mungbean-rice cropping pattern	- Increasing cropping intensity and soil fertility - Determining N-use efficiency - Creating a suitable cropping pattern within the rice-wheat system, and - Study the profitability of this pattern.	Shyampur, Rajshahi
49	Effect of tillage options with recently released varieties for sustainable crop production in wheat-maize-rice cropping pattern	To select the suitable wheat, maize and rice varieties under conservation agriculture system and establish this pattern in drought prone area.	Shyampur, Rajshahi
50	Integrated fertilizer management on soil fertility and productivity of Wheat - T. Aus-T. Aman cropping pattern	- To find out a suitable combination of vermicompost with chemical fertilizers for growth and yield of wheat and - To sustain the soil fertility and productivity.	Nashipur, Dinajpur
51	Response of Newly Evolved Wheat Varieties to Sowing Dates	- To find out heat-tolerant and heat-sensitive variety and - To find out the optimum sowing time for a specific variety.	Dinajpur, Rajshahi and Jashore
52	Determination of Seed Rate of Wheat for Late Sown Condition	- To evaluate the various seeding rates of recently developed wheat variety under late sown condition and - To determine optimum seed rates for achieving higher grain yield under late sown condition.	Dinajpur
53	Evaluation of Wheat Genotypes against Salinity at Seedling Stage	- To select the wheat genotypes tolerant to salt stress and - To assist in releasing salt tolerant wheat variety.	Gazipur
54	Performance of Selected Wheat Genotypes for Salinity Tolerance In Southern Bangladesh	To find out the best option for higher yield, system productivity and profitability of this cropping system	Southern districts of Bangladesh
SOIL SCIENCE DIVISION			
55	Yield, System Productivity and Profitability of Rice-Maize Cropping System Are Influenced by Tillage Options in Combination with Different Levels of Irrigation and Nitrogen	To find out the best option for higher yield, system productivity and profitability of this cropping system	Nashipur, Dinajpur

Sl.	Research Title	Objective(s)	Location(s)
PLANT PATHOLOGY DIVISION			
56	Evaluation of wheat germplasm against Bipolaris leaf blight under field conditions	• To evaluate available wheat germplasm against Bipolaris leaf blight under field conditions	Dinajpur, Jashore and Jamalpur
57	Evaluation of wheat genotypes for resistance to Bipolaris leaf blight under inoculated conditions	• To evaluate the response of advanced wheat genotypes against Bipolaris leaf blight under inoculated conditions	Dinajpur
58	Evaluation of wheat genotypes for resistance to leaf rust under inoculated conditions	• To evaluate the response of the advanced wheat genotypes against leaf rust under inoculated field conditions	Dinajpur
59	Monitoring and evaluation in international wheat disease nurseries	• To identify diseases, track pathogens and assess disease severity • To identify and select sources of resistance • To collaborate with the international partners for developing global disease management strategies	Dinajpur, Jashore and Jamalpur
60	Efficacy of fungicides in controlling Bipolaris leaf blight and leaf rust of wheat	• To evaluate the efficacy of some new fungicides in controlling Bipolaris leaf blight and leaf rust of wheat	Dinajpur
61	Surveillance of blast and rusts diseases of wheat in Bangladesh	• To identify diseases, track pathogens and assess disease severity • To collaborate with the international partners for developing global disease management strategies	Major wheat growing areas of Bangladesh
62	Evaluation of wheat germplasm against wheat blast under field/inoculated conditions	• To find out resistant/tolerant lines against wheat blast under inoculated/ field conditions	Dinajpur and Jashore
63	Evaluation of elite wheat genotypes for resistance to wheat blast under inoculated field conditions	• To find out resistant / tolerant germplasm from different sources against wheat blast under inoculated field conditions	Jashore
64	Wheat blast: Precision Phenotyping Platform	• To screen available germplasm from different sources for resistance to wheat blast	Jashore
65	Effect of sowing dates and genotypes on the severity of wheat blast caused by <i>Magnaporthe oryzae</i> pathotype <i>Triticum</i> (MoT)	• To determine the sowing time due to wheat blast infection on different wheat varieties at various growth stages	Jashore
66	Efficacy of foliar fungicides in controlling wheat blast	• To evaluate the efficacy of some new foliar fungicides in controlling wheat blast under field conditions	Jashore
67	Sporulation capacity of <i>Magnaporthe oryzae</i> (MoT) in different culture media and identifying virulent race	• To evaluate the sporulation and virulence nature of <i>M. oryzae</i> isolates	Dinajpur

Sl.	Research Title	Objective(s)	Location(s)
68	Determining status of seed-borne fungi including <i>Magnaporthe oryzae</i> (MoT) causing wheat blast	• To determine the prevalence of seed-borne fungal pathogens in wheat seeds	Dinajpur
69	Molecular detection of wheat blast pathogen <i>Magnaporthe oryzae</i> pathotype <i>Triticum</i> (MoT) using MoT3 assay and nucleotide sequencing	• To detect wheat blast pathogen at molecular level through PCR assay	Dinajpur
70	Survey and monitoring of maize diseases in Bangladesh	• To monitor maize fields for knowing current status of its diseases in the country and to take effective control measure	Different maize growing areas of Bangladesh
71	Disease evaluation of maize genotypes in different maize trials of BWMRI	• To identify the sources of resistance in maize genotypes against different diseases under natural epiphytotic conditions	Dinajpur
ENTOMOLOGY DIVISION			
72	Development of bio-rational management package to control fall armyworm (<i>Spodoptera frugiperda</i>) on maize	• To develop a eco-friendly and sustainable management package against FAW <i>S. frugiperda</i> on maize	Dinajpur
73	Determination of Exposure time prior to seed sowing after treatment with Cyantraniliprole (Fortenza) against FAW on maize	• To determine the exposure time after seed treatment with Cyantraniliprole (Fortenza) prior to seed sowing against <i>S. frugiperda</i> on maize crop	Dinajpur
74	Yield loss assessment due to Fall Armyworm, <i>Spodoptera frugiperda</i> (Lepidoptera: Noctuidae) infestation on maize in different months	i) Yield loss assessment due to attack of FAW on maize in different months • ii) To evaluate the FAW abundance and infestation intensity on maize in different months	Dinajpur
75	Agro-ecological management of fall armyworm (<i>S. frugiperda</i>) on maize	To develop an appropriate agro-ecological measures for the management of FAW on maize	Dinajpur and Rajshahi
AGRICULTURAL ENGINEERING DIVISION			
76	Improvement of a four wheel tractor operated seeder	• Improvement of the tractor operated seeder for both wheat and maize To test and evaluate the performance of the tractor driven seeder	Dinajpur
77	Development and performance evaluation of different type of weeders for maize	• Fabrication and development a low cost manually operated different type weeders of different shape and size for upland crops. • Evaluation of its performance of weeding for maize and line sowing crops. • To compare the cost of weeding with traditional methods	Rajshahi
78	Improvement and fine tuning of two wheel tractor	• To develop and set up tine systems	Rajshahi

Sl.	Research Title	Objective(s)	Location(s)
	operated strip till of conservation agricultural machinery for cereal crops	• To test and evaluate the seeding performance of the developed implements.	
79	Study on performance of mixed ratio of wheat, maize, rice flour for vava pitha making purpose	• To find out best mix ratio of flour • To adopt and change the food habit • To include wheat and maize as a partial part of food instead of rice	Rajshahi
BIOTECHNOLOGY DIVISION			
80	Molecular screening of blast and leaf rust resistance in wheat genotypes using molecular markers	• To screen available wheat germplasm for identifying 2NS translocation/gene(s) conferring wheat blast and leaf rust resistance.	Dinajpur
81	Molecular detection of wheat blast pathogen <i>Magnaporthe oryzae</i> pathotype <i>Triticum</i> (MoT) using MoT3 assay and nucleotide sequencing	• To identify <i>Magnaporthe</i> pathogen at the genetic level to confirm its pathotype using molecular tools	Dinajpur
82	Assessment of genetic diversity and population structure of <i>Magnaporthe oryzae</i> (MoT) including other hosts blast isolates by whole genome sequencing	• To study genetic diversity of wheat and some other hosts blast isolates	Dinajpur
REGIONAL STATION, GAZIPUR			
Wheat Breeding			
83	Hybridization for wheat variety development	• To transfer desirable traits from donor parents to the recipient parents.	Gazipur
84	Confirmation of F ₁ single and top crosses	• Confirming hybrids derived from crosses of different parents • Generation of F₂ seeds and making top and back crosses utilizing F₁ plants	Gazipur
85	Selection in Segregating (F ₂ - F ₆) Generation	• Ensuring fixation of desirable additive genes in the advancing filial generations • Select desirable families/individual plants in each filial generation following selected bulk method • Reaching homozygosity after hybridization	
86	Bangladesh Wheat Screening Nursery (BWSN)	• Evaluating selected genotypes/lines from different national and international nurseries for high yield potential • Selecting promising lines for evaluation in Preliminary Yield Trial	Gazipur
87	Preliminary Yield Trial (PYT)	• Evaluating yield potential of the promising lines selected from BWSN. • Selecting promising lines for Advance Yield Trial	Gazipur
88	Advance Yield Trial (AYT)	• Evaluating yield potential of the advance lines under different locations	Gazipur

Sl.	Research Title	Objective(s)	Location(s)
		Selecting promising lines for evaluation in Candidate Variety Demonstration (CVD)	
89	On-station Demonstration of Old and New varieties	Demonstrating wheat varieties to the visitors under optimum and late seeding conditions	Gazipur
90	Twelveth high zinc wheat yield trial (12 th HZWYT)	To evaluate forty nine Zn-enriched elite wheat lines develop by CIMMYT and to select promising high yielding genotypes along with good agronomic background.	Gazipur
91	Eleventh stress adaptive trait yield nursery-drought (11 th SATYN-DRGT)	To find potential stress adaptive traits and to select promising genotypes that performs better under drought stress condition.	Gazipur
92	Twentyth high temperature wheat yield trial (20 th HTWYT)	To select promising heat tolerant lines that can be exploited in developing heat tolerant wheat variety.	Gazipur
93	Truthfully Leveled Seed Production of Wheat	- To use the deeds in setting demonstration in farmers field in next season - To supply seed to different NGOs and farmers	Gazipur
94	Demonstration of Newly Released Wheat Varieties	To disseminate new varieties to the farmers quickly all over the country	Gazipur
Maize Breeding			
95	Maintenance and characterization of locally developed maize inbred lines (3 sets)	To identify a particular variety and maintain seed purity by rouging off type plant.	Gazipur
96	Study on combining ability and heterosis in fall army worm resistant hybrids	To estimate the general and specific combining abilities of seven inbred lines of maize and their single-crosses involving a 7×7 diallel analysis.	Gazipur
97	Evaluation of promising hybrids of field corn and popcorn at different agro-ecological regions (Set-I-field corn)	To evaluate the performance of some locally developed maize hybrids and to identify high yielding one(s) in Bangladesh condition.	Gazipur
98	Evaluation of promising hybrids of field corn and popcorn at different agro-ecological regions (Set-II-field corn)	To evaluate the performance of some locally developed maize hybrids and to identify high yielding one(s) in Bangladesh condition.	Gazipur
99	Evaluation of promising hybrids of field corn and popcorn at different agro-ecological regions (Set-III-field corn)	To evaluate the performance of some locally developed maize hybrids and to identify high yielding one(s) in Bangladesh condition	Gazipur
100	Evaluation of promising hybrids of field corn and popcorn at different agro-ecological regions (Set-IV-popcorn)	To evaluate the performance of some locally developed maize hybrids and to identify high yielding and superior one(s) in Bangladesh condition.	Gazipur

Sl.	Research Title	Objective(s)	Location(s)
101	Comparative yield trial of local and imported maize hybrids at Gazipur location	• To evaluate these hybrids and to select promising ones for the farmers.	Gazipur
102	Phenotyping of the HTMA hybrids in Gazipur during rabi season (HY 2114-127r, HY 2113-123r, HY 2112-110r, HY 2112-210r, HY 2111-18r)	• To evaluate the performance of some maize hybrids received under CRMA project and to identify better performing hybrids in optimal condition in Bangladesh.	Gazipur
103	Evaluation of some released and promising hybrids and OPVS of maize for fodder purpose	• Initiative to evaluate the status of its' released varieties (along with commercial check and one promising color maize) as both fodder and silage	Gazipur
Crop And Soil Management			
104	Evaluation of wheat genotypes against salinity at seedling stage	• To select the wheat genotypes tolerant to salt stress and • To assist in releasing salt tolerant wheat variety.	Gazipur
105	Performance of selected wheat genotypes for salinity tolerance in southern Bangladesh	• To find out wheat germplasm with salinity tolerance adapted to southern Bangladesh.	Gazipur
106	Performance of different herbicides for weed control in wheat	• To find out effective herbicide for weed control in wheat.	Gazipur
Disease Management			
107	SAARC Disease Trap Nursery	• To identify diseases, track pathogens and assess severity under agro-climatic condition in Bangladesh.	Gazipur
REGIONAL STATION, RAJSHAHI			
108	Hybridization: Selection of F ₅ & F ₆ generations	• Varietal improvement	Rajshahi
109	Bangladesh wheat screening nursery set-II (BWSN-II)	• Varietal improvement	Rajshahi
110	Advance yield trial (AYT)	• Varietal improvement	Rajshahi
111	Preliminary Yield Trial (PYT)	• Varietal improvement	Rajshahi
112	On station demonstration (OSD) of varieties		Rajshahi
113	9 th Drought tolerant wheat yield trials (9 th DTWYT)	• Variety development for drought prone areas	Rajshahi
114	Evaluation of drought tolerant advanced lines in Barind area (WVS)	• Variety development for drought prone areas	Rajshahi and farmers' field
115	29 th Semi-arid wheat yield trial (29 th SAWYT)	• Variety development for drought	Rajshahi
116	39 th Semi-arid wheat screening nursery (39 th SAWSN)	• Variety development for drought	Rajshahi

Sl.	Research Title	Objective(s)	Location(s)
117	20 th High Temperature Wheat Yield Trial (20 th HTWYT)	• Variety development for heat and drought	Rajshahi
118	12 th High Zinc Wheat Yield Trial (12 th HZWYT)	• Zinc enrich Variety development	Rajshahi
Crop and Soil Management			
119	Long-term bed planting trial for improving crops productivity and soil fertility in wheat-mungbean-rice cropping pattern	• Evaluate system productivity in wheat-mungbean-rice sequences on PRB compared with conventionally tilled systems. • Assess the effect of mulching on crop performance and soil properties on PRB • Assess N level effects on productivity and estimate N uptake and use efficiency • Study the changes in soil properties over time	Rajshahi
120	Response of newly evolved wheat, maize and rice varieties under conservation agriculture systems	• To select the suitable wheat, maize and rice varieties under conservation agriculture system and • To establish wheat- maize - rice cropping pattern in drought prone area	Rajshahi
Maize Seed Production			
121	Seed production of BARI hybrid maize 16	• To increase seed stock of the BARI released hybrid maize variety 16 to be used for demonstration and future use	Rajshahi
AGRICULTURE ENGINEERING DIVISION			
122	Development of different type of weeders for maize	• Fabrication and development a low cost manually operated different type weeders of different shape and size for upland crops. • Evaluation of its performance of weeding for maize and line sowing crops. • To compare the cost of weeding with traditional methods	Rajshahi
REGIONAL STATION, JASHORE			
Wheat Breeding			
123	Selection in F ₆ generations	• To select yield potential, BpLB; wheat blast resistance and heat tolerant lines for varietal development	Jashore
124	Bangladesh wheat screening nursery (bwsn) in its & ils conditions	• To select promising lines for Preliminary Yield Trial (PYT) in the next year.	Jashore
125	Preliminary yield trial (pyt)	• To evaluate the performance of the advance lines in comparison to the check variety for selecting high yielding disease resistant genotypes for testing in AYT next year.	Jashore
126	Advanced yield trial (ayt) in its and ils conditions	• To evaluate the performance of the advance lines in comparison to check variety for selecting the promising lines for using as Candidate variety demonstration and On-farm trials at MLT sites.	Jashore

Sl.	Research Title	Objective(s)	Location(s)
127	Candidate variety demonstration	• To evaluate a line before applying to NSB for release as a new variety.	Jashore
128	Effect of sowing dates and genotypes on the severity of wheat blast	• To assess the effect of sowing dates on the intensity of wheat blast disease on different wheat variety.	Jashore
129	Bipolaris leaf blight screening nursery (bplbsn)	• To add some BpLB tolerant lines in the breeding programme in order to develop BpLB resistant and high yielding wheat variety.	Jashore
130	16 th International Stem Rust Resistance Screening Nursery (16 th STEMRRSN)	• To determine disease incidence, identify stem rust pathogen and assess the effectiveness of known resistance genes (Sr 31, Sr 36, Sr 24 and Sr 2 etc.).	Jashore
131	13 th Helminthosporium Blight Screening (13 th HLBSN)	• To add some Helminthosporium tolerant lines in the breeding programme in order to develop resistant and high yielding wheat variety.	Jashore
132	Efficacy of foliar fungicides in controlling wheat blast	• To evaluate the efficacy of some new foliar fungicides in controlling wheat blast under field conditions.	Jashore
133	Evaluation of elite wheat genotypes for resistance to wheat blast under inoculated field conditions	• To find out resistant sources by screening available germplasm from different sources for resistance to the disease	Jashore
134	Farmers training on wheat demonstrations	• To train the farmers, Sub-Assistant Agricultural Officer and SA on setting-up of wheat variety demonstration	Jashore, Jhenaidah, Kushtia, Meherpur, Chuadanga, Magura, Narail, Khulna
135	Wheat variety demonstration in south western bangladesh	• To demonstrate yield performance of new variety in order to technology transfer.	Jashore, Jhenaidah, Kushtia, Meherpur, Chuadanga, Magura, Narail, Khulna
136	Phenotyping of the htma hybrids under optimal condition (hy2114-128 & hy2111-39)	• To identify better performing hybrids both in optimal and heat stress condition in Bangladesh.	Jashore
Maize Breeding			
137	Comparative yield trial of imported and local maize hybrids	• To find out new hybrid(s) with better performance and use of those materials to our breeding program.	Jashore
138	Evaluation of some released and promising hybrids and opvs of maize for fodder purpose atjashore	• To find out better performing hybrids/OPV(s) to recommend as fodder.	Jashore

Sl.	Research Title	Objective(s)	Location(s)
139	Demonstration trial of released and promising hybrids, opvs with commercial hybrids at jashore	• To evaluate the performance of released hybrid maize along with the commercial varieties at research station.	Jashore
140	Farmers training on hybrid maize production	• To train the farmers, Sub-Assistant Agricultural Officer (SAAO) and SA on setting-up of maize hybrid demonstration.	Khulna, Sathkhira
REGIONAL STATION, JAMALPUR			
Wheat Breeding			
141	Hybridization of wheat	• To produce desirable cross combinations of wheat	Jamalpur
142	Confirmation and selection in F_1 generation	• To confirm the last year hybrids	Jamalpur
143	Selection in F_2 – F_6 generations of wheat	• To select the progeny from F_2 , F_3 , F_4 , F_5 , and F_6 generations	Jamalpur
144	On station demonstration trials of old and new varieties	• To show the performance of the old and new varieties to the visitors	Jamalpur
145	Bangladesh wheat screening nursery-ii (BWSN-II)	• To select high yielding, disease resistant and heat tolerant promising wheat lines	Jamalpur
146	Advance yield trial (AYT) of wheat	• To select high yielding, disease resistant, promising lines.	Jamalpur
147	Inbred line evaluation of wheat	• To evaluate the performance of genotypes	Jamalpur
148	Accelerating wheat breeding program through cutting edge genomics and phenotypic technologies	• To optimize use of the high throughput phenotypic platforms, to predict grain yield, to implement the genomic selection and GWAS approach	Jamalpur
149	Germplasm evaluation of wheat against <i>bipolaris</i> leaf blight	• To evaluate germplasm against <i>Bipolaris</i> of wheat	Jamalpur
150	16 th stem rust resistance screening nursery	• To evaluate the bplb and leaf rust, grain yield and other agronomic characters under field condition	Jamalpur
151	13 th <i>helminthosporium</i> leaf blight screening nursery	• To screen out <i>Helminthosporium</i> leaf blight against spot blotch (<i>Bipolaris</i> leaf blight) under natural condition	Jamalpur
152	SAARC disease trap nursery	• To find out the lines which is free from rust disease	Jamalpur
153	Wheat and maize variety demonstration	• To demonstrate the performance of promising varieties	Jamalpur
154	Lock demonstration of wheat and maize	• To demonstrate the performance of promising varieties	Jamalpur
155	Seed increase of recommended wheat varieties	• To increasing the seeds of TLS and promising line	Jamalpur

Sl.	Research Title	Objective(s)	Location(s)
Maize Breeding			
156	Training and field day on wheat and maize production technology	• To train farmer about production technology of wheat and maize	Jamalpur
157	Comparative yield trial of imported and local maize hybrids	• To find desirable hybrid(s)	Jamalpur
158	Evaluation of promising field corn hybrids at Jamalpur region (SET-I)	• To evaluate previously found promising variety	Jamalpur
159	Evaluation of promising field corn FAW resistant hybrids at Jamalpur regions (SET-II)	• To test the performance of locally developed single cross hybrids	Jamalpur
160	Evaluation of single cross hybrids of popcorn (SET-IV)	• To identify desirable popcorn hybrid(s)	Jamalpur
161	Evaluation of some released and promising hybrids and OPVs of maize for fodder purpose at Jamalpur	• To identify desirable genotypes	Jamalpur
162	Study on combining ability and heterosis in fall armyworm resistant hybrids at Jamalpur	• To study general combining ability (GCA) of parents, specific combining ability (SCA) effects of the crosses; and to estimate standard heterosis and selection of better cross(es)	Jamalpur
163	Demonstration trail of released and promising hybrids, OPVs with commercial hybrids at Jamalpur	• To demonstrate the performance of promising varieties	Jamalpur
164	Seed production of the parental lines of different released maize hybrids	• To increase the seeds of parental lines of different released maize hybrids.	Jamalpur



SOIL RESOURCE DEVELOPMENT INSTITUTE

SOIL RESOURCE DEVELOPMENT INSTITUTE

Sl.	Research Title	Objective(s)	Location(s)
SALINITY MANAGEMENT AND RESEARCH CENTER, BATIAGHATA, KHULNA			
01	Effect of different strength of saline water on emergence and growth of Country Bean	• To find out the effect of different strength of saline water on emergence and growth of Country Bean	Batiaghata, Khulna
02	Effect of different strength of saline water on emergence and growth of Sweet Gourd	• To find out the effect of different strength of saline water on emergence and growth of Sweet Gourd	Batiaghata, Khulna
03	Effect of different types of mulch on soil salinity and yield of Sweet Gourd	• To find out effect of different types of mulch on soil salinity and yield of Sweet Gourd in coastal saline soil	Batiaghata, Khulna
04	Effect of Different types of organic manure on soil salinity and yield of Sweet Gourd	• To find out the effect of different types of organic manure on soil salinity and yield of Sweet Gourd in coastal area.	Batiaghata, Khulna
05	Reducing Soil Salinity Through Shade and Mulch Technology	• To find out effect of shade and mulch on soil salinity and yield of Sweet Gourd in coastal saline soil.	Batiaghata, Khulna
SOIL CONSERVATION AND WATERSHED MANAGEMENT CENTER, MEGHLA, BANDARBAN			
06	Studying Broom Grass for controlling soil erosion and its economic value at CHT.	• To prevent frequent landslides, retain ground moisture and to increase soil fertility. • To find out a significant source of income. • To provide green forage for livestock. • To rehabilitate the endangered animals and to keep ecological balance.	Meghla, Bandarban
07	Effect of plantation of Bamboo for erosion control and its economical purposes. Muli/Paiya: <i>Gigantochloa robusta</i> and Ora: <i>Fargesia robusta</i> .	• Reclamation of gullied land by minimizing erosion hazard. • For Landscape, aesthetic and economic purposes, • For environmental and ecological conservation, • To mitigate the demand of food and fodder, • To introduce handy craft as a part off-farm activities for livelihood.	Meghla, Bandarban
08	Studying Brushwood Check Dam for minimizing erosion hazard and reclamation of gullied land.	• To reduce the velocity of run-off. • To prevent deepening and widening of the gully. • To collect sedimentation and to recharge the water table.	Meghla, Bandarban
09	Effect of indigenous & zero tillage cultivation methods of pineapple on soil erosion, run off, nutrient mining in hilly areas.	• To estimate & compare soil loss, runoff and nutrient mining under indigenous and zero tillage cultivation systems of Pineapple. • To calculate effect of soil loss on soil chemical properties. • To create awareness about soil conservation & Watershed management among hill dwellers.	Meghla, Bandarban
10	Studying effect of Natural	• To examine the effect of NVS on the	Meghla,

Sl.	Research Title	Objective(s)	Location(s)
	Vegetative Strip (NVS) for minimizing soil erosion in cultivation of vegetables.	• maintenance of soil fertility and reducing soil erosion in moderate hill slope. • To examine the effect of NVS on vegetables productivity in hill slope.	Bandarban
11	Study on management and economic value of <i>schumannianthus dichotoma</i> (murta/ patibet) in hilly jhiri land at CHT.	• To study the suitability and yield or productivity of Murta in Hilly Region of Bangladesh. • To ensure the fallow lands of hilly Jhiri into productive and minimize soil erosion hazard. • To strengthen the economical efforts of the hill dwellers by increasing off farm activities & to supplement the Traditional Jhum Practices.	Meghla, Bandarban
12	Up scaling of Quesungual Slash and Mulch Agro-forestry System (QSMAS) for enhancing crop yields and soil quality in Chittagong Hill Tracts.	• To evaluate the soil erosion hazard, productivity, economic return & fertility status practicing jhum under different treatment having the land abandoned for 3 years. • To create awareness about soil conservation and watershed management among hill dwellers.	Meghla, Bandarban
13	Studying performance of Water Melon in rainy season at hill slopes using soil conservation technique.	• To find out the suitability of water melon without irrigation (rainy season) at hill slopes. • To compare soil loss, runoff and nutrient mining under different hedge species & different slopes. • To find out a significant source of income.	Meghla, Bandarban
14	Studying soil loss and yield performance of Pineapple-based Jackfruit orchard on hill slope following contour line.	• To introduce technique for effective land use in achieving food security as an alternative farming system. • To study the yield of pineapple as an intermediate crop with permanent horticulture. • To determine soil loss in peg method.	Meghla, Bandarban
15	Effect of different hedge species on controlling soil erosion, run off, and nutrient mining of White Gourd at gentle slope in CHT.	• To compare soil loss, runoff and nutrient mining in cultivating White Gourd under different hedge species. • To evaluate the economic. aspects of cultivation under different hedge species.	Meghla, Bandarban



BANGLADESH TEA RESEARCH INSTITUTE

BANGLADESH TEA RESEARCH INSTITUTE

Sl.	Research Title	Objective(s)	Location(s)
AGRONOMY DIVISION			
1	Development of a new pruning cycle for higher and sustainable tea yield in the context of present climate change	To find out appropriate pruning cycle for a specific clone in the context of present climate change	BTRI Main Farm
2	Effects of different types of compost on growth and development of clonal tea	- To observe the effect of different types of compost on the growth and development of young tea - To find out a good alternative of cow-dung for using as organic manure during tea plantation	BTRI Main Farm
3	Mechanization in pruning and its impact on the yield of tea	- To check the impact of mechanized pruning on the yield of tea. - To find out the best pruning policy using pruning machine	BTRI Main Farm
4	Implementation of grafting technique to produce composite tea plants in the nursery for increasing yield and drought resistance capacity of the plant	To develop comparatively more drought tolerant tea plants as well as to increase the yield.	BTRI Main Farm
5	Effect of different irrigation techniques to irrigate young tea, planted at the hot slope in tillah area	- To observe the efficacy of different irrigation techniques over the control in southern part of tillah area; and - To find out the most effective and economic irrigation techniques for hot slope of tillah area.	Bilashcherra Experimental Farm, BTRI
6	Effect of a growth promoter (Flora-Nitrobenzene) on growth and yield of mature tea	Main objective was to find out the effect of FLORA on growth and yield of tea in Bangladesh	BTRI Main Farm
7	Effect of First Frame Formation Pruning of winter planted tea at different times after planting on its growth and survivability	To find out the appropriate/optimum time for First Frame Formation Pruning for winter plantation for better frame formation and to reduce the maintenance period.	Luskorpore Tea Estate, Habigonj
SOIL SCIENCE DIVISION			
8	Evaluation of physical properties of some selected tea soils of Bangladesh & their influence on chemical properties & yield of tea (2017-2022).	- To evaluate the physical characteristics of the tea growing soils of Bangladesh. - To identify the changes of physical properties of soil due to continuous tea cultivation. - Assessment of changes in nutrient status and crop yield due to variation in physical properties of tea soil.	BTRI and Different Tea Estate.
9	Status of Micronutrient (B, Mo, Zn, Mn, Fe & Cu) in some selected tea soils and its effects on the growth & yield of young tea and mature tea (2012-2022).	- To determine the micro nutrients status of tea soil in Bangladesh. - To compare the micro nutrients status between old tea soil &	BTRI and Different Tea Estate.

Sl.	Research Title	Objective(s)	Location(s)
		young tea soil. • To estimate the effects of micronutrients on the growth and yield of young tea and mature tea	
10	Present status of toxic heavy metals (Pb, Cd, Hg, Cr) in tea soils, green leaves and made tea in Bangladesh (2018-2022).	• Determination of presence and number of heavy substances in tea soil, raw leaves and made tea of Bangladesh.	BTRI and Different Tea Estate.
11	Determination of critical values of nutrients in tea soil and plant leaf in Sylhet, Chittagong and Panchagarh region (2018-2023).	• To determine the status of changes in soil nutrients as a result of long-term tea cultivation and climate change.	BTRI and Different Tea Estate.
12	Comparative study of conservation & conventional agriculture practice in small holding tea cultivation in response to climate change (2020-2025).	• Efficient use of external and natural resources. • Economically viable and effective for small tea farmers. • Providing efficient and sustainable eco-farming systems for livestock, social structures etc. • Reducing mortality of new plantings during the dry season. • To reduce soil erosion with nutrients	Bilashcherra Experimental Farm.
13	Effect of different mulching materials on soil properties, earthworm population and growth of young tea (2020-2022)	• Improving soil moisture conditions. • To increase soil organic carbon. • Determining the number of earthworms and increasing the growth and yield of tea plants. • Determining soil characteristics of new tea plantations.	Bilashcherra Experimental Farm And Luskerpore Tea Estate
14	Formulation of a New Fertilizer cum pesticides (FCP) and study the efficiency of foliar spray on tea plant (2022-2023)	• To form a new pattern of organic fertilizer. • Determining the quality and efficiency of the organic fertilizer on tea plants. • To reduce foliar application of chemical fertilizers.	BTRI Farm
PLANT PATHOLOGY DIVISION			
15	Investigations on phytotoxicity of commonly used fungicides for controlling tea diseases in Bangladesh.	• To know fungicide residue on tea plants. • To study the vascular system (xylem and phloem) • To analyze the stomatal characteristics of tea plants.	BTRI & its experimental farm and Plant Pathology laboratory, BTRI, Srimangal.
16	Cross Inoculation and Host Range Studies of some important tea pathogens in tea ecosystem.	• To specify the alternate harbor and/or succumb of tea pathogens by the sets of plants. • To regulate the matrices of compatible and incompatible reactions and the identification of races in tea ecosystem.	BTRI & its experimental farm and Plant Pathology laboratory, BTRI, Srimangal.

Sl.	Research Title	Objective(s)	Location(s)
17	Screening of BTRI released tea clones against different tea diseases.	To find out the tolerance level of BTRI released tea clones against major diseases of tea in Bangladesh.	BTRI & its experimental farm and Plant Pathology laboratory, BTRI, Srimangal.
18	Effect of different group of herbicides on tea soil environment.	To reveal the impact of different herbicides used in tea cultivation on tea soil environment.	BTRI & its experimental farm and Plant Pathology laboratory, BTRI, Srimangal.
19	Screening of new fungicides and herbicides against different diseases and weeds in tea.	To evaluate and standardize new fungicides and herbicides against different tea diseases and weeds.	BTRI & its experimental farm and Plant Pathology laboratory, BTRI, Srimangal.
ENTOMOLOGY DIVISION			
20	Biopesticides as promising alternatives to chemical pesticides for sustainable management of tea insect pests	- To determine the effects of biopesticides against looper caterpillar in tea - To find out the comparative efficacy of microbials and chemicals to looper caterpillar - To standardize the effectiveness	Bilashcherra Experimental farm & BTRI main farm
21	Ethoprophos: An alternative chemical option for nematode control in tea	- To find out the reduction of plant parasitic nematode in tea soil - To evaluate the comparative efficacy of EC and granular formulation - To standardize the effectiveness	Nematology laboratory (Field & room) & V.P nursery, BTRI
22	Survey and monitoring of new insect pests in tea due to change in climate: Causes and Remedies	- To identify the emergence of new insect pests - To study the seasonal abundances and nature of damage	Bilashcherra Experimental farm & different tea estates
23	Screening of pesticides against <i>Helopeltis</i> , Red spider mites, Termites, Looper caterpillar, Thrips & Nematodes in tea	- To determine the effectiveness of different group of insecticides against <i>Helopeltis</i> in tea - To find out a wide range of alternative and economical pesticides to avoid pest resistance - To ensure variable choice of effective pesticides by the management	BTRI main farm & Bilashcherra Experimental farm
STATISTICS & ECONOMICS DIVISION			
24	Adoption of BTRI matured Technologies and its Extension to Tea Estates of Bangladesh	The experiment was attempted to study the present status about the adoption of BTRI technologies and its efficiency in crop improvement in the tea estates.	167 Tea Estates of Bangladesh

Sl.	Research Title	Objective(s)	Location(s)
		It was also aimed to create a statistical database on adoption of these technologies to the tea estates as well as to find out the limitations of dissemination the technologies.	
25	Economic efficiency of some selective test clones and standard clones of BTRI	- Study the economic efficiency of the test clones in respect of yield. - Find out the economic efficient test clone(s) comparing internal rate of return. - Use of economic performance as a parameter for suitable selection of significant clone(s).	BTRI Campus
BIOCHEMISTRY DIVISION			
26	Effect of storage time and packaging material on the quality of black tea.	- To identify the best packaging material for the storage of tea. - To determine the shelf life of tea under a specific packaging material.	BTRI, Biochemistry Division Lab, Sreemangal-3210, Moulvibazar.
27	Effect of Brassinosteroids on the yield and quality improvement by influencing formation of biochemical components in tea.	To improve yield and quality of the tea by the application of phytohormone Brassinosteroids.	BTRI Farm, Sreemangal-3210, Moulvibazar
BOTANY DIVISION			
28	B1-27: Selection of Vegetative Clones at Shumshernugger T. E., Section Main Div. Sec. No. 9.	- To isolate desirable mother bushes from the existing variable seedling population. - To identify promising plants having yield and quality potential through exploiting existing variability. - To isolate plants tolerant to insect, disease and drought. - To observe rooting ability of the selected mother bushes.	Shumshernugger T. E
29	B1-28: Selection of Vegetative Clones at Amo T. E., Section No. 8		Amo T. E.,
30	B1-31: Selection of Vegetative Clones at Baraoorah T. E., Section No. 8		Baraoorah T. E
31	B2-40: Yield and Quality Trial of Six Test clones – MZ/39, E/4, D/13, B2T1, BR2/97 and SDL/1 against Standard BT2	- To select promising test clones having desirable characteristics i.e., either yield or quality or both. - To identify stress tolerant test clones such as drought tolerant. - To identify test clones which are less susceptible to pests. - In order to release clones for cultivation from the test clones under trial which have desirable characteristics of commercial importance i.e., yield, cup quality, tolerant to insect, disease, drought etc.	BTRI Farm
32	B2-41: Yield and Quality Trial of Four Test clones Selected from Amo T. E.; Test clones – A/8/37, A/8/55, A/8/62 and A/8/66 against Standard BT2		BTRI Farm
33	B2-42: Yield and Quality Trial of Four Test clones Selected from Phulcherra, Amo and Shumshernugger T. Es.; Test clones – A/17/16, Ph/9/1, Ph/9/9 and Sh/B/6/46 against Standard BT1.		BTRI Farm
34	B2-43: Yield and Quality Trial of Four Test clones Selected from Phulcherra and Hybrid Progeny; Test clones– Ph/9/4, Ph/9/25, Ph/9/40 and BS/67 against Standard BT5.		BTRI Farm
35	B2-44: Yield and Quality Trial of Three		BTRI Farm

Sl.	Research Title	Objective(s)	Location(s)
	Test clones Selected from Amo and Phulcherra T. Es.; Test clones– A/8B/1, Ph/9B/1, Ph/9/11 and against Standard BT1.		
36	B2-45: Yield and Quality Trial of Three Test clones Selected from Amo, Phulcherra and Shumshernugger T. Es.; Test clones- A/8/61, Ph/9/68A, Sh/D/11/18 (retrial from Expt. B2-26) and One Introduced Clone SC/12/28 against Standard BT2		BTRI Farm
37	B2-46: Yield and Quality Trial of Four Test clones Selected from BTRI Farm (Dulia Section); Test clones – D1/18, D/6, D/10 and D/12 against Standard BT5		BTRI Farm
38	B2-47: Yield and Quality Trial of Four Test clones Selected from Phulcherra T. E. and BTRI Germplasm Bank; Test clones-Ph/9/92, BS/3, Ph/9/108 and G/61/8 against Standard BT15.		BTRI Farm
39	B2-48: Yield and Quality Trial of Four Test clones Selected from Shumshernugger and Amo T. Es. Test clones – A/8/124, Sh/10/2, A/8/125 and A/11/38 against Standard BT2.		BTRI Farm
40	B2-49: Yield and Quality Trial of Four Test clones Selected from Shumshernugger T.E. (Sh/10/5, Sh/D/13/4 and Amo T. Es. Test clones – A/8/128, BS/91/6, against Standard BT2		BTRI Farm
41	B2-50: Yield and Quality Trial of Three Test Clones Selected from Baraoorah T.E. and Shumshernugger T.E. Test Clones – B/8/79, Sh/9/43 and B/8/93 against Standard BT2 and BT17		BTRI Farm
42	B2-51: Yield and Quality Trial of Two Test Clones Selected from Amo T.E., and Shumshernugger T.E.; Test Clones – A/8/194 and Sh/9/65 against Standard BT2, BT17 and BTS1. (BTRI, 2015-2032).		BTRI Farm
43	B2-52: Yield and Quality Trial of Four Test Clones Selected from Amo T.E., Baraoorah T.E., and Shumshernugger T.E.; Test Clones–B/8/97, B/8/101, Sh/9/71 and A/8/217 against Standard BT2 (BTRI, 2017-2034).		BTRI Farm
44	B2-53: Yield and Quality Trial of Four Test Clones Selected from Amo T.E., Baraoorah T.E., and Shumshernugger T.E.; Test Clones–B/8/131, B/8/144, Sh/9/85 and A/8/254 against Standard BT2 (BTRI, 2017-2034).		BTRI Farm
45	B2-54: Yield and Quality Trial of Four		BTRI Farm

Sl.	Research Title	Objective(s)	Location(s)
	Test Clones Selected from Rajghat T.E. (Biddyabil Division), Amrail T.E., and Madhabpur T.E.; Test Clones– P/RJG/8/80, P/AML/14/98, P/RJG/11/106 and P/MDP/13/70 against Standard BT2 (BTRI, 2019-2036).		
46	B2-55: Yield and Quality Trial of Four Test Clones Selected from Rajghat T.E. (Biddyabil Division), Kurmah T.E., and Champarai T.E.; Test Clones– P/RJG/6/57, P/KRM/11/46, P/RJG/6/48 and P/CHM/18/79 against Standard BT2 (BTRI, 2019-2032).		BTRI Farm
47	B2-56: Long term Yield and Quality Trial of Four Test Clones (Multi-location trail) at Amo Tea Estate		Amo Tea Estate
48	B2-57: Long term Yield and Quality Trial of Four Test Clones (Multi-location trail) at Hafiz Tea Estate		Hafiz Tea Estate
49	B2-58: Yield and Quality Trial of Four Test Clones Selected from Chandbagh T. E., Teliapara T.E., (Satchori Division), Kapnapahar T. E., Madhabpur T. E.; Test Clones–P/CHB/18/67, P/TLP/5/58, P/KPR/56 and P/MDP/12/41 against Standard BT20 (BTRI, 2019-2032).		BTRI Farm
50	B2-59: Yield and Quality Trial of Four Test Clones Selected from Monipore T. E. , Amrail T. E., Rajghat T.E. (Biddyabil Division); Test Clones– P/MPR/16a/99, P/AML/12/20, P/MPR/16a/78 and P/RJG/6/19 against Standard BT15 (BTRI, 2019-2032).		BTRI Farm
51	B2-60: Yield and Quality Trial of Three Test Clones Selected from Bethelpara para and Lairunpi para from Ruma Upazila of Bandarban District; Test Clones– P/RU/LAI/13, P/RU/BTL/49 and P/RU/LAI/53 against Standard BT19 (BTRI, 2020-2033).		BTRI Farm
52	B2-61: Yield and Quality Trial of four Test Clones; Test Clones– P1, P2, P3 and P4 against Standard BT2 (BTRI, 2021-2033).		BTRI Farm
53	B2-62: Yield and Quality Trial of Three Test Clones; Test Clones– A1, A2 and A3 against Standard BT13 (BTRI, 2021-2033).		BTRI Farm
54	B3-1.1: Controlled Pollination between Selected Clones/Agrotypes and Selection of Generative Clones for the Establishment of Clonal Seed Reserve (1964-)	• To study compatibility between different clones and agrotypes. • To observe seed setting ability of different cross combinations. • To observe hybrid vigour of seed progeny.	BTRI Farm
55	B3-1.3: Establishment of polyclonal seedbaries according to the proposed		BTRI Farm

Sl.	Research Title	Objective(s)	Location(s)
	model by the Institute and observation on the open pollinated progenies.	• To identify suitable generative clones or agrotypes for hybrid seed (biclonal seed) production. • In order to select vegetative clones from hybrid progeny having desirable characters. • To evaluate indigenous and exotic biclonal seeds.	
56	B3-1.5: Establishment of a Biclonal Seedbarie with Clones TV18 and BT3.		BTRI Farm
57	B3-8: Survey and Conservation of Gene Resources of Tea in Bangladesh (BTRI, 1981-)		BTRI Farm
58	B3-11: a. Survey and isolation of mother bush of breeding value in Parkul Tea Estate Seed Barie		BTRI Farm
59	B3-11: b. Survey and isolation of mother bush of breeding value in Monipore Tea Estate Seed Barie		BTRI Farm
60	B3-11: c. Survey and isolation of mother bush of breeding value in Merina Tea Estate Seed Barie		BTRI Farm
61	B3-12: Morphological characterization of BTRI released clones, some test clones and wild genotypes.		BTRI Farm
62	B4-10: Effect of drought on morpho-physiological and water relations traits in tea clones at nursery level	• To screen drought tolerant germplasm	BTRI Farm
63	B4-11: Effect of drought on morpho-physiological and water relations traits in tea clones at field level.		BTRI Farm
64	B4-12: Sustainable protocol development of artisan tea and different kinds of value-added tea.	• To develop sustainable protocol of artisan tea and different kinds of value-added tea.	BTRI Farm
65	B4-13: Amendment of existing of tea plantation area and standardization of new extension plantation area by using BTRI released clones for manufacturing better cup quality tea in Northern region of Bangladesh. (2022-)	• To make an Amendment of existing of tea plantation area and standardization of new extension plantation area by using BTRI released clones	Northern region of Bangladesh
66	B4-14. Impact of Biokad and micronutrients on productivity and sustainable tea farming (2021-).	• To increase productivity by Biokad and micronutrients	BTRI Farm
67	B4-15. Fabrication and characterization of polymer matrix composite based on tea waste and different polymer (2021-).	• To develop polymer matrix composite based on tea waste	BTRI
68	B4-16. Estimation of simple equation for measuring Leaf Area of BTRI released individual clones and biclones (2021-).	• To estimate a simple equation for measuring Leaf Area	BTRI Farm
69	B4-17. Effect of number of tea leaf pubescence and rate of fermentation on made tea quality of BTRI released clones & biclones (2021-).	• To study the effect of number of tea leaf pubescence and rate of fermentation on made tea	BTRI Farm
70	B4-18: Impact of blending on commercial tea cultivar on black tea quality along with price. (2021-)	• To study the impact of blending on commercial tea cultivar on black tea quality along with price	BTRI Farm



BANGLADESH FOREST RESEARCH INSTITUTE

BANGLADESH FOREST RESEARCH INSTITUTE

Sl.	Research Title	Objective(s)	Location(s)
AGRICULTURE (BOTANY DIVISION)			
1	Floristic Composition and Natural Regeneration Status of Pabla Khali Wildlife Sanctuary in Rangamati Hill District, Bangladesh	- To prepare a checklist of forest trees, woody shrubs, herbs, climbers and pteridophyte of Pabla Khali Wildlife Sanctuary. - To observe the natural regeneration status of tree species in different habitats of Pabla Khali Wildlife Sanctuary.	Chattogram
2	Village Common Forest Restoration and Management by the local Community People of Itchari Para, Khagrachari Hill District, Bangladesh	- Documentation of floristic composition and indigenous management practices of VCF by tribal community people. - To aware of the tribal community people about restoration and conservation of VCF. - To observe the natural regeneration status of the VCF. - To develop a management plan.	Chattogram
MANGROVE SILVICULTURE DIVISION			
3	Impact of climate change on floral biodiversity in the Sundarbans.	- To conserve the species/genetic diversity of plants and animals as well as to preserve the continuity of food chains in the Sundarbans. - To know the impact of climate change as well as soil and water salinity in the Sundarbans. - To assess the floral biodiversity of the Sundarbans.	Khulna
4	Conservation of mangrove species in the three arboretum areas of three salinity zones in the Sundarban (Third phase).	- To conserve and demonstrate floral species in natural habitat in the Sundarbans - To centralize threatened mangrove species. - To enrich the biodiversity of the Sundarbans.	Khulna
5	Ex-situ conservation of major mangrove species at the adjacent char land areas of the Sundarbans.	- To ex-situ conservation major mangrove species in the adjacent char land of the Sundarbans. - To expand the mangrove ecosystem and biodiversity.	Khulna
Wildlife Section			
6	Dependency of Birds and Mammals of Mohamaya Eco-Park, Mirsharai, Chattogram in relation to plant diversity.	- Survey of floristic Plant composition to find out dependency of Birds and Mammals of Mohamaya Eco-Park in relation to plant diversity. - To identify the different type of wildlife species of Mohamaya Eco-Park - To determine abundance of different type of wildlife species of Mohamaya Eco-Park - To identify the major threats to wildlife species of Mohamaya Eco-Park	Chattogram

Sl.	Research Title	Objective(s)	Location(s)
FOREST ECONOMICS DIVISION			
7	Valuation of Ecosystem Services in Sitakunda Botanical Garden and Ecopark, Chattogram.	• To assess the forest resources of the park. • To estimate total economic value of the identified provisioning, regulatory, cultural and support services • To determine the livelihood dependency of local communities on Ecosystem Services. • To measure the importance of ES of the park to public and decision makers. • Recommend the necessary measures for conservation of the park to sustain the ecosystem	Chattogram
8	Community dependency on the Village Common Forests (VCFs) of Bandarban hill district.	• Socioeconomic status measurement of the Forest User Groups (FUG). • Assessment of forest resources of the selected VCFs • Understanding the pattern of uses (Social and monetary) of forest resources. • Preparing a scientific management model for VCFs.	Chattogram
9	Economic impact of bee keeping in selected areas of Bangladesh.	• To estimate honey and wax yield production in each selected location of Bandarban, Khagrachari and Rangamati. • To determine economic return of honey and wax yield production. • To compare output of honey and flora in beekeeping area with control area.	Chattogram
FOREST INVENTORY DIVISION			
10	Growth, Yield and Carbon Storage of Rubber tree, (<i>Hevea brasiliensis</i> . Muell Arg.) Plantations in Bangladesh.	• To derive mathematical models for determining site index or site classes from tree-site variables for rubber tree • To derive reliable growth and yield predication mathematical models, and expected rotation age for rubber tree. • To determine the carbon stock in existing plantations of rubber tree	Chattogram
11	Tree Resource Assessment of Homestead in the Northern parts of Bangladesh.	• To assess status of homestead biodiversity (Floristic and structural composition and plant utilization pattern) • To assess size/age class distribution of the species. • To assess carbon stock (above and below ground) in home garden.	Chattogram
FOREST PROTECTION DIVISION			
12	Neem (<i>Azadirachta indica</i> A. Juss.) mortality in Northern part of Bangladesh and its management.	• To find out the spread and also the extent of damage in the Neem plantation areas • To find out the primary cause of Neem mortality. • To determine suitable control measures of mortality of Neem.	Chattogram

Sl.	Research Title	Objective(s)	Location(s)
13	Identification and Evaluation of Entomopathogenic Fungi to Control Lepidopteran Pests of Some Important Forest Tree species, viz. Teak (<i>Tectona grandis</i> , Koroi (<i>Albizia</i> spp.) and Agar (<i>Aquilaria malaccensis</i>) (Ongoing)	- To evaluate the bio-efficacy of entomopathogenic fungal species on the Lepidopteran pests of Teak, Koroi and Agar tree. - To evaluate the suitability of different substrates for mass multiplication of entomopathogenic fungi	Chattogram
14	Investigation of Rain Tree Mortality in Bangladesh Due to Pest and Pathogen and Their Management	- To know the present status of Rain tree mortality at major Rain tree plantation areas of Bangladesh - To find out the causal pest and pathogens associate with massive mortality of Rain tree - To develop a suitable management technique for key pest and pathogens responsible for Rain tree mortality	Chattogram
15	Seed and Seedling Diseases of Five Important Forest Tree Species in Bangladesh and their Management	- To record the incidence % of seed and seedling diseases of five important forest tree species at forest nurseries in different areas of Bangladesh - To isolate and identify the pathogen associated with seed and seedling diseases of important forest tree species in storage and field condition - To investigate the impact of seed born pathogen on seed germination and seedlings growth	Chattogram
16	Biological Control of Three Commercially Cultivated Medicinal Plant disease in Bangladesh	- To identify antagonistic fungi and bacteria - To develop a suitable management technique for biological control of major diseases of three commercially cultivated medicinal plants	Chattogram
MANGROVE SILVICULTURE DIVISION			
17	Ecological monitoring through establishment of Permanent Sample Plots (PSPs) in the Sundarbans of Bangladesh.	- To determine the species composition. - To determine the natural regeneration status of major mangrove species. - To understand the vegetation dynamics in the Sundarbans over time. - To assess the impact of salinity and siltation on the change of vegetation.	Khulna
18	Nursery and plantation techniques of Moth goran (<i>Ceriops tagal</i>) in the Sundarbans.	- To develop nursery and plantation techniques of moth goran - To conserve the species and biodiversity.	Khulna
SEED ORCHARD DIVISION			
19	Development of Vegetative Propagation techniques of important forest tree species of Gutgutya and Bandarhola.	- To develop a suitable vegetative propagation technique for Gutgutya and Bandarhola - To produce and supply of quality planting materials of Gutgutya and Bandarhola to the planters.	Chattogram

Sl.	Research Title	Objective(s)	Location(s)
20	Development of seed Sources of Boilam, Dharmara, Haldu, Civit and Gutguya through establishment of seedling seed orchard	- To establish seed source of five endangered species. - To conserve five endangered indigenous species.	Chattogram
SILVICULTURE GENETICS DIVISION			
21	Molecular characterization of endangered forest tree species viz. boilam (<i>Anisoptera scaphula</i>), shada garjan (<i>Dipterocarpus costatus</i>) and telia garjan (<i>Dipterocarpus turbinatus</i>) through DNA barcoding.	- To identify the plant species based on extracting a DNA sequence from a tiny tissue sample. - To make a distinction from particular species, varieties or even inter varieties.	Chattogram
22	Micro-propagation and genetic analysis of variation in regenerated plants of african teakoak (<i>Chlorophora excelsa</i>), boilam (<i>Anisoptera scaphula</i>) and taxodium (<i>Taxodium mucronatum</i>).	- To develop high micro-propagation efficiency for the selected species. - Production of quality planting stock in a short time. - Replication of improve genetic material through medium to long term conservation.	Chattogram
23	Development of tissue culture techniques for four new bamboo species viz., asper (<i>Dendrocalamus asper</i>), sinicus (<i>D. sinicus</i>), latiflorous (<i>D. latiflorous</i>), and moso bamboo (<i>P. edulis</i>).	- To develop <i>in vitro</i> protocol for the new bamboo species. - Production of quality bamboo seedlings for large scale cultivation.	Chattogram
24	Development of improved protocols for <i>in vitro</i> plant regeneration of selected rubber (<i>Hevea brasiliensis</i>) clones.	- To establish embryogenic callus culture and plant regeneration protocol via somatic embryogenesis from potential explants of <i>H. brasiliensis</i>. - To evaluate the <i>in vitro</i> micro-propagation capacity of somatic embryo derived plants - To produce a homogenous plant population of selected rubber clone	Chattogram
25	Enrichment and maintenance of mangrove museum.	- To collect and preserve the floral and faunal specimen from the Sundarbans. - To identify the unknown flora and fauna. - To maintenance of mangrove museum. - To demonstrate the forest specimens to the students, teachers, researchers and visitors.	Chattogram
26	Optimization of seedling production and mass propagation of ten important village bamboos through branch cutting technique and seedling proliferation	- To make available bamboo propagules for wider distribution - Popularization of bamboo branch cutting technique - To develop linkage with different stakeholders of BFRI.	Chattogram
MINOR FOREST PRODUCTS DIVISION			
27	Germplasm conservation and	To authenticate correct identification of	Chattogram

Sl.	Research Title	Objective(s)	Location(s)
	management practices of different medicinal plants	medicinal plants. • To conserve medicinal plants for scientific study and demonstration. • To develop a gene pool of medicinal plants species for propagation purposes. • To popularize the cultivation and use of medicinal plants. • To determine management techniques for maximum yield of medicinal plants.	
28	Screening of host /nurse plants for raising chandan (<i>Santalum album</i>) plantation	• To develop plantation and management techniques for sustain yield. • To select suitable host plants for raising chandan plantation.	Chattogram
29	Development of vegetative propagation technique for cashew nut (<i>Anacardium occidentale</i> L.)	• To develop a vegetative propagation technique. • To facilitate the production of planting materials to improve the yield of cashew.	Chattogram
30	Nursery techniques of three medicinal plants: putranjiva (<i>Drypetes roxburghii</i>), painna gula (<i>Flacourtia jangomas</i>) and chaulmoogra (<i>Hydnocarpus kurzii</i>).	• To develop nursery techniques for production of planting materials. • To popularize cultivation and use of those medicinal plants	Chattogram
31	Growth performance of <i>Avicennia alba</i> and <i>Avicennia marina</i> in the western coastal belt of Bangladesh	• To select site suitability of two <i>Avicennia</i> species in the western coastal areas of Bangladesh. • To assess the growth performance of two baen species in the western coastal belt of Bangladesh	Plantation Trial Unit Division
32	Monitoring and maintenance of existing trial plantations in the coastal areas of Bangladesh	• To assess the growth performance and phenology of different mangrove and non-mangrove species at different char lands.	Plantation Trial Unit Division
33	Growth assessment of established plantations at four Silviculture Research Station.	• To assess the growth performance of different tree species in four dendro-ecological regions of the country. • To determine the factors influencing the growth performance.	Silviculture Research Division
34	Growth performance of three indigenous fast growing tree species Gamar (<i>Gmelina arborea</i>), Toon (<i>Toona ciliata</i>), and Shil Koroï (<i>Albizia procera</i>).	• To select plantation technique for timber and fuel wood production for native fast growing tree species. • To find the site suitability. • To assess the growth performance.	Silviculture Research Division
35	Restoration of degraded Hill and Sal Forest site through Assisted Natural Regeneration (ANR)	• To develop suitable ANR methods for degraded forestland area management.	Silviculture Research Division
36	Nursery and Plantation technique of six important <i>Ficus</i> species at Lawachara and Keochia Silviculture Research Stations.	• To develop nursery and plantation technique of six <i>Ficus</i> species.	Silviculture Research Division
37	Introduction of site suitable	• To find out the site suitable bamboo species	Regional

Sl.	Research Title	Objective(s)	Location(s)
	bamboo species in Rangpur division of Bangladesh	for northern region of Bangladesh. • To enhance the bamboo diversity and raw materials for value added products in northern part of Bangladesh.	Bamboo Research and Training Center
38	Early evaluation and Production of quality planting materials of nine important forest tree species.	• To evaluate, produce and supply of quality planting materials to the planters. • To develop Linkage with planters for awareness about the importance and benefits of quality seedlings.	Seed Orchard Division
39	Enhancement of life span of Dharmara, Jarul and Toon seed through different storage media.	• To find out a suitable storage condition/medium for selected species.	Seed Orchard Division
40	Effects of seed grading on germination and early growth performance of Tellya-garjan (<i>Dipterocarpus turbinatus</i>), Dholi-garjan (<i>Dipterocarpus alatus</i>) and Baittya-garjan (<i>Dipterocarpus costatus</i>)	• To evaluate the physical and morphological characteristics of seeds of Tellya-garjan, Dholi-garjan and Baittya-garjan. • To assess the influence of seed size on germination, survival and early growth performance of these three threatened forest tree species of Bangladesh under nursery conditions.	Seed Orchard Division
41	Development of nursery techniques of four important endangered indigenous forest tree species.	• To standardize the nursery techniques of selected indigenous forest tree species. • To provide quality seedlings to planters for successful plantation establishment.	Silviculture Research Division
42	Development of Nursery and Plantation techniques of two important threatened species Tali (<i>Palaquium polyanthum</i> Engl.) and Lombatasbi (<i>Miliusa longiflora</i> Hook. f. & Thomson) Finet & Gagnep.	• To develop nursery technique of Tali and Lombatasbi. • To develop plantation technique of Tali and Lombatasbi	Silviculture Research Division
43	Development of degraded hill for soil conservation and Watershed management in Baraiyadhala National Park, Sitakunda, Chattogram and Bandarban Hill District	• To rehabilitate the degraded hilly land for soil conservation and watershed management • To involve the local communities for sustainable land management	Soil Science Division
44	Effect of bamboo plantation on soil erosion minimization in the coastal areas of Chattogram	• To observe the effects of different bamboo species on soil erosion minimization • To assess the growth and survival of different bamboo species in the coastal areas of Chattogram	Soil Science Division
45	Assessment of soil quality for sustainable forest ecosystem of hill forest areas at Bandarban hill district	• To assess the soil quality of different forest ecosystems in the hilly areas of Bandarban hill district • To observe the effects of soil quality on forest ecosystems	Soil Science Division
46	Development of Deinking Process from Used Paper as Fiber Material	• To explore a cost effective and environment friendly deinking process of used book pulp;	Pulp and Paper Division

Sl.	Research Title	Objective(s)	Location(s)
		• To prepare eco-friendly packaging fiber material.	
47	Determination of physical and mechanical properties of Farua (<i>Bambusa polymorpha</i>) and Membra bansh (<i>Dendrocalamus membranaceus</i>).	• To assess the suitability of bamboo species for various uses.	Seasoning and Timber Physics Division
48	Application of solar heated kiln for determination of seasoning schedule of Ora bansh (<i>Dendrocalamus longispithua</i>) and Talla bansh (<i>Bambusa longispiculata</i>) round bamboo	• To determine the seasoning schedule of Orabansh (<i>Dendrocalamus longispithua</i>) and Tallabansh (<i>Bambusa longispiculata</i>) round bamboo species.	Seasoning and Timber Physics Division
49	Determination of physical and mechanical properties of Gamar (<i>Gmelina arborea</i>), Mango (<i>Mangifera indica</i>) and Silkroi (<i>Albizia procera</i>) through heat treatment.	• To investigate the effect of heat treatment on physical and mechanical properties of wood • To assess the suitability of wood for making furniture and construction materials.	Seasoning and Timber Physics Division
50	Determination of Physical and mechanical properties of Rangoon bansh (<i>Thyrsostachys oliveri</i>).	• To assess the suitability of bamboo species for various uses.	Seasoning and Timber Physics Division
51	Suitability of manufacturing medium density fiberboard (MDF) made from borak (<i>Bambusa balcooa</i>)	• To determine the suitability of medium density fiberboard made from borak (<i>Bambusa balcooa</i>) bamboos.	Veneer and Composite Wood Products Division
52	Suitability of medium density fiberboard (MDF) made from Mahogany (<i>Swietenia macrophylla</i>) wood.	• To determine the suitability of medium density fiberboard made from <i>Swietenia macrophylla</i> wood.	Veneer and Composite Wood Products Division
53	Suitability of medium density fiberboard (MDF) made from Rain tree (<i>Samanea saman</i>) wood.	• To determine the suitability of medium density fibreboard made from Rain tree (<i>Samanea saman</i>) wood.	Veneer and Composite Wood Products Division
54	Effectiveness of Disodium Octaborate Tetrahydrate (DOT) and Zinc chloride ($ZnCl_2$) as preservative chemicals.	• To determine the treating schedule of preservative treatment of wood using DOT and $ZnCl_2$ solution. • To determine the treatability and durability of DOT and $ZnCl_2$ treated wood. • To disseminate the information to the end-users.	Wood Preservation Division
55	Characterization of Ghora neem (<i>Melia azadarach</i>) wood for working and finishing properties.	• To assess the suitability of Ghora neem (<i>Melia azadarach</i>) wood for furniture and other utilization purposes • To decrease the pressure on traditional timber species.	Wood Working and Timber Engineering Division
56	Potential uses of Toon (<i>Toona</i>	• To assess the suitability of Toon (<i>Toona</i>	Wood

Sl.	Research Title	Objective(s)	Location(s)
	<i>ciliata</i>) wood for furniture and construction materials.	<i>ciliata</i>) wood for furniture and other utilization purposes • To decrease the pressure on traditional timber species.	Working and Timber Engineering Division



COTTON DEVELOPMENT BOARD

COTTON DEVELOPMENT BOARD

Sl.	Research Title	Objective(s)	Location(s)
BREEDING DISCIPLINE			
Selection Breeding			
1	Non-Replicated Progeny Row Trial of Upland cotton	• To select the superior genotypes for new acquisition trials.	Cotton Research Center (CRC), Mahigonj Farm
2	Screening of upland cotton (<i>Gossypium hirsutum</i>) in hilly area	• To identify the suitable variety for hilly area	CRC, Balaghata, Bandarban.
3	Replicated Progeny Row Trial of Upland cotton	• To select the superior genotypes for new acquisition trials	CRC, Mahigonj
4	Preliminary yield trial of Upland Cotton	• To test the yield and quality performance of some newly promising lines through comparing their agronomic and ginning characters with existing standard cultivars.	CRC, Rangpur, Dinajpur, Jashore & Gazipur.
5	Advance yield trial of Upland Cotton	• To compare the agronomic, ginning and quality performance of some advanced lines with superior existing cultivars that currently being multiplied for release to farmers.	CRC, Rangpur, Dinajpur, Jashore & Gazipur
6	Candidate variety Trial / Zonal Yield Trial of Upland Cotton	• To test the yield and adaptability of some advanced lines with the existing cultivars at zonal level in farmers field that currently being multiplied for release to farmers	Jashore, Jhenaidah, Chuadanga, Kushtia, Bogura, Rajshahi, Rangpur, Thakurgaon, Mymensingh, Dhaka, Rangamati, Khagrachari and Bandarban
Germplasm Evaluation			
7	Evaluation and Characterization of Some Materials of Upland Cotton	• To select the superior genotypes for new acquisition trials. • To evaluate the yield and quality performance of some lines.	CRC, Jagadishpur
Mutation Breeding			
8	Non-replicated progeny rows of M5 generation	• To evaluate the performances of mutant genotypes in M5 generation	CRC (Sreepur, Gazipur; Balaghat Bandarban)
9	Replicated progeny rows of M5 generation	• To evaluate the performances of mutant genotypes in M5 generation	CRC, Sreepur, Gazipur
10	Evaluation of mutant genotypes under high density planting system	• To evaluate the performances of mutant genotypes in M5 generation under high density planting system	CRC, Sreepur, Gazipur
11	Evaluation of mutant genotypes under high density	• To evaluate the performances of mutant genotypes in M5 generation under high density planting system	13 Zones of CDB

Sl.	Research Title	Objective(s)	Location(s)
	planting system at Farmers field		
12	Evaluation of the Cotton Mutant Varieties Obtained from IAEA	To know the performances of the mutant varieties obtained from IAEA in comparison with CDB developed varieties by reducing plant spacing	CRC, Jagadishpur
13	Effect of mutation on SR-25 Tree cotton (Gossypium arboreum)	To find out the better performing mutant of SR- 25 Tree cotton	CRC, Sreepur, Gazipur
AGRONOMY DISCIPLINE			
14	Determination of sowing time of SR-25 Tree cotton (Gossypium arboreum)	To find out the appropriate sowing time of SR-25 Tree cotton	CRC, Sreepur, Gazipur
15	Performance of natural colour cotton under organic cultivation method.	To find out the performance of different color cotton germplasm following the standard operative procedures of organic farming	CRC, Sreepur, Gazipur
16	Effect of Growth Regulator (GR) on Cotton Yield, Growth and Insect- disease abundance under High Density Planting System	- To identify GR application package suitable for HDPS. - To observe insect & disease abundance in different GR application package - To estimate economics of HDPS	CRC, Sreepur, Gazipur
17	Effect of sowing time and seedling transplanting age on cotton crop duration and yield	- To find out the effect of sowing time on crop duration and yield - To find out the effect of seedling age on crop duration and yield	CRC, Rangpur Sadarpur Dinajpur
18	Effect of different plant spacing on cotton yield and yield contributing characters of CB- 14	To find out the suitable spacing for the highest seed cotton yield	CRC, Jagadishpur Jashore
19	Effect of weed free period on the growth and yield of cotton	- To determine the effect of the timing of weed removal - To determine the duration of weed interference on cotton yield under field conditions.	Cotton Research Farm, Sreepur, Gazipur.
20	Effect of plant population density on growth and yield of cotton variety CB- 15	- To investigate the effect of plant population density on cotton growth - To understand how to make the most efficient use of plant population to incorporate into Production strategies	CRC, Sreepur
21	Effect of mulching and planting method on cotton yield and yield contributing characters at Barind tract	- To find out the effect of mulching on cotton yield - To generate technology suitable for Barind Tract	CRC, Chapainawabganj
22	Intercropping of Cotton with Jute Seed Crop	To know the compatibility of jute seed for intercropping with cotton	CRC (Rangpur, Dinajpur, Jashore, Gazipur)

Sl.	Research Title	Objective(s)	Location(s)
			& Bandarban)
23	Intercropping of Cotton with Onion	To know the compatibility of onion for intercropping with cotton	CRC (Rangpur, Dinajpur, Jashore Gazipur & Bandarban)
24	Intercropping of Cotton with ground nut	To know the compatibility of ground nut for intercropping with cotton	CRC, Sreepur, Gazipur
25	Intercropping of Cotton with black gram	To know the compatibility of black gram for intercropping with cotton	CRC, Sreepur, Gazipur
26	Evaluation of cotton-based cropping patterns	- To determine suitable cotton-based cropping pattern - To increase the return from a unit area of land - To utilize fellow land	CRC, Jagadishpur, Jashore
27	Reducing Field Duration of Robi Cotton through Seedling Transplanting Technique	To find out the effect of seedling age on crop duration and yield	Amtoly , Borguna
28	Agronomic response of cotton as influenced by drought management practices		CRC, Chapainawabganj
ENTOMOLOGY DISCIPLINE			
29	Testing of some insecticides against cotton sucking pest	To find out the of insecticides to control sucking pest in cotton field.	Cotton Research Station (CRS), Balaghata, Bandarban
30	Seasonal abundance of cotton sucking insect pests at Balaghata	To know the incidence and severity of cotton sucking pest at Balaghata	CRS, Balaghata, Bandarban
31	Seasonal abundance of cotton chewing insect pests at Balaghata	To know the incidence and severity of cotton chewing pest at Balaghata	CRS, Balaghata, Bandarban
32	Seasonal abundance of beneficial insects at cotton fields in Balaghata	To know the incidence of cotton beneficial insect at Balaghata	CRS, Balaghata, Bandarban



BANGLADESH SERICULTURE RESEARCH AND TRAINING INSTITUTE

BANGLADESH SERICULTURE RESEARCH AND TRAINING INSTITUTE

Sl.	Research Title	Objectives	Location(s)
MULBERRY SECTION (Mulberry Breeding)			
1	Collection conservation and evaluation of mulberry genetic resources.	• To increase the genetic materials of mulberry for further varietal development.	Rajshahi
2	Selection of developed mulberry varieties from open pollinated seeds.	• To select the develop varieties from open pollinated seeds.	
3	Development of mulberry varieties through hybridization.	• To available the mulberry genotype superior to the existing genotype.	
4	Development of mulberry variety through induced mutation.	• To develop the high yielding mulberry varieties. • To develop mulberry variety(s) through induced mutation.	
5	Selection of mulberry variety tolerant to drought condition.	• To screen out drought tolerant mulberry variety.	Rajshahi
6	Screening and evaluation of mulberry varieties suitable for cultivation in winter season.	• To select mulberry varieties suitable for lean season (winter season) cultivation.	
7	Selection of mulberry variety tolerant to saline condition.	• To screen out salinity tolerant mulberry variety	
8	Selection of mulberry variety tolerant to water logging condition.	• To screen out rain fed suited mulberry variety.	
Mulberry Pathology			
9	Study on the occurrence of major mulberry disease and pest in the aspect of changing climate.	• To identify the major disease and pest of mulberry plant.	Rajshahi.
10	Study on the acute infestation period for different diseases and pests in the aspect of changing climates.	• To identify the acute infestation period of mulberry disease and pest.	
11	Study of the impact of bio-organic amendments/ botanical extracts on the infestation of major pests diseases and leaf productively.	• To estimate the impact of bio-organic amendments/ botanical extracts on the infestation of major pests diseases and leaf productively.	
12	Study of the impact of different plantation systems on the infestation of major pests and foliar disease.	• To estimate the impact of the mulberry plantation system on infestation of major pests and foliar disease.	

Sl.	Research Title	Objectives	Location(s)
SILKWORM SECTION (Silkworm Breeding)			
13	Screening of high yielding multi×bivoltine hybrids suitable for Agrohayoni season.	• To select season wise hardy hybrid combinations in favorable condition of Bangladesh.	Rajshahi.
14	Screening of high yielding multi×bivoltine hybrids suitable for Chaita season.		
SERI CHEMISTRY (Mulberry Nutrition)			
15	Study on nutritional properties of mulberry varieties at drought condition.	• To find out mulberry leaf nutrition at drought condition. • To find out mulberry leaf nutrition at water bogging condition.	Rajshahi.
16	Study on nutritional properties of mulberry varieties at water logging condition.		
SILK TECHNOLOGY (Silk quality Improvement)			
17	Fabrication of spinning machine with re-reeling devices.	• Suitable spinning machine will be developed. • To find out suitable reeling methods/ devise for improving productivity of quality raw silk production.	Rajshahi.
18	Comparative study of reeling performance of multi-end reeling machine and cottage basin reeling machine for qualitative and quantitative improvement of raw silk production.		
MULBERRY SECTION (Mulberry Agronomy)			
19	Fertilizer dose upgradation for mulberry variety BM-9.	• To updating the fertilizer doses for newly developed mulberry varieties.	Rajshahi.
20	Fertilizer dose upgradation for mulberry variety BM-10.		
21	Fertilizer dose upgradation for mulberry variety BM-11.		
22	Efficacy of pulses intercropping with mulberry plant.	• To crop diversification and income generation for sole mulberry growing sericulture farmers	Rajshahi
23	Study on the effect of vegetables intercropping with sole mulberry.		
24	Efficacy of cereals intercropping with mulberry plant.		
25	Efficacy of vermi-compost application on seri-cultural production.	• To estimate the impact of vermi-compost on mulberry plant productivity as well as silk cocoon production. • To estimate the impact of foliar urea on mulberry plant productivity as well as silk cocoon production. • To estimate the impact of FYM on mulberry plant productivity as well as silk cocoon production.	Rajshahi
26	Effect of foliar application of urea on seri-cultural productivity.		
27	Study on the effect of farm yard manure (FYM) on seri-cultural productivity.		

Sl.	Research Title	Objectives	Location(s)
SILKWORM PATHOLOGY			
28	Screening of effective chemicals/disinfectants against bacterial diseases of silkworm.	To screening effective disinfectants for controlling silkworm diseases and pest.	Rajshahi.
29	Screening of effective chemicals/disinfectants against viral diseases of silkworm.		
30	Screening of effective chemicals/disinfectants against silkworm pests.		



BANGLADESH FISHERIES RESEARCH INSTITUTE

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Sl.	Title of experiment	Objective(s)	Location(s)
FRESHWATER STATION, MYMENSINGH			
1	Stock Improvement of Major Carps (Rui & Catla) and DNA barcoding of Important freshwater fishes in Bangladesh	• To improve Rohu and Catla stocks using DNA technology • To analyze genetic variability of Rohu and Catla stocks using DNA markers • To identify freshwater fishes at the species level based on DNA barcoding data	Mymensingh
2	Conservation and Seed Production of important endangered fish species in Bangladesh	• To refine breeding technique of Dhela (<i>Osteobrama cotio</i>) and Rani (<i>B. dario</i>) for mass seed production • To develop nursery and culture technique of Dhela (<i>O. cotio</i>) and Rani (<i>B. dario</i>) in ponds under different stocking density • To collect & domesticate Hiralu (<i>Barilius bendelisis</i>), Gang tengra (<i>Gagata youssoufi</i>) and Garua (<i>Clupisoma garua</i>) • To investigate the efficacy of different hormones doses for induced breeding of Hiralu (<i>Barilius bendelisis</i>), Gang tengra (<i>Gagata youssoufi</i>), Mohashoal (<i>T. tor</i>) and Garua (<i>Clupisoma garua</i>) • To collect indigenous freshwater fish species from different regions for live gene-bank	Mymensingh
3	Improvement of freshwater pearl culture techniques in Bangladesh	• Improving existing techniques for producing different types of freshwater pearls • Estimating economics of pearl culture	Mymensingh
4	Identification of Etiological Agents Responsible for Fish Diseases using PCR Techniques and Mitigation Measures	• To isolate and identify the causal agents responsible for fish diseases with special references to Pabda and Gulsha • Detection of etiological agents based on PCR techniques • To determine the antibiotic resistivity of isolated pathogens. • To find out the protective measures against diseases	Mymensingh
5	Ecological assessment of inland open water fisheries population with bio-physicochemical properties to frame EBFM approach (Comp-A)	• To estimate population ecology and diet composition of available inland (<i>haor & beel</i>) open water fishes • To assess the bio-physicochemical properties of inland water bodies with seasonal variation • To assess stock of available major fish groups through using modern techniques based on catch and CPUE data • To assist for farming or formulating ecosystem based management approach for inland open waters with emphasizing to increase productivity and conservation of fisheries resources	Mymensingh

Sl.	Title of experiment	Objective(s)	Location(s)
6	Culture of Indigenous Small Fishes in Biofloc Aquaculture System (Component-A)	• To optimize the stocking density of Shing, <i>Heteropneusteus fossilis</i> and Pabda, <i>Ompok pabda</i>/Gulsha, <i>Mystus cavasius</i> in Biofloc system • To evaluate the growth & production of Prawn, <i>M. rosenbergii</i> in Biofloc system • To evaluate the growth & production of Magur, <i>Clarias batrachus</i> in Biofloc system (2021-2022) • To analyse the economic benefits of Biofloc system	Mymensingh
7	Refinement of breeding and culture technology of Cuchia, <i>M. Cuchia</i>	• To refine fry to fingerling of <i>Monopterusuchia</i> rearing technology using different types of feed; • To refine cuchia breeding technology using different types of feed ingredients with various stocking density in pond/cistern ecology; • To disseminate control breeding and baby eel rearing technology	Mymensingh
8	Improving Feeds Formulation and Quality from Conventional and Non-conventional Feed Ingredients Supplementation with Amino Acids for Commercially Important Fish Farming	• To optimize dietary protein to energy ratio (P/E ratio) • To evaluate the effect of supplementation limiting amino acids in the formulated diets for commercially important fish species; • To develop feed formulation and quality from conventional and non-conventional feed ingredients for fish farming; • To recommend the potential limiting amino acids as feed additives in the formulated diets	Mymensingh
9	Production performance of hairy river prawn, <i>Macrobrachium rude</i> with feed and fertilizer in pond condition	• Explore the triggering factor of natural production of small prawn in pond without stocking • Development of nursing technique of Gurachingri, <i>M. dayanum</i> • Development of poly-culture technique of Gura chingri, Mola and Jaitputi fish • To produce improved quality post larvae (PLs) of <i>Macrobrachium rosenbergii</i> through proper genetic techniques and disseminate to the fish farmer/hatchery owners	Mymensingh
10	Development of induced breeding and culture techniques for Mekong giant catfish, <i>Pangasianodon gigas</i>	• Study on application of vitamins A, D & E and diets containing C for augmenting gonadal maturation of <i>Pangasianodon gigas</i>. • Development of induced breeding technique for <i>Pangasianodon gigas</i>. • Development of rearing technique for <i>Pangasianodon gigas</i>	Mymensingh
11	Development of YY GIFT production using marker-assisted selection and quality bi-sex seed production of GIFT strain through Cohort breeding	• To develop MAS-selected YY super-males • To produce of quality mass seed of GIFT strain using Rotational Breeding	Mymensingh

Sl.	Title of experiment	Objective(s)	Location(s)
12	Breeding Biology of Threatened Freshwater Mollusks and Development of Culture Techniques with Fish	• To investigate breeding biology of commercially important mollusk (mussel and snail) available in Bangladesh • To develop breeding technique and culture system of mollusk in confined condition and pond ecosystem	Mymensingh
13	Development of Breeding Technique of Snakehead Species	• Collection & domestication of various types of Snakeheads • Study of the reproductive biology of Snakeheads • Development of control & induced breeding technique of Snakehead	Mymensingh
14	Improved germplasm production of carps, White Pangus and pure-line breeding of Kalibaus (<i>Labeo calbasu</i>)	• To upgrade & produce Quality seeds of carps, Suborno Rui, Catfish & distribute to the fish farmer/hatchery owners • To develop live gene bank with quality brood stocks through implementation of effective breeding plan • To produce improve pure-line stocks of Kalibaus through cross breeding & mass selection techniques • To evaluate the growth performance of selected pure breeds with non-selected breeds of Kalibaus (Generation to generation)	Mymensingh
15	Studies on the causes of gonadal development in small size hilsa: Assessment of the Factors Associated with the Early Gonadal Development of Hilsa	• To determine the age of small and large hilsa using otolith of <i>T. ilisha</i>; • To estimate the gonado-somatic index of <i>T. ilisha</i> during spawning season; • To determine the gonad maturation stages using cellular analysis through histology & • To identify the qualitative and quantative expression level of genes involved in gonad development of <i>T. ilisha</i> using PCR system; • To assess the water quality parameters and plankton abundance of selected habitats; and • To determine the plankton composition of gut of hilsa in the selected habitats.	Mymensingh
16	Analysis of Bioactive Compounds with its Antioxidant Activities of Crude Extracts of <i>Sargassum</i> sp. Extension	• To determine the molecular weight of fucodian using different spectroscopic method and confirm the structure by NMR • To identify the monosaccharide composition of fucodian using High Performance Liquid Chromatography (HPLC) method • To evaluate anti-diabetic, anti-inflammatory and anti-alzheimers activity of fucodian using different in-vitro assays.	Mymensingh
17	Sustainability Analysis of Elasmobranch Fishery in Bangladesh and Evaluating the Resilience of These Populations to the Existing Fishing Pressure	• To identify species composition, distribution, and relative abundance of Elasmobranches of BoB across sites	Mymensingh

Sl.	Title of experiment	Objective(s)	Location(s)
		• To reveal Species-specific threat score-based vulnerability assessment scale (elasmovulnerability scale) for prioritizing conservation measures.	
18	Post-Harvest Fish Losses (PHFLs) and Its Potential Utilization in Aqua-Value Chain of Bangladesh.	• Discarded/underutilized fish samples organoleptic quality and nutrition profile should be identified • Monitoring of nutritional quality difference between discarded/underutilized and fresh fish of same species (did; difference-in-difference ie same species nutritional profile if it goes in different direction one is for quality human food fish (dry fish) and another line is poorly handled fish mainly destined for fish feed) • Develop a mobile and easy to operate tools to utilize the discarded fish into fish meal and fish oil preparation.	Mymensingh
19	Studies on Changes in fish larvae Abundance at Cox's Bazar coast in the Bay of Bengal in Response to Ocean Acidification.	• To provide actual scenario of the ocean acidification at Cox's Bazar coast in Bay of Bengal. • To identify and evaluate effects of ocean acidification on the larvae abundance at the Cox's Bazar coast in Bay of Bengal	Cox's Bazar
20	Occurrence and Abundance of Harmful Microalgae and Their Relation to Environmental Factors in the Coastal Waters of the Bay of Bengal, Bangladesh.	• To provide actual scenario of the ocean acidification at Cox's Bazar coast in Bay of Bengal. • To identify and evaluate effects of ocean acidification on the larvae abundance at the Cox's Bazar coast in Bay of Bengal	Cox's Bazar
FRESHWATER SUB-STATION, BOGURA			
21	Ecological Assessment of Beel Fisheries Population with Bio-physicochemical Properties to Frame EBFM approach (Comp. B)	• To estimate population ecology and diet composition of some commercially significant inland open water (beel) fishes • To assess bio-physicochemical properties of inland waterbodies with then seasonal variation • To assess stock of commercially significant open water fishes through using modern techniques based on catch and CPUE data • To assist for framing or formulating ecosystem-based management approach for inland open waters with emphasizing to increase productivity and conservation of the fisheries resources	Bogura
22	Development of induced breeding & culture techniques of Gangetic endangered fish species	• Refinement of induced breeding techniques of the Batashi and Paly • Development of induced breeding technique of the Kajoli • Development of nursing and culture technique of Batashi and Paly	Bogura
23	Species availability and develop a suitable technology of value-	• Survey of the available SIS species for Shidol production	Bogura

Sl.	Title of experiment	Objective(s)	Location(s)
	added dried fish product (Shidol) in flood plain region of Bangladesh	• To analyze the proximate composition and nutritive value of Shidol. • To develop suitable technology of Shidol production	
FRESHWATER SUB-STATION, JASHORE			
24	Development of breeding and culture technique of Needle fish and Reba fish	• To develop breeding and larval rearing technique of Kakila fish in captive condition • To domesticate and brood development of Tatkini fish in captive condition • To develop breeding and larval rearing technique of Tatkini fish in captive condition • To develop culture technique of Kakila and Tatkini fish in captive condition	Jashore
25	Ecological assessment of inland open water fisheries population with bio-physicochemical properties to frame EBFM approach (Comp. C)	• To estimate population ecology and diet composition of some commercially significant inland open water (baor) fishes • To assess bio-physicochemical properties of inland waterbodies with then seasonal variation • To assess stock of commercially significant open water fishes through using modern techniques based on catch and CPUE data • To assist for framing or formulating ecosystem-based management approach for inland open waters with emphasizing to increase productivity and conservation of the fisheries resources	Jashore
26	Culture of indigenous small fishes in Biofloc aquaculture system (Comp. B)	• To observe growth and survival of short cycle catfishes viz; Shing, Magur, Pabda, Tengra under Biofloc aquaculture system; • To determine water quality parameters under Biofloc aquaculture system; • To analysis the economic benefits of Biofloc system; and • To disseminate the suitable culture trials of short cycle catfishes under Biofloc aquaculture system in the northern part of Bangladesh	Jashore
27	Domestication and conservation of some important threatened stream fishes in Northern part of Bangladesh	• To collect the selected fishes from wild sources; • To study the reproductive biology of the fishes; • To domesticate and brood development of the fishes in captive condition; • To determine the reproduction response of the selected fishes to different doses of natural and synthetic hormones in captive condition; and • To develop the larvae and nursery rearing techniques of the selected fishes in captive condition.	Jashore
28	Culture Suitability of <i>Barilius barila</i> , <i>Labeo angra</i> and <i>Colisa</i>	• To evaluate the production potential of <i>Barilius barila</i>, <i>Labeo angra</i> and <i>Colisa fasciatus</i> with	Jashore

Sl.	Title of experiment	Objective(s)	Location(s)
	<i>fasciatus</i> under Polyculture in Farmers Pond of Northern Region of Bangladesh	short-cycle species in the seasonal water bodies of farmers field • To assess the water quality parameters of cultural water bodies • To assess the BCR of culture technologies; and • To disseminate suitable culture techniques of <i>Barilius barila</i> <i>Labeo angra</i> and <i>Colisa fasciatus</i> in different aqua-ecological zones in the northern part of Bangladesh.	
RIVERINE STATION, CHANDPUR			
29	Niche Characterization using integrated eco-morphological and hydrodynamic modeling at Meghna River basin: A GIS approach	• To formulate GIS-based models to picture effects of different ecological traits • To generate Spatio-temporal models of ecological risk factors in context of Meteorological alterations, interaction between different traits, ecological degradation • To develop models of geo-morphological and Hydro dynamic aspects using GIS • To produce GIS-based models for characterization of entire niche to assess suitability	Chandpur
30	Ecological assessment of inland open water fisheries population with bio-physicochemical properties to frame EBFM approach (Comp-D)	• To estimate population ecology and diet composition of some commercially significant inland open water fishes (especially <i>haor</i> and <i>beel</i> resident fishes) • To assess bio-physicochemical properties of some selected inland water bodies (<i>haors</i> and <i>beels</i>) including seasonal variation and impact assessment of agro-chemicals level • To assess stock and biomass of some important ecological fish groups i.e. Planktivores/Herbivores, Detritivores, Carnivores & Omnivores based on catch and CPUE data • To formulate ecosystem-based management approach of some major inland open water bodies (especially <i>haors</i> and <i>beels</i>) with emphasizing to increase productivity, stock enhancement and conservation of the fisheries resources	Chandpur
31	Population dynamics and stock assessment of <i>Tenulosa ilisha</i> in Bangladesh	• To determine the temporal and spatial variation of hilsa demographics in Bangladesh • To determine the Length-Weight relationship and different types of condition factors of hilsa • To determine the suitable mesh size of gill net to juvenile hilsa • To determine the population parameters of hilsa at different regions of Bangladesh • To estimate the MSY, Biomass and stock of hilsa in Bangladesh	Chandpur

Sl.	Title of experiment	Objective(s)	Location(s)
32	Impact of Lunar Periodicity, Saline Intrusion, Rainfall and Water Discharge on Hilsa Fisheries in a Changing Climate in Bangladesh	• To determine the effects of lunar periodicity and tidal fluctuations on hilsa breeding and production • To assess the extent and intensity of saline intrusion on hilsa navigation route in Bangladesh and its impact on hilsa abundance and distribution • To determine the impacts of rainfall and water discharge on hilsa production • To estimate the impact of physico-chemical parameters on hilsa production • To update hilsa management interventions and policy guidelines	Chandpur
33	Enhancement of brood stock development of mud crab (<i>Scylla olivacea</i>)	• To develop gonad maturation of mud crab, <i>Scylla olivacea</i> both in earthen ponds and hatchery conditions. • To uplift the survival of crab larvae at different larval stages and improvement of crab seed production. • To enhance culture and fattening of mud crab in coastal areas	Chandpur
34	Improvement of soft-shell culture technique of mud crab (<i>Scylla olivacea</i>) in south-west coastal region of Bangladesh	• To observe the effect of environmental conditions (salinity variations and aeration) on molting efficiency of mud crab; • To observe the effect of physical stress (limb trimming) on molting of mud crab; and • To compare the performance of soft-shell shedding between hatchery produced and natural crablets.	Chandpur
35	Domestication, Breeding and Seed Production of Some Commercially Important Brackishwater Fin fishes (<i>Scatophagus argus</i> ; <i>Pomadasys hasta</i> ; <i>Mugil cephalus</i> ; <i>Datnioides polota</i> ; <i>Plotosus canius</i> , <i>Glossogobius giuris</i> and <i>Polynemus paradiseus</i>)	• To domesticate the commercially important fishes of brackishwater environment. • To observe the feeding habit and reproductive biology of the fishes • To develop induced breeding, seed production and nursery management technique of the fishes	Chandpur
36	Development of culture technique of microalgae isolated from brackishwater for shrimp and fish larvae feed (Comp. B)	• To identify and isolate commercially important microalgae from the coastal region • To investigate the nutritional status of identified microalgae • To utilize the isolated microalgae as a live feed supplement for fish/shellfish larvae culture	
37	Estimation of nutrient flux and primary productivity in the major nursery grounds of hilsa	• To assess the primary productivity of nursery grounds of hilsa • To study the factors affecting primary productivity of nursery grounds of hilsa • To assess the carrying capacity of nursey grounds of hilsa	

Sl.	Title of experiment	Objective(s)	Location(s)
38	Sanctuary management for sustainable Hilsa production in Bangladesh	• Reassess the previously identified spawning and nursery grounds • Identification of spawning and nursery grounds of Hilsa	
RIVERINE SUB-STATION, RANGAMATI			
39	Diversity of adaptive gears and their impact on Kaptai Lake fisheries	• To identify the traditional/improvised gear used in the Kaptai Lake • To determine the CPUE and catch composition • Cataloging fish and gear of Kaptai lake • To analyze cumulative length frequency	Rangamati
40	Ecological assessment of inland open water (Kaptai lake) fisheries population with bio-physicochemical properties to frame EBFM approach (Comp.-D, RSS)	• To estimate population ecology and diet composition of some commercially significant fishes of Kaptai Lake. • To assess stock and biomass of some important ecological fish groups i.e. Planktivores/Herbivores, Detritivores, Carnivores & Omnivores based on catch and CPUE data • To assess bio-physicochemical properties of above water bodies including seasonal variation • To formulate ecosystem based management approach for Kaptai Lake with emphasizing to increase productivity, stock enhancement and conservation of the fisheries resources	Rangamati
41	Development of Cuchia Breeding and Dissemination of Culture Technology in Hill Tract Districts	• To develop breeding technique of <i>M. cuchia</i> • To disseminate the <i>M. cuchia</i> culture in Chittagong Hill Districts • To popularize cuchia culture in Hill tract area	Rangamati
RIVERINE SUB-STATION, PATUAKHAL			
42	Identification, culture and bio-activity analysis of some commercially important seaweeds in mid-Southern coast of Bangladesh	• To conduct detail survey for identification of natural growing seaweed species at Kuakata coastline and its surrounding areas • To find out the potential area for seaweeds in this region • To demonstrate culture technique of seaweeds in the Kuakata coastline • To investigate bioactive compounds and their activity of certain seaweed	Patuakhali
43	Development of mariculture practice of Seabass (<i>Lates calcarifer</i>) in the southwest coast of Bangladesh (Comp. C)	• To develop cage culture technique of Seabass in coastal water of Bangladesh • To develop brood of Seabass in coastal environment. • To study growth and survival of Seabass in net cage.	Patuakhali
44	Domestication, breeding and culture potentiality of Green Mussel and Oyster in mid-	• To domesticate important mollusks i.e., green mussel (<i>Pernaviridis</i>) and oyster (<i>Crassostrea sp.</i>).	Patuakhali

Sl.	Title of experiment	Objective(s)	Location(s)
	southern coast of Bangladesh (Comp. B)	• To know the breeding biology of green mussel (<i>Pernaviridis</i>) and oyster (<i>Crassostrea sp.</i>). • To develop the breeding and culture techniques of green mussel (<i>Pernaviridis</i>) and oyster (<i>Crassostrea sp.</i>).	
BRACKISHWATER STATION, PAIKGACHA			
45	Population dynamics of important fish and shell fish species in the Sundarbans Mangrove of Bangladesh	• To assess abundance and to estimate growth parameters of species; • To calculate the mortality rate and exploitation level of important species; and • To identify vulnerable size groups of fishes/shellfishes in the Sundarbans.	Paikgacha
46	Potentiality of aquatic weed as alternative feed ingredient for the development of cost-effective fish feed for coastal aquaculture	• To investigate the status of available aquatic weed in South-west region and make inventory based on morphometry and DNA barcode analysis • To observe the nutritional status (macro & micro elements) of important aquatic weed • To examine the potentials of explored weed as dietary ingredients in fish feed • To know the effect of aquatic weed in fish immune system	Paikgacha
47	Breeding, seed production and culture of indigenous Brackishwater prawns (<i>Macrobrachium villosimanus</i> , <i>M. rude</i> and <i>M. dayanum</i>) under captive conditions BS, Khulna	• To domesticate brackishwater prawns under captive condition for broodstock development • To investigate the reproductive biology (fecundity, GSI, breeding time, embryonic development, etc.) of the prawns • To develop breeding and larvae rearing protocol of the prawns	Paikgacha
SHRIMP RESEARCH STATION, BAGERHAT			
48	Influencing Haemocytic Defence in Black Tiger Shrimp (<i>Penaeus monodon</i>) using Diversified Lipid A-coren Oligosaccharide Molecules to Cope with WSSV Infection	• To identify suitable gram-negative bacteria as a better immune-modulators • To develop effective administrative methods of LPS to boost immunity • To assess the efficacy of algal supplement on survival and metamorphosis of <i>Macrobrachium rosenbergii</i> larvae into Post Larvae (PL)	Bagerhat
49	Bioaccumulation of hazardous organochlorine pesticides and antibiotics in shrimp and its impact on human health	• To assess bioaccumulation of pesticides in cultured and wild shrimp/prawn • To assess the risk of pesticides residues on human health	Bagerhat
50	Reveiling the natural strategies: in reference to immunity boost up and biochemical activities of submerged aquatic Plant, <i>Najas sp.</i> in Shrimp (<i>P. monodon</i>) aquaculture	• To assess the primary productivity and soil, water quality of pond • Comparative study on microbial community and shrimp health status • To assess the bioactivity of <i>Najas sp.</i>	Bagerhat

Sl.	Title of experiment	Objective(s)	Location(s)
51	Development of mariculture practice of seabass fish (<i>Lates calcarifer</i>) in the southeast coast of Bangladesh (Comp. A)	• To develop cage culture technique of Seabass in coastal water of Bangladesh • To develop brood of Seabass in coastal environment • To study growth and survival of Seabass in net cage	Bagerhat
52	Refinement of existing organic shrimp (<i>Penaeus monodon</i>) farming using eco-friendly management protocol in southwest region of Bangladesh	• To assess the present status of organic shrimp (<i>P. monodon</i>) farming compare to standard protocol • To improve the management practice of organic shrimp (<i>P. monodon</i>) culture in aspect of Bangladesh	Bagerhat
MARINE FISHERIES & TECHNOLOGY STATION, COX'S BAZAR			
53	Molecular identification and culture practice of Commercially Important Seaweeds in Bangladesh	• To make a detailed inventory of available seaweed species in Bangladesh coast • To develop culture technique (indoor to field) of selected seaweed in St. Martin and other suitable areas • To develop <i>in-vitro</i> tissue culture technique of some selected seaweed species • To develop value added products from selected seaweeds • Genetical identification of seaweeds available in our coast	Cox's Bazar
54	Nutritional Status of Some Commercial Important Seaweed in Bangladesh Coast	• To assess the proximate composition of commercially important seaweeds available in Bangladesh coast • To determine the micro-nutrient and toxic element (heavy metals) of the commercially important seaweeds • To determine amino-acid & fatty acid composition of certain commercially important seaweed species. • To compare the biochemical composition based on localities and season	Cox's Bazar
55	Ecological Services and Environmental Risks Associated with Seaweed Cultivation at Cox's Bazar coast, Bangladesh	• To assess the sediment deposition and sedimentation rate in seaweed culture site • To measure the accumulation of trace and heavy metals by cultivable seaweeds that are essential for living biota as well as toxic to human health and the ecosystem • To evaluate the seaweed culture site as potential benthic faunal biodiversity hotspot • To evaluate the seaweed culture bed as suitable habitat and food source for resident and migratory fauna. Environmental risks (absorption of excessive light, nutrients, carbon, noise creation, release of dissolved and particulate matter, hub for parasites and non-native species, creates artificial habitat, etc.) will be assessed that are responsible for ecosystem degradation.	Cox's Bazar

Sl.	Title of experiment	Objective(s)	Location(s)
56	Seaweed Seedling Production Through Biotechnology: Hatchery to Field Assessment	• Morpho-genetical identification of seaweed species • Vegetative approach to micro propagation of seaweed in-vitro • Growth observation of seaweed seedlings in tank and natural settings • Quality assessment of growing seaweeds from tank and natural setting sources	Cox's Bazar
57	Development of mariculture Practices of Some Important fin fishes (Seabass, Mullet) in the South-East Coast of Bangladesh (Comp. B)	• To develop a proper nursery and grow-out management protocols for cage culture of suitable species (Mullet, Seabass). • To optimize stocking density and evaluate production performance in cage culture. • To develop suitable species (Mullet, Seabass) cage culture co-management practice through pilot project.	Cox's Bazar
58	Development of culture technique for live feed isolated from the Bay of Bengal (Comp. A)	• To identify the commercially important microalgae from the Bay of Bengal • To scale up the isolated microalgae <i>in vitro</i> condition • To utilize the isolated microalgae as a live feed supplement for fish/shellfish larvae in culture system. • To investigate the cause of water quality deterioration in the live feed habitat at the coastal region of Cox's Bazar.	Cox's Bazar
59	Assessment of stock and standardization of the spawning potential ratio (SPR) of commercially important marine fish groups of Bangladesh	• To estimate the life-history characteristics and stocks of commercially important marine fish species (Tuna and Mackerels) of Bangladesh • To estimate the biological reference points (BRP) of Tuna and Mackerels. • To standardize Spawning Potential Ratio (SPR) of Tuna and Mackerels.	Cox's Bazar
60	Breeding and culture potential of marine Oyster and Green Mussel in the Bay of Bengal Bangladesh Coast (Comp. A)	• To develop culture techniques of oyster and green mussel in Cox's Bazar and other suitable areas • To develop breeding techniques of oyster in captivity • To develop larval rearing techniques of oyster	Cox's Bazar
61	Domestication and breeding of blue swimming crab (<i>Portunus pelagicus</i>) and Horseshoe crab (<i>Tachypleus gigas</i>) of the Bay of Bengal Bangladesh	• To domesticate the Blue Swimming crab (<i>Portunus pelagicus</i>) and Horseshoe Crab (<i>Tachypleus gigas</i>) broodstock under captive/ hatchery conditions. • To develop breeding technology of Blue Swimming crab (<i>Portunus pelagicus</i>) in captive/hatchery conditions. • To develop larval and nursery management technique of Blue Swimming crab. • To isolate commercially important microalgae from Bay of Bengal and investigate its habitat.	Cox's Bazar

Sl.	Title of experiment	Objective(s)	Location(s)
62	Development of Breeding, Seed Production and Nursery Techniques of Seabass, <i>Lates calcarifer</i>	• To study the reproductive biology of Seabass • To develop the captive brood Seabass • To confirm the hormones and standardize the dosages in breeding of Seabass. • To develop the larval rearing technique of Seabass. • To develop the nursery technique of Seabass.	Cox's Bazar
HEADQUARTERS			
63	Impacts of BFRI evolved technologies and training on farmers' field	• To determine the extent of adoption of BFRI technologies by the people • To determine the per capita average fish production by the people with and without training • To ascertain the livelihoods of the same people • To compare the production potentials and livelihood status of training and non-training recipients as well as technology adopters and non-adopters	Mymensingh



BANGLADESH LIVESTOCK RESEARCH INSTITUTE

BANGLADESH LIVESTOCK RESEARCH INSTITUTE

Sl.	Research Title	Objective(s)	Location(s)
ANIMAL PRODUCTION RESEARCH DIVISION			
1	Determination of best management practice of Napier grass to increase the production performance of cattle	• Evaluation of beef production performance of local growing bulls fed Napier grass managed with best management practice	Savar, Dhaka
2	Field validation of Gamma radiated mutant lines of different fodder cultivars developed by BLRI	• Conservation and improvement of stress tolerant gamma radiated mutant lines of different fodder varieties in Germplasm Bank of BLRI • To validation of a mutant lines of winter fodder Oat at saline, draught and plain land areas in Bangladesh. • Validation of a mutant lines of Napier cultivars at saline and drought prone areas in Bangladesh	Savar, Dhaka Shamnagar, Sathkhira, Nachole, Chapainababganj Ashulia, Savar
3	Conservation and improvement of Munshiganj (MC) and North Bengal Grey (NBG) cattle	• To characterize Munshiganj and North Bengal Grey cattle phenotypically and genetically\ • To collect potential Munshiganj and North Bengal Grey bulls and cows from their breeding tracts and ex-situ conservation at BLRI research farm • To produce and multiply superior progeny of Munshiganj and North Bengal Grey by using superior sires and dams	Savar, Dhaka
4	Strategic development of beef cattle in Bangladesh	• To develop suitable beef breed (s) using selective exotic beef sire (s) and native dams • To develop feeding and management system/package for crossbred beef progeny • To determine meat production efficiency and quality of different beef genotypes at certain ages.	Savar, Dhaka
5	Conservation and improvement of fodder crops and BRRI Dhan 91 and evaluation of their production performance and nutritional quality	• To enhance biomass production of Napier 3 cultivar • To improve nutritional quality of Napier 3 • To identify best line method of Maize and alfa alfa to get higher biomass and nutrient value • To evaluate fast growth and ratoon performances of BRRI dhan91 compared with BRRI-28.	Savar, Dhaka
POULTRY PRODUCTION RESEARCH DIVISION			
6	Conservation and Improvement of Native Chicken: Performance of tenth generation	• To assess the performances of three indigenous chicken genotypes under intensive management • To select parental birds (males and females) and breed them in an assortative plan for the production of tenth generation birds • To collect, evaluate and dilute of native chicken cock semen	Savar, Dhaka
7	Conservation and Improvement of exotics germplasm for the	• To conserve and strengthen production of four pure lines of chicken.	Savar, Dhaka

Sl.	Research Title	Objective(s)	Location(s)
	development of egg and meat type chicken	• To refine and optimize feeding and management standard of MCTC parent line. • Production and evaluation of cross breeding (two, three way and reciprocal cross) using native with locally adopted exotic germplasms	
8	Component C: Development of meat type quail through appropriate breeding	• To increase the sixth week body weight of Dhakai and BB-white quail through selective breeding • To select parental birds (males and females) and breed them using best to best mating plan for the production of 11th generation birds	Savar, Dhaka
9	Improvement of egg and meat producing duck through selection and breeding	• To investigate the inclusion level of Azolla (unconventional feed) in the basal diet of laying duck • To evaluate fresh Azolla on production performance and egg quality of laying ducks under intensive system at 30-42 weeks of age • To compare the production cost of laying duck provided with diets containing different levels of Azolla in the duck laying ration	Savar, Dhaka
10	Improvement of egg production and egg quality through nutritional manipulation	• To investigate the inclusion level of Azolla (unconventional feed) in the basal diet of laying duck • To evaluate fresh Azolla on production performance and egg quality of laying ducks under intensive system at 30-42 weeks of age • To compare the production cost of laying duck provided with diets containing different levels of Azolla in the duck laying ration	Savar, Dhaka
11	On-farm measurement of noxious greenhouse gases from poultry litter and their possible utilization	• To developing low-protein diets supplemented with particular amino acid in the feed of slow growing meat type chicken • To isolate, identification, and quantification of <i>Trichoderma spp.</i> • To reduce odor and noxious gas emission from poultry litter applying <i>Trichoderma spp.</i> • To utilize poultry litter as a valuable product	Savar, Dhaka
BIOTECHNOLOGY DIVISION			
12	Establishment of semen bank for BLRI improved germplasm	• Develop efficient semen cryopreservation technique for different species • Conserve BLRI improved indigenous germplasm of high socio-economic importance	BLRI
13	Comparative genomics and functional proteomics studies of Gayal to explore unique genomic features	• To foster comparative genomics to identify gene(s) associated with different important traits of Gayal (eg. Adaptation, high prolificacy, muscle strength) • To employ RNAseq technology to explore comparative proteomics and transcriptomes of different gayals with specific traits • To visualize the complete genome and proteome of Gayal through a genome browser	Chattogram Veterinary and Animal Sciences University.

Sl.	Research Title	Objective(s)	Location(s)
		To strengthen national and international collaboration towards capacity building and human resource development to promote Gayal conservation	
14	Development of microbial silage inoculant and evaluation of its efficacy on ensiling roughages	- To develop microbial inoculant for ensiling fodder. - To test the efficacy of developed inoculant in fodder preservation at farmers' condition - To evaluate the growth and production performances of dairy cows fed silages ensiled with bacterial inoculant.	BLRI
GOAT PRODUCTION RESEARCH DIVISION			
15	Identification of causative markers and their use in the conservation and improvement program of Jamunapari Goat at BLRI	- To study on the productive and reproductive performance of Jamunapari Goat. - To identify the candidate genes or mutations as the casual markers associated with productive and reproductive traits, i.e prolificacy, milk production and body weight. - To conserve and improve Jamunapari goat through selective breeding using identified causal markers as a molecular tool	BLRI and Bangladesh Agricultural University
SHEEP PRODUCTION RESEARCH DIVISION			
16	Ex-situ conservation and improvement of native sheep at Bangladesh Livestock Research Institute	- To develop a stock of superior native sheep germplasm and to continue their improvement at BLRI - To study the productive and reproductive performance of native sheep - To utilize candidate genes polymorphisms associated with prolificacy trait in native sheep	Savar, Dhaka
17	Exotic sheep adaptation and their crossbred's production for the development of a meat type synthetic sheep breed	- To adapt high yielding exotic sheep breeds in our climatic condition and production of their crossbreds - To evaluate the productive and reproductive performances of different crossbred genotypes - To evaluate the adaptability of different crossbred genotypes in hot and humid climatic conditions	Savar, Dhaka
18	Investigation of Pneumonic Pasteurellosis and PPR in sheep and their mitigation to develop a model sheep health management package for ideal farming	- To identify Pneumonic Pasteurellosis in Sheep and to determine the effectiveness of available HS vaccine against Pneumonic Pasteurellosis in Sheep - Sero-prevalence and Identification of PPR in Sheep - Development of a sheep health management package against Pneumonic Pasteurellosis and PPR	Savar, Dhaka Naikhangchari, Bandarban, Tangail, Rajshahi
ANIMAL HEALTH RESEARCH DIVISION			
19	Development of duck plague vaccine seed from circulating strain	- To isolate, identify and characterize DPV from suspected ducks' samples. - To adapt the virulent strain of DPV by several passages in suitable host systems like in	Duck farms of different areas in Bangladesh (specially duck

Sl.	Research Title	Objective(s)	Location(s)
		developing duck/chicken embryo or their primary fibroblast cell. • To develop live attenuated vaccine seed from circulating DPV isolate.	rearing haor areas like Kishorgonj, Sunamgonj, etc)
20	Monitoring and evaluation of Peste des Petits Ruminants (PPR) virus isolates circulating in Bangladesh and development of vaccine seed.	• To monitor the sero-surveillance of PPR disease in the selected areas of Bangladesh • To detect and characterize PPR virus from recent outbreak in Bangladesh • To isolate and maintain PPR virus repository at SAARC PPR laboratory • To adapt and attenuate PPRV for the development of live attenuated PPR vaccine seed from circulating strain. • To evaluate the efficacy of various diluents in live attenuated PPR vaccine seed.	Different districts of Bangladesh (specially goat farms and goat prone areas).
21	Development of goat pox vaccine seed from circulating isolates in Bangladesh.	• Identification and molecular characterization of goat pox virus from suspected goat pox samples. • Isolation of goat pox virus in primary lamb testis or kidney cell. • Adaptation and attenuation of goat pox virus in cell line. • Development of live attenuated goat pox vaccine seed.	Savar, Dhaka Meherpur Jhenaidah, Chuadanga, Rangamati and Dinajpur
22	Phenotypic and genotypic profiling of antimicrobial resistance (AMR) in enteric bacterial communities in finisher livestock and poultry in Bangladesh	• To assess herd-to-herd variation in antimicrobial resistance phenotypes and associated antimicrobial resistance genes (ARG) in faecal commensal enteric bacteria in finisher livestock and poultry • To assess spatio-temporal variation in antimicrobial resistance profile in retail meat in LMBs and slaughter houses	Savar, Gazipur, Narsingdi, Bogura, Joypurhat, Barishal, Jessore, Chattogram, Cox's bazar, Sylhet
23	Surveillance and molecular evolution of highly pathogenic avian influenza virus (HPAIV) in Bangladesh	• Detection, isolation and molecular evolution of avian influenza viruses circulating in Bangladesh. • Monitoring of avian influenza viruses from migratory birds.	Gazipur, Dhamrai and Savar
24	Surveillance and molecular evolution of highly pathogenic avian influenza virus (HPAIV) in Bangladesh	• Detection, isolation and molecular evolution of avian influenza viruses circulating in Bangladesh. • Monitoring of avian influenza viruses from migratory birds.	Gazipur, Dhamrai and Savar
25	Development of multivalent coccidial vaccine for poultry	• Isolation, identification, and molecular characterization of different Eimeria spp. of chicken in Bangladesh • Development of multivalent coccidial vaccine candidate from circulating Eimeria spp in chicken • Formulation of multivalent coccidial vaccine and its potency, efficacy, and safety test	Savar, Tangail, Rajshaji, Mymensing

Sl.	Research Title	Objective(s)	Location(s)
26	Investigation of Lumpy Skin Disease (LSD) in Bangladesh	- Isolation, identification and molecular characterization of Lumpy Skin Disease (LSD) virus circulating in Bangladesh - Development of live attenuated Lumpy skin disease virus vaccine seed using Bangladeshi isolates	Dhaka (Dhamrai), Jessore, Jhenaidaha, Chattogram, Rajshahi, and Pabna
27	Development of vaccines for economically important bacterial diseases of poultry	- Isolation and Identification of <i>S. Gallinarum</i> and <i>S. Pullorum</i> from suspected poultry samples - Molecular characterization of species-specific isolates by PCR and WGS - Development of killed bivalent vaccine seed	Savar, Bogura, Joypurhat, Rangpur, Gazipur
28	Development of Avian Influenza H9N2 vaccine seed from local circulating strain in Bangladesh	Development of inactivated Avian Influenza H9N2 vaccine seed from circulating strain.	Rangpur, Mymensingh, Tangail, Gaibandha, Savar, Barishal, Munshiganj, Dharmrai, Gazipur.
SOCIOECONOMIC RESEARCH DIVISION			
29	Production & marketing of beef in different areas of Bangladesh	- To identify and compare the National & International beef Price; - To measure the profitability of beef production in different areas of Bangladesh under different farming categories; - To identify the factors influencing beef price in Bangladesh; and - To suggest some policy guidelines to increase profitability and marketing efficiency	Seven divisions of Bangladesh named as Dhaka, Barishal, Khulna, Rajshahi, Chittagong, Mymensingh, Rangpur
FARMING SYSTEM RESEARCH DIVISION			
30	Piloting of “BLRI Technology village” at BLRI Regional station	- To disseminate BLRI developed livestock technologies for increasing productivity - Identification of constraints to adoption and determine the causes circumscribing the sustainability of technologies at farm level. - To acquaintance with the “BLRI technologies village” and adaptation it’s at farm community.	Dhamrai, Dhaka Naikhongchari, Bandarban Shahjadpur, Sirajgonj Rajabarihat, Rajshahi Vanga, Faridpur, Jashore Sadar, Jashore
	Farm level adoption of Bangladesh livestock Research Institute developed technologies in different farm categories	- To recognize the effectiveness of technology dissemination methods at different farm categories - To determine adoption level of BLRI technologies at commercial, scavenging and semi-scavenging farms - To identify problems relating to adoption and suggest the remedies of problems - To formulate policy recommendation.	Dhamrai, Dhaka Naikhongchari, Bandarban Shahjadpur, Sirajgonj Rajabarihat, Rajshahi Vanga, Faridpur Jashore Sadar, Jashore

Sl.	Research Title	Objective(s)	Location(s)
31	Conservation and improvement of farm animal and poultry genetic resources at hilly region, Naikhongchari	• To conserve and improvement of different livestock and poultry germplasm suitable for hilly region • To select parental animal and birds and breed them in an assortative design for the production of next generation • To develop a replica herd/flock of different animal and poultry species. • Development of hilly region based technology or production packages for livestock and poultry species. • Development of farm animal and poultry health package at hilly region, Naikhongchari	Naikhongchari, Bandarban
TRAINING, PLANNING AND TECHNOLOGY TESTING DIVISION			
32	Impact of Training Given to Farmers on BLRI Technologies	• To determine the impact of training on farmers in adoption of BLRI technology • To identify the economic efficiency of farmers before and after training • To suggest some policy recommendation based on the findings	Regional Stations (Rajshahi, Sirajganj, Faridpur, Jashore, Naikhongchari) and Savar
33	Need assessment, technology intervention and livestock advisory development for increasing resilience in livestock production system	• To assess vulnerability and loss in livestock enterprise during extreme/prolonged climatic events • To identify farmers' need of scientific knowledge, services and technology for increasing resilience and exploring options for their provisions • To develop advisories for livestock farmers for both extreme climatic events and seasonal weather events • Capacity building of climate vulnerable farmers at pilot scale	Shariakandi, Bogra, Saghata, Gaibandha, Islampur, Jamalpur
DAIRY RESEARCH AND TRAINING CENTRE			
34	Dairy production & livelihood scenario in different climatic region of Bangladesh	• To identify the existing dairy production practices in Bangladesh. • To know the effects of climate stress on dairy production. • To investigate the dairy processing methods and marketing systems in Bangladesh. • To determine the consumer preference of different milk and milk products.	Dairy Research and Training Centre, BLRI
35	Quality and safety assessments of milk and development of fortifying dairy products	• To determine the physical, chemical and microbiological properties of milk samples • To measure the level of antibiotic residue and heavy metals in milk and milk products • To assess the minerals and vitamins content of milk and milk products • To develop fortified milk and dairy products	Dairy Research and Training Centre, BLRI

Sl.	Research Title	Objective(s)	Location(s)
REGIONAL STATION, BAGHABARI			
36	Upgrading indigenous cattle genetic resource through breeding, feeding and health managements at Baghabari and Jashore	• To investigate productive and reproductive performance of F1 and F2 progeny of Pabna, Pabna×HF and Pabna × indigenous • To determine the standard feeding regime for F1 and F2 progeny	Baghabari, Pabna, Jashore
37	Establishment of Milk Processing Facility at BLRI: Fermented Milk (Dodhi, Yoghurt, Lassi & Laban) Production and Quality Control Setup	• To establish a modern state of the art pilot plant to process milk for making fermented milk products. • To commission a quality control laboratory to judge the products. • To provide a guideline on the cost-benefit issues in establishing a pilot scale milk processing operation for small scale producers.	Dhaka, Baghabari



Bangladesh Agricultural Research Council

Farmgate, Dhaka-1215, Bangladesh

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