Directory of Annual Agricultural Research Programme of NARS Institutes 2020-2021

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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 relined 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.

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Compiled and Edited by
Shaikh Mohammad Bokhtiar, PhD
Kabir Uddin Ahmed, PhD
Susmita Das, PhD
Md. Abdul Quayyum, PhD
Md. Saimum Hasan

Bangladesh Agricultural Research Council
Farmgate, Dhaka 1215, Bangladesh
www.barc.gov.bd

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Foreword

It is my great pleasure to present the Directory of Annual Agricultural Research Programme of the NARS institutes 2020-2021 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 am sure 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, mentioning quality research and development works of the NARS institutes with subtle decision making is my priority. The success and the achievement in agricultural growth 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 2020-2021. 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.

(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 upto 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 five volumes for 2014-15, 2015-16, 2016-17, 2017-18, 2018-2019 and 2019-2020 have been published over the years.

Institute wise no. of Research Programmes in 2020-21

Name of the Institute	**No. of Experiment conducted**
Bangladesh Agricultural Research Institute (BARI)	1803
Bangladesh Rice Research Institute (BRRI)	943
Bangladesh Jute Research Institute (BJRI)	167
Bangladesh Institute of Nuclear Agriculture (BINA)	506
Bangladesh Sugarcrop Research Institute (BSRI)	161
Bangladesh Wheat and Maize Research Institute (BWMRI)	145
Soil Resource Development Institute (SRDI)	15
Bangladesh Tea Research Institute (BTRI)	60
Bangladesh Forest Research Institute (BFRI)	58
Cotton Development Board (CDB)	21
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BANGLADESH AGRICULTURAL RESEARCH INSTITUTE

BANGLADESH AGRICULTURAL RESEARCH INSTITUTE

Sl. No.	Research Title	Objective (s)	Location
HORTICULTURE RESEARCH CENTRE			
OLERICULTURE DIVISION			
1.	Genetic diversity of eggplant germplasm	• To assess the extent of genetic diversity of eggplant germplasm.	Gazipur (Central Station)
2.	Performance of bacterial wilt tolerant white colored 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
3.	Preliminary yield trial of purple coloured eggplant lines	• To observe the performance of purple colored eggplant lines with a view to develop new high yielding purple colored eggplant variety.	Gazipur
4.	Advanced yield trial of green coloured eggplant lines in relation to insect and diseases	• To study the performance of 28 green colored eggplant lines regarding yield and having tolerance to eggplant fruit and shoot borer and bacterial wilt.	Gazipur
5.	Regional yield trial of high temperature resistant op eggplant lines	• To observe the performance of the advanced lines with a view to develop new summer variety having tolerance to high temperature, eggplant fruit and shoot borer and bacterial wilt.	Akbarpur Hathazari Jamalpur Cumilla Burirhat Ishwardi Jessore and Rahamapur (RARS)
6.	Regional yield trial of eggplant lines resistance to pest and diseases	• To observe the performance of advanced green and purple colored lines with a view to develop new variety having high yield and tolerance to bacterial wilt	Akbarpur Hathazari Jamalpur Cumilla Burirhat Ishwardi Jessore and Rahamapur (RARS)
7.	Evaluation of tomato germplasm	• To evaluate the performance and characterization of collected tomato germplasm in relation to yield and yield contributing characters	Gazipur

Sl. No.	Research Title	Objective (s)	Location
8.	Performance of semi determinate tomato lines	• To develop semi-determinate type OP tomato varieties and inbred lines for developing hybrid tomato.	Gazipur
9.	Evolutionand characterization of AFACI tomato germplasm	• To observe the horticultural traits and yield potentiality and to select suitable tomato lines for developing good quality pest and diseases tolerant winter and summer tomato varieties.	Gazipur
10.	Regional yield trial of insect pests and diseases resistant tomato lines	• To evaluate adaptability and performance of yield and yield contributing traits and diseases reactions and at different AEZ	Gazipur
11.	Regional yield trial of bacterial wilt and TYLCV disease tolerant tomato lines	• To develop multiple disease (BW, TYLCV) tolerant tomato variety	Gazipur
12.	Evaluation of sweet pepper germplasm	• To observe the performance of wvc sweet pepper germplasm in relation of yield, yield contributing parameters and pest and diseases to develop good quality varieties for Bangladesh.	Gazipur
13.	Advanced yield trial of sweet pepper lines	• To observe the performance of the selected lines. • To develop high yielding and pest and disease tolerant sweet pepper varieties.	Gazipur
14.	Performance of selected of summer radish lines	• To develop high yielding heat tolerant OP radish varieties.	Gazipur
15.	Advanced yield trialof broccoli lines	• To evaluate the yield potentiality and develop new OP variety.	Gazipur
16.	Evaluation of turnip lines	• To develop superior turnip OP variety	Gazipur
17.	Evaluation of bottle gourd germplasm	• To study the performance of bottle gourd germplasm regarding yield and tolerance to fruit fly and stem blight.	Gazipur
18.	Regional yield trial of bottle gourd lines	• To develop bottle gourd OP variety having earliness, higher yield and attractive consumers preferred fruit shape and color.	Gazipur
19.	Regional yield trial of ash gourd lines	• To find out high yielding having attractive quality of ash gourd	Gazipur

Sl. No.	Research Title	Objective (s)	Location
		variety.	
20.	Collection and evaluation of cucumber germplasm	• To evaluate indigenous cucumber accessions with respect to agro-morphological traits and reaction to different biotic stresses.	Cumilla
21.	Collection and evaluation of ridge gourd germplasm	• To evaluate indigenous cucumber accessions with respect to agro-morphological traits and reaction to different biotic stresses.	Cumilla
22.	Preliminary yield trial of teasle gourd	• To assess the yield and yield contributing parameters having less-seeded teasle gourd lines.	Gazipur
23.	Advanced yield trial of selected teasle gourd lines	• To observe the performance of teasle gourd lines for yield and yield contributing parameters having tolerance to pest and diseases.	Gazipur
24.	Regional yield trial of squash lines	• To select superior lines having higher yield and attractive consumer preferred fruit shape squash for country wide cultivation.	Gazipur
25.	Collection and evaluation of muskmelon germplasm	• To characterize and evaluate indigenous muskmelon accessions with respect to agro-morphological traits and reaction to different abiotic and biotic stresses.	Cumilla
26.	Advanced yield trial of muskmelon lines	• To develop promising muskmelon variety for higher yield and better quality.	Gazipur
27.	Advanced yield trial of netted melon lines	• To develop high yielding with better tasted netted melon variety.	Gazipur
28.	Collection, evaluation and characterization of different genotypes of winter hyacinth bean under high rain fall areas of north-eastern region of Bangladesh	• To study the performance of six hyacinth bean genotypes.	Akbarpur
29.	Evaluation of hyacinth bean lines	• To evaluate the performance of hyacinth bean lines in respect of	Ishwardi

Sl. No.	Research Title	Objective (s)	Location
		yield and insect reaction.	
30.	Advanced yield trial of country bean lines	• To evaluate the yield and yield contributing traits of 3 country bean lines.	Gazipur
31.	Advanced yield trial of yard long bean	• To evaluate the yield and yield contributing traits of 8 advance yard long bean lines.	Gazipur
32.	Preliminary yield trial of garden pea lines	• To develop garden pea variety having high yield potentiality.	Gazipur
33.	Evaluation of okra germplasm in cumilla region	• To evaluate the performance of collected okra germplasm and • To find out superior okra variety with tolerance to YVMV and high yield.	Cumilla
34.	Regional yield trial of selected okra lines	• To develop high yielding and YVMV tolerant okra variety.	Gazipur
35.	Evaluation of stem amaranth genotypes for growing in winter season	• To identify superior line to cultivate in winter season.	Cumilla
36.	Advanced yield trial of stem amaranth lines	• To develop high yielding having less fiber stem amaranth variety.	Gazipur
37.	Advanced yield trial of selected carrot lines	• To develop the high yielding OP carrot variety.	Gazipur
38.	Advanced yield trial of lettuce lines	• To evaluate the selected lines for yield and quality for salad purpose colored lettuce variety.	Gazipur
39.	Evaluation of drumstick lines	• Development of new on and off-season drumstick varieties.	Gazipur
40.	Collection, evaluation and conservation of underutilized indigenous vegetables	• To find out the superior indigenous vegetables and to conserve the indigenous vegetables.	Gazipur
41.	Evaluation of purple coloured eggplant hybrids	• To observe the performance of purple colored hybrids regarding yield and having tolerance to EFSB and bacterial wilt with attractive size, shape and color.	Gazipur
42.	Performance of green colored eggplant hybrids	• To develop new diversified green colored eggplant hybrid variety tolerance to different pest and diseases.	Gazipur
43.	Regional yield trial of high temperature resistant eggplant	• To develop green and purple colored hybrids regarding yield	Gazipur

Sl. No.	Research Title	Objective (s)	Location
	hybrids	and having tolerance to high temperature and bacterial wilt at different locations of Bangladesh.	
44.	Regional yield trial of green and purple colored eggplant hybrids	• To develop green and purple colored hybrids regarding attractive shape, color, earliness, yield and having tolerance to EFSB, bacterial wilt at different locations of Bangladesh.	Gazipur
45.	Estimation of heterosis of summer tomato in relation to virus infection, quality and yield	• To study the heterosis of heat tolerant crosses of tomato.	Gazipur
46.	Preliminary yield trial of summer tomato hybrids	• To assess the yield performance of summer tomato hybrids for releasing new summer hybrid tomato varieties.	Gazipur
47.	Regional yield trial of hybrids of tomato in summer	• To observe yield & and quality of tomato hybrids in summer. To select tomato hybrids for summer season.	Gazipur
48.	Regional yield trial of tomato hybrids	• To assess the yield potentiality of tomato hybrids for selecting suitable tomato hybrid variety.	Gazipur
49.	Regional yield trial of saline tolerant tomato hybrids	• To assess the adaptability and yield potentiality of saline tolerant hybrid tomato lines for releasing new saline tolerant hybrid tomato varieties	Gazipur
50.	Regional yield trial of semi determinate tomato hybrids	• To assess the yield potentiality of tomato hybrids at different AEZ's of Bangladesh for releasing new semi determinate hybrid tomato varieties.	Gazipur
51.	Regional yield trial of determinate tomato hybrids	• To assess the adaptability and yield potentiality of tomato hybrids at different AEZ's for releasing new determinate hybrid tomato varieties.	Gazipur
52.	Maintenance of BARI released tomato varieties	• To purify OP and inbred lines (parents) of hybrid varieties.	Gazipur
53.	Evaluation of sweet pepper hybrids	• To develop new sweet pepper hybrid variety.	Gazipur
54.	Regional yield trial of bottle	• To study the performance of	Gazipur

Sl. No.	Research Title	Objective (s)	Location
	gourd hybrids	advanced bottle gourd hybrids regarding yield and yield contributing characters at different locations of Bangladesh.	
55.	Regional yield trial of bitter gourd hybrids	• To observe yield and quality of bitter gourd hybrids. To select bitter gourd hybrids for release as variety.	Gazipur
56.	Regional yield trial of pumpkin hybrids	• To observe yield and quality of pumpkin hybrids. To select pumpkin hybrids for release as variety.	Gazipur
57.	Development of inbred in pumpkin (set-1: $s_1$to s_2)	• To develop variable inbred lines in order to develop potential hybrid varieties (S_1 to S_2).	Cumilla
58.	Development of inbred in pumpkin (set-2: s_0 to s_1)	• To develop variable inbred lines in order to develop potential hybrid varieties (S_0 to S_1).	Cumilla
59.	Hybridization in pumpkin	• To develop high yielding pumpkin hybrid varieties and • To select pumpkin hybrid varieties for winter and summer season.	Lebukhali (RHRS)
60.	Performance of watermelon hybrids	• To develop high yielding watermelon hybrid varieties.	Lebukhali
61.	Performance trial of watermelon hybrids	• To assess the watermelon hybrids to develop new watermelon hybrid variety.	Gazipur
62.	Year round performance of BARI released tomato varieties	• To select suitable tomato varieties for year round cultivation.	Gazipur
63.	Standardization of growing media for sweet pepper on rooftop gardening	• To assess the performance of sweet pepper production to find out the suitable media for producing sweet pepper on the rooftop.	Gazipur
64.	Development of leaves production techniques of drumstick	• To standardize proper techniques for leaves production of drumstick.	Gazipur
65.	Standardization of hydroponic nutrient solution for growing vegetables	• To standardize the hydroponic nutrient solution developed by Olericulture division.	Gazipur

Sl. No.	Research Title	Objective (s)	Location
66.	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
67.	Year round production of selected vegetable crops through hydroponic culture	• To investigate the growth, yield, varieties, and time of planting for yield round production under soilless culture.	Gazipur
68.	Performance of lettuce, spinach, pakchoi and tomato in hydroponics	• To determine the production cost and profit comes from this cultivation system.	Gazipur
69.	Performance of different cultivars of sweet pepper in coconut coir substrate	• To investigate the growth and yield performance of commercial sweet pepper hybrids in soilless culture.	Gazipur
70.	Performance of indigenous and exotic leafy vegetables in three hydroponic nutrient solutions	• To investigate the performance of eleven indigenous and exotic leafy vegetables in three types of hydroponic nutrient solution.	Gazipur
71.	Effect of different level of zinc, iron and selenium in nutrient solution on the growth and zinc uptake in kang kong	• To evaluate their influence on its growth and mineral uptake through hydroponics.	Gazipur
72.	Performance of elevated bench systems of growing vegetables crops in coconut coir based substrates	• To develop a suitable and economic soilless culture system for growing vegetables.	Gazipur
73.	Development of simplified hydroponic system for growing mineral enriched vegetables providing human health benefit	• To develop simplified hydroponics system for growing leafy vegetable ensuring high quality and safe production.	Gazipur
74.	Effect of different shade house on quality seedling raising of high	• To select the suitable shade house for quality seedling raising of high value vegetables in Bangladesh	Gazipur
75.	Effect of different mulch paper on growth and yield of different high value vegetables	• To select the suitable mulch paper for quality high-value vegetable production	Gazipur
76.	Performance of 4th generation	• To develop self-population of	Gazipur

Sl. No.	Research Title	Objective (s)	Location
	magic population of tomato under organic practices	MAGIC (Multiline Advance Generation Intercrossing) lines and evaluation of 4th generation lines.	
77.	Evaluation of tomato genotypes under organic condition at pest exclusion net (pen)	• To study the performance of tomato crosses under organic with pen and mulching.	Gazipur
78.	Evaluation of advanced carrot genotypes under organic condition	• To find out the suitable genotypes of carrot for organic cultivation and capable to produce seeds	Gazipur
79.	Phytotoxicity of organic fertilizers	• To find the quality of the organic fertilizer ready to use in the field	Gazipur
80.	Application of multiple treatments for safe eggplant production	• To reduce the risk of pesticide, insecticide and inorganic fertilizer in agriculture and • To ensure food safety and minimizing adverse effects of pesticide, insecticide and inorganic fertilizer on health and environment	Gazipur
81.	Application of multiple treatments for safe bitter gourd production	• To reduce the risk of pesticide, insecticide and inorganic fertilizer in agriculture and • To ensure food safety and minimizing adverse effects of pesticide, insecticide and inorganic fertilizer on health and environment.	Gazipur
82.	Screening of eggplant varieties against different salinity	• To screen the salt tolerant potentiality of BARI released eggplant varieties at germination stage.	Gazipur
83.	Screening of tomato hybrids against different level of salinity	• To assess the saline tolerance of hybrid tomato lines for releasing new saline tolerant hybrid tomato varieties.	Gazipur
84.	Evaluation of summer tomato hybrids at satkhira region	• To assess the best hybrid summer tomato varieties for saline areas of Bangladesh.	Benarpota, Satkhira (ARS)
85.	Evaluation of sweet pepper against salinity	• To identify the saline tolerant sweet pepper varieties for the saline region of Satkhira.	Benarpota, Satkhira

Sl. No.	Research Title	Objective (s)	Location
		on the interaction of genotype, environment and management.	
1241.	Effect of Foxtail millet varieties as influenced by different weeding methods	• To find out the suitable varieties for ginger cultivation and • To find out the optimum planting time at Sherpur region	Sharisabari, Jamalpur
1242.	Effect of varieties and planting dates on Ginger	• To find out the suitable weed control method of onion bulbs production and • To increase total yield and farmer's income.	Tarakandi, Sherpur
1243.	Effect of weeding on the bulb yield of summer Onion	• To see the performance of sesame under different sowing options • To reduce crop loss due to rainfall/excessive soil moisture induced by climate change and • To increase sustainable production and famers income.	Ganggarampur and Atghoria, Pabna
1244.	Performance of Sesame under different sowing options	• To see the performance of vegetables as influenced by plant growth regulators and • To increase vegetable production and famers income.	Ganggarampur, Pabna
1245.	Effect of different growth regulators on yield of Brinjal and Okra	• To see the performance of vegetables as influenced by plant growth regulators and • To increase vegetable production and famers income.	Ganggarampur, Pabna
1246.	Survey, monitoring and documentation of major insect pests of pulse crops in high Barind tract	• To see the performance of vegetables as influenced by plant growth regulators and • To increase vegetable production and famers income.	Basnitola, Godagari and Amnura and Chapai-Nawabganj
1247.	Survey, monitoring and documentation of major insect pests, diseases and soil nutrients of Betel leaf in Rajshahi region	• To find out the major pests of pulse crops.	Basnitola, Godagari and Amnura, Chapai-Nawabganj
1248.	Storing performance of mature mango under different condition	• To find out the major pests, diseases and soil nutrients of betel vine and • To estimate loses of betel vine	Bagmara, Durgapur, Rajshahi

Sl. No.	Research Title	Objective (s)	Location
		due to pests and diseases attack.	
1249.	Out scaling of homestead gardening through LSP	• To observe the storing duration of mature Mango under different storage methods. • To make availability of Mango during off-season and • To reduce the post-harvest loss of Mango.	Rangpur
1250.	Effect of planting method and seedling age on Sunflower in haor areas	• To disseminate homestead gardening through local service provider (LSP) for sustainability.	Ajoddhapur, Rangpur (FSRD)
1251.	Effect of crop establishment method on yield and yield attributes of different varieties of Lentil	• To find out the suitable planting system for Sunflower to save it from natural disaster in the haor area and • To increase yield and farmers' income	
1252.	Effect of planting date on yield of Gladiolus varieties	• To evaluate the performance of different varieties of Lentil under different crop establishment method in low land rice growing areas	Atghoria, Pabna (MLT)
1253.	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 and • To find-out economic weed strategy for dry direct seeded Aus rice in HBT.	Godagari or Duboil, Tanore, Rajshahi (FSRD)
1254.	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 and • To reduce indiscriminate use of insecticides	Godagari, Rajshahi and Sapahar, Noagaon.
1255.	Productivity and profitability of Okra under different plant spacing	• To find out a suitable spacing arrangement for okra production under AEZ-3	Tangail and Gazipur (SRC)
1256.	Performance of Garlic varieties under zero tillage method with mulch	• To find out optimum spacing of zero tillage potato for higher yield.	Dacope, Khulna
1257.	Effect of spacing of Potato under zero tillage condition in saline soil of Bangladesh	• To find out effect of sowing date on yield performance of spinach and	Dacope, Khulna and Khulna (On-Station)

Sl. No.	Research Title	Objective (s)	Location
		• To find out effect of harvest date on the quality of spinach	
1258.	Effect of sowing date on yield of Spinach in southwestern saline soil	• To minimize soil salinity effect on sunflower and • To increase system productivity	Dacope, Khulna
1259.	Effect of cover crops for salinity management in Sunflower	• To find out the effect of irrigation on the yield of sweet potato and • To increase yield as well as farmers income.	Melandah, Jamalpur (MLT)
1260.	Effect of irrigation on Sweet potato in charland of Jamalpur	• To find out the suitable rabi crops in saline soil and • To increase production.	Chakaria and Cox's Bazar
1261.	Performance of different Rabi crops in coastal saline area	• To find out the suitable rabi crops in saline soil and • To increase production.	Chakaria and Cox's Bazar
1262.	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 and • To early harvest of watermelon.	MLT site Kuakata (MLT)
1263.	Residual effect of herbicides applied in strip-planted Wheat on grain and on soil microbes	• To observe any kind of change in soil beneficial microbes as affected by the residue of post-emergence herbicides applied at label rate and higher than the label rate in strip-planted wheat and • To evaluate the residual effect of post-emergence herbicides on wheat grain.	Gazipur (On-Station)
1264.	Determination of pretilachlor residue in puddle and non-puddle soil during Aman rice season	• To determine the presence of residue of pretilachlor in soil during Amanrice season under puddle and non-puddled field condition.	Gazipur
1265.	Field observation of salt application on rice and subsequent crops in farmers field	• To collect base line information on details of this practice from the areas where farmers are using salt on crops • To gain knowledge on agronomic response of crops due to salt application through	Pabna and Barind

Sl. No.	Research Title	Objective (s)	Location
		sharing with farmers, DAE personnel, BRRI scientists, Dealer and other stakeholder and • To make documentation on this practice and set up mini research trial (pot experiment) to convince farmers to drop this hazardous practice.	
1266.	Effect of border trees on Potato in northern region of Bangladesh	• To find out the border trees effect on crop land area and • To estimate the yield loss.	Rangpur
1267.	Optimization of Okra spacing and sowing dates in the saline soils of southwestern Bangladesh	• To reduce the cucurbit fruit fly infestation more effectively through the use of attract and kill lure, sex pheromone and proper sanitation approaches at farmers' field.	Dawlatkhan and Charfashion, Bhola (MLT)
1268.	Controlling Fruit Fly of Cucurbits using Biological trap with Proper Sanitation	• To evaluate the effectiveness of chemicals and botanicals against pod borer, *Maruca vitrata* of mungbeanand • To identify the effective chemicals and botanicals	Patuakhali and Borguna
1269.	Management of pod borer, *Maruca vitrata* using chemicals, botanicals and biopesticides in Mungbean at southern districts	• To evaluate the effectiveness of repellent tools against bird pests in Sunflower. • To minimize production cost of Sunflower.	Karmosuchi/ Patuakhali
1270.	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
1271.	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 amongthe farmers.	Charghat and Bagha, Rajshahi
1272.	Development of management techniques against scale insect attacking Mango	• To popularize bio-rational based management techniques in controlling Mango fruit fly amongthe farmers.	Charghat and Bagha, Rajshahi
1273.	Survey and documentation of insect pests attacking Potato in	• Documentation of insect pests attacking Potato at Tanor,	Tanor, Godagari and

Sl. No.	Research Title	Objective (s)	Location
	Rajshahi region	Godagari and Mohanpur of Rajshahi district.	Mohanpur Rajshahi
1274.	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)
1275.	Management of gummosis disease of Citrus in Narsingdi	• To identify suitable fungicide for controlling Gummosis and • To increase yield and farmers' income	Shibpur, Narsingdi
1276.	Development of cropping pattern in Mango based agroforestry systems	• To see the performance of different cropping pattern under Mango based agro-forestry systems and • To increase productivity and income of the agro-forestry systems	Shibpur, Rajshahi (MLT)
1277.	Performance of pulses in Mango based Agro-forestry system in HBT	• To increase cropping intensity and productivity in the High Barind Tract	Kadamshahar, Godagari, Rajshahi
1278.	Feasibility of growing shade tolerant vegetable crops in fruit tree-based agroforestry systems	• To introduce short duration shade tolerant crops in agroforestry systems and • To increase productivity and income of the agroforestry systems.	Pabna (ARS)
1279.	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 and • To find out the suitable variety(ies) of Turmeric under Mango-based agroforestry system.	Cumilla and Chandpur
1280.	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 and • To increase production and economic return.	Cumilla and Chandpur
1281.	Performance of intercropping Red amaranth/Jute leaf with BARI Tomato and Sweet gourd	• To observe the performance of red amaranth along with winter	Cumilla and Chandpur

Sl. No.	Research Title	Objective (s)	Location
	varieties under Mango-based agroforestry system	vegetables in the mango-based agroforestry system and • To increase total production and economic return.	
1282.	On-farm trial of BARI developed Country bean variety	• To evaluate the performance of BARI Country bean varieties.	Faridpur
1283.	On farm trial of BARI developed Pointed gourd varieties	• To evaluate the performance of BARI released Pointed gourd varieties	Faridpur
1284.	Adaptive trial with newly released BARI Brinjal varieties in Southern region of Bangladesh	• To study the performance of newly released BARI Brinjal varieties in Barishal	Gournadi, Barishal (MLT)
1285.	Performance of Mustard varieties as relay crop with T. Aman rice	• To see the performance of Mustard varieties as relay crop with T. Aman	Dawlatkhan and Borhanuddin, Bhola (MLT)
1286.	Adaptive trial of BARI developed Gladiolus varieties in medium highland of Bhola	• To popularize BARI developed Gladiolus variety to farmer's level and • To increase farmers income	Charfashion, Bhola
1287.	On-farm trial of Foxtail millet in coastal region of Bangladesh	• To find out suitable millet variety for coastal region and • To introduce millet in coastal region	Patuakhali, Barguna, Khulna and Cumilla
1288.	On-farm trial of Barley varieties in coastal region of Bangladesh	• To find out suitable Barley variety for coastal region and • To introduce Barley in coastal region	Patuakhali and Cumilla
1289.	Performance of different Onion varieties in Gopalganj district	• To evaluate the performance of Onion varieties at different locations and • To popularize BARI developed Onion variety among the farmers	Gopalganj, Jashore and Narsingdi
1290.	On farm verification trial of different variety of Garlic	• To study the performance of Garlic varieties in farmer's field and • To popularize new Garlic variety at different locations among the farmers to promote their adoption.	Gopalganj and Jashore
1291.	On-farm trial of BARI developed winter hybrid Tomato	• To evaluate the performance of winter Hybrid Tomato varieties in farmers' field	Gopalganj and Pirojpur

Sl. No.	Research Title	Objective (s)	Location
1292.	Adaptive trial of Mustard varieties in south western part Bangladesh	• To evaluate the performance of different Mustard varieties at Gopalgonj and Pirojpur district.	Gopalganj and Pirojpur
1293.	Evaluation of BARI released Grass pea varieties under AEZ-14	• To evaluate the performance of Grass pea varieties and • To increase productivity and popularize among the farmers	Gopalganj and Pirojpur
1294.	Adaptive trial of different varieties of Mungbean	• To evaluate the performance of Mungbean varieties and • To increase productivity and popularize among the farmers	Gopalganj, Pirojpur and Dinjapur
1295.	On-Farm trial of BARI developed winter Bottle gourd varieties	• To introduce high yielding BARI released Bottle gourd varieties and • To increase yield and income of farmers.	Bandarban, Sadar and Rowangchhari upazila
1296.	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
1297.	On-Farm trial of BARI developed Ridge gourd varieties	• To evaluate the performance of BARI released Ridge gourd varieties at farmer's field and • To popularize and disseminate BARI released Ridge gourd varieties in the hilly areas.	Bandarban Sadar and Rowangchhari
1298.	Performance of BARI developed Capsicum varieties in Cumilla region	• To popularize BARI released high yielding capsicum varieties at Cumilla region and • To study the adaptability of BARI released capsicum varieties at farmers' level.	Debidwer, Chandina, Barura of Cumilla, Kashba, Brahmanbaria and Shahrasti of Chandpur
1299.	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
1300.	On-farm trial of BARI released Tomato variety in Sherpur	• To evaluate the performance of BARI released winter Tomato variety in farmers' field and	Bolairchar, Sherpur Sadar, Sherpur

Sl. No.	Research Title	Objective (s)	Location
		• To increase the productivity and farmers income	
1301.	On-farm trial of BARI developed Mukhikachu varieties	• To evaluate the performance of Mukhikachu varieties field condition and • To increase production and income.	Narsingdi
1302.	On-farm trial of BARI Turmeric varieties in Narsingdi	• To evaluate the performance of BARI released Turmeric variety at farmers field and • To increase production and farmer's income.	Narsingdi
1303.	Yield performance of BARI released Blackgram varieties in charland areas of Rajshahi region	• To compare the economic performance of BARI released black gram varieties and local variety at farmer's level and • To assess the varietal impact of BARI Mash varieties in the farmer's field;	Alipur Charland, Godagari.
1304.	Adaptive trial of BARI released Sweet potato varieties in AEZ 11	• To popularize the newly released improved Sweet Potato varieties and • To collect the feedback of the newly released varieties.	Puthia, Rajshahi
1305.	Adaptive trial of BARI released Long Coriander variety	• To find out the performance of BARI developed varieties in comparison to local variety.	Purbo Shullukia, Hazirhat, Noakhali
1306.	Performance of Garden pea varieties at charland of Noakhali under AEZ 18	• To find out the suitable garden pea variety for char land of Noakhali and • To popularize the variety (ies) among the farmers.	Noakhali Feni and Sherpur
1307.	Performance of BARI released Potato varieties in farmers' fields	• To introduce the BARI released Potato varieties in the locality and • To increase economic return of farmers.	Pirganj, Thakurgaon and Sherpur
1308.	Performance of BARI Chickpea varieties in Dinajpur	• To find out the appropriate variety for Dinajpur region and • To increase yield and income of the farmers.	Dinajpur and Rangpur
1309.	Performance of Garden pea varieties at charland of Noakhali	• To find out the suitable Garden pea variety for char land of	Noakhali and Feni

Sl. No.	Research Title	Objective (s)	Location
	under AEZ 18	Noakhali and • To popularize the variety (ies) among the farmers.	
1310.	On farm trial of BARI Dragon fruit varieties	• To evaluate the performance of BARI released different dragon fruit varieties.	Faridpur
1311.	Adaptive trial with newly released Potato varieties	• To popularize the newly released improved Potato varieties and To collect the feedback of the newly released varieties. Location : Barishal, Bhola, Borguna, Bogura, Chittagonj (Pahartoli& RARS), Chandpur, Coxes bazar, Cumilla, Dinajpur, Faridpur, Gibandha, Gopalgonj, Gazipur, Jamalpur, Jashore, Jhenaidah, Khulna, Kishoregonj, Kushtia, Madaripur, Manikgonj, Munshiganj, Mymensing, Norshindi, Noakhali, Panchogor, Patuakhali, Rajshahi, Rangpur, Sherpur, Satkhira, Tangail and Thakurgoan.	
1312.	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. • To increase the production as well as income of the growers. Location: Dinajpur, Rangpur, Bogura, Jamalpur, Rajshahi, Niphamary, Panchagarh, Thakurgoan and Jashore	
1313.	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 and • To increase the production as well as income of the growers. Location :Barishal, Patuakhali, Barguna, Khulna, Satkhira.	
1314.	Adaptive trials with Sweet potato varieties	• To popularize the newly released improved Potato varieties. • To collect the feedback of the newly released varieties and • To increase the production as well as income of the growers. Location : Barishal, Patuakhali, Barguna, Khulna, Satkhira, Chattagram, Cox's Bazar, Noakhali, Bhola and Jashore	
1315.	Adaptive trials with newly	• To popularize the newly released improved Sweet	

Sl. No.	Research Title	Objective (s)	Location
	released varieties of Panikachu	Potato varieties and • To collect the feedback of the newly released varieties. Location : Narsingdi, Manikgong, Bogura, Gaibanda, Rangpur, Kurigram, Jamalpur, Sherpur, Kishoregong, Mymensingh, Jashore, Noakhali, Sylhet and Cumilla	
1316.	Adaptive trials with newly released varieties of Mukhikachu	• To test the adaptability of the improved varieties of Panikachu at farmers' level. Location : Gazipur, Narsingdi, Manikgong, Bogura, Joypurhat, Gaibanda, Rangpur, Jamalpur, Sherpur, Kishoregong, Mymensingh, Chattagram, Jashore, Kushtia, Noakhali, Habigonj/Sylhet and Barishal	
1317.	Effect of nutrient management and storage methods on the yield and storability of Sweet potato	• To test the adaptability of the improved varieties of Mukhikachu at farmers' level. Location : Gazipur, Bogura, Joypurhat, Gaibanda, Jamalpur, Sherpur, KishoregongMymensingh Chattagram, Jashore, Kushtia, Noakhali, Habigonj/Sylhet and Barishal	
1318.	Adaptive trial of advanced lines of Brassica rapa	• To disseminate the developed fertilizer package for the yield and storability of Sweet Potato. Location : To collect the feedback of the newly developed fertilizer package • Kushtia, Bogra, Gaibandha, Serpur	
1319.	Adaptive trial of advanced lines of B napus	• To evaluate the performance of advanced lines of Brassica rapa in the farmer's field. • To develop high yielding short duration variety of Brassica rapa. Location: Pabna, Cumilla, Netrakona and Tangail	
1320.	Adaptive trial of advanced lines of Sesame	• To select high yield potential lines with early maturity those can be grown in between T. Aman and Boro rice.	Jamalpur Sherpur Rangpur and Kishoregonj
1321.	Adaptive Trial of Ground nut	• 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 Patuakhali
1322.	Validation of intercropping of black cumin with Groundnut in charland areas	• To identify the suitable row arrangement of Black cumin with Groundnut for higher productivity and profit in charland areas	Tangail Jamalpur and Rajshahi

Sl. No.	Research Title	Objective (s)	Location
1323.	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
1324.	Validation of intercropping of 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
1325.	Development of seed rate for Mustard-Boro mixed cropping system	• To observe the optimum rate of seed for Mustard-Boro mixed cropping.	Cumilla
1326.	On-Farm adaptive trial of Mustard genotypes in Barind tract areas	• To select suitable genotype of Mustard for Barind areas.	Joypurhat and Rajshahi
1327.	Performance of Sunflower and Soybean genotypes in southern region of Bangladesh	• To identify the suitable variety of sunflower and Soybean in southern region	Barisal PirojpurShatkhira and Noakhali
1328.	Performance of selected genotypes of Soybean under saline condition in saline area	• To find out the better genotype tolerant to salinity	Noakhali and Shatkhira
1329.	On farm trial of Sweet Potato yield as influenced by integrated nutrient management	• To validate the developed nutrient management of Sweet Potato for higher productivity in farmers field	Jamalpur and Rangpur
1330.	On farm trial of Sorghum and Garden pea intercropping	• To validate the developed combination of sorghum and Garden pea and intercropping for higher productivity and monetary advantage in farmers field	Jashore and Jamalpur
1331.	On farm trial of Brinjal and Spinach and Red amaranth Intercropping	• To validate the developed combination of Brinjal and spinach and red amaranth intercropping for higher productivity and monetary advantage in farmers field	Jashore and Jamalpur
1332.	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 and	Rangpur

Sl. No.	Research Title	Objective (s)	Location
		• To find out the Boron use efficiency of Mungbean	
1333.	Validation of Biofertilizer on different legumes	• To popularize the rhizobium bio-fertilizer technology for producing pulse and oilseed legumes in the farmer's level.	Khustia Satkhira Sylhet and Faridpur
1334.	On-farm trial of BARI developed summer Hybrid Tomato	• To evaluate the performance of summer hybrid variety in farmers' field Location : Comilla, Shyampur, Pabna, Daulatpur, Bandarban, Patuakhali, Noakhali, Barind, Bhola and Faridpur	
1335.	On-farm trial of BARI developed Cauliflower variety	• To evaluate the performance of the variety in farmer's field • Location ; Daulatpur, Khulna, Comilla, Mymensingh Patuakhali, Rangpur and Narsingdi	
1336.	On-farm trial of BARI developed Hybrid Pumpkin variety	• To evaluate the performance of hybrid pumpkin variety in farmers field Location : Comilla, Narsingdi, Mymensingh Jashore, Pabna, Bandarban, Rajshahi, Manikganj, Fardipur and Rangpur	
1337.	On-farm trial of BARI developed Bitter gourd variety	• To evaluate the performance of bitter gourd variety in farmer's field Location : Comilla, Narsinghdi, Mymensingh, Jessore, Pabna, Bandarban, Rajshahi and Rangpur	
1338.	On-farm trial of BARI Sponge gourd variety	• To evaluate the performance of sponge gourd variety in farmer's field Location : Comilla, Narsinghdi, Mymensingh, Jessore, Pabna, Bandarban, Rajshahi and Rangpur	
1339.	Integrated Farming for Improving Livelihood of Resource Poor Farm Households in a Participatory Approach	• To evaluate the performance of sponge gourd variety in farmer's field Location ; Comilla, Narsinghdi, Mymensingh, Jessore, Pabna, Bandarban, Rajshahi and Rangpur	
1340.	Adoption of BARI Chili varieties in some selected areas of Bangladesh	• To know the adoption of BARI Chili varieties and their management technologies at farm level. • To find out the factors affecting their adoptions and non-adoptions. • To estimate the cost and return of Chili varieties. • To identify the problems and constraints and also make some Location : Manikganj, Mymensingh and Kishoreganj	
1341.	Profitability and resource use efficiency of Dragon fruit cultivation in Rajshahi and	• To assess the technical efficiency and factors affecting their efficiency in Dragon fruit production	

Sl. No.	Research Title	Objective (s)	Location
	Mymensingh district	• To determine the profitability of dragon fruit production in the study area and • To identify the problems associated with dragon fruit production Location :Rajshahi and Mymensingh	
1342.	Impact of BARI Released Pulse Varieties in the Rajshahi region of Bangladesh	• To determine the adoption and factors affecting adoption of BARI released pulse varieties in the Rajshahi region. • To evaluate the impacts of BARI released pulse varieties on productivity, profitability and farmers income and Location: To identify the problems and constraints for adopting BARI released pulse varieties in the Rajshahi region. • Poba and Godagari Upazila of Rajshahi, and Amnura of Capai Nababganj District	
1343.	Adoption of BARI released major winter vegetables in Narsingdi districts	• To know the adoption rate of Brinjal, Tomato and Radish in selected areas • To know the profitability of selected vegetables in the study areas • To know the problems and constraints faced by the farmers	Narsingdi
1344.	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 and • To increase cropping intensity and farmers income	Patuakhali Borguna Pirojpur and Bhola
1345.	Production of Garlic with zero tillage method	• To increase cropping intensity in coastal region • To increase farmers income and • To utilize fallow land during late Rabi season	Bandarban
1346.	Pilot Production program of cereals, pulses, vegetables and fruit crops in Bandarban region	• To popularize the BARI developed cereals, pulses, vegetables and fruitvariety in hilly region and • To increase oilseed production and farmer's income. Location : Chokoria and Coxsbazer sadar, Coxsbazer and Gangni, Chuadanga, Mujibnagar, Bheramara and Kushtia	

Sl. No.	Research Title	Objective (s)	Location
1347.	Pilot Production program of Tomato varieties	• To popularize the BARI developed Tomato variety in coastal region. • To increase oilseed production and farmer's income. Location : Chokoria and Coxsbazer sadar, Coxsbazer, Gangni, Chuadanga, Mujibnagar, Bheramara and Kushtia	
1348.	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, Coxsbazer
1349.	Pilot production program of cereals, pulses, oilseeds and vegetablecrops in Cumilla region	• To validate and popularize the BARI developed pulses, oilseeds and vegetable crop varieties in Cumilla region.	Brahmanbaria and Chandpur
1350.	Pilot Production program of Dragon fruit	• To introduce BARI released dragon fruit at farmers level.	Kushtia sadar
1351.	Pilot Production program of Tomato, Potato, Groundnut, Sunflower varieties in the haor and char area of Kishoreganj	• To popularize BARI varieties in the char areas and • To increase cropping intensity and productivity of the farmers.	Shibaloya, Manikganj
1352.	Pilot Production program of Bt Brinjal in the farmers' field at Manikganj	• To popularize and disseminate BARI Bt Begun-4 variety in the farmer's field. • To know farmers' response about Bt Brinjal and • To increase yield and farmers' income	Ghior /Saturia, Manikganj
1353.	Pilot Production program of Brinjal varieties in the farmers field at Manikganj	• To popularize and disseminate BARI Brinjal varieties in the farmer's field. • To know farmers' opinion about the BARI developed varieties and • To increase yield and farmers' income	Ghior/ Saturia, Manikganj
1354.	Production program of Tomato varieties in the farmers field at Manikganj	• To popularize and disseminate BARI winter Tomato varieties at farmer's field • To know farmers' opinion about the BARI developed varieties and • To increase yield and farmers'	Gurkhi, Sadar Manikganj

Sl. No.	Research Title	Objective (s)	Location
		income	
1355.	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 and • To increase yield and farmers' income	Gurkhi, Sadar Manikganj
1356.	Upscaling of summer Onion in Bogura region	• To popularize BARI Piaj-5 as summer Onion variety to the farmers and • To increase the area as well as production at on-farm condition	Shibganj /Sonatola Bogura
1357.	Pilot Production Program of hybrid Tomato in vegetables growing areas of Bogura	• To disseminate and popularize the BARI released summer hybrid Tomato at on-farm level	Shibganj, Sonatola, Bogura
IRRIGATION AND WATER MANAGEMENT DIVISION			
1358.	Response of Mungbean to Different Levels of irrigation	• To determine the effect of irrigation at different growth stages of mungbean and • To understand the effects of irrigation on yield and yield components of mungbean.	Gazipur and Rahmatpur, Barishal
1359.	Growth and Yield of Chilli as Influenced by Different Levels and Intervals of Drip Irrigation	• To observe the effect of different drip irrigation levels on growth and yield of chilli and • To Study the soil wetting patterns and water productivity under different irrigation regimes.	Gazipur
1360.	Optimize Fertigation Management to Minimize Nitrate Leaching from Drip Irrigated Brinjal Field	• To optimize drip fertigation management to minimize nitrate leaching	Gazipur
1361.	Daily and Multi-Step Ahead Forecasting of Potential Evapotranspiration Using Machine Learning Algorithms with Limited Climatic Data	• To forecast daily and multi-step ahead reference evapotranspiration using different machine learning algorithms and • To investigate generalization capability of machine learning algorithms in modelling	Gazipur

Sl. No.	Research Title	Objective (s)	Location
		reference evapotranspiration	
1362.	Effect of Irrigation on Bulb Yield and Water use of Summer Onion	• To find out response of summer onion to different levels of irrigation and • To evaluate economic feasibility of summer onion production	Gazipur and Ishurdi
1363.	Irrigation Scheduling of Dragon Fruit Production	• To find out the effect different level of irrigation on yield of dragon fruit and • To evaluate economic feasibility of dragon fruit production	Ishurdi, Pabna
1364.	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 and • To study and evaluate the hydraulic and operational performance of the developed sprinkler system.	Gazipur
1365.	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.	Gazipur
1366.	Performance of Fertigation System on Pumpkin Cultivation	• To investigate the performance of pumpkin under fertigation systems and • To study the cost effectiveness of the system	Gazipur
1367.	Effect of Drip Irrigation and Mulching on Growth and Flowering of Chrysanthemum as Cut Flower	• To find out the optimum irrigation scheduling and mulches for Chrysanthemum production and • To evaluate the feasibility of drip irrigation with different mulches for Chrysanthemum cultivation in terms of growth and flowering of Chrysanthemum.	Gazipur
1368.	Yield and Water Productivity Indices of Different Onion Varieties Under Sprinkler Irrigation	• To compare the performance of different onion varieties in terms of yield and water productivity. • To determine yield response factors of different onion varieties and • To assess cost effectiveness of	Gazipur

Sl. No.	Research Title	Objective (s)	Location
		onion cultivation under sprinkler irrigation	
1369.	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 metter and quality of processing potato and • To find out the appropriate irrigation frequency and date for optimum yield, dry metter and quality of processing potato	Gazipur
1370.	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.	Gazipur
1371.	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.	Hathazari, Chattogram
1372.	Socio-economic Study of Drip Irrigation use in Bangladesh	• To find out the present status of drip irrigation use at farm level. • To assess the impact of using drip irrigation on horticultural crop production and • To explore the problem and constraints to use drip irrigation at farm level.	All over the country
1373.	Prediction of Saltwater Intrusion for Different Scenarios of Aquifer Recharge and Groundwater Extraction Under Changing Climate	• To predict saltwater intrusion with respect to varying recharge and groundwater extraction scenarios and • To identify the optimum groundwater extraction that minimizes saltwater intrusion	Coastal aquifers
1374.	Coastal Groundwater Management Using an Uncertainty-Based Coupled Simulation-Optimization Approach	• To develop a saltwater intrusion management strategy that maximizes groundwater extraction while minimizing salinity intrusion into the aquifer.	Coastal aquifers (southern)
1375.	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 and • To determine the depletion of groundwater level.	Gazipur All RARS and Bogura (SRC)

Sl. No.	Research Title	Objective (s)	Location
1376.	Effects of Floating Agriculture on the Water Quality of Ponds	• To determine the change of water quality of ponds for household use and fish cultivation in floating agriculture.	Rahmatput, Barishal
1377.	Assessment of Groundwater Quality in Some Research Stations of BARI	• To determine the suitability groundwater for drinking and irrigation purposes Location : Barishal, Cumilla, Bogura, Rajshahi, Ishurdi, Jessore, Hathazari, Rangpur, Jamalpur, Satkhira, Gazipur	
1378.	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 and • To increase the crop-water productivity and reduce irrigation water use in saline areas of Bangladesh.	Patuakhali Barguna Bhola Satkhira and Noakhali
1379.	Dissemination of Water Saving Technologies for Non-Rice Crops in Hilly Area	• To promote the water saving technologies among the farmers in hilly area and • To study the suitability of the water saving technologies	Khagrachari and Raikhali
FARM MACHINERY AND POST-HARVEST ENGINEERING DIVISION			
1380.	Development and evaluation of four-wheel tractor operated seeder	• To design and fabricate four-wheel tractor operated seeder and • To evaluate performance of the seeder	Gazipur
1381.	Design and development of a power tiller operated vegetable seedling transplanter	• To design and fabricate a power tiller operated vegetable seedling transplanter. • To test and evaluate performance of the transplanter and • To compare performance of the transplanter with that of the conventional method.	Gazipur
1382.	Energy use analysis of conservation tillage systems for the rice-maize cropping pattern	• To assess productivity of conservation agriculture (CA) tillage practices. • To quantify input- output energy flow in Rice-Soybean cropping pattern and • To evaluate energy efficiency	Gazipur

Sl. No.	Research Title	Objective (s)	Location
		and financial profitability of the systems.	
1383.	Design and development of onion and garlic detopper	• Design and fabrication of the detopper and • Testing and performance of the developed machines.	Gazipur
1384.	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 and • Testing, demonstration and adoption of selected conservation agriculture and irrigation machinery and methods in the selected areas.	Gazipur Barishal Patuakhali and Khulna
1385.	Development of a residue clearing device for conservation tillage by precision seeder to prevent blockage of furrow openers and improve seeding uniformity	• To develop a device to reduce seed blockage of furrow openers under conservation tillage seeding by precision seeder and • To evaluate field performance of the device under different soil and crop residue conditions.	Gazipur
1386.	Development of orchard weeder cum mini tiller	• To design and fabricate the power weeder suitable for both orchard and kitchen yard and • To evaluate financial and social viability of the machine.	Gazipur
1387.	Design and fabrication of petrol engine operated boom sprayer for field crops	• To increase spray efficiency of the sprayer. • To ensure proper pesticide application and • To reduce human drudgery and time consumption of spraying.	Gazipur and Noakhali
1388.	Development of an automatic irrigation device	• To develop an automated irrigation device from available materials. • Calibrating the device to determine exact soil moisture content and • On-farm evaluation and fine tuning of the device.	Gazipur
1389.	Development of a barley thresher	• To develop a barley thresher that can efficiently thresh barley.	Gazipur

Sl. No.	Research Title	Objective (s)	Location
		• To evaluate performance of the barley thresher and • On-farm evaluation and fine tuning of the thresher.	
1390.	Development of a power operated sunflower thresher	• To design and fabricate a power operated sunflower thresher and • To evaluate performance of the sunflower thresher.	Gazipur and Noakhali
1391.	Improvement of the sitting type coconut tree climber	• To design and fabricate a sitting type coconut tree climber and • To evaluate performance of the climber.	Gazipur
1392.	Development of soymilk making machinery	• To design and develop soymilk making machinery and • Performance evaluation of the machines.	Gazipur
1393.	Adaptive trial of BARI Cream Separator	• To evaluate performance of the cream separator and • To do financial analysis of the cream separator.	Gazipur and Sirajganj
1394.	Development of drum type carrot washing machine	• To develop a higher capacity self-propelled drum type carrot washing machine and • To evaluate performance of the developed machine.	Gazipur and Savar
1395.	Upscaling and fine tuning of coffee postharvest processing machinery	• To improve and fine tune coffee postharvest machinery and • To evaluate performance of the coffee postharvest machinery.	Gazipur
1396.	Design and development of a jute decorticator	• To develop a suitable, portable and handy jute decorticator and • To evaluate performance of the jute decorticator.	Gazipur
1397.	Development and adoption of suitable technology for hygienic potato chips production	• To improve and adopt BARI slicer for rural region to enhance healthy and quality potato slices. • To design and develop a low-cost solar tunnel dryer for efficient and hygienic drying of potato slices and • To design and develop a spiral potato slicer for value addition of potato chips.	Gazipur Bogura and Tangail
1398.	Up-scaling and fine tuning of	• To improve and fine tune	Gazipur

Sl. No.	Research Title	Objective (s)	Location
	cashew nut postharvest processing machine and oil extracting machine	cashew nut postharvest machinery and • To evaluate performance of the cashew nut postharvest machinery.	
1399.	Improvement of chili seed separator	• To improve the power operated chilli seed separator and • To evaluate performance of the chilli seed separator.	Gazipur
1400.	Improvement of tomato seed separator cum pulper	• To improve the tomato seed separator cum pulper and • To evaluate performance of tomato seed separator cum pulper.	Gazipur
1401.	Performance evaluation of flat bed dryer for maize drying	• To evaluate performance of the flatbed dryer for maize drying and • To evaluate economic performance of the dryer.	Gazipur
1402.	Development of a suitable fruit bagging tool	• To design and fabricate a suitable fruits bagging tool and • To evaluate performance of the fruit bagging tool.	Gazipur
1403.	Up-scaling and application of solar photovoltaic pump for smallholder irrigation and household appliances in the central coastal region of Bangladesh	• Up-scaling and improvement of solar pump for higher capacity and efficiency. • Test the efficacy of application of solar energy for pumping and household appliances for year round uses and • Field trials of solar pump for irrigation of high value crops and year round uses of solar energy in household appliances in the central coastal region of Bangladesh.	Gazipur Barguna Patuakhali and Bhola
1404.	Development and adoption of a solar cabinet dryer for vegetable seeds	• Designing and fabrication of solar powered and electricity backup vegetable seed dryer. • Evaluation of technical and economic performance of dryer for producing quality vegetable seeds. • To test and demonstrate the dryer in the farmers' fields and	Gazipur and Jashore

Sl. No.	Research Title	Objective (s)	Location
		• To disseminate the dryer among the seed growers and traders through training, field demonstration, workshop and print media.	
1405.	Development of cost-effective, intensified and sustainable Recirculating Aquaculture System (RAS) in Bangladesh	• To develop a cost-effective RAS using locally available resources. • To assess efficiency of RAS to maintain water quality parameters, solid removal and biofilter system and • To develop business model for RAS system.	Gazipur
1406.	Adaptive trial of BARI developed agricultural machinery for crop production in the coastal areas of Bangladesh	• Evaluation of the performance of BARI developed machinery for crop establishment in coastal area and • Dissemination of these machinery in coastal areas.	Patuakhali Barguna Bhola Satkhira Noakhali and Lakshmipur
POST HARVEST TECHNOLOGY DIVISION			
1407.	Effects of frying temperature and time on physicochemical changes and shelf life of vacuum fried jackfruit chips	• To study the effect of different frying conditions such as temperature and time on the quality of vacuum fried jackfruit chips.	Gazipur
1408.	Optimization of processing parameter for producing quality vacuum fried banana chips	• To optimize the processing parameters such as frying temperature and time for producing quality vacuum fried banana chips.	Gazipur
1409.	Effect of sugar concentration on physicochemical properties, bioactive compounds and shelf life of osmotically dehydrated mango slices	• To investigate the effect of different sugar concentration on the nutritional quality and shelf life of osmotically dehydrated mango slices.	Gazipur
1410.	Physicochemical properties and shelf life of osmotically dehydrated jackfruit slices	• To investigate the osmo-dehydration ofjackfruit slices followed by hot air convective drying to obtain better quality dehydrated product.	Gazipur
1411.	Effect of drying on physicochemical properties, bioactive compounds and microstructure of jackfruit seed flour	• To investigate the effect of drying methods on the physicochemical properties, bioactive compounds, antioxidant properties and	Gazipur

Sl. No.	Research Title	Objective (s)	Location
		microstructure of jackfruit seed flour.	
1412.	Effect of cooking methods and oil on physicochemical, nutritional, minerals and bioactive compounds of leafy vegetables with the focus to dietary lifestyle	• To evaluate the effect of the two cooking methods and edible oils on the composition of nutritional, minerals and phytochemicals of the selected green leafy vegetable.	Gazipur
1413.	Effect of pineapple pomace on the development of peanut bar and their physicochemical and nutritional properties with consumer acceptance	• To develop pineapple pomace peanut bar by utilizing pineapple pomace for maximizing the use of pineapple fruits.	Gazipur
1414.	Effect of orange peel concentration on the development of sapota marmalade in terms of proximate and nutritional composition and consumer preferences	• To develop value added marmalade from sapota using different concentration of orange peel.	Gazipur
1415.	Effect of steam blanching and cooking oils on physicochemical, nutritional, minerals and bioactive compounds of mixed vegetables with the focus to dietary lifestyle	• To compare the cooking oil effect on physicochemical, nutritional, minerals and phytochemical compounds and • To compare the results obtained from this study with the results of staple food of rice, wheat bread (roti) and oats.	Gazipur
1416.	Kinetics of dehydration and appreciation of the physicochemical properties of osmo-dehydrated plum	• To find out the effect of processing variables on the dehydration kinetics of plum along with the assessment of the physicochemical and rehydration properties of the osmo-dehydrated plum produced from fresh plum.	Gazipur
1417.	Study on physico-chemical characteristics of plum during preservationat different concentrations of sodium chloride	• To process and preserve fresh plum using various concentration of sodium chloride • To investigate the shelf life of plum with quality concern in an ambient condition.	Gazipur
1418.	Effect of various combinations of sodium chloride and sucrose concentrations on the quality of	• To find out optimum combinations of sodium chloride and sucrose for plum pickle and	Gazipur

Sl. No.	Research Title	Objective (s)	Location
	plum pickle during storage	• To determine the nutritional quality and microbial growth of fresh and stored pickle.	
1419.	Effects of various sucrose concentrations on the quality of plum chutney during storage	• To find out optimal formulation of plum chutney and examine the shelf life of the prepared chutney.	Gazipur
1420.	Effect of pretreatments and storage temperatures on the physico-chemical parameters and quality of plum	• To find out the effect of pre-treatments and temperatures on quality of plum to identify the shelf life.	Gazipur
1421.	Changes in the quality characteristics during storage of plum jam and its optimal preparation conditions	• To prepare and standardize plum jam and • To analyze the quality characteristics of prepared jam at various concentrations of sugar.	Gazipur
1422.	Effect of different fruit juice on the physicochemical properties, bioactive compounds and shelf life of jackfruit leather	• To prepare jackfruit leather using lemon and tamarind juice to reduce the strong jackfruit flavor.	Gazipur
1423.	Baseline survey on existing hazardous agents in fresh cut fruits and salad vegetables used in street vendor, hotels and restaurant at selected locations in Bangladesh	• To generate information on existing status of fresh-cut fruits and salad vegetables from processing to marketing for measuring the sanitation level of the street food vendor, hotels and restaurants during directly serving fresh-cut fruits and salad vegetables to the customers.	Bogra Gazipur and Dhaka
1424.	Determination of hazards in fresh-cut fruits and salad vegetables used in street food vendor, hotels and restaurant at selected locations in Bangladesh	• To get baseline data on microbial load of selected fresh-cut fruits and salad vegetables from restaurant to street vendor level and to compare the microbial load with the detectable range.	Bogra Gazipur and Dhaka
1425.	Effect of different sanitizer on physicochemical, microbiological load and shelf life of spinach	• To evaluate the effect of different sanitizer on physicochemical, microbial load and shelf life of spinach during storage in refrigerator.	Gazipur
1426.	Hands on training program for dissemination of postharvest handling, processing, preservation and packaging	• Creation of income generation scope for the rural poor people with a view to alleviate poverty and	Khagrachari Tangail Gazipur Barishal and

Sl. No.	Research Title	Objective (s)	Location
	technologies of crops	• Dissemination of matured technologies on postharvest handling, packaging, processing, and preservation at different levels of end users.	Rajshahi
SEED TECHNOLOGY DIVISION			
1427.	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.	Gazipur
1428.	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.	Gazipur
1429.	Effect of vermicompost stimulated integrated nutrient management on seed yield and quality of onion	• To find out a suitable vermicompost based integrated nutrient management for quality seed production of onion.	Magura (RPRC) and Rajbari, Dinajpur (ARS)
1430.	Effect of GA_3 on seed yield of Garden pea	• To evaluate the impact of GA_3on growth, seed yield and quality of Garden pea.	Gazipur
1431.	Effect of pre-sowing invigoration seed treatment with micronutrients on mother bulb yield of onion	• To examine the effect of seed invigoration treatment with different concentration of micronutrients on mother bulb yield of onion.	Gazipur
1432.	Improving field emergence performance of soybean by sand matrix priming	• To examine the effect of sand matrix priming on field emergence performance of soybean.	Gazipur
1433.	Effect of Fermentation duration on Seed Quality of Bt Brinjal	• To find out the proper fermentation duration on quality seed production of Bt brinjal.	Gazipur
1434.	Influence of fruit positions and fruit retention loads on seed quality of okra	• To identify the best fruit position and fruit retention load for harvesting vigorous and quality seeds of okra.	Gazipur
1435.	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.	Gazipur and Takurgaon (ARS)
1436.	Assessment of seed quality of	• To study certain changes	Gazipur

Sl. No.	Research Title	Objective (s)	Location
	groundnut through accelerated aging method	associated with loss of viability during accelerated ageing of groundnut and • To predict duration of groundnut seed storability in storage.	
1437.	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 and • To find out the effective seed treatment for controlling seed borne fungi in seed storage of capsicum.	Gazipur
1438.	Influence of chemicals and crude plant materials as pre and post-storage seed quality of onion seed	• To find out the suitable pre-storage seed treatment to minimize the loss of vigor and viability of onion seeds during storage.	Gazipur
1439.	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.	Gazipur
1440.	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 and • To predict the longevity of sesame seed in storage.	Gazipur
1441.	Documentation of indigenous storage practices of pulse seed	• For documentation of pulse seed storage method (farmers practice) and • To find out the suitable and more effective indigenous storage practice of pulse seed.	Iswurdi,Pabna Madaripur Faridpur Jessore Barishal and Patuakhali
1442.	Effect of after ripening period and drying methods on seed quality of bitter gourd	• To identify the appropriate after ripening period along with drying method for better seed quality of bitter gourd.	Gazipur
1443.	Effect of plant spacing and fertilizer dose on seed yield and quality of onion	• To identify a suitable plant spacing along with fertilizer dose for higher seed yield with better seed quality of onion.	Gazipur
1444.	Effect of seed storage condition and packaging materials on seed quality of onion seeds	• To know the effect of seed storage condition on seed	Gazipur

Sl. No.	Research Title	Objective (s)	Location
		quality of onion and • To know the effect of seed storage medium on seed quality of onion.	
1445.	Quality seed production of onion as influenced by GA_3	• To observe the effect of plant growth regulators on growth, yield and quality seed production of onion and • To find out the suitable growth regulators and its concentrations for better growth, yield and quality seed production of onion.	Gazipur
1446.	Effect of lateral vines removal on seed yield and quality of bottle gourd	• To assess the removal of lateral vines for quality seed production of bitter gourd.	Gazipur
1447.	Effect of GA_3 and time of application on seed yield and quality of soybean	• To identify the appropriate appropriate dose and time of application of GA_3	Gazipur
1448.	Impact of Foliar Boron Sprays on Seed Yield and Seed Quality of Capsicum	• To find out optimum dose of Boron spray for getting higher seed yield and quality seed of Capsicum.	Gazipur
1449.	Seed production of BARI Hybrid Begun	• To produce quality seed of BARI Hybrid Begun.	Gazipur
1450.	Breeder seed production of onion	• To produce quality seed of onion.	Gazipur
1451.	Quality seed production of garden pea	• To produce better quality seed of garden pea.	Gazipur
1452.	Quality seed production of mungbean	• To produce quality seed of mungbean.	Gazipur
BIO-TECHNOLOGY DIVISION			
1453.	Standardization of micropropagation protocol for enhancing large-scale production of BARI released strawberry varieties	• To develop a suitable protocol for rapid multiplication of BARI released strawberry varieties.	Gazipur
1454.	Large-scale multiplication of BARI released banana varieties through tissue culture	• To produce large number of disease free propagating materials for BARI released banana varieties.	Gazipur
1455.	Development of *in vitro* propagation protocol for gerbera	• To develop a suitable *in vitro* protocolof gerbera for large-scale multiplication.	Gazipur

Sl. No.	Research Title	Objective (s)	Location
1456.	*In vitro* regeneration of papaya (*Carica papaya* L.)	• To develop an efficient regeneration protocol of papaya for future transformation work.	Gazipur
1457.	*In vitro* regeneration of soybean (*Glycine max* L.)	• To develop an *in vitro* regeneration protocol of soybean.	Gazipur
1458.	Development of an efficient *invitro* regeneration protocol for BARI mungbean varieties	• To develop a reproducible *invitro* plant regeneration protocol of BARI mungbean varieties for future transformation work.	Gazipur
1459.	Micropropagation of date palm (*Phoenix dactylifera* L.)	• To develop an effective micropropagation protocol in date palm.	Gazipur
1460.	Rescue of Amritsagar banana from extinction through biotechnological approaches	• Collection and *in vitro* propagation of Amritsagar banana variety and • Large-scale propagation through tissue culture to prevent the extinction of Amritsagar banana variety and to reintroduce its cultivation at farmers' level.	Gazipur
1461.	PCR-based detection and characterization of papaya viruses in Bangladesh	• Diagnosis and characterization of papaya viruses prevailing in Bangladesh using advanced molecular techniques and • Generating information for developing virus resistant transgenic papaya.	Gazipur
1462.	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 and • To observe the comparative performance of BARI Bt eggplant varieties and their corresponding non-Bt eggplant varieties on artificial inoculation of bacterial wilt pathogen	Gazipur
1463.	Collection and identification of germplasm of cultivated crop and wild species for drought and salinity stress tolerance	• To find out drought tolerant germplasm of cultivated crop and wild species and • To find out salinity tolerant germplasm of cultivated cropand wild species.	Gazipur
1464.	Transformation of tomato for broad-spectrum resistance	• Construction of appropriate plasmid vectors for virus derived	Gazipur

Sl. No.	Research Title	Objective (s)	Location
	against leaf curl viruses	resistance against ToLCV and • Transformation of tomato plants with vectors harboring cloned virus sequences.	
1465.	Exploring the development of gametophyte–mediated genetic transformation systems in crop plants	• Exploring gametophyte-mediated genetic transformation systems in model plants and • Application of gametophyte-mediated genetic transformation systems in crop plants.	Gazipur
1466.	Validation trial of tissue cultured BARI Strawberry-2 plantlets under field condition	• To evaluate the field performance of tissue cultured BARI Strawberry-2plantletsraised from tissue culture.	Gazipur
1467.	Sustaining Bt eggplant in Bangladesh by implementing effective stewardship	• To sustain the first GE crop Bt brinjal in the long run.	Gazipur
1468.	Contained trial of late blight resistant transgenic 3R-gene potato	• To develop late blight resistant transgenic 3R-gene potato varieties in Bangladesh.	Gazipur
PLANT PHYSIOLOGY DIVISION			
1469.	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 and • To find out optimum dose of K and source.	Gazipur
1470.	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.	Gazipur
1471.	Induction of seed dormancy in groundnut by foliar application of growth regulators	• To find out suitable growth regulator and optimum dose for dormancy induction and • To inhibit sprouting of seeds in field at maturity.	Gazipur
1472.	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.	Gazipur
1473.	Screening of brinjal genotypes against salinity at seedling stage	• To identify the salt-tolerant genotype(s) based on seedling traits.	Gazipur

Sl. No.	Research Title	Objective (s)	Location
1474.	Screening of sweet-pepper advance lines against salinity at seedling stage	• To identify the salt-tolerant genotype(s) based on seedling traits.	Gazipur
1475.	Screening of mungbean genotypes against salinity	• To find out saline tolerant Mungbean genotype(s).	Gazipur
1476.	Dormancy breakdown and germination acceleration of BARI Alu-62 through GA3 and KNO3 application	• To observe the effect of dormancy breakdown and germination acceleration of BARI Alu-62.	Gazipur
1477.	Phenology, growth and yield of chickpea as influenced by sowing dates	• To generate basic data for crop model (DSSAT/APSIM).	Gazipur
1478.	Screening of linseed genotypes against drought stress	• To select drought tolerant linseed genotypes (s) for growing in drought prone areas.	Gazipur
1479.	Morpho-physiological evaluation of selected tomato varieties under drought condition at early flowering stage	• To select drought tolerant tomato variety(s) and • To evaluate the morpho-physiological responses of tomato under drought stress.	Gazipur
1480.	Phytochemicals accumulation in Bt begun cultivar at variable Planting time	• To quantify different phytochemicals concentrations at various planting time.	Gazipur
1481.	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.	Gazipur
1482.	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.	Gazipur
1483.	Evaluation of selected grasspea genotypes against salinity in coastal region	• To find out saline tolerant Grass pea genotype(s).	Satkhira (ARS), Dumuria/ Dacope, Khulna
1484.	Screening of sunflower genotype under excess moisture condition	• To find out waterlog tolerant sunflower genotype.	Gazipur
1485.	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.	Gazipur
1486.	Novel Bacillus 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	Gazipur (PPD)

Sl. No.	Research Title	Objective (s)	Location
		levels under influence of Y007.	
VERTEBRATE PEST DIVISION			
1487.	Evaluation of some plant oils as repellent against rodents	• To find out an effective rodent repellent to minimize crop losses due to rodents.	Gazipur
1488.	Modification and evaluation of indigenous trap for controlling field rat	• To develop highly effective eco-friendly device to control the rodent pest	Gazipur
1489.	Evaluation of some wrapping materials for poison baiting inside the burrow	• To find out the highly effective wrapping material for poison baiting inside the burrow	Gazipur
1490.	Comparative efficacy of different traps (live, kill and gopher) for controlling rodents	• To evaluate the success of different traps for controlling rats and • To find out the suitable trap for different condition for capturing rats	Gazipur and Dinajpur
1491.	Survey on squirrel damage in different fruits and vegetables in selected areas of Bangladesh	• To understand the status of squirrel as a pest of fruits and vegetables, their damage severity and control measures by farmers against squirrel.	Rajbari and Cox's Bazar
1492.	Efficacy of netting against pest bird's management and bird diversity in sunflower	• To protect sunflower from pest birds using nylon netting and • To document the bird species composition and diversity in sunflower field.	Gazipur
1493.	Controlling of bird pests in sunflower crop using different repellent tools at coastal areas of Bangladesh	• To find out the appropriate repellent options for sunflower production and • To enhance production of the farmers at coastal areas of Bangladesh.	Patuakhali
1494.	Local people perception and knowledge about owls and their conservation implications in three districts of Bangladesh	• To know the local people knowledge, perception and attitude about owl and their way of conservation.	Gazipur Rajshahi and Jashore
1495.	Relative abundance and documentation of available owl species in Bangladesh	• To know the local people knowledge, perception and attitude about owl and their way of conservation.	Gazipur Rajshahi and Barishal
1496.	Diet of barn owl, Tyto alba and spotted owlet, Athena brama regurgitated pellets at locations	• To know the dietary composition of Barn owl and Spotted Owlet around their nesting and roosting	Gazipur and Rajshahi

Sl. No.	Research Title	Objective (s)	Location
	of Gazipur and Rajshahi	sites.	
1497.	Assessment of rat damage surrounding the watch tower areas and nest box occupation by owl	• to assessed the rat damage around the watching tower and the effectiveness of nest box for owl occupation.	Gazipur and Rajshahi
1498.	Efficacy of Commando, Zill phosphide and Zero phosphide for controlling rats	• to assessed the rat damage around the watching tower and the effectiveness of nest box for owl occupation.	Gazipur and Dinajpur
AGRICULTURAL ECONOMICS DIVISION			
1499.	Socio-economic study of lentil cultivation in some selected areas of Bangladesh	• To know the farm-level adoption of improved lentil varieties and to explore the factors of adoption of improved lentil varieties at the farm level • To measure the profitability and comparative advantage of lentil production and • To explore the socio-economic constraints to lentil production and to make policy recommendations for higher adoption of the improved lentil varieties.	Faridpur Magura Kushtia Jhenaidah Manikgonj and Sirajganj
1500.	Baseline survey for smallholder agricultural competitiveness project (SACP) in Southern region of Bangladesh	• To know the present status of production, processing and marketing of selected HVCs at farm level • To document some baseline data and information for assessing the impacts of BARI technology adoption on farmers' income and livelihood and • To explore the constraints and opportunities of producing demand led HVCs production, processing and marketing under changing climate condition.	Shatkhira Bagarhat Pirojpu Jhalokati Patuakhali Pirojpur Barguna Noakhali Bhola Chattogram and Feni
1501.	Financial profitability and constraints to the production, processing and marketing of mungbean seed in some selected areas of Bangladesh	• To determine socioeconomic information of the mungbean farmers • To find out financial profitability in the mungbean seed production • To estimate effect of inputs on the yield of mungbean seed	Jhalokathi and Barishal

Sl. No.	Research Title	Objective (s)	Location
		production and • To identify the constraints in the mungbean seed production, processing and marketing as well as to suggest some policy recommendation.	
1502.	Profitability and varietal adoption of field pea in some selected areas of Bangladesh	• To know the status of varietal adoption of field pea at the farm level • To estimate the financial and economic profitability of field pea • To explore the problems of field pea cultivation and • To suggest some policy guidelines for further improvement of the crop.	Pabna Jashore and Gopalganj
1503.	Adoption and profitability of BARI chilli varieties in some selected areas of Bangladesh	• To know the status of adoption of BARI Chilli varieties and their management technologies at farm leve • To estimate the cost and return of cultivating Chili at farm level • To identify the problems of chili cultivation and • To make some recommendations for higher adoption of BARI chili varieties.	Kishoreganj and Mymensingh
1504.	Socioeconomic study on local cultivar of brinjal and chilli in Chattogram district	• To document socioeconomic and contextual information of the growers • To estimate the input use, productivity, and profitability of those cultivars • To know the perceptions of farmers and consumers to those cultivars and • To identify the production problems and opportunities to develop some new varieties from those cultivars.	Chattogram
1505.	Socioeconomic analysis of exotic hybrid bitter gourd cultivation in Chattogram district	• To document the socioeconomic profile of sample bitter gourd farmers • To estimate the input use,	Chattogram

Sl. No.	Research Title	Objective (s)	Location
		productivity, and profitability of hybrid bitter gourd cultivation and • To know the farmers' perception about the exotic hybrid and BARI-developed bitter gourd cultivation.	
1506.	Assessment of agricultural market for the high value crops of smallholder farmers under SACP in Southern areas of Bangladesh	• To develop value chain map and estimate the value addition by different market actors of selected HVC • To address the value addition by different market actors of selected HVCs • To assess and mapping service market of value chain actors involved in each of the surveyed HVCs • To assess value chain governance and • To identify the positive and negative sides of each of the value chain for policy intervention	Shatkhira Bagarhat Pirojpur Jhalokati Patuakhali Pirojpur Barguna Noakhali Bhola Chattogram and Feni
1507.	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.	Khagrachori
1508.	Production and marketing system of different flowers in selected areas of Jashore district	• To find out the production technologies involved in the flower cultivation • To estimate the cost and return of different flowers cultivation • To know the marketing system of flower marketing and estimate the costs and margins at different levels and	Jashore

Sl. No.	Research Title	Objective (s)	Location
		• To find out the problems of flowers production and marketing in the study areas.	
1509.	Gender-specific perception to climate variability, productivity and agricultural adaptation strategies in salinity intrusion coastal areas of Bangladesh: an empirical investigation of watermelon cultivation	• To assess the perceptions on climate change risk • To evaluate the major adaptation strategies being commonly undertaken by farmers in response to the effect of climate change, and input output relationship of watermelon cultivation • To determine the major factors that influence farmers' adoption of climate change adaptation strategies and • To estimate the impact of climate change adaptation strategies on watermelon yield and household income of project beneficiaries and non-beneficiaries of watermelon household.	Khulna
1510.	Impact of climate change on crop farming in selected coastal region of Bangladesh	• To determine the economic impacts of climate change on crop farming and • To forecast the impact of climate change on crop farming in the selected coastal zone of Bangladesh.	Khulna Bagherhat and Satkhira
1511.	Contribution of nutrition garden to cope with COVID-19situation through ensuring food and nutritional security	• To explore the present cultivation practices of nutrition gardening • To evaluate and compare the consumption and nutritional status of the households with garden and without garden and • To assess the effect of nutrition gardens on household food security status.	Pabna and Tangail
AGRICULTURAL STATISTICS AND INFORMATION & COMMUNICATION TECHNOLOGY (ASICT)			
Agro-Environmental remote sensing and modeling			
1512.	Characterising dry season's agricultural landuse in northwest	• Assess spatiotemporal dynamics of land cover and land use	Northwest region of

Sl. No.	Research Title	Objective (s)	Location
	Bangladesh: spatial dynamics and water use	• Assess spatiotemporal dynamics of cropping systems (type, extent) and • Assess the water use of dry season irrigation using remote sensing.	Bangladesh
1513.	Assessment of cropping patterns for sustainable intensification in drought prone ecosystem using remote sensing and geospatial modeling	• To develop dry season's crop types maps in the study areas using remote sensing image analysis • To develop agro-environmental resources and constraints geo-database from remote sensing image analysis and secondary data acquisition and • To suggest location specific suitable cropping patterns for sustainable intensification by geospatial modeling.	Rajshahi, Chapai-nawabgonj and Naogaon (High Barind Tract)
1514.	Satellites and ICT based location and crop specific irrigation advisory system for growing more with less water	• To develop a satellite and ICT based crop and location-specific irrigation advisory generation and dissemination system for Bangladesh conditions; • To optimize irrigation advisory information for effective understanding by the farmers. • To evaluate farmers' benefit of usability of the developed system over conventional methods.	Rangpur Rajshahi Chapai-nawabgonj, Kustia and Pabna (OFRD stations / sub-stations)
1515.	Assessment of water recession dynamics in selected haors for dry season cropping intensification using spatial data	• To monitor long-term dynamics of seasonal water recession and land use patterns in selected haor using satellite imageries • To assess the impact of extreme flooding on dry-season crop-production using satellite imageries and • To outline current fallow-lands along with its utilization strategies using geospatial modeling	Selected haors of the northeast region
1516.	Spatio-temporal assessment of cultivable land in selected C*har-*	• To delineate char-lands using satellite data	Selected Char-lands of the

Sl. No.	Research Title	Objective (s)	Location
	lands of the northwestern Bangladesh	• To determine the dynamics of land use in char-lands using satellite data and • To identify the present status of cultivable lands for agricultural expansion using satellite images.	northern Bangladesh
1517.	Non-destructive determination of Mango maturity using hyperspectral reflectance spectroscopy	• To establish relationship of spectral reflectances of mango fruits with its major physico-chemical parameters and • To predict the mango maturity conditions from hyperspectral remote sensing reflectance data.	Gazipur (ASICT Division)
1518.	Early detection of leaf physiological and chemical traits to salt stress in wheat using hyperspectral reflectance spectroscopy	• To determine the influence of soil salinity stress on leaf physiological and chemical properties of Wheat using VNIR spectroscopy and • To evaluate the usefulness of VNIR hyperspectral data to estimate leaf physiological and chemical properties	Gazipur (ASICT and PPD)
Agricultural Statistics			
1519.	Determinants of Household Food Security in Rural Bangladesh: An Imperial Analysis of Farm Level Data	• To explore the present status of food security in Bangladesh based on availability, accessibility and utilization of food • To identify the factors influencing food security/ insecurity in Bangladesh • To establish an econometric time series model to forecast the future food security status and • To formulate policy guidelines/ suggestions	Gazipur
1520.	Data science and analytic technology in agricultural production of Bangladesh.	• To improve the real-time agricultural forecast for supporting information system.	Gazipur (ASICT)
Crop bio informatics and functional genomics			
1521.	Genome-wide analysis of DCL, AGO, and RDR gene families in Brassica species (Brassica rapa L.) using integrated bioinformatic approaches	• To identify gene ontologies (GO) of BrDCL, BrAGO and BrRDR. • To analyse associated transcription components with	Gazipur

Sl. No.	Research Title	Objective (s)	Location
		BrDCL, BrAGO, and BrRDR and • To predict three-dimensional (3-D) protein structure an	
REGIONAL AGRICULTURAL RESEARCH STATION,JAMALPUR			
1522.	Evaluation of mango germplasm at Jamalpur region	• To select suitable mango germplasm	Jamalpur
1523.	Evaluation of ber germplasm	• To release a new soury sweet ber variety	Jamalpur
1524.	Evaluation of pummelo germplasm	• To select promising line(s) to develop as variety	Jamalpur
1525.	Evaluation of lime germplasm	• To release a new export quality lime variety	Jamalpur
1526.	Evaluation of bullock's heart germplasm	• To release a new variety	Jamalpur
1527.	Evaluation of water chestnut germplasm	• To release a new variety for commercial cultivation	Jamalpur
1528.	IN-SITU evaluation of bael germplasm	• To release a new variety	Jamalpur
1529.	Intercropping of winter vegetables in mango orchard	• To find out the suitability of winter vegetables in mango orchard as intercrop.	Jamalpur
1530.	Standerdization of soil media for roof gardening of guava	• To maximize the yield of a rooftop garden as well as ensure family nutrition of the urban people.	Jamalpur
1531.	Standardization of soil media for roof top gardening of dragon fruit	• To maximize the yield of a rooftop garden as well as ensure family nutrition of the urban people.	Jamalpur
1532.	Effect of stem prunning on the growth and yield of dragon fruit	• To get a good canopy and with good yield of Dragon fruit.	Jamalpur
1533.	Effect of bagging and fruit thinning on the yield and quality of mango	• To be carried out for getting safe and good quality mango production	Jamalpur
1534.	Effect of split application of fertilizer on the harvesting time, yield and quality of ber	• To study the effect of fertilizer on growth, yield and quality of ber.	Jamalpur
1535.	Maintenance of different fruit germplasm at Jamalpur	• Existing germplasm of vegetatively propagated crops are being maintained in field gene bank.	Jamalpur
1536.	Propagules production and	• To distribute among the farmers	Jamalpur

Sl. No.	Research Title	Objective (s)	Location
	distribution of different fruits	and growers.	
1537.	Advanced yield trial of carrot lines	• To release seed prducing OP carrot variety.	Jamalpur
1538.	Evaluation of pumpkin lines	• To release a new variety.	Jamalpur
1539.	Advance yield trial of egg plant lines for winter at Jamalpur region	• To release a new variety.	Jamalpur
1540.	Evaluation of eggplant lines for summer at Jamalpur region	• To release a new summer egg plant variety.	Jamalpur
1541.	Advance yield trial of ash gourd lines	• To release a new variety.	Jamalpur
1542.	Evaluation of sponge gourd lines in summer	• To release a new summer variety.	Jamalpur
1543.	Advanced yield trial of selected hyacinth bean lines	• To release a new variety.	Jamalpur
1544.	Evaluation of stem amaranth lines at Jamalpur region	• To release a new variety.	Jamalpur
1545.	Evaluation of teasle gourd lines in summer at Jamalpur region	• To release a new summer variety.	Jamalpur
1546.	Production of selected vegetables through automatic hydroponic system	• To reduce the labour cost in hydroponics culture system.	Jamalpur
1547.	Demonstration trial of hydroponic culture	• To popularise the hydroponics culture system in Jamalpur region.	Jamalpur
1548.	Breeder seed production and distribution of different vegetable crops	• To distribute the seeds among the farmers ang growers.	Jamalpur
1549.	Collection and maintenance of cactus and succulents	• To collect and maintain Cactus and Succulents for decorative and commercial purposes.	Jamalpur
1550.	Performance of BARI developed gladiolus varieties	• To evaluate the performance of BARI developed gladiolus varieties under Jamalpur condition.	Jamalpur
1551.	Performance of BARI Released Sweet Potato Variety In Charland	• To find out the suitable varieties for charland of Jamalpur.	Jamalpur
1552.	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

Sl. No.	Research Title	Objective (s)	Location
1553.	Seed / Propagule Multiplication and Distribution, TCRC, RARS, Jamalpur	• To maintain the purity and increase the breeder seed stock of an advance line of different tuber crops for future use.	Jamalpur
1554.	Hybridization in *Brassica napus*	• To develop new varieties of crops having higher yield.	Jamalpur
1555.	Observation yield trial of *Brassica napus*	• To find out the high yield potential genotypes of this species.	Jamalpur
1556.	Observation yield trial of *Brassica rapa* l (set-01)	• To developing a short durable high yielding variety.	Jamalpur
1557.	Breeder seed Production	• To distribute among farmers, growers, NGO, DAE and BADC.	Jamalpur
1558.	Seed bulb production of onion	• To maintain the purity and increase the bulb stock of variety of onion (BARI Piaz-4) for future use.	Jamalpur
1559.	Breeder seed production of onion	• To maintain the purity and increase the breeder seed stock of variety of onion (BARI Piaz-4) for future use.	Jamalpur
1560.	Breeder seed production of black cumin	• To distribute among farmers, growers, NGO, DAE and BADC.	Jamalpur
1561.	Characterization of chilli germplasm	• To identify desirable genotypes of chilli for breeding programs.	Jamalpur
1562.	Evaluation of foxtail millet germplasm	• To develop new varieties of crops having higher yield.	Jamalpur
1563.	Performance yield trial of pearl millets	• To develop new varieties of crops having higher yield.	Jamalpur
1564.	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
1565.	Breeder seed production of foxtail millet	• To distribute among farmers, growers, NGO, DAE and BADC.	Jamalpur
1566.	Breeder seed production of barley	• To distribute among farmers, growers, NGO, DAE and BADC.	Jamalpur
1567.	Breeder seed production of	• To distribute among farmers,	Jamalpur

Sl. No.	Research Title	Objective (s)	Location
	sorghum variety	growers, NGO, DAE and BADC.	
1568.	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.	Jamalpur
1569.	Effect of variety and sowing dates of year round chilli production	• To find out the suitable variety and sowing dates of year round chilli production.	Jamalpur
1570.	Effect of planting time and variety on taro	• To find out suitable planting time and variety on taro.	Jamalpur
1571.	Performance of relay bitter gourd with chilli + lalsha intercropping at medium high land without treilis	• To observe the performance of Bittergourd and lalshak as intercropping and relay cropping with chilli at medium high land under AEZ-9.	Jamalpur
1572.	Performance of relay snake gourd in brinjal +onion intercropping at medium high land without treilis	• To observe the performance of onion and snake gourd as intercropping and relay cropping with brinjal at medium high land under AEZ-9.	Jamalpur
1573.	Performance of relay bitter gourd in chilli +onion intercropping at medium high land without treilis	• To observe the performance of onion and bitter gourd as intercropping and relay cropping with chilli at medium high land under AEZ-9.	Jamalpur
1574.	Effect of kitchen waste compost on soil carbon accumulation and tomato yield	• To explore the possibility of bioconversion of kitchen wastes to fertilizer that will helps to improve the yield, restore the soil fertility.	Jamalpur
1575.	Effect of vermicompost on groundnut yield and soil fertility in charland	• To optimize fertilizer management to maximize yields and quality while reducing the use of inorganic fertilizer and maintaining good-quality soil.	Jamalpur
1576.	Application of vermiwash on growth and quality of brinjal	• To find out the influence of vermiwash on growth and yield parameters of brinjal plants.	Jamalpur
1577.	Application of rice straw mulch for soil moisture conservation in chilli	• To popularize rice straw mulch technology for soil moisture conservation in chilli production.	Jamalpur
1578.	Production program of vermicompost	• To use in research field and distribute to some farmers	Jamalpur

Sl. No.	Research Title	Objective (s)	Location
1579.	Production program of biochar	• To popularizes the use in research field and distribute to some farmers	Jamalpur
1580.	Nutrient management through organic manuring and biofertilizers on the yield of onion and soil health improvement	• To study the effect of bio-fertilizer (AMF) and tricho compost on yield of onion and reduce the chemical fertilizer in onion cultivation.	Jamalpur
1581.	Nutrient management through tricho compost on the growth and yield of garlic in Jamalpur	• To find out the IPNS based nutrient management for garlic production.	Jamalpur
1582.	Development of application methods of potassium on panikachu	• To evaluate the relative cost and return in Aroid production as influenced by different application methods of Potassium fertilizers.	Jamalpur
1583.	Changes of biochar and soil properties after 5-years of *in-situ* aging under field conditions	• To investigate the changes of biochar and its effect on soil properties after a certain long time of soil amendment and accelerate the sustainable carbon sequestration in to soil.	Jamalpur
1584.	Application of biochar as a soil amendment for quality tuber production of potato and soil health improvement	• To take an effective effort to produce this crops soil disease free in a eco-friendly measure coupled with soil health improvement.	Jamalpur
1585.	Sustainable substrate composition as influenced by biochar amendment on crop yield in an extensive green roof	• To assess the improvement of soil- substrate properties and crop yield in an extensive green roof.	Jamalpur
1586.	Development of biorational management approach against major insect pest complex in chilli	• To evaluate the efficacy of some IPM management tactic for controlling the major insect pests complex in chilli.	Jamalpur
1587.	Development of biorational management approach against major insect pest complex of sweet gourd	• To develop a bio-rational based IPM package to manage the insect pest complex of sweet gourd.	Jamalpur
1588.	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	Jamalpur

Sl. No.	Research Title	Objective (s)	Location
		system.	
1589.	Effect of tillage system and crop residue retention on soil carbon sequestration in wheat-mungbean-T. amon cropping system	• To observe 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
1590.	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
1591.	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			
1592.	Collection and evaluation of lime germplasm	• To evaluate the lime germplasm in Jashore region. • To develop variety of lime	Jashore (HRC)
1593.	Collection and evaluation of guava	• To Identify genotypes for the development of suitable variety.	Jashore (HRC)
1594.	Collection and evaluation of water chestnut	• To Identify genotypes for the development of suitable variety.	Jashore (RARS)
1595.	Collection and evaluation of jamun germplasm	• To find out superior genotypes of jamun germplasm for better yield with insect-pest resistant.	Jashore (HRC)
1596.	Collection and evaluation of local ber germplasm	• To select suitable ber varieties for different regions. • To conserve fruit genetic resources.	Jashore (HRC)
1597.	Collection and evaluation of sapota lines	• To release good quality superior sapota variety.	Jashore (HRC)
1598.	Collection and evaluation of Banana germplasm at RARS Jashore	• To see the yield potentiality of the germplasm.	Jashore (HRC)
1599.	Evaluation of blackberry germplasm at RARS Jashore	• To see the yield potentiality of the germplasm.	Jashore (HRC)

Sl. No.	Research Title	Objective (s)	Location
1600.	Collection and evaluation of dwarf coconut germplasm	• To find out the dwarf coconut germplasm for higher yield and quality.	Jashore (HRC))
1601.	Collection and evaluation of local mango germplasm in Jashore region	• To develop good quality local mango variety and to enrich the gene pool of mango.	Jashore (HRC)
1602.	Evaluation of custard apple germplasm	• To select superior lines of custard apple and • To conserve germplasm.	Jashore (HRC)
1603.	Integrated management of white fly and sooty mold in mango and guava in Jashore region	• To find out the most effective management technique against white fly and sooty mold attacking coconut and guava.	Jashore (HRC)
1604.	Seedling/sapling production of fruits and Bt-brinjal	• To increase seeds of modern varieties of fruits and Bt brinjal and • To supply seed to DAE, research divisions and other research organizations, NGOs, farmers etc.	Jashore (HRC)
1605.	Adaptation trial of BARI Bt-brinjal in Jashore region	• To find out the suitable Btbrinjal variety for Jashore region.	Jashore (HRC)
1606.	Effect of different management practices against fruit dropping of bottle gourds in Jashore region	• To find out the suitable management practices against fruit dropping of bottle gourds for improvement of yield.	Jashore (HRC)
1607.	*In-vitro* seed germination and seedling growth performance of mungbean genotypes under NaCl salt stress	• To evaluate the influence of salt stress on germination and seedling growth of mungbean genotypes with a view of understanding of the mechanisms and capability of salt tolerance in these genotypes.	Jashore (PRC)
1608.	Taxonomic diversity of weed flora in pulse crops growing field at Jashore region	• To make a complete documentation of weed flora grown in pulse crop growing field at Jashore.	Jashore (PRC)
1609.	Effect of Meteorological factors imposed by sowing dates on growth, yield and disease development of BARI Masur-6 in Jashore region	• To evaluate the effect of sowing dates on yield contributing characters, yield and SB disease development in BARI Masur-6 and • To correlate meterological data with soil born disease incidence	Jashore (PRC)

Sl. No.	Research Title	Objective (s)	Location
		of lentil in Jashore region	
1610.	Effect of long-term fertilization on crop productivity, soil properties and nutrient efficiency under conservation agriculture practice with in a Mustard-Boro-T. Aman cropping pattern	• To examine the long-term effects of chemical fertilization on yield productivity under conservation agriculture (CA) practice in the intensive rice-based cropping system in Jashore region • To examine the long-term effects of chemical fertilization on soil properties under CA practice and • To study the long-term effects of chemical fertilization on nutrient use efficiency under CA practice in the intensive rice-based cropping system.	Jashore (SSD)
1611.	Effect of foliar application of micro-nutrient on quality and yield of tomato	• To find out the dose of Zn,B and Mo suitable for foliar application and • To increase the quantity and quality of tomato production.	Jashore (SSD)
1612.	Survey and documentation of Rugose Spiraling Whitefly (RSW) attacking coconut tree in Jashore region	• To assess the present status of cocount rugose spiraling whitefly in Jashore region and • To documentation of coconut rugose spiraling whitefly in major coconut growing area in Jashore region.	Jashore Satkhira Khulna and Norail
1613.	Development of eco-friendly management approach against flea beetle attacking mustard	• To find out the most effective management option for flea beetle on cabbage and • To know the damage severity of the pest.	Jashore (Entomology)
1614.	Design and development of rain pipe irrigation system	• To design rain pipe irrigation system • To fabricate the designed irrigation system and • To evaluate the developed irrigation system for different crop establishment.	Jashore (RARS)
1615.	Design and development of semi automatic drip irrigation system for watering rooftop garden	• To design semi automatic drip irrigation system. • To fabricate the designed irrigation system and	Jashore (RARS)

Sl. No.	Research Title	Objective (s)	Location
		• To evaluate the developed irrigation system for crop establishment.	
1616.	Performance of cereal combine harvester on legume crops harvesting	• To evaluate performance of combine harvester on legume crops.	Jashore (RARS)
1617.	Adoption and profitability of BARI mustard varieties in some selected areas of south western region of Bangladesh	• To study the adoptions of BARI mustard varieties and their management technologies at farm level. • To estimate the input use pattern and economic profitability and • To estimate the contribution of different production factors.	Jashore Jhenaidah Magura Narail and Satkhira
1618.	Study on documentation, production and marketing system of different flowers cultivated at Godkhali union	• Documentation of different flowers cultivated at Godkhali union. • To assess the production system and profitability of different flowers. • To estimate the marketing system, marketing channel of different flower from Godkhali to other market and • To estimate the constraints of flowers production and marketing.	Godkhali, Jashore
1619.	Performance of field pea as relay cropping with T.aman rice	• To see the performance of field pea as relay crop with T. aman. • To increase the income of farmers.	Jhikargacha, Jessore and Tularampur, Narail (MLT)
REGIONAL AGRICULTURAL RESEARCH STATION, AKBARPUR, MOULVIBAZAR			
1620.	Effect of different sowing dates on growth and yield of garden pea at Moulvibazar	• To find out the suitable sowing time of this region for maximization of yield.	Akbarpur, Moulvibazar
1621.	Effect of different level of phosphorus on growth and yield of Garden pea varieties in Sylhet region	• To find out the optimum doses of P for garden peaand • Response of garden pea varieties to different doses of P fertilizers.	Akbarpur, Moulvibazar
1622.	Collection, evaluation and characterization of different genotypes of winter Hyacinth bean under high rain fall areas of north-eastern region of	• Winter hyacinth bean variety will be developed.	Akbarpur, Moulvibazar

Sl. No.	Research Title	Objective (s)	Location
	Bangladesh		
1623.	Effect of intercropping sweet gourd with dragon fruit in semi hilly Sylhet region	• To develop a cultivation technique for dragon-fruit grower in hilly and semi-hilly areas.	Akbarpur, Moulvibazar
1624.	Evaluation of off-season Jackfruit germplasm	• To develop new off-season Jackfruit variety.	Akbarpur, Moulvibazar
1625.	Evaluation of existing Ber germplasm at RARS, Akbarpur	• To develop a new ber variety, highly adapted in this soil and climatic condition.	Akbarpur, Moulvibazar
1626.	Evaluation of local mango germplasm	• To find out superior Mango genotypes to release as variety.	Akbarpur, Moulvibazar
1627.	Management practices to overcome fruit cracking of Mango var. BARIAam-3	• To develop technology to overcome fruit-cracking problem of mango.	Akbarpur, Moulvibazar
1628.	Performance of BARI released Potato varieties in Sylhet region	• To know performances of the newly released improved potato varieties.	Akbarpur, Moulvibazar
1629.	Adaptive trial with newly released Panikachu varieties	• To test the adaptability of the improved Panikachu varieties at Sylhet region.	Akbarpur, Moulvibazar
1630.	Performance of Mukhikachu varieties under Moulvibazar areas	• To know the performance of our mukhikachu varieties.	Akbarpur, Moulvibazar
1631.	Performance of BARI released Mustard varieties at Moulvibazar	• To know the performance of mustard at Moulvibazar.	Akbarpur, Moulvibazar
1632.	Effect of sowing dates on Sunflower at Moulvibazar	• To find out the optimum sowing date for obtaining maximum yield of sunflower.	Akbarpur, Moulvibazar
1633.	Varietal performance of Sesame in hilly and semi hilly areas of Moulvibazar	• To find out the suitable variety of Sesame for this region.	Akbarpur, Moulvibazar
REGIONAL AGRICULTURAL RESEARCH STATION,RAHMATPUR, BARISHAL			
1634.	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 and • To know the effect of different mulching materials on plant growth and yield potential of tomato crop.	Rahmatpur, Barishal
1635.	Impact of plant spacing on the	• To find the most suitable plant	Rahmatpur,

Sl. No.	Research Title	Objective (s)	Location
	growth, fruit quality and yield of okra in southern region of Bangladesh	spacing regime which would produce the higher yield of okra in the southern region of Bangladesh.	Barishal
1636.	Standardization of growing media of year-round vegetable production technique on rooftop	• To suggest suitable growth media and production packages of year-round rooftop fruit gardening.	Rahmatpur, Barishal
1637.	Effect of vermicompost on growth, yield and quality of sweet orange	• To study the effect of vermicompost on growth, morpho-physical attributes of sweet orange and • To study the effect of vermicompost on yield and quality attributes of sweet orange.	Rahmatpur, Barishal (Pomology)
1638.	Collection and evaluation of cowa germplasm	• To select the superior lines and • To identify suitable germplasm for higher yield and quality.	Rahmatpur, Barishal
1639.	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.	Rahmatpur, Barishal, Jhalokati and Pirojpur (Entomology)
1640.	Survey, monitoring, and documentation of major insect pests of betel leaf in southern region of Bangladesh	• Identification of insect pests attacking betel leaf. • Determination of damage severity of insect pests.	Rahmatpur, Barishal, Bhola, Jhalokati
1641.	First record of inflorescence caterpillar: Tirathaba spp. (Pyralidae: Lepidoptera) on betel nut in Bangladesh	• Betel nut (Areca catechu) is an economically important plantation crop in Bangladesh especially southern region of Bangladesh.	Rahmatpur, Barishal, Pirojpur and Bhola
1642.	Survey, monitoring, and documentation of major insect pests of coconut in southern region of Bangladesh	• To record the insect pests and documenting their incidence on coconut in southern region of Bangladesh	Rahmatpur, Barishal, Pirojpur and Bhola
1643.	Development of environment friendly management approach against coconut mite Acaceria gurreroni (Keifer) (Acari: Eriophyidae)	• To find out eco-friendly management practices against coconut mite.	Barishal Lubukhali, Patuakhali (RHRS)
1644.	Development of environment friendly management approach	• To find out eco-friendly management practices against	Barishal, Bhola

Sl. No.	Research Title	Objective (s)	Location
	against betel vine black fly, Aleurocanthus spp (Aleyrodidae: Hemiptera)	betel vine black fly.	
1645.	Development of eco-friendly management package against major insect pests of mungbean in southern region	• Developing environment friendly management package(s) of major insect pests of mungbean and • Producing toxic insecticide free mungbean.	Rahmatpur, Barishal
1646.	Survey, monitoring and documentation of major insect pests in vegetable and spices crops grown on floating bed	• To document the damage severity of insect pests attacking Cucumber, sweet gourd, okra, and Indian spinach grown on floating bed.	Barishal Pirojpur and Gopalgonj
1647.	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 and • To produce toxic synthetic chemical pesticide free cucurbits.	Barishal Pirojpur and Gopalganj
1648.	Development of bio-rational pest management package against major insect pests of okra grown on floating bed	• To develop appropriate strategy for managing the insect pest complex ofokra grown on floating bed.	Barishal Pirojpur and Gopalganj
1649.	Development of bio-rational management approach against thrips-mite complex of chili grown on floating bed	• To develop appropriate strategy for managing the thrips-mites complex infesting chilligrown on floating bed.	Barishal Pirojpur and Gopalganj
1650.	Survey of diseases of malta in southern region	• To identity the diseases of Malta and • To determine the severity of the diseases.	Barishal Pirojpur Jalkathi Gopalgonj and Sylhet (PPD)
1651.	Determination of transmission mechanismof okrayellow veinclearing mosaic virus (OKYVCMV) of okra	• To determine transmission mechanisms of OKYVCMV of Okra.	Rahmatpur, Barishal
1652.	Effect of micronutrient on cowpea in southern region of Bangladesh	• To examine the effect of micronutrient on relayed cowpea. • To increase the yield of cowpea in southern region of Bangladesh.	Rahmatpur, Barishal (Agronomy)

Sl. No.	Research Title	Objective (s)	Location
1653.	Effects of different rates of growth regulator (Gibberellic acid) on cowpea in southern region of Bangladesh	• To examine the effect of growth regulator (Gibberellic Acid) on cowpea. • To increase the yield of cowpea in southern region of Bangladesh	Rahmatpur, Barishal
1654.	Testing of fodder and seed yields performances of BARI released grass pea varieties	• To test the dual performances (both fodder and seed yields) of BARI released khesari varieties	Rahmatpur, Barishal
1655.	Integrated nutrient management for bitter gourd on floating bed cum trellis	• To develop nutrient management practice for bitter gourd and yard long bean on water hyacinth made floating bed and • To increase the yield of the vegetables under floating agriculture system.	Rahmatpur, Barishal
1656.	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 maximize the productivity as well as farmers income	Rahmatpur, Barishal
1657.	Effect of tillage and fertilizer doses on sunflower growth and yield in southern region of Bangladesh	• To reduce cost of cultivation and • To increase soil health through reducing soil erosion.	Rahmatpur, Barishal
1658.	weed control management in groundnut cultivation in rabi season	• To find the suitable method for controlling weeds in groundnut and • To find out low-cost management option for weed control.	Rahmatpur, Barishal
	Effect of seedling age on yield of transplanted sunflower under zero tillage condition in southern region of Bangladesh	• To find out the optimum age of sunflower seedling for getting higher yield under zero tillage condition in southern region of Bangladesh.	Rahmatpur, Barishal
1659.	Nutrient management for mustard as relay crop with T.aman rice under Ganges Tidal Floodplain	• To develop nutrient management package for mustard as relay crop with T.aman rice under Ganges Tidal Floodplain and • To increase the economic return of mustard.	Rahmatpur, Barishal
1660.	Performances of minor cereal crops under different tillage conditions in rice based	• To evaluate the performances of minor cereals under different tillage conditions in rice based	Rahmatpur, Barishal

Sl. No.	Research Title	Objective (s)	Location
	cropping systems in southern region of Bangladesh	cropping systems and • To increase the cropping intensity and economic return.	
1661.	Development of floating bed cum trellis (tidal model) for creeper vegetables cultivation under tidal flooded ecosystem of Bangladesh	• To develop floating bed cum trellis (Tidal model) for creeper vegetables cultivation under tidal flooded ecosystem of Bangladesh and • To reduce the use of water hyacinth for floating agriculture system.	Banaripara Barishal and / Nazirpur, Pirojpur
1662.	Integrated vegetables and fish cultivation through plastic drum based floating system in flooded ecosystem of Bangladesh	• To integrated vegetables and fishes under floating agriculture system and • To increase the total productivity and net return in flooded ecosystem through integrated vegetables and fish cultivation.	Rahmatpur, Barishal and Pirojpur
1663.	Sorjan based integrated farming systems research for increasing agricultural productivity 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 and • To increase agricultural productivity and profitability of sorjan systems through integration of crops, fishery, dairy, ducks and other enterprises.	Rahmatpur, Barishal
1664.	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) and • To improve the quality of shitalpati (cooling mat).	Nalcity, Jhalakati
1665.	Effects of different chemical treatments of murta cane on the quality of Shital Pati in Bangladesh	• To develop suitable chemical treatment/process of murta cane for improving the quality of shitalpati in Bangladesh.	Rahmatpur, Barishal and Nalcity, Jhalakati
1666.	Adaptation and fine-tuning of BARI zero-till seeder for expanding mungbean cultivation in wet-clay soil of coastal fallows	• To expand mechanized mugnbean production in excessively wet clay soil of coastal fallows	Patuakhali and Barguna (Agril. Eng.)

Sl. No.	Research Title	Objective (s)	Location
1667.	Effect of boron fertilization on lentil in Barishal region	• To find out the response of BARI Masur-8 to boron fertilizer and • To determine the optimum dose of boron for maximizing the yield of • BARI Masur-8.	Rahmatpur, Barishal (SSD)
1668.	Integrated nutrient management for chilli in the southern region of Bangladesh	• To find out efficacy of poultry manure with chemical fertilizer on chilli production and • To find out nutrient uptake as influenced by poultry manure.	Rahmatpur, Barishal
1669.	Integrated nutrient management for locally collected bitter gourd	• To find out the response of fertilizer on newly collected bitter gourd and • To develop nutrient management package for bitter gourd.	Rahmatpur, Barishal
1670.	Nutrient management of sesame in Barishal region	• To develop nutrient management package for sesame in this region and • To increase the yield of sesame through fertilizer management	Rahmatpur, Barishal
REGIONAL AGRICULTURAL RESEARCH STATION HATHHAZARI, CHATTOGRAM			
1671.	Regional yield trial of eggplant lines (purple) for winter	• To observe their yield potentialities and other performances.	Hathazari, Chattogram
1672.	Regional yield trial of eggplant lines (green) for winter	• To observe their yield potentialities and other performances.	Hathazari, Chattogram
1673.	Regional yield trial of selected brinjal hybrids (green)	• To study the performance of yield potentialities of these hybrid lines at different locations of Bangladesh and • To develop high yielding hybrid brinjal variety.	Hathazari, Chattogram
1674.	Regional yield trial of selected brinjal hybrids (purple)	• To observe the performance of yield potentiality at different locations of Bangladesh and to develop new hybrid brinjal variety.	Hathazari, Chattogram
1675.	Regional yield trial of winter bottle gourd lines	• To observe their yield potentialities. The present investigation is a part of that	Hathazari, Chattogram

Sl. No.	Research Title	Objective (s)	Location
		program.	
1676.	Regional yield trial of french bean lines (Set –I)	• To finding out suitable pole bean genotypes as a khaishya variety.	Hathazari, Chattogram
1677.	Regional yield trial of french bean lines	• To finding out suitable French bean genotypes as a khaishya variety.	Hathazari, Chattogram
1678.	Evaluation of local brinjal (potha begun) germplasm	• To observe their yield potentialities with wilt resistance and other performances.	Hathazari, Chattogram
1679.	Evaluation of local chilli (halda morich) germplasm	• To observe their yield potentialities with wilt resistance and other performances.	Hathazari, Chattogram
1680.	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
1681.	Intercropping of cauliflower with sweet gourd at different plant population	• To find out the cauliflower population suitable for intercropping with Sweet gourd.	Hathazari, Chattogram
1682.	Performance of legume vegetables intercropping with chilli	• To find out suitable crop combination for higher productivity and economic return.	Hathazari, Chattogram
1683.	Validation trial of *Bacillus* species and their EMOs for controlling bacterial wilting in eggplant	• To control bacterial wilt of BARI Bt begun 2 which is very susceptible eggplant variety.	Hathazari, Chattogram
1684.	Effect of bacterial fertilizer on yield in tomato	• Alternative control measure, biological agent or integrated agents of *Bacillus* sp. called EMOs, is being launched in Chattogram division.	Hathazari, Chattogram
1685.	Characterization of novel species for degradation of propiconazole fungicide in mango	• To find out the novel endophytic isolates, we highlighted only the endophytic *Bacillus* strains to degrade the propiconazole properties.	Hathazari, Chattogram
1686.	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
1687.	Socio-economic study on local cultivar of brinjal and chiili in Chattogram district	• To document socioeconomic and contextual information of the growers	Hathazari, Chattogram

Sl. No.	Research Title	Objective (s)	Location
		• To estimate input use, productivity and profitability of those cultivars and • To know the perceptions of farmers and consumers to those cultivars and • To identify the production problems and opportunities to develop a new variety of those cultivars.	
1688.	Socio-economic analysis of exotic hybrid bitter gourd cultivation in Chattogram district	• To document socioeconomic profile of sample farmers • To estimate input use, productivity and profitability of hybrid bitter gourd cultivation • To analyse the factors affecting the production of hybrid bitter gourd cultivation and • To know the farmers perception to the hybrid bitter gourd and BARI developed variety of Bitter gourd.	Hathazari, Chattogram
REGIONAL AGRICULTURAL RESEARCH STATION, BURIRHAT, RANGPUR			
1689.	Integrated nutrient management for Garlic – Maize -T. A*man* rice cropping pattern in Rangpur region	• To find out effective fertilizer dose for Garlic - Maize -T. Aman rice cropping pattern of Rangpur region.	Burirhat, Rangpur (RARS)
1690.	Integrated nutrient management on Garlic- T. Aus rice - T. Aman rice cropping pattern in Rangpur region	• To find out effective fertilizer dose for Garlic- T. Aus rice - T. Aman rice cropping pattern of Rangpur region	Burirhat, Rangpur
1691.	Integrated nutrient management on Onion seed production - T. Aus rice - T. Aman rice cropping pattern in Rangpur region	• To find out the best fertilizer dose and economic return for Onion seed production - T. Aus rice -T. Aman rice cropping pattern of Rangpur region	Burirhat, Rangpur
1692.	Development of alternate cropping pattern for increasing cropping intensity and productivity in Rangpur region	• To increase cropping intensity and productivity in rice based cropping system and • To increase farmers' income and employment opportunity in agriculture.	Burirhat, Rangpur
1693.	Performance of sweet potato at char land areas in Rangpur	• To find out the yield performance of different sweet potato verities in char land.	Mohipur char, Gangachara, Rangpur

Sl. No.	Research Title	Objective (s)	Location
1694.	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 maximum economic return.	Mohipur char, Gangachara, Rangpur
1695.	Development of fertilizer package for Spinach-T. *Aus* rice - T. *Aman* rice cropping pattern in northern region of Bangladesh	• -To find out an optimum and economic fertilizer dose for Spinach - T. *Aus* rice -T. *Aman*rice cropping pattern at Rangpur region.	Burirhat, Rangpur
1696.	Effect of planting date of onion bulb for Onion True Seed Production in Rangpur Region	• To select suitable time of onion bulb planting for quality onion true seed production of BARI Onion-1.	Burirhat, Rangpur (PPD)
1697.	Collection, characterization and maintenance of millets germplasm	• To select better performing foxtail millet germplasm for releasing variety(s).	Burirhat, Rangpur
1698.	Characterization of bitter gourd germplasm of Rangpur region	• To select better performing bitter gourd germplasm for releasing variety(s).	Burirhat, Rangpur
1699.	Effect of sowing date of foxtail millets at kharif season in Rangpur	• To select effective sowing time of foxtail millet in kharif season of Rangpur region.	Burirhat, Rangpur
1700.	Inter-varietal Hybridization of mango	• To develop variety(s) having larger fruit size, increased shelf life, regular and off-season bearing habit.	Burirhat, Rangpur (HRC)
1701.	Evaluation of mango Hybrids	• To know the detailed information on plant growth.	Burirhat, Rangpur
1702.	Effect of integrated fertilizer management on growth and yield of mango (CV. Harivanga)	• To find out optimum doses of organic and inorganic fertilizer.	Mithapukur, Rangpur (On-Farm)
1703.	Evaluation of exotic mango germplasm	• To select suitable mango germplasm for releasing as variety(s).	Rangpur
1704.	Evaluation of bael genotypes	• To develop high yielding quality variety(s) of bael.	Burirhat, Rangpur
1705.	Development of Eco-friendly Management Tactics for Controlling Onion Thrips (*Thripstabaci* lindeman)	• To develop eco-friendly management technique to control onion thrips.	Burirhat, Rangpur (Entomology)
1706.	Survey and Monitoring of Insect Pests and Their Natural Enemies	• To document the seasonal fluctuation of major insect pests	Burirhat, Rangpur

Sl. No.	Research Title	Objective (s)	Location
	of Dragon Fruit, Sweet Orange and Mandarin Orange	of sweet orange and dragon fruit and • To record the natural enemies of major insect pests of sweet orange and dragon fruit.	
1707.	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 ofcitrus and • To record the natural enemies of major insect pests of citrus.	Burirhat, Rangpur
1708.	Isolation and Characterization of Entomopathogenic Microbes for Lepidopteran Insect Pests Management	• To develop microbial biocontrol agents against insect pests and • To develop environmental friendly management strategies for insect pests using beneficial microbes.	Burirhat, Rangpur
1709.	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 and • To identify the natural enemies of pod borer complex.	Burirhat, Rangpur
1710.	Development of a Bio-rational Based Management Approach against Asian Citrus Psyllid	• To develop an eco-friendly sustainable management package against Asian citrus psyllid and • To produce insecticides free lemon.	Burirhat, Rangpur
1711.	Development of a Bio-rational Based Management Package for Mango Fruit and Nut Weevil	• To develop a management package against mango fruit fly and nut weevil and • To increase mango production in Rangpur region.	Burirhat, Rangpur
1712.	Field Validation of Bio-rational Based Management Packages against Insect Pests and Diseases in Mango	• To validate the most effective bio-rational based management package for the management ofinsect pests in mango and • To produce insecticide free mango.	Matherhat, Mithapukur, Rangpur (On-Farm)
1713.	Field Validation of Bio-rational Based Management Packages against Insect Pests and Diseases in Litchi	• To validate the most effective bio-rational based management package for the management ofinsect pests in litchi. • To produce insecticide free litchi.	Kolkonda, Gangachora, Rangpur (On-Farm)

Sl. No.	Research Title	Objective (s)	Location
1714.	Yield loss assessment of late blight (lb) resistant potato variety/germplasm under natural inoculums pressure	• To assess the yield loss due to disease and • To select optimum time of planting for avoiding late blight disease.	Burirhat, Rangpur (PPD)
1715.	Development of cost-effective integrated fertilizer management practice utilizing agricultural waste tobacco dust for disease free potato production	• To develop cost-effective integrated fertilizer management practice utilizing agricultural waste tobacco dust and • To manage soil borne disease.	Burirhat, Rangpur
1716.	Management of soil-borne diseases of bottle gourd and banana using tobacco dust waste	• To evaluate efficacy of tobacco dust waste against soil-borne diseases of Bottle gourd and Banana.	Burirhat, Rangpur
1717.	Isolation and identification of causal organism of gummosis disease in wood apple	• To identify the causal organism of gummosis disease in wood apple.	Burirhat, Rangpur
1718.	Screening of selected Potato Varieties and Germplasm against Late Blight	• To confirm the resistant ability of varieties / germplasms and • To reduce the yield loss due to disease	Burirhat, Rangpur
1719.	Effect of different fungicidal combination in controlling late blight of potato	• To select effective combination (s) of fungicides for controlling late blight of potato.	Burirhat, Rangpur
1720.	Effect of different organic matter for managing soil borne diseases (common scab and black scurf and stem canker)	• To select effective organic amendment(s) for potato cultivation.	Burirhat, Rangpur
1721.	Multiplication, purification and maintenance of indigenous potato cultivars	• To maintain its' purity and future research and variety development.	Burirhat, Rangpur
1722.	Effect of different fungicidal combination in controlling foliar diseases of onion	• To select effective chemical(s) against foliar diseases of onion	Burirhat, Rangpur (PPD)
1723.	Performance of different organic matter for organic potato production	• To observe effect of different organic matter on the yield and quality of potato and • To observe effect of organic matter on soil health.	Burirhat, Rangpur
1724.	Effect of different chemicals in controlling common scab disease of potato	• To evaluate efficacy of different chemicals against common scab disease of potato.	Burirhat, Rangpur
1725.	Promotion and dissemination of	• To popularize late blight	Burirhat,

Sl. No.	Research Title	Objective (s)	Location
	newly released late blight resistant potato variety at farmers' level, Rangpur	resistant potato varieties at farmers' level and • To minimize production cost and environmental hazards.	Rangpur
REGIONAL AGRICULTURAL RESEARCH STATION, ISHURDI, PABNA			
1726.	Evaluation of hyacinth bean lines	• To evaluate the performance of hyacinth bean germplasm in respect of yield and quality.	Ishwardi
1727.	Morphological characterization of grasspea germplasm	• To characterize the germplasm and regenerate seeds for conservation and • To develop a photographic monograph with descriptor of the collection.	Ishwardi
1728.	Morphological characterization of lentil germplasm	• To characterize the germplasm and regenerate seeds for conservation and • To develop a photographic. monograph with descriptor of the collection	Ishwardi
1729.	Morphological characterization of country bean germplasm	• To characterize the germplasm and regenerate seeds for conservation and • To develop a photographic monograph with descriptor of the collection	Ishwardi
1730.	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	Ishwardi
1731.	Optimization of doses and time of application of pendimethalin on weed control of onion	• To find out the appropriate dose and time of Pendimethalin application for effective weed control of onion	Ishwardi
1732.	Adaptation of BARI released crop varieties in charland	• To adapt important crop varieties at charland for higher productivity and validation of approved technologies	Ishwardi
1733.	Characterization of pigeon pea germplasm	• To characterize the germplasm and regenerate seeds for conservation and • To develop a photographic monograph with descriptor of the collection	Ishwardi

Sl. No.	Research Title	Objective (s)	Location
1734.	Survey of aloe vera plant diseases	• To identify the major diseases of Aloe vera with their causal agents and • To know the existing management practices using by the grower during the Aloe vera cultivation	Ishwardi
1735.	Management of alternaria leaf spot and flower blight disease of marigold	• To know the effect of fungicides in controlling alternaria leaf spot and flower blight of marigold	Ishwardi
1736.	Stemphylium blight disease and yield of lentil as influenced by date of sowing, fungicide spray and variety	• To evaluate date of sowing and screening of superior lentil variety(s) to manage Stemphylium blight disease.	Ishwardi
1737.	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	Ishwardi
1738.	Germplasm evaluation against leaf curl virus of chili	• To find out the resistant lines/varieties against virus diseases	Ishwardi
1739.	Bio-rational based management of legume pod borer, *maruca vitrata* F. Attacking summer country bean	• To develop IPM package for the pod borer infesting summer country bean. • To produce toxic pesticide free country bean.	Ishwardi
REGIONAL AGRICULTURAL RESEARCH STATION, CUMILLA			
1740.	Development of inbred in pumpkin (Set-2: S_0 to S_1)	• To develop inbred population in pumpkin.	Cumilla
1741.	Inbred development in pumpkin (Set-1: S_1 to S_2)	• To develop inbred population in pumpkin.	Cumilla
1742.	Collection and evaluation of cucumber germplasm	• To search for a disease resistant line (specially wilt and virus disease) and • To evaluate collected germplasm as well as to strengthen cucumber breeding program.	Cumilla
1743.	Development of base population in cucumber	• To develop source population in cucumber • To obtain information on the pedigree of the parental genotypes and • To get information on the	Cumilla

Sl. No.	Research Title	Objective (s)	Location
		genetic divergence of the parental genotypes.	
1744.	Development of base population in bitter gourd	• To develop source population in bitter gourd.	Cumilla
1745.	Collection and evaluation of muskmelon germplasm	• To collect and screen superior germplasm in order to develop elite base population	Cumilla
1746.	Screening of okra germplasm for resistance to YVMV	• To find out superior okra lines to release as variety with tolerance to YVMV and high yield.	Cumilla
1747.	Collection and evaluation of local germplasm of ridge gourd	• To find out superior ridge gourd lines to release as variety.	Cumilla
1748.	Collection and evaluation of stem amaranth in Cumilla region	• To evaluate the performance of selected stem amaranth lines in different session and • To select suitable lines for higher yield and good quality.	Cumilla
1749.	Effectofvermicompostand chemicalfertilizersonnutritional quality ofcabbage	• Toassesstheeffectofvermicompo stonqualityofcabbage ascompare to inorganic fertilizer.	Gazipurand Cumilla
1750.	Screening of tomato varieties against salinity	• To find out the suitable tomato varieties for cultivation in coastal area.	Nowakhali (OFRD)
1751.	Morphological characterization of mango (M*angifera indica* L.) germplasm	• To characterize different breeding lines • To identify suitable parents for hybridization program and • To develop photographic monograph with descriptors.	Cumilla
1752.	Hybridization in mango	• To develop a hybrid mango variety of desired character(s).	Cumilla
1753.	Collection and evaluation of lemon germplasm	• To select suitable lines of lemon • To conserve germplasm.	Cumilla
1754.	Collection and evaluation of lime germplasm	• To select suitable lines of lime • To conserve germplasm.	Cumilla
1755.	Collection and evaluation of pummelo germplasm	• To select suitable lines of pummelo • To conserve germplasm.	Cumilla
1756.	Collection and evaluation of year round pummelo germplasm in Cumilla region	• To find out superior year round pummelo genotypes and • To study on the diversity of pummelo genotypes.	Cumilla
1757.	Effect of rootstock and spacing	• To find out suitable rootstock	Cumilla

Sl. No.	Research Title	Objective (s)	Location
	on sweet orange	and plant spacing for BARI Malta-1 • To standardize the suitable rootstock for sweet orange and • To increase yield and quality of sweet orange.	
1758.	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
1759.	Collection and evaluation of plantain germplasm	• To select the superior lines of plantain. • To conserve the genotypes.	Cumilla
1760.	Collection and evaluation of bullock's heart germplasm	• To select superior lines ofbullock's heart and • To conserve fruit genetic resources.	Cumilla
1761.	Responseofstrawberry to organic andinorganic fertilizer	• To find out the effective combination of organic and in organic fertilizer dose for quality and yield maximization of strawberry and • To make nutrient balance sheet	Gazipur and Cumilla
1762.	Collection and evaluation of local germplasm of chilli in Cumilla region	• To find out superior chilli lines regarding yield and quality and • To conserve the genetic resources.	Cumilla
1763.	Yield performance of turmeric in mango orchard	• To find out the yield and economic performance of BARI released turmericvarieties under mango orchard as intercrop and • To monitor the disease incidence of turmeric under plantation environment.	Cumilla
1764.	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
1765.	Advanced yield trial of mukhikachu lines	• To select high yielding mukhikachu line(s) as a better one for release as a variety.	Cumilla
1766.	Participatory variety selection trial with stolon producing panikachu germplasm	• To evaluate the selected germplams in farmers field to know the farmer's opinion as well as acceptance and	Cumilla Brahmanbaria and Chandpur

Sl. No.	Research Title	Objective (s)	Location
		• To select high yielding stolon producing panikachu line(s) as a better one for release as a variety.	
1767.	Participatory variety selection trial of mukhikachu lines	• To select high yielding mukhikachu line(s) as a better one for release as a variety and • To evaluate the selected germplams in farmers field to know the farmer's opinion as well as acceptance.	Cumilla Brahmanbaria and Chandpur
1768.	Effect of growth regulators on seed yield and quality of mustard	• To investigate the effect of some growth regulators (GA_3 and IAA) on seed yield and quality of mustard.	Cumilla
1769.	Effect of foliar application of different concentrations of salicylic acid on seed yield and quality of mustard at late sowing condition	• To know the effect of salicylic acid on seed yield and quality of mustard at late sowing condition.	Cumilla
1770.	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
1771.	Screening of different chilli germplasm in waterlogging condition	• To find out suitable waterlogging tolerant chilli germplasm for cultivation in flooding area.	Cumilla
1772.	Intercropping of summer onion with mukhikachu in Cumilla region	• The present experiment will be undertaken to find out the suitable intercrop combination of summer onion with mukhikachu.	Cumilla
1773.	Intercropping of spices with chilli in Cumilla region	• The present experiment will be undertaken to find out the suitable intercrop combination of spices with chilli in Cumilla region	Cumilla
	Effect of different nitrogen sources on nitrogen use efficiency and yield of tomato in Cumilla Region	• To find out the best nitrogen source for tomato yield in Cumilla region and • To find out the nitrogen use efficiency of different sources on nitrogen.	Cumilla
1774.	Nitrogen balance and nitrogen	• To determine the NUE for the	Cumilla

Sl. No.	Research Title	Objective (s)	Location
	use efficiency in Potato-Maize-Fallow based cropping pattern grown with organic-inorganic nitrogen sources	crop(s) grown in Potato- Maize-Fallow cropping pattern in Cumilla region and • To quantify total N uptake and balance for the crops grown in Potato-Maize-Fallow cropping pattern.	
1775.	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
1776.	Effect of foliar application of zinc in sweet orange	• To determine the efficiency of Zn sources in providing the plants with sufficient micronutrients and • To compare new doses of sweet orange orchards with traditionally used sources.	Cumilla
HILL AGRICULTURAL RESEARCH STATION, KHAGRACHARI			
1777.	Evaluation of jackfruit germplasm in the hill region	• To identify superior small sized jackfruit germplasm with high yield potentiality and edible qualities.	Khagrachari
1778.	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
1779.	Evaluation of indegenous ber germplasm at Khagrachari	• To select superior land races for commercial cultivation in the hilly areas.	Khagrachari
1780.	Evaluation of sweet orange germplasm in the hilly region	• To evaluate the collected germplasms to identify the superior germplasm for developing variety.	Khagrachari
1781.	*In-situ* evaluation of year round pummelo germplasm	• To select high yielding desirable line for year round bearing.	Khagrachari
1782.	Evaluation of late-season pummelo germplasm in the hilly region	• To select high yielding desirable line for off-season/late-season bearing.	Khagrachari
1783.	Evaluation of promising coffee germplasm in the hilly region of	• To find out the suitable germplasm for varietal	Khagrachari

Sl. No.	Research Title	Objective (s)	Location
	Bangladesh	development activities.	
1784.	Characterization and evaluation of turmeric lines	• To evaluate collected turmeric germplasm for higher rhizome yield with better quality.	Khagrachari
1785.	Effect of different standard on growth and yield of black pepper (*P. nigrum*)	• To examine effect of pole types on the early growth of black pepper.	Khagrachari
1786.	Regional yield trial of french bean lines	• To develop new variety(s) of French bean with desirable horticultural characters.	Khagrachari
1787.	Effect of different mulching materials on broccoli cultivation	• To study the effect of different mulching materials on growth and yield of broccoli.	Khagrachari
1788.	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
HILL AGRICULTURAL RESEARCH STATIONS, RAMGHAR, KHAGRACHARI			
1789.	Evaluation of Indian dillenia germplasm in hilly region	• To evaluate Indian dillenia germplasm in hilly region	Ramgarh
1790.	Evaluation of golden apple germplasm in hilly region	• To evaluate golden apple germplasm in order to select best line(s) for release variety	Ramgarh
1791.	Evaluation of china mandarin germplasm in hilly region	• To study genetic diversities of china mandarin germplasm	Ramgarh
1792.	Evaluation of jaboticaba germplasm in hilly region	• To select better jaboticaba germplasm in hilly region	Ramgarh
1793.	Evaluation of promising cashewnut germplasm in hill tract	• To identify promising line(s) to release variety.	Ramgarh
1794.	Evaluation of color fleshed jackfruit germplasm in hilly region	• To develop color fleshed jackfruit variety	Ramgarh
HILL AGRICULTURAL RESEARCH STATIONS, RAIKHALI, RANGAMATI			
1795.	Collection and evaluation of custard apple germplasm	• To select suitable custard apple lines in respect of yield and quality	Raikhali (HARS)
1796.	Evaluation of newly collected mango germplasm	• To select suitable mango germplasm in respect of yield and quality.	Raikhali
1797.	Collection and evaluation of coffee germplasm	• To select suitable coffee lines in respect of yield and quality.	Raikhali

Sl. No.	Research Title	Objective (s)	Location
1798.	Collection and evaluation of cashew germplasm	• To select suitable cashew lines in respect of yield and quality.	Raikhali
1799.	Collection and evaluation of avocado germplasm	• To select suitable avocado lines in respect of yield and quality.	Raikhali
1800.	Regional yield trial of French bean lines	• To select suitable lines for release as a variety.	Raikhali
1801.	Evaluation of exotic cherry tomato germplasm	• To select suitable cherry tomato germplasm in respect of yield and quality.	Raikhali
1802.	Collection and evaluation of pumpkin lines during winter season at hill valley of Chattagram Hill Tracts	• To select suitable lines for release as a variety.	Raikhali
1803.	Collection and evaluation of year-round muskmelon at hill valley of Chattagram Hill Tracts	• To select suitable lines for release as a variety.	Raikhali

BANGLADESH RICE RESEARCH INSTITUTE

BANGLADESH RICE RESEARCH INSTITUTE

Sl. No.	Research Title	Objective (s)	Location
PLANT BREEDING DIVISION			
1	Hybridization	• 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_1s and use of the selected F_1s to produce F_2 seeds	Gazipur
3	Segregating population	• Advancement of segregating generations following single seed descent-based RGA method	Gazipur
4	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, and short growth duration	Gazipur
5	Preliminary Yield Trial (PYT)	• Initial yield evaluation of advanced breeding lines in replicated trials.	Gazipur
6	Secondary Yield Trial (SYT)	• Confirmation of yield potential in replicated trials	Gazipur
7	Hybridization	• To develop high yielding rice variety with low (10-19%) to intermediate (20-25%) and high (25%) grain amylose content and drought tolerance suitable for Jhum cultivation	Gazipur
8	Confirmation of F_1	• To confirm the crosses as true F_1s	Gazipur
9	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
10	Preliminary Yield Trial (PYT)	• Initial yield evaluation of advanced breeding lines in replicated trials	Gazipur

Sl. No.	Research Title	Objective (s)	Location
11	Advanced Yield Trial (AYT)	• Advanced evaluation of promising entries in replicated trial under targeted hill condition	Chattogram Hill districts
12	Hybridization (Development of Transplanted Aus)	• Introgression of earliness, pre-harvest sprouting tolerance and tolerance to high temperature into 13high yielding varieties	Gazipur
13	Growing of F_1 populations	• To confirm the crosses as true hybrid	Gazipur
14	Segregating population	• Advancement of segregating generations following single seed descent-based RGA method	Gazipur
15	Line Stage Testing (LST)	• Screening of genetically fixed breeding lines for homogeneity, plant type, grain yield potential, grain quality and other attributes	Gazipur
16	Observational Yield Trial (OYT)	• Selection of homogeneous breeding lines with acceptable grain quality having high yield with good plant type	Gazipur Cumilla Rajshahi and Rangpur
17	Preliminary Yield Trial (PYT)	• Initial yield evaluation of advanced breeding lines in replicated trials for whole Bangladesh	Gazipur Cumilla Rajshahi and Rangpur
18	Regional Yield Trial (RYT-1) for favorable ecosystem	• Evaluation of agronomic performance, specific and general adaptability under on station condition	Gazipur Cumilla Rangpur Kushtia Satkhira and Rajshahi
19	Regional Yield Trial (RYT-2) for tidal prone ecosystem	• Evaluation of agronomic performance, specific and general adaptability under on station condition	Gazipur Sonagazi and Greater Barishal
20	Advanced Line Adaptive Research Trial (ALART#1)	• On-farm evaluation of advanced breeding lines compared to standard checks for testing their specific and general adaptability	Sites selected by ARD

Sl. No.	Research Title	Objective (s)	Location
21	Advanced Line Adaptive Research Trial (ALART#2) for tidal prone ecosystem	• On-farm evaluation of advance breeding lines compared to standard checks for testing their specific and general adaptability	Sites selected by ARD
22	Proposed Variety Trial (PVT)	• Nomination of advanced breeding line for final release as variety by NSB	T. Aus Sites selected by SCA
23	2.12 Maintenance and seed increase of key parents	• To maintain genetic purity of parent materials with seed production	Gazipur
24	Hybridization (Development of Shallow Flooded Rice Varieties)	• To develop semi-deep water rice varieties incorporating lodging tolerance 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 deepwater rice varieties with facultative type elongation and drought tolerance, higher grain (2.5-3.5 t/ha) and straw (10 - 12 t/ha) yield and • To develop materials having supper ratooning ability, strong culm, faster growth and tallness, higher grain (4.0-5.0 t/ha) and straw (14 -15 t/ha) yield.	Gazipur
25	Confirmation	• Confirmation of crosses with introgression of genes for slow and fast elongation, higher grain and straw yield for semi and deep flooded environment	Gazipur
26	Segregating population	• Advancement of segregating generations under rainfed conditions	Gazipur
27	SYT-Shallow flood (slow elongation, more grain and straw yield and superior ratooning ability)	• Selection of semi-deep water rice advanced breeding lines having slow elongation, lodging tolerance, fast growth, more straw and grain yield and superior ratooning ability	Gazipur
28	RYT-Shallow flood (slow elongation, more straw and grain yield, superior ratooning ability)	• Selection of semi-deep water rice advanced lines having tallness, moderate elongation, submergence tolerance, more straw and grain yield	Sylhet Cumilla Sirajganj Munshiganj Manikganj and Faridpur

Sl. No.	Research Title	Objective (s)	Location
29	ALART (Stagnant shallow flood)	• Selection of tall advanced breeding lines having faster growth, submergence tolerance, more straw and grain yield for stagnant shallow flooding conditions	Sylhet Satkhira Jashore Sirajganj Cumilla Faridpur and Munshiganj
30	ALART (Deep flood)	• Selection of deep water rice advanced breeding and local pure lines having facultative type fast elongation, more straw and grain yield for deep flooding conditions	Sylhet Sirajganj Tangail Cumilla and Faridpur
31	Collection and seed increase of deep water rice land races	• Maintenance of seed purity and seed increase of land races having higher elongation ability	Gazipur
	Seed increase and demonstration trials of BRRI dha91	• Increasing the seeds of BRRI dha91 and to set up 50 demonstration trials in farmers field	Gazipur and semi-deep flooded locations
32	Hybridization	• 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_2 - F_6 generations through single seed descent-based RGA method	Gazipur
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	Preliminary Yield Trial#1 (PYT#1)	• Initial yield evaluation of advanced lines compared to standard checks in replicated trial	Gazipur
37	Preliminary Yield Trial#2 (PYT#2)	• Initial yield evaluation of advanced lines compared to standard checks in replicated trial	Gazipur
38	Preliminary Yield Trial#3 (PYT#3)	• Initial yield evaluation of advanced lines compared to standard checks in replicated trial	Gazipur

Sl. No.	Research Title	Objective (s)	Location
39	Secondary Yield Trial#1 (SYT#1)	• Confirmation of potential advanced lines compared to standard checks in replicated trial	Gazipur
40	Secondary Yield Trial#2 (SYT#2)	• Confirmation of potential advanced lines compared to standard checks in replicated trial	Gazipur
41	Regional Yield Trial#1 (RYT#1)	• 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
42	Regional Yield Trial#2 (RYT#2)	• 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
43	Advanced Lines Adaptive Research Trial (ALART)	• Evaluation of specific and general adaptability under on farm condition	10 locations selected by ARD
	Hybridization (Development of Salt Tolerant T. Aman Rice)	• Introgression of salinity tolerant traits/ gene(s) in high yielding varieties suitable for RLR ecosystem	Gazipur
44	Confirmation of F_1	• To confirm the crosses as true hybrid	Gazipur
45	Advancement of segregation population through FRGA	• Generation Advancement	Gazipur
46	Line Stage Testing (LST) Trial	• Identification of uniform lines based on plant height, flowering date and grain type	Satkhira/ Gazipur
47	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

Sl. No.	Research Title	Objective (s)	Location
48	Preliminary Yield Trial (PYT)	• Initial yield evaluation of advanced lines compared to standard checks in replicated trial	Gazipur Satkhira and Khulna
49	Hybridization/ Maintenance of Parent (Development of Salt Tolerant Boro Rice)	• Introgression of salinity tolerant traits/ gene (s) in high yielding varieties suitable for RLR ecosystem	Gazipur
50	F_1 confirmation	• To confirm the crosses as true hybrid	Gazipur
51	Advancement of segregation population through FRGA Population (F_2 to F_6)	• Generation Advancement	Gazipur
52	Line Stage Testing (LST)	• Identification of uniform lines based on plant height, flowering date and grain type	Gazipur
53	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
54	Preliminary Yield Trial (PYT #1, PYT 2, PYT #3 and PYT#4	• Initial yield evaluation of advanced lines compared to standard checks in replicated trial	Gazipur Satkhira and Khulna
55	Advanced Yield Trial (AYT#1 & AYT #2)	• Confirmatory yield evaluation of advanced lines compared to standard checks	Gazipur Satkhira and Khulna
56	Regional Yield Trial (RYT/PVS)	• To evaluate specific and general adaptability of the advance breeding lines as compared with standard checks in on-farm condition	Gazipur Satkhira and Khulna
57	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	10 locations selected by ARD
58	Hybridization (Development of Premium Quality Rice (PQR) T. Aman)	• Introgression of genes of premium quality grain (national & international grade) with aroma and anti-oxidant into high yielding rice genetic background	Gazipur
59	Confirmation of F_1	• To confirm the crosses as true hybrids	Gazipur

Sl. No.	Research Title	Objective (s)	Location
60	Growing of F_2 population	• To select progenies with emphasis on earliness, plant type, fine grain type, aroma and high yield potential compared to standard varieties	Gazipur
61	Pedigree nursery	• Selection of progenies with improved plant type, earliness, premium quality grain and high yield potential compared to standard varieties	Gazipur
62	Observational Yield Trial (OYT)	• Selection of genetically fixed lines with fine grain properties having high yield with good plant type	Gazipur
63	Preliminary Yield Trial (PYT)	• Initial yield evaluation of advanced lines compared to standard checks	Gazipur
64	Secondary Yield Trial (SYT)	• Secondary yield evaluation of advanced lines compared to standard checks	Gazipur
65	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 (HQ) Rangpur Rajshahi Kushtia Cumilla and Habiganj(R/S)
66	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	Locations selected by ARD
67	Maintenance of parents	• Maintenance of parent for future use in the hybridization or in the experiments as check variety	Gazipur
68	Hybridization (Development of Premium Quality Rice (PQR) Boro)	• Introgression of extra-long grain and small grain with or without aroma into high yielding rice genetic background	Gazipur
69	F_1 confirmation	• To confirm the crosses as true hybrid	Gazipur
70	Segregating populations	• Generation Advancement through RGA/FRGA	Gazipur
71	Line Stage Test (LST)	• Identification of uniform lines based on plant height, flowering date and grain type	Gazipur

Sl. No.	Research Title	Objective (s)	Location
72	Preliminary Yield Trial (PYT)	• Initial yield evaluation of advanced lines compared to standard checks	Gazipur
73	Secondary Yield Trial (SYT)	• Secondary yield evaluation of advanced lines compared to standard checks	Gazipur
74	Regional Yield Trial (RYT)	• To evaluate specific and general adaptability of the advance breeding lines as compared with standard checks in on-station condition	10 locations at Gazipur and R/S
75	Advanced Line Adaptive Research Trial (ALART)	• On-farm evaluation of advanced breeding lines compared to standard checks for testing their specific and general adaptability	Location selected by ARD (10)
76	Hybridization (Development of photo-sensitive T. Aman rice)	• Development of strong photo-sensitive (Nizersail type) and medium photo-sensitive (Gainza type) premium quality rice for T. Aman season	Gazipur
77	Observational Yield Trial (OYT)	• Selection of genetically fixed lines having high yield with photosensitivity	Gazipur
78	Preliminary Yield Trial (PYT)	• Initial yield evaluation of advanced lines compared to standard checks	Gazipur
79	Regional Yield Trial (RYT)	• To evaluate specific and general adaptability of the advanced breeding lines as compared with standard checks in on-station condition	Gazipur (Central) Rangpur Rajshahi Kushtia Cumilla Habiganj (R/S)
80	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
81	Confirmation of F_1	• To confirm the crosses as true F_1s and use of the selected F_1s to produce F_2 seeds and use in making different types of crosses	Gazipur
82	Segregating RGA (F_2-F_6)	• Generation Advance	Gazipur
83	Line Stage Testing (LST)	• To select uniform genotypes in terms of plant height and days to flowering with key target traits	Gazipur

Sl. No.	Research Title	Objective (s)	Location
84	Observational Yield Trial (OYT)	• Selection of superior lines with desired agronomic characters	Gazipur Cumilla Habiganj and Rangpur
85	Advanced Yield Trial (AYT)	• Evaluation of breeding lines for yield potential in multi-locations in replicated trial	Gazipu, Cumilla and Habiganj
86	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 and R/S (9)
87	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 and Rangpur
88	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
89	Confirmation of F_1	• To confirm the crosses as true F_1s and use of the selected F_1s to produce F_2 seeds and use in making different types of crosses	Gazipur
90	Segregating RGA (F_2-F_6)	• Generation Advance	Gazipur
91	Line Stage Testing (LST)	• To select uniform genotypes in terms of plant height and days to flowering with key target traits	Gazipur
92	Observational Yield Trial (OYT#1)[Cold stress (15 Oct seeding) and non-stress (15 Nov seeding)]	• Selection of superior and cold tolerant lines under natural cold condition	Gazipur and Habiganj
93	Observational Yield Trial (OYT#2) [Cold stress (15 Oct seeding) and non-stress (15 Nov seeding)]	• Selection of superior and cold tolerant lines under natural cold condition	Gazipur and Habiganj
94	Advanced Yield Trial (AYT)	• Evaluation of breeding lines for yield potential in multi-locations in replicated trial Location : Gazipur, Rajshahi, Rangpur and Habiganj, Kishoreganj and Sunamganj (Haor)	

Sl. No.	Research Title	Objective (s)	Location
95	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) Rangpur (3) Habiganj (3)
96	Regional Yield Trial in Haor areas (RYT-Haor)	• To evaluate specific and general adaptability of the advance breeding lines as compared with standard checks at Haor areas	Habiganj(3) Nikly (3) Kishoreganj Tahirpur and Sunamganj
97	Hybridization (Development for Zinc Enriched T. Aman Rice)	• 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
98	Confirmation of F_1	• To confirm the crosses as true F_1s and use of the selected F_1s to produce F_2 seeds and in different types of crosses	Gazipur
99	Field RGA	• Advancement of F_2 – F_5 segregating generations following single seed descent-based RGA method	Gazipur
100	Pedigree nursery	• To select progenies with emphasis on modern plant type, large panicle, more grains in panicle, lodging resistance and acceptable grain quality	Gazipur
101	Observational Yield Trial#1 (OYT #1)	• To select lines homogeneity for morpho-agronomic characters having early seedling emergence, good seedling vigor, uniformity in heading and short growth duration	Gazipur
102	Observational Yield Trial #2 (OYT#2)	• To select lines homogeneity for morpho-agronomic characters having early seedling emergence, good seedling vigor, uniformity in heading, short growth duration	Gazipur
103	Preliminary Yield Trial#1 (PYT#1)	• Evaluation of initial yield potential in replicated plots	Gazipur
104	Preliminary Yield Trial#2 (PYT#2)	• Evaluation of initial yield potential in replicated plots	Gazipur

Sl. No.	Research Title	Objective (s)	Location
105	Preliminary Yield Trial#3 (PYT#3)	• Evaluation of initial yield potential in replicated plots	Gazipur
106	Secondary Yield Trial#1 (SYT#1)	• Confirmation of yield potential in replicated plots	Gazipur
107	Secondary Yield Trial#2 (SYT#2)	• Confirmation of yield potential in replicated plots	Gazipur
108	Regional yield Trial#1 (RYT#1)	• Evaluation of agronomic performance, specific and general adaptability under on station condition	R/S and Gazipur
109	Regional yield Trial#2 (RYT#2)	• Evaluation of agronomic performance, specific and general adaptability under on station condition	R/S and Gazipur
110	Advanced Lines Adaptive Research Trial (ALART)	• Evaluation of specific and general adaptability under on farm condition	ARD (10)
111	Proposed Variety Trial (PVT)	• On-farm evaluation of proposed line by the NSB team for the recommendation of release as a new variety Location: Rajshahi, Rangpur, Kustia, Barishal, Feni, Cumilla, Habiganj, Satkhira, Gazipur and Bhanga	
112	Hybridization (Development for Zinc Enriched Boro Rice	• Development of new genotypes with high zinc and iron content along with resistance to major insect pests and diseases, abiotic stress tolerance 1and acceptable grain quality	Gazipur
113	Confirmation of F_1	• To confirm the crosses as true F_1s and use of the selected F_1s to produce F_2 seeds and in different types of crosses	Gazipur
114	Pedigree nursery	• To select progenies with emphasis on modern plant type, large panicle, more grains in panicle, lodging resistance and acceptable grain quality	Gazipur
115	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
116	Preliminary Yield Trial (PYT)	• Initial yield evaluation of advanced lines compared to standard checks	Gazipur
117	Secondary Yield Trial (SYT)	• Confirmation of yield potentiality of the advanced lines compared to standard checks	Gazipur

Sl. No.	Research Title	Objective (s)	Location
118	Regional yield Trial (RYT)	• Evaluation of agronomic performance, specific and general adaptability under on station condition	R/S and Gazipur
119	Advanced Lines Adaptive Research Trial (ALART)	• Evaluation of specific and general adaptability under on farm condition Location: Jhalkhathi, Satkhira, Habiganj, Kustia, Gazipur, Kapasia, Gazipur, Paba, Rajshahi, Feni and Rangpur	
120	Proposed Variety Trial (PVT)	• On-farm evaluation of proposed line by the NSB team for the recommendation of release as a new variety	Locations selected by SCA (10)
121	Hybridization: Development of Insect Resistant Rice (IRR) T. Aman rice	• Introgression of genes of BPH and gall midge into high yielding rice genetic background	Gazipur
122	Confirmation of F_1	• To confirm the crosses as true hybrids	Gazipur
123	FRGA	• Generation Advance	Gazipur
124	Line Stage Testing (LST)	• Identification of uniform lines based on good plant type, flowering date and grain type	Gazipur
125	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 and Cumilla
126	Preliminary Yield Trial (PYT#1 & 2)	• Initial yield evaluation of advanced lines compared to standard checks	Gazipur Rajshahi and Cumilla
127	Regional Yield Trial (RYT)	• Evaluation of agronomic performance, specific and general adaptability under on station condition	All BRRI R/S and Gazipur
128	Advanced Line Adaptive Research Trial (ALART)	• On-farm evaluation of Swarna-type advance breeding lines compared to standard checks for testing their specific and general adaptability	Sites selected by ARD
129	Hybridization (Development of Insect Resistant Rice (IRR), Boro rice	• Introgression of genes of BPH and gall midge into high yielding rice genetic background	Gazipur
130	Confirmation of F_1	• To confirm the crosses as true hybrid	Gazipur

Sl. No.	Research Title	Objective (s)	Location
131	FRGA	• Generation Advance	Gazipur
132	Line Stage Testing (LST)	• Identification of uniform lines based on good plant type, flowering date and grain type	Satkhira
133	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 and Cumilla
134	Preliminary Yield Trial (PYT)	• Initial yield evaluation of advanced lines compared to standard checks	Gazipur Rangpur and Cumilla
135	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 and Cumilla
136	Screening breeding lines for BPH and GM resistance	• To identify new sources of BPH and GM resistance	Entamology Division
137	Maintenance and seed increase of key parents.	• To maintain genetic purity of parent materials with seed production	Gazipur
138	Hybridization (Development of Disease Resistant Rice (BB, Blast and RTV), T. Aman rice	• Introgression of high yield, lodging tolerance and disease resistance trait for BB, Blast and RTV	Gazipur
139	F_1 confirmation	• To confirm the crosses as true hybrid	Gazipur
140	Segregating population	• Advancement of segregating generations following single seed descent-based RGA method	Gazipur
141	Line Stage Testing	• Screening of genetically homozygous lines for homogeneity, grain quality, grain yield potential and specific SNP markers	Gazipur
142	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 and Rajshahi

Sl. No.	Research Title	Objective (s)	Location
143	Preliminary Yield Trial (PYT)	• Initial yield evaluation of advanced breeding lines in replicated trials for BB resistance	Gazipur Cumilla Rangpur and Rajshahi
144	Regional Yield Trial (RYT)	• Evaluation of agronomic performance, specific and general adaptability under on station condition	Gazipur and R/S
145	Advanced Yield Trial	• Confirmatory yield evaluation of advanced lines compared to standard checks	Gazipur
146	Maintenance and seed increase of key parents.	• To maintain genetic purity of parent materials with seed production	Gazipur
147	Hybridization (Development of Disease Resistant Rice (BB, Blast & RTV), Boro rice	• Introgression of high yield, lodging tolerance and disease resistance trait for BB and Blast	Gazipur
148	F_1 confirmation	• To confirm the crosses as true hybrid	Gazipur
149	Segregating population	• Advancement of segregating generations following single seed descent-based RGA method	Gazipur
150	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 and Rajshahi
151	Preliminary Yield Trial (PYT)	• Initial yield evaluation of advanced breeding lines in replicated trials for BB resistance Location : Gazipur, Cumilla, Rangpur and Rajshahi	
152	Advanced Yield Trial (AYT)	• To evaluate/confirm yield performance of the advance breeding lines as compared with standard checks at multi-locations trials: Location : Gazipur, Cumilla, Rangpur and Rajshahi	
153	Proposed Variety Trial (PVT)	• To evaluate specific and general adaptability of the advanced breeding lines as compared with standard checks in on-farm condition	Locations selected by SCA (10)

Sl. No.	Research Title	Objective (s)	Location
154	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
155	F_1 confirmation	• Confirmation of crosses with introgression of genes for submergence tolerance (particularly *SUB1*) and water stagnation tolerance into improved genetic background	Gazipur
156	Segregating population	• Advancement of segregating generations following single seed descent-based RGA techniques	Gazipur
157	Pedigree nurseries	• Selection of submergence and medium stagnant water tolerant progenies with improved plant type under controlled condition	Rangpur
158	Line Stage Testing	• Screening of genetically homozygous lines for homogeneity, grain quality, grain yield potential and *SUB1*-specific SNP markers	Gazipur
160	Marker-Assisted Selection for introgressing *SUB1* QTL into modern RLR varieties	• Introgression of *SUB1* QTL into BR10 and BRRI dhan30	Gazipur
161	Line Augmentation	• Introgression of Sub1 and selection of homozygous quickly at earlier stage of F2 to develop advanced lines	Gazipur
162	Observational Yield Trial-1 (SUB)	• Initial evaluation of the genotypes with putative tolerance against submergence rainfed and controlled conditions	Gazipur and Rangpur
163	Preliminary Yield Trial-1 (BR22-Sub1 lines_PHS)	• Initial evaluation of the genotypes with putative tolerance against submergence under farmer's field & rainfed condition with higher yield.	Gazipur and Rangpur
164	Preliminary Yield Trial-2 (BRRI dhan62-Sub1)	• Initial evaluation of the genotypes with putative tolerance against submergence under farmer's field & rainfed condition with higher yield.	Gazipur and Rangpur

Sl. No.	Research Title	Objective (s)	Location
165	Preliminary Yield Trial-3 (SUB)	• Initial evaluation of the genotypes with putative tolerance against submergence under farmer's field and rainfed condition with higher yield.	Gazipur and Rangpur
166	Preliminary Yield Trial-3 (Sub + BB)	• Initial evaluation of the genotypes with putative tolerance against submergence under farmer's field & rainfed condition with higher yield.	Gazipur
167	Advanced Yield Trial-1 (Sub + SF)	• Advanced yield evaluation of the genotypes against submergence and stagnant flood under rain fed, controlled submergence and natural flood condition	Gazipur and Rangpur
168	Advanced Yield Trial-2 (Sub + Drought)	• Advanced yield evaluation materials with better phenotypic acceptance and higher yield potentials under flood and drought (reproductive stage) condition.	Gazipur and Rajshahi
169	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
170	Maintenance and seed increase of key parents.	• To ensure seed safety of land races	Gazipur
171	Screening of Core parental material for submergence tolerance	• Screening of Core parental material for submergence tolerance	Gazipur
172	Screening of progenies for stagnant flood tolerant	• Phenotyping of the progenies for identifying stagnant flood tolerant entries	Gazipur
173	Hybridization Development of Drought Tolerant Rice (T. Aman rice)	• Introgression of drought tolerance gene into high yielding rice genetic background	Gazipur
174	Confirmation of F_1	• To confirm the crosses as true F_1 and use of the selected F_1s to produce F_2 seeds and in different types of crosses	Gazipur
175	Field RGA	• Rapid advancement of F_2 - F_6 generations through field RGA	Gazipur

Sl. No.	Research Title	Objective (s)	Location
176	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
177	Preliminary Yield Trial (PYT)	• Initial yield evaluation of the genotypes against Drought stress under rainfed condition Location : Gazipur Cumilla Rajshahi and Rangpur (Drought)	
178	Hybridization (Development of Water Saving Rice)	• Introgression genes of high yield and water saving	Gazipur
179	Segregating population	• Advancement of segregating generations following single seed descent-based RGA method	Gazipur
180	Preliminary Yield Trial (PYT)	• Preliminary evaluation of promising breeding lines for their phenotypic acceptability, adaptation under local climatic condition and grain yield potentials under on-station AWD condition	Gazipur
181	Advanced Yield Trial (AYT)	• To evaluate/confirm yield performance of the advance breeding lines as compared with standard checks	Gazipur
182	International Upland Rice Observational Nursery (IURON) (International Network For Genetic Evaluation of Rice (INGER), T. Aman)	• Sharing germplasm and breeding lines through international platform for the acceleration of rice improvement	Gazipur
183	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 and Barishal
184	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	Satkhira

Sl. No.	Research Title	Objective (s)	Location
185	International Rice Blast Nursery (IRBN)-2 set	• Sharing germplasm and breeding lines through international platform for the acceleration of rice improvement	Gazipur
186	International Rice Brown Plant Hopper Nursery (IRBPHN)- 2 set	• Sharing germplasm and breeding lines through international platform for the acceleration of rice improvement	Gazipur
187	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
188	International Irrigated Rice Observational Nursery (IIRON)-3 sets of International Network For Genetic Evaluation of Rice (INGER), Boro	• Sharing germplasm and breeding lines through international platform for the acceleration of rice improvement	Gazipur Barishal and Habiganj
189	International Temperate Rice Observational Nursery (IRTON)-2 sets	• Sharing germplasm and breeding lines through international platform for the acceleration of rice improvement	Gazipur and Rangpur
190	International Rice Soil Stress Tolerance Nursery (IRSSTN-Dry)	• Sharing germplasm and breeding lines through international platform for the acceleration of rice improvement	Satkhira
191	Marker Assisted Backcrossing (MABC) (Deployment and Validation of High Beta-carotene Rice and High-Iron and Zinc Rice Varieties of T. Aman rice)	• BC2F1 generation in the background of BRRI dha48, BRRI dhan67, BRRI dhan71, BRRI dhan84, BRRI dhan87 and BRRI dhan89 will be advanced through marker assisted breeding	Gazipur
192	Marker Assisted Backcrossing (MABC)	• BC3F5 generation in the background of BRRI dha28, BRRI dhan49 and BRRI dhan62 will be advanced through marker assisted breeding	Gazipur
193	Contained Trial (CT)	• To evaluate agronomic and product performance (Iron and Zinc level) of the advanced introgressed breeding lines under contained trial at screen house condition.	Gazipur

Sl. No.	Research Title	Objective (s)	Location
194	16.1 Hybridization Deployment and Validation of High Beta-carotene Rice and High-Iron & Zinc Rice Varieties (Healthier Rice Project), Boro rice	• 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
195	Contained Trial (CT) of GR 2E Golden rice	• To evaluate agronomic and product performance of the advanced pro-vitamin-A enriched GR2E BRRI dhan28 golden rice introgression lines and pure lines of GR2E BRRI dhan29 golden rice (IR112060 GR2-E: 2-7-63-2-96) under contained trial at screen house condition	Gazipur
196	Confined Field Trial (CFT), High Iron and Zinc Rice (HIZR)	• To evaluate agronomic and product performance and assess environmental safety of the advanced introgressed lines of high Iron and Zinc rice (Event IRS1030-039, IRS1030-031, IRS1027-059) under field condition of Bangladesh	Gazipur
BIO-TECHNOLOGY DIVISION			
197	Development of low glycemic index (GI) rice variety through anther culture.	• To generate low glycemic index rice through anther culture	Gazipur
198	Development of salt tolerant rice variety through anther culture	• To develop salt tolerant high yielding rice variety	Gazipur
199	Development of premium quality rice variety through anther culture	• To develop premium quality high yielding rice DH lines through anther culture	Gazipur
200	Development of Aus variety through anther culture	• To develop short duration high yield Aus rice variety through anther culture	Gazipur
201	Development of antioxidant enriched rice variety through anther culture	• To develop antioxidant enriched high yielding black rice	Gazipur

Sl. No.	Research Title	Objective (s)	Location
202	Development of somaclone using EMS treaded rice seed	• To develop modern rice varieties for Aus and T. Aman	Gazipur
203	Development of Aus variety through somaclonal variation	• To create somaclonal variation for developing high yielding Aus rice variety	Gazipur
204	Improvement of BRRI dhan47 through somclonal variation	• To create somaclonal variation for reducing seed shattering of BRRI dhan 47 BRRI dhan47.	Gazipur
205	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
206	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
207	Development of high yielding photosensitive rice variety through anther culture	• To develop photosensitive rice variety	Gazipur
208	Development of premium quality rice (kalijira type) through somaclonal variation	• To develop high yielding short stature aromatic Kilizira type varieties	Gazipur
209	Identification of QTLs for taller seedling height in rice	• To identify QTLs for taller seedling height for developing tidal submergence tolerant rice variety	Gazipur
210	Marker assisted selection for fragrance in F_3 Population of BRRI dhan87 and Kalijira.	• To develop high yielding aromatic rice	Gazipur
211	Development of salt tolerant transgenic rice	• To develop salt tolerant transgenic rice lines	Gazipur
212	Introgression of salt tolerant mangrove gene	• To develop salt tolerance transgenic rice lines	Gazipur
213	Development of salt tolerant transgenic rice with *PVA1*	• To develop salt tolerant transgenic rice lines	Gazipur

Sl. No.	Research Title	Objective (s)	Location
214	Development of high yielding aromatic rice lines through genome editing	• To develop high yielding aromatic rice lines using CRISPR-Cas9 technology.	Gazipur
215	Development of high yielding blast resistant rice lines through genome editing	• To develop high yielding blast resistant lines lines using CRISPR-Cas9 technology.	Gazipur
216	Isolation and cloning of stress tolerant gene	• To isolate and cloning of stress tolerance gene	Gazipur
217	Isolation and cloning of stress tolerant gene from Wheat	• Isolate and cloning of drought tolerance gene	Gazipur
218	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
219	Development of Kalijira type rice variety through mutation by NMU	• To develop high yielding short stature aromatic Kalizira type varieties	Gazipur
220	Development of high yielding sheath blight resistant rice variety	• To develop Sheath Blight resistant lines	Gazipur
221	Identification of major regulators for C4 rice	• Characterizing *Setaria italica* mutant population for loss of C4 functions	Gazipur
HYBRID RICE DIVISION			
222	Source Nursery	• Identification of prospective maintainers and restorers of diversified origin for making experimental rice hybrids	Gazipur
223	Testcross Nursery	• Confirmation of maintainers and restorers from the crossed entries • Selection of heterotic rice hybrids and • Conversion of prospective maintainers into new CMS lines	Gazipur

Sl. No.	Research Title	Objective (s)	Location
224	Backcross Nursery	• Developing CMS lines from identified maintainer by back crossing.	Gazipur
225	CMS Maintenance and Evaluation Nursery	• Evaluation of locally developed and exotic CMS lines along with their maintainer lines	Gazipur
226	Improvement of parental lines through B×B and R×R crosses	• Development of new recombinant maintainer and restorer lines with broader genetic base	Gazipur
227	Development of Disease resistant hybrid rice parental lines	• To develop new CMS lines resistance to disease (BB) Selection of heterotic rice hybrids & usable parental materials resistance to disease (BB)	Gazipur
228	Development of hybrid rice varieties resilient against major biotic and abiotic stresses particularly suitable for unfavorable ecosystem of Bangladesh	• Development of hybrid rice varieties resilient against major biotic and abiotic stresses through staking/pooling/ pyramiding of genes/QTLs into elite maintainer and restorer lines. Commencement of genomics in hybrid rice breeding derived from re-sequencing technology in Bangladesh.	Gazipur
229	Evaluation of Multi-stress tolerant lines	• To find out prospective maintainer and restorer lines in the background of multi-stress situation	Gazipur
230	Field Rapid Generation Advance (FRGA) for B & R line improvement	• Advancement of generation with >70% recovery	Gazipur
231	Parental line development for premium quality hybrid rice	• To develop parental lines (B & R) having premium quality characteristics	Gazipur
232	Parental line development for blast tolerant hybrid rice	• Advancement of generation with >70% recovery	Gazipur
233	Evaluation of experimental hybrids (OT)	• Selection of promising hybrids	Gazipur
234	Preliminary Yield trials (PYT) of promising hybrids	• To study the wider adaptability and yield potentiality of promising hybrids	Gazipur Bogura, Mymesingh Barisal and Rangpur

Sl. No.	Research Title	Objective (s)	Location
235	Multi-location yield trials of promising hybrids	• To select potential hybrids with wide adaptability	Gazipur, Mymensingh Ishwardi and Barishal
236	Combining ability of A, B & R lines	• To select the best combiner (S) in respect of grain yield & yield components	Gazipur
237	National Hybrid Rice Yield Trial (NHRYT) SCA	• To identify promising hybrids from home and abroad	Gazipur
238	Quality ensure of previous season produced F_1 and CMS lines through grow out test	• To determine purity of parental lines of released hybrids and produced F_1's	Gazipur
239	Demonstration trials of BRRI released hybrids along with promising hybrids and checks	• To evaluate the performances of released hybrids with promising ones	Gazipur
240	Seed multiplication of promising CMS lines	• To produce pure and good quality seed of CMS lines for subsequent use.	Gazipur
241	CMS line multiplication of BRRI hybrid dhan1 & BRRI hybrid dhan4	• Production of sufficient quantity quality seeds of CMS lines for subsequent use	Gazipur
242	CMS line multiplication of BRRI hybrid dhan2	• Production of sufficient quantity quality seeds of CMS lines for subsequent use	Gazipur
243	CMS line multiplication of BRRI hybrid dhan3	• Production of sufficient quantity quality seeds of CMS lines for subsequent use	Gazipur
244	F_1 seed production of BRRI hybrid dhan2	• Production of sufficient quantity quality hybrid seed for subsequent use	Gazipur
245	F_1 seed production of BRRI hybrid dhan3	• Production of sufficient quantity quality hybrid seed for subsequent use	Gazipur
246	F_1 seed production of BRRI hybrid dhan4	• Production of sufficient quantity quality hybrid seed for subsequent use	Gazipur
247	F_1 seed production of promising hybrids	• Production of sufficient quantity quality hybrid seed of promising hybrids for subsequent use	Gazipur

Sl. No.	Research Title	Objective (s)	Location
248	CMS line multiplication of BRRI hybrid dhan5	• Production of sufficient quantity quality seeds of CMS lines for subsequent use	Gazipur
249	CMS line multiplication of BRRI hybrid dhan6	• Production of sufficient quantity quality seeds of CMS lines for subsequent use	Gazipur
250	CMS line multiplication of BRRI hybrid dhan7	• Production of sufficient quantity quality seeds of CMS lines for subsequent use	Gazipur
251	F_1 seed production of BRRI hybrid dhan5	• Production of sufficient quantity quality hybrid seed for subsequent use	Gazipur
252	F_1 seed production of BRRI hybrid dhan6	• Production of sufficient quantity quality hybrid seed for subsequent use	Gazipur
253	F_1 seed production of BRRI hybrid dhan7	• Production of sufficient quantity quality hybrid seed for subsequent use	Gazipur
254	Establishment of crossing block for nucleus seed production	• To initiate crossing program for nucleus seed production	Gazipur
255	Growth duration differentiation method (GDDM) for synchronization in flowering	• To determine proper heading time of parental lines (A &R) of promising hybrids	Gazipur
256	Maintainer and restorer lines multiplication of BRRI released hybrids	• Production of sufficient quantity quality parental lines for subsequent use	Gazipur
257	Experimental F_1 seed production of selected promising hybrids from OT	• To find out commercial seed production feasibility of promising hybrids from OT	Gazipur
GENETIC RESOURCE AND SEED DIVISION			
258	Collection of rice (*Oryza sativa* 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. No.	Research Title	Objective (s)	Location
259	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
260	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
261	Molecular characterization of rice germplasm.	• To characterize the rice germplasm through molecular tools (DNA Fingerprinting).	Gazipur (Mol. Lab, GRSD)
262	Processing, registration and storage of rice germplasm.	• To store the rice germplasm with respective accession number in the long, medium and short-term storages of Genebank after rejuvenation and duplicate sorting.	Gazipur (GRSD)
263	Viability testing, periodic evaluation and routine monitoring of stored germplasm.	• To check and monitor the germination (percentage) of the stored germplasm in the short, medium and long term storages.	Gazipur
264	Rice germplasm supply and exchange.	• To supply rice germplasm to different researchers at home and abroad as per their demand and to exchange germplasm (if possible) with national/international organization(s).	Gazipur
265	Maintenance of BRRI recommended HYVs and LIVs and nucleus seed production (Seed Production and Variety Maintenance)	• To maintain the BRRI recommended HYVs (High Yielding Variety) and LIVs (Locally Improved Variety) for encouraging farmers to cultivate and for any other purpose and • To maintain genetic purity and homogeneity of morphological characteristics of BRRI developed rice varieties as a source of breeder seed.	Gazipur
266	Breeder seed production and distribution.	• To produce and supply of breeder seed of BRRI developed rice varieties as per indent of GO, NGOs and PS seed producing organizations/ companies/ entrepreneurs.	Gazipur and all R/S (except Khustia)

Sl. No.	Research Title	Objective (s)	Location
267	Sending *khudebarta* (SMS) for breeder seed distribution	• To make it easy for all Rice Seed Network clients to get the information of BS distribution	Gazipur (GRSD)
268	Monitoring seed production plots and 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.	Regional Stations (10)
269	Secondary Yield Trial (SYT) of 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
270	Secondary Yield Trial (SYT) 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
271	Performance study of nine aromatic rice germplasm.	• To evaluate the yield performance of nine aromatic rice germplasm compared to standard check.	Gazipur
272	Performance study of Jirasail genotype.	• To evaluate the initial yield performance of popular Jirasail germplasm for comparing with standard check.	Gazipur
273	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
274	DNA finger printing of Kalijira rice germplasm accessions.	• To characterize the rice germplasm through molecular tools (DNA Fingerprinting).	Gazipur (Molecular Lab, GRSD)
275	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 Location : (Bogura, Kurigram, Lalmonirhat, Gaibandha, Rangpur and Jamalpur).	Gazipur
276	Performance evaluation of available local aromatic rice germplasm in BRRI	• To identify better aromatic rice germplasm comparing with BRRI dhan34 for releasing as a new variety.	Gazipur

	Genebank.		
Sl. No.	**Research Title**	**Objective (s)**	**Location**
277	Characterization of similar named Tepi Boro_group of rice germplasm.	• To characterize and evaluate the rice germplasm through quantitative and qualitative traits and as well as by SSR markers for QTL *aro3.1*, *aro4* and *aro8.1 (*represented by *badh2* gene) of rice aroma for developing its core collection.	Gazipur
278	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
GRAIN QUALITY AND NUTRITION DIVISION			
279	Determination of physicochemical and cooking properties of advanced breeding lines	• To help to develop data base on physicochemical, cooking and eating qualities of grain for newly developed of breeding lines.	Gazipur
280	Determination of physicochemical and cooking properties of transforming rice breeding lines	• To find out the physicochemical and eating quality of promising lines for identifying better grain quality	Gazipur
281	Evaluation of physicochemical properties of newly released BRRI varieties	• To determine physicochemical and cooking qualities of BRRI developed rice varieties for updating the database.	Gazipur
282	Nutraceutical Characterization of newly released BRRI varieties	• To determine nutraceutical properties including antioxidants, minerals, fatty acid and amino acid profiling' of BRRI released HYVs from BR1 to BRRI dhan95 and BRRI hybrid1 to BRRI hybrid dhan6 along with their physicochemical and cooking properties.	Gazipur
283	Calibration of NIR to predict proximate composition of rice varieties.	• To calibrate a near accurate prediction model for proximate composition of rice and • To characterize the proximate composition (moisture, carbohydrate, protein, lipids, ash and Dietary fiber) of BRRI varieties as an index of	Gazipur

		nutritional worth.	
Sl. No.	**Research Title**	**Objective (s)**	**Location**
284	A survey of rice grain quality in Bangladesh: Consumer preference.	• To identify scientific reasons of preferring local varieties over HYV in terms of grain quality and nutrition. •	Gazipur
285	Taste profiling of popular rice varieties in Bangladesh .	• To characterize the textural and cooking properties of a collection of rice varieties belonging to the intermediate and high AC classes and • To apply modeling techniques to predict distinct cooking quality ideotypes based on visco-elastic, textural attributes and flavor.	Gazipur
286	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.	• To evaluate on appropriate analysis methodology and study amount of FA and their relation to nutrition properties in rice and • To evaluate the burning effects of RBO.	Gazipur
287	To Screening, Selection, and Training of Sensory Panelists.	• To determine impairment of primary senses (colour, vision, ageusia and anosmia • To matching test for taste and odor substances • To ability to detect basic taste and odor acuity • To determine ability to characterized texture • To performance in comparison with other candidates and • To increase sensory acuity of panelists and provide them with rudimentary knowledge of procedures used in sensory evaluation.	Gazipur
288	A study on the different components of rice in relation to the palatability.	• Urban people of Bangladesh prefer fine grain rice which depends on palatability of cooked rice. They take less amount of rice with other ingredients on the nutritional point of	Gazipur

		view.	
Sl. No.	**Research Title**	**Objective (s)**	**Location**
289	Fatty acid profiles and nutritional quality of rice bran oil (RBO) in BRRI high yielding varieties.	• To identify the varieties containing higher amount of oil content and • To analyze the fatty acid profile and nutritive value of rice bran oil	Gazipur
290	Study on anti-oxidative and anti-cancer properties of pigmented (black, red, purple) rice varieties in Bangladesh.	• Anti-carcinogenic effects by observing the anti-proliferative activity in cancer cells (Out sourcing) • Anti-oxidant enzyme activity in the lysates of cultured cells by estimating activities of detoxifying enzymes (Out sourcing). • Anti-diabetic effects by measuring serum glucose and insulin levels in type 2 diabetic rats and • Anti-inflammatory effects by estimating serum levels of IL-4, IL-6 and TGF-beta	Gazipur
291	Effect of Zn and phytate activities on Zn enriched rice varieties at different locations in T. Aman season.	• To determine the Zn and phytate activities with physicochemical properties of Zn enriched rice varieties at different locations in T. Aman season.	Gazipur
292	Determination of physicochemical properties and nutritional quality of puffed, popped and flattened rice from newly released BRRI varieties.	• To identify the physical quality of puffed, popped and flattened rice and • To determine the nutritional value of puffed, popped and flattened rice.	Gazipur
293	Survey on indigenous rice products of BRRI modern varieties.	• To find out the popular BRRI varieties are used for producing puffed popped and flattened rice.	Gazipur

Sl. No.	Research Title	Objective (s)	Location
294	Value addition and standardization of nutritional level in selected food items to mitigate malnutrition.	• Extraction of starch from rice, casave, potato, jackfruit seeds and sagu as potential ingredient of rice based products Formulation of low cost rice based nutraceutical food items and • Impact evaluation studies of formulated rice based foods.	Gazipur
RICE FARMING SYSTEMS DIVISION			
295	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	Manikganj Rangpur Kushtia Meherpur and Bandarban
296	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	Faridpur and Sirajganj
297	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	Tangail Mymensingh Gazipur Kishoreganj Sirajganj Rajshahi Khulna and Satkhira
298	Synchronization of transplanting of Boro rice in different elevation of haor by single and double transplanting methods	• 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 in haor areas	Kishoreganj
299	Impact evaluation of temperature and precipitation changes on promising rice cultivars yield 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 and Dinajpur

Sl. No.	Research Title	Objective (s)	Location
300	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 use efficiency through proper management	Rangamati Bandarban and Khagrachhari
301	Performance of HYV Aus rice along with local varieties under Jhum cultivation sytsem	• To determine comparative productivity and suitability of HYVs in respect to local Jhum cultivars	Rangamati Bandarban and Khagrachhari
303	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
304	Determination of the effects of rice sowing date, seedling age, and rice growth duration 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 ORYZA and • To determine optimum transplanting window, management practices for increased yield	Gazipur and Dinajpur
305	Development of four-crop cropping patterns for favorable irrigated ecosystems in medium highland	• To increase total productivity of unit area per year by increasing cropping intensity and • To compare the sustainability of four-crop cropping patterns with that of three-crop cropping pattern in terms of soil heath and profit.	Gazipur
306	Intensification of Boro–Fallow–T. Aman cropping pattern through the inclusion of mustard in irrigated ecosystem of Madhupur Tract	• To scale up the Mustard-Boro-T. Aman cropping pattern through farmers participatory cropping pattern trials and • To increase the productivity of the system by community basis	Dhanbari, Tangail

Sl. No.	Research Title	Objective (s)	Location
307	Improvement of Jhum cultivation through the replacement of local rice with the modern Aus rice in hilly areas	• To increase the system productivity	Rangamati Bandarban and Khagrachhari
308	Intensification of single T. Aman area through the inclusion of modern Aus rice in plain land in hilly areas	• To increase the system productivity	Rangamati Bandarban and Khagrachhari
309	Inclusion of Mustard after T. Aman in Boro – Fallow –T. Aman cropping pattern in piedmont plain	• To increase the total system productivity and • To increase oil seed production	Rangamati Bandarban and Khagrachhari
310	Piloting of cropping pattern technologies to increase the productivity	• To increase the productivity of cropping systems at farm level •	Kotiadi Pakundia, Kishoreganj
311	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	Rangpur
312	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
313	Performance of exotic date palm (Phoenix dactylifera) in homestead and agroforestry systems	• To develop agro-forestry system with exotic date palm to increase the system productivity and income of the farmers	Meherpur (Mujibnagar complex)
314	Year round vegetables and spices production in homestead	• Production of high value vegetables in fallow land of homestead with a view to increase income. • To meet up the nutrient requirements of the family members throughout the year and enhance the women empowerment.	Sreepur, Gazipur (FSRD)
315	Improvement of the existing Boro-Fallow-T. Aman cropping pattern through inclusion of oil seed and pulse crops	• To validate different cropping patterns by introducing short duration variety of mustard, mungbean. • To increase land productivity by introducing new crops in the existing pattern. • To increase overall farm income.	Sreepur, Gazipur

Sl. No.	Research Title	Objective (s)	Location
316	On-farm evaluation of Aus and T. Aman rice varieties in T. Aus-T. Aman-Rabi cropping system in partially irrigated ecosystem	• To investigate the suitability of Aus and T. Aman rice varieties in Rabi-T. Aus-T. Aman cropping system	Sreepur, Gazipur
317	Evaluation of turmeric and ginger production under fruit tree based agro forestry system	• To utilize the fallow land under orchard and • To increase the total productivity of orchard	Sreepur, Gazipur
318	Performance of chewing type sugarcane cultivation in homestead	• To evaluate the performance of chewing type sugarcane varieties in homestead	Sreepur, Gazipur
319	An improved cropping pattern for highland in Madhupur Tract soil: Mustard-Mungbean-T. Aus-Blackgram	• To increase the system productivity and farmer's income	Sreepur, Gazipur
320	Vegetable production nearby homestead at FSRD site, Tengra, Sreepur, Gazipur	• To intensify the single T. Aman area and • To increase farmers' income	Sreepur, Gazipur
321	Vaccination program for livestocks at FSRD site, Tengra, Sreepur, Gazipur	• To reduce or minimize the mortality rate of livestock	Sreepur, Gazipur
322	Turkey rearing under scavenging system	• To check the feasibility of turkey rearing under rural condition and • To increase household income through empowering rural women •	Sreepur, Gazipur
323	Small scale pigeon rearing in farmer's household	• To increase family income through squab production and to increase nutritional supply to family members.	Sreepur, Gazipur
324	Maximization of farmer's income through carp poly culture technique at low cost management in perennial pond	• To increase production and farmers income	Sreepur, Gazipur

Sl. No.	Research Title	Objective (s)	Location
325	Semi-aquatic production system of vegetables, fish and fruit in mini pond	• To develop mixed farming system technology in mini pond for diversifying and maximizing yield.	Sreepur, Gazipur
326	Development of mini orchard in homestead	• To diversify fruit production system at homestead	Sreepur, Gazipur
327	Empowerment of rural woman through off-farm activities at FSRD Site, Sreepur, Gazipur	• To improve the economic condition of rural women.	Sreepur, Gazipur
328	Farmers' participatory mushroom production at FSRD Site	• To increase family income and nutrition.	Sreepur, Gazipur
AGRONOMY DIVISION			
329	Application of Nano-Zinc Oxide to Improve Salt Tolerance in Rice	• To develop an eco-friendly protocol to synthesis Nano-Zinc Oxide and • To investigate the effect of Nano-Zinc Oxide on growth, yield and mineral status of rice under salinity stress	Gazipur (On-Station)
330	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	Sirajganj
331	Nitrogen application to maximize grain yield of Swarna type varieties in T. Aman season	• To find out optimum nitrogen rate for swarna type varieties and • To find out the influence of nitrogen application on the grain N uptake, growth and yield of swarna type varieties.	Gazipur
332	Effect of nitrogen and potassium fertilizer management on growth and yield of mechanically transplanted boro rice.	• To determine the suitable N and K fertilizer management options for mechanically transplanted rice.	Gazipur

Sl. No.	Research Title	Objective (s)	Location
333	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 and • To determine the residue of pre and post-emergence herbicides in the irrigation water, soil, rice straw and grain	Gazipur
334	Herbicide Application: Shifts in soil microbial community structure	• To characterize the herbicide-induced responses of microorganisms in transplanted rice and • To evaluate the herbicide-induced tolerance of soil microbes	Gazipur
335	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 and • To find out and recommended the most appropriate Agronomic management packages for yield maximization and quality improvement of some local fine aromatic popular varieties.	Gazipur
336	Yield maximization of T. Aus rice through integrated crop management	• To study the effect of some Agronomic management for yield maximization of some T. Aus rice varieties.	Gazipur
337	Maximizing yield of BRRI developed new varieties through manipulating some agronomic factors in boro season.	• To find out the effect of agronomic critical factors for yield maximization of newly BRRI developed varieties in boro season	Gazipur
338	Yield maximization of boro rice through good agricultural practice (GAP).	• To maximize the yield of boro rice through good agricultural practices (GAP).	Gazipur
339	Effect of micronutrient and organic matter for growth and yield maximization of boro rice.	• To observe the effect of micronutrient on growth and yield of boro rice. and • To observe the effect of organic matter on growth and yield of boro rice.	Gazipur

Sl. No.	Research Title	Objective (s)	Location
340	Determination of economic nitrogen rate for popular transplanted Aus rice varieties.	• To determine the economic nitrogen rate of Aus varieties.	Gazipur
341	Improvement of soil health in four crops pattern through agronomic management.	• To improve the soil health through agronomic management and • To increase the cropping intensity and productivity.	Gazipur
342	Effect of planting time on growth and grain yield of advanced lines/popular varieties	• To determine suitable planting time of potential genotypes suitable for T Aus, T Aman and Boro season.	Gazipur
343	Effect of time of planting on growth and yield of BRRI developed varieties for Haor region in Boro season	• To identify the suitable time of planting appropriate high yielding variety for Haor area.and • To identify the suitable appropriate high yielding variety for Haor area.	Habiganj
344	Effect of seedling age on tillering dynamics of BRRI varieties and its impact on yield in T Aman and Boro season.	• To investigate the effect of seedling age on tillering dynamics of BRRI varieties • To observe the effect of seedling age on growth and yield of boro rice.	Gazipur
345	Evaluation of candidate herbicides	• To evaluate the suitable herbicides with satisfactory weed control efficiency in rice	Gazipur
SOIL SCIENCE DIVISION			
346	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	Gazipur (Green house)
347	Nutrient management for growing four crops in a year	• To increase crop production • To maintain soil fertility and improve nutrient use-efficiency.	Gazipur
348	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 and • To develop locally based mitigation options that can be compared within plot based experiments.	Gazipur

Sl. No.	Research Title	Objective (s)	Location
349	Determination of N fertilizer doses for ALART (BB res.) materials	• To determine optimum N doses for ALART materials	Gazipur
350	Determination of N fertilizer doses for new BRRI varieties	• To determine optimum N doses newly released BRRI varieties.	Gazipur
351	Effect of nitrogen and potassium rates on modern rice cultivation	• To find out the suitable combination of N and K for MV rice cultivation and • To study the N and K dynamics in soil and plant.	Gazipur
352	Screening of N use efficient rice genotypes	• To find the N use efficient genotypes • To find the agronomic traits related efficient N management and • GWA mapping of selected NUE lines	Gazipur
353	Performance of BRRI rice varieties under P deficient soil	• To find out P efficient rice varieties	Gazipur
354	Effect of different micronutrients on growth and yield of rice	• To study the effect of micronutrients and beneficial nutrients on growth and yield of rice • To observe the interactions among the different micro nutrients and beneficial nutrients and • To study the effect of micronutrients and beneficial nutrients on soil biochemical properties	Gazipur
355	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 and • To devise a nutrient dynamics model to estimate the nutrient status on long-term basis	Gazipur
356	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

Sl. No.	Research Title	Objective (s)	Location
357	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) and • To maintain soil fertility	Dinajpur
358	Determination of Phosphorus Fractions from Long-term Phosphorus deficient Experiment	• To quantify the fractions of P in long-term P applied soils • To identify the mining nutrient and • To identify the N-P and N-K ratio for optimum rice yield	
359	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 and • To identify the soil fertility capability classification.	Regional Station
360	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 and • To devise a nutrient dynamics model to estimate the nutrient status on long-term basis	Gazipur
361	Regional Yield Maximization Trial under Recommended Management Practices	• To validate integrated improved management practices (IIMP) compared with BRRI recommendation practices and • To maximize proper filling of grains in a panicle under IIMP	Gazipur Cumilla and Sonagazi
362	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 and • To determine management options for solution of soil problem(s)	Gazipur
363	Long-term missing element trial at BRRI regional station	• To determine nutrient mining problem on soil fertility and its influence on rice yield and • To find out nutrient management options for correcting soil problems	Gazipur

Sl. No.	Research Title	Objective (s)	Location
364	Consequences of continuous wetland rice cropping on rice yield and soil health	• To evaluate soil fertility and rice yield changes over time and • To find out mitigation options of soil health	Gazipur
365	Determination of Critical Limit of Nutrients for Major Soils and Crops	• Delineation of the present status of different nutrients in calcareous, non-calcareous, piedmont and terrace soils of AEZ 18, 19 and 20 and • Determination of critical limit of P, K, S, Zn and B for different soils and rice crop.	Gazipur
366	Integrated nutrient management for double and triple rice cropping for maximizing productivity	• To improve land productivity and soil health under intensive cropping system.	Gazipur
367	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
368	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
369	Heavy metal contamination risk assessment in irrigation water, soil and rice plant in farmers field of the Industrial areas of Gazipur-Sadar	• To measure the presence of heavy metals in the soil, plant and irrigation water in the contaminated industrial area • To measure the uptake of Pb, Cr, Ni and Cd by the rice plants • To calculate the bioaccumulation of these heavy metals and • To compare the conc. of heavy metals in farmers field with the control research plot at BRRI farm, Gazipur.	Gazipur
370	Effect of different organic sources for amelioration of industrial polluted area	• To evaluate the efficacy bio-organic fertilizer for growth and yield of rice and • To assess the impact of bio-organic fertilizer on soil health	Gazipur
371	Increase Rice Yield through Vermicompost in Coastal Land	• To assess the impact of vermicompost on the yield of rice in coastal saline soil	Borguna and Khulna

Sl. No.	Research Title	Objective (s)	Location
372	Effect of biochar on rice yield and soil health on problem soils	• Optimum rate of biochar for rice cultivation in charland soil and • Increased rice yield and improved soil health	
373	Effects of different sources of fertilizer and variety on rice production in saline soil	• To develop suitable integrated nutrient management package utilizing local resources, which could help sustaining rice production with maintaining soil fertility.	Khulna
374	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 and • To assess the impact of bio-organic fertilizer on soil health	Gazipur
375	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) and To develop bio-fertilizer using potential microbes for rice cultivation in acid and saline soil	Gazipur
IRRIGATION AND WATER MANAGEMENT DIVISION			
376	Determination of physical and hydraulic properties in different soil types	• To document the important soil physical properties in different soil profiles and • To develop a soil moisture characteristics curve	Regional Stations
377	Automated Alternate Wetting and Drying Irrigation System for Rice production	• To automate conventional implementation of AWD technology • To make the AWD method easy and user-friendly • To save irrigation water by precise water level monitoring	Gazipur
378	Technique for Using Basin Water for Elevated Land Rice Cultivation in Haor Area during Dry Season	• To develop a technique for using basin water of haor during dry season • To bring elevated land under boro cultivation and • To improve land productivity	Habiganj and Netrokona

Sl. No.	Research Title	Objective (s)	Location
379	Problems and potentials for crop productivity improvement through water management in the Hilly areas	• To identify problems & potentials of water resources development for agriculture and livelihood improvement in the Hilly area and • To recommend suitable water management options	Chittagong Hill Tracts
380	Study on water stress tolerance capacity for different advanced rice genotype of BRRI	• To quantify water-stress tolerance capacity for different varieties and • To determine yield of varieties under different water stress condition	Gazipur
381	Performance evaluation of the proposed rice varieties under different water regimes	• To study performance of the proposed rice varieties under different water regimes and • To evaluate suitable water regimes for proposed lines/varieties of rice	Gazipur
382	Improving soil-water availability for crop production in char land by amendment practices	• To determine soil physical properties of root zone soil layers and • To determine water holding capacity of root zone soil layers • To determine infiltration rate and saturated hydraulic conductivity of the soil layers before and after soil amendment and • To measure soil-water retention curves of the soil layers and determine their parameters	Sirajgonj (RS)
383	Determining minimum irrigation water requirement of rice at different regions of Bangladesh through water balance from on-farm demand and model simulation	• To measure minimum water requirement for rice irrigation at different regions • To measure yield response of rice to irrigation application based on on-farm demand and simulated irrigation requirement and • To recommend the suitable water requirement package	Gazipur Kushtia and Rangpur
384	Optimization of water use efficiency through sub-irrigation system in fine (light) textured soils of Bangladesh	• To design and installation of a sub-irrigation system in a particular field based on soil physical and hydraulic properties • To estimate the total annual water balance in the sub-irrigation system and • To evaluate the performance of sub-irrigation system	Sirajgonj Rangpur and Kuhstia

Sl. No.	Research Title	Objective (s)	Location
385	Agricultural drought forecasting for mitigation of drought in T. Aman rice	• To determine drought using forecasted rainfall and evapotranspiration • To mitigate effect of drought by applying supplemental irrigation • To determine suitability of existing model for drought forecasting and • To determine yield performance of T. Aman rice after mitigating drought	Gazipur
386	Irrigation scheduling of Boro rice (Oryza sativa L.) based on weather forecasting in Gazipur	• To predict water demand through WBSM (Towfiq, 2007) • To compare performance of WBSM with AWD and CSW methods • To validate WBSM with CROPWAT 8.0 model and • To recommend the better method for irrigation scheduling of Boro rice	Gazipur
387	Feasibility evaluation of the use of sub-surface drainage system for rice-based cropping pattern in Bangladesh	• To identify post-monsoon waterlogged crop field under rice-based cropping pattern and • To collect detail information about land use, elevation and gradient, soil physical and hydraulic properties • To evaluate potential benefit due to installation of sub-surface drainage system and • To recommend suitable area for sub-surface drainage for increasing productivity	Coastal zone (tidal and saline)
388	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 • To assess the availability of water and potentials for irrigated crop cultivation and • To assess the constraints and prospects of tidal water utilization for crop production.	Barisal Jhalokhati Pirojpur Patuakhali and Barguna.

Sl. No.	Research Title	Objective (s)	Location
389	Water resources assessment during dry season crop cultivation in selected polders of coastal region	• To delineate suitable water resources during dry season • To determine the amount of fresh water available for crop production during the period and • To assess the cultivated area by different cropping pattern based on water resources	Dacope (Khulna) and Amtoli (Barguna) .
390	Use of less saline water resources for increasing cropping intensity in Barisal region	• To bring fallow land under Boro cultivation and • To improve crop and land productivity in the region	Barisal
391	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.	Gazipur and all regional stations
392	Conjunctive use of wastewater and fresh water for irrigation in Boro rice cultivation	• To determine suitability of wastewaters for boro rice cultivation and • To analyze rice grain sample for heavy metal uptake.	Gazipur
393	Effect on percolation losses and groundwater recharge due to weak plough-pan formed under long term conservation agriculture	• To determine amount of irrigation water contributed through deep percolation to ground water recharge under SP and CT • To determine depth of vertical movement of irrigation water towards ground water level and • To determine the depth and vicinity of the nearest aquifer	Rajshahi
394	Assessment of groundwater level depletion dynamics in selected locations of Bangladesh	• To evaluate fluctuation pattern of GWL • To determine the GWL depletion trend • To assess the GW recharge pattern through model study and • To recommend location specific safe GW use	Northwest hydrological region
395	Assessment of surface and groundwater quality for irrigation in selected locations of Bangladesh	• To determine the surface and groundwater quality parameters and • To determine the suitability of groundwater for irrigation	Gazipur and all R/S

Sl. No.	Research Title	Objective (s)	Location
396	Evaluation of available groundwater resources for sustainable crop production in selected locations of Bangladesh	• To evaluate fluctuation pattern of GWL • To determine the GWL depletion trend • To assess the GW recharge pattern through model study and • To recommend the safe use of GW in study locations	Selected locations of Bangladesh
397	Monitoring and performance analysis of wastewater at Gazipur district	• To monitor quality of wastewater for irrigation throughout the year and • To determine suitability of wastewater for boro rice cultivation.	Gazipur
398	Development of a low-cost DC solar water pump for irrigation in Bangladesh	• To use brushless DC motor for operating solar water pump • To find out optimum panel size • To test efficacy of the pump for surface water irrigation and • To determine economic feasibility of the pump for rice cultivation	Gazipur
399	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 develop a portable type PV panel structure • To determine the maximum command area covered by the solar pumps for rice irrigation • To analyze the feasibility of the pumps for rice cultivation and • To assess the value addition for versatile use of solar panels (Solar home system/Paddy thresher)	Gazipur
400	Mitigation options of GHG emission under different water regimes	• To find out the suitable water management options based on GHG emission and sustainable rice production	Gazipur

Sl. No.	Research Title	Objective (s)	Location
401	Improved Water Management Technologies for increasing Agricultural Production in the Haor areas (Phase-2)	• To demonstrate the effectiveness of some water management technologies in the haor areas • To assess the existing land uses and potential for increasing production and • To assess the water resources availability and potential of irrigation expansion through improved management	Greater Sylhet Division
PLANT PHYSIOLOGY DIVISION			
402	Exploring new sources of salinity tolerance from BRRI Gene Bank germplasm at seedling stage	• To identify salt tolerant advance breeding lines/genotypes at seedling stage	Gazipur
403	Characterization for salinity tolerance of Bengal Assam Aus Panel (BAAP) rice germplasm at seedling stage	• To find out new sources of salinity tolerance from BAAP Panel germplasm at seedling stage.	Gazipur
404	Characterization for salinity tolerance at seedling stage during T. Aman and Boro season	• To identify salt tolerant advance breeding lines/genotypes at seedling stage	Gazipur
405	Characterization of advanced breeding lines at salinity stress for whole growth period during Aman and Boro season	• To know the level of salinity tolerance of different genotypes.	Gazipur
406	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 *OsRR22*	Gazipur
407	Validation of Ashfal balam salinity tolerant QTLs for seedling and reproductive stage	• To measure the effects of QTLs at seedling and reproductive stage salinity tolerance	Gazipur
408	Characterization for salt tolerance of a backcross population of rice at seedling stage	• To classify the population in to different classes according to the level of tolerances and • To identify marker-trait linkage of Saltol specific markers through selective genotyping	Gazipur

Sl. No.	Research Title	Objective (s)	Location
409	Identification of rice germplasm for two weeks flash flood submergence tolerance	• To identify tolerant germplasm for two weeks of complete submergence at vegetative stage.	Gazipur
410	Identification of advance breeding lines for flash flood submergence tolerance	• To identify tolerant advance line for two weeks under complete submerged condition at vegetative stage	Gazipur
411	Screening for stagnant flooding tolerance of advance breeding lines and germplasm at whole growth period during T. Aman season	• To identify tolerant germplasm for water stagnation condition and • To observe tillering ability under water stagnation conditions	Gazipur
412	Evaluation of survivability and tolerance level of BRRI dhan78 under saline submergence condition	• To identify the tolerant level and survivability of BRRI dhan78 under saline submergence condition.	Gazipur
413	Evaluation of elongation ability of BRRI dhan91 under deep flooding condition	• To observe the elongation ability of BRRI dhan91 under deep flooding condition.	Gazipur
414	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.	Gazipur
415	Screening germplasm for drought tolerance at reproductive phase (TRB-Project)	• To identify rice germplasm tolerant to drought stress at reproductive phase.	Gazipur
416	Evaluation of previously selected germplasms 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	Gazipur
417	Physiological and biochemical characterization of advance breeding lines under drought stress at reproductive phase	• To assess the effect of drought stress on growth and yield of the tested genotypes and • To identify the physiological traits associated with drought tolerance.	Gazipur

Sl. No.	Research Title	Objective (s)	Location
418	Characterization of rice germplasms under drought stress at reproductive phase using SSR marker	• To study the genetic diversity of the germplasms.	Gazipur
419	Screening rice germplasm and breeding lines for heat tolerance	• To identify new heat tolerant donor and advanced breeding lines.	Gazipur
420	Generation advance and yield trial of spikelet fertility introgressed lines in the background dhan28 and BRRI dhan29	• To fix the spikelet fertility QTL and background loci to develop heat tolerant BRRI dhan28 and BRRI dhan29.	Gazipur
421	Screening for high temperature tolerance of spikelet fertility QTL introgression lines	• To identify high temperature tolerant lines under controlled condition	Gazipur
422	Exploring new sources of cold tolerance from BRRI Gene Bank collections at seedling stage	• To identify rice genotypes those can tolerate low temperature at seedling stage.	Gazipur
423	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
424	Characterization and evaluation of some selected rice genotypes for cold tolerance	• To identify cold tolerant rice genotypes at natural condition.	Gazipur
425	Effect of polythene covering on seedling raising in Boro season	• To identify a suitable technique for protecting Boro rice seedling from cold injury	Gazipur
426	Reduction of growth duration through vernalization and accumulation of degree days at seedling	• To determine vernalization effect on life period of rice	Gazipur
427	Determination of growth stages of some rice varieties as affected by sowing time	• To determine the duration of the different growth phases of rice varieties at various transplanting dates and • To detect appropriate degree days to initiate panicle in different transplanting dates.	Gazipur

Sl. No.	Research Title	Objective (s)	Location
428	Determination of growth phase and yield potentials of 60 days Aus rice varieties	• To determine the duration of the different growth phases and yield potential of Indian Aus rice varieties	Gazipur
429	Photo-sensitivity test of some advanced breeding lines	• To know the photo-sensitivity of advanced breeding lines and recently released T. Aman varieties	Gazipur
430	Investigation of anatomical and photosynthetic differences in rice leaves and related C4 species	• To identify leaf anatomical differences between rice and C4 species and • To explore differences of photosynthetic related parameters between rice and C4 species	Gazipur
431	Rooting dynamics of BRRI rice varieties against different nitrogen concentrations	• Evaluation BRRI rice varieties to find out varieties having vigorous root system under high nitrogen condition	Gazipur
432	Automatic weather station data collection and maintenance	• To collect, transfer and storage of automatic weather station data	Gazipur
433	Manual weather station data collection and maintenance	• To collect, transfer and storage of different weather variables	Gazipur
ENTOMOLOGY DIVISION			
434	Pest monitoring in BRRI farm. (Survey & Monitoring of Rice Arthropods)	• To study the insec-pests and their natural enemy incidence at BRRI farm and to create a database to develop a forecasting system.	Gazipur
435	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
436	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. and • To assess the yield loss due to infestation of rice insect pests.	Barisal Rangpur and Satkhira
437	Fall army worm (FAW) monitoring in rice.	• To determine the incidence pattern of FAW in rice.	Gazipur Barishal Chuadanga Kushtia

Sl. No.	Research Title	Objective (s)	Location
438	Impact of lighting period on the trapping of insect.	• To find out the effective lighting period for maximum insect trapping • To find out suitable insect catching time and • To reduce the trapping of natural enemies	Gazipur Barishal and Rajshahi
439	Behavioral adaptation of rice leafroller against global warming (Bio-Ecology of Rice Insect Pest and Natural Enemy)	• To identify the effects of temperature elevation on life cycle of rice leaf roller.	Gazipur
440	Species composition of rice stemborer.	• To document the stem borer species in the selected region.	Rajshahi Gazipur
441	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
442	Leveraging diversity for ecologically based pest management (Biological Control of Rice Insect Pests)	• To conserve natural enemies through ecological engineering approaches.	Gazipur and Rajshahi Rangpur
443	Study on entomogenous fungi to control BPH.	• To isolate the fungi from naturally infected insects and • To explore suitable media for mass production of the entomogenous fungi and its use in BPH management	Gazipur
444	Effect of deadheart and whitehead on grain yield of BRRI rice varieties (Crop Loss Assessment)	• To determine the compensation abilities of different rice varieties against yellow stem borer damage and • To know the relationship between YSB damage and yield loss.	Gazipur
445	Test of different insecticides against major insect pests (Evaluation of Chemicals and Botanicals against Rice Insect Pests)	• To evaluate the effectiveness of commercial formulations of different insecticides against major insect pests of rice.	Gazipur

Sl. No.	Research Title	Objective (s)	Location
446	Rice weevil (*Sitophilus oryzae*) and anguimous grain moth (*Sitotroga* sp.) control in rice.	• To assess the effectiveness of botanicals and chemicals against stored grain pests	Rangpur and Habiganj
447	Use of nanoparticle to control rice insect pests.	• To develop nano-particle based pest management in rice and • To reduce chemical pesticide load in environment.	Gazipur
448	Effect of insecticides on natural enemies of rice insect pests.	• To identify relatively safer insecticides for using (if needed) in IPM program	Gazipur
448	Effect of selected insecticide to control stem borer	• To find out effective insecticide against stem borer management	Rajshahi
449	Residue analysis of thiamethoxam and chlorantraniliprol-e in rice **(**Insecticide Toxicology)	• To detect insecticide residues in rice hull, bran and polished rice and • To establish monitoring and guidance on safe use of insecticide in rice field.	Gazipur
450	Evaluation of pesticide residue in candidate rice samples.	• To detect insecticide residues (if any) in candidate rice samples.	Gazipur
451	Screening of rice germplasm, advance line against major insect pests (Host Plant Resistance)	• To identify resistant rice germplasm against major insect pests.	Gazipur
452	Development of BPH resistance rice introgression lines through marker assisted selection.	• Development of elite donor for BPH resistance breeding program and • Development of new breeding lines for BPH resistance.	Gazipur
453	Identification of BPH resistant sources from rice germplasm.	• To identify BPH resistant germplasms and • To characterize BPH resistant germplasms using BPH resistant linked markers.	Gazipur
454	Suppression of serotonin synthesis in rice using CRISPR Cas9 for insect control.	• To develop insect resistant rice variety and • To reduce insecticide dependency.	Gazipur

Sl. No.	Research Title	Objective (s)	Location
455	Genome sequencing of rice hispa, *Dicladispa armigera.* (Molecular Biology of Rice Insect Pests)	• To provide a complete and accurate genome sequence of rice hispa	Gazipur
456	Molecular characterization of *Nilaparvata lugens* 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
457	Gene drive to control *Nilaparvata lugens.*	• To assess a gene drive strategy to control the insect pest that threatens the staple food production in Bangladesh.	Gazipur
458	Use of sex pheromone to control rice leafroller, *C. medinalis (* Integrated Pest Management)	• To test the efficacy of sex pheromone against leaf-roller in rice field and • To control rice leaf roller without insecticide.	Rajshahi
459	Study on the efficiency of different traps against rice field rats (Vertebrate Pest Management)	• To find out effective rat control techniques.	Gazipur Barishal an Rajshahi
PATHOLOGY DIVISION			
460	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	All AEZs of Bangladesh
461	Monitoring of rice diseases in HIZR and healthier rice under confined condition	• To determine the incidence and severity of rice diseases on the genotypes.	Gazipurr
462	Estimation of production loss due to rice disease	• To estimate the yield loss in selected areas	Gazipur and Cumilla

Sl. No.	Research Title	Objective (s)	Location
463	Pathotypic and genetic diversity of *Rhizoctonia solani* AG1-IA	• To estimate the genetic diversity of *R. solani* AG1-IA using ITS region sequences • To examine differentiation in aggressiveness of the isolates using seedling/plant assays in the greenhouse/field and • To determine the relationship between geographic origin and the pathogenic as well as genetic variability of *R. solani* AG1-IA populations.	Gazipur
464	Molecular characterization of bakanae causing fungi in Bangladesh	• To find out the fungi associated with bakanae disease of rice in Bangladesh	Gazipur
465	Development of differential system of *Xanthomonas oryzae pv. oryzae* and study on its molecular diversity	• To identify a standard differential set of isolates of *X. oryzae* pv. *Oryzae* andTo know the diversity of *X. oryzae* pv. *oryzae*.	Gazipur
466	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 and • To find out the efficacy of microbes as drought tolerance in rice.	Gazipur
467	Determination of toxins from infected seeds by seed borne pathogens	• To determine the level of major toxins in contaminated seeds and • To identify deterioration of antioxidant properties in infected seeds.	Gazipur
468	Studies on entomopathogenic fungi (*Metarhizium anisopliae*) to control BPH	• To identify the pathogenicity of entomopathogenic fungi against BPH and • To examine suitable media for mass production and find out appropriate rate of application for BPH management.	Gazipur
469	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

Sl. No.	Research Title	Objective (s)	Location
470	Development of a new scale for scoring of sheath rot disease	• To develop an easy and accurate scale for sheath rot disease scoring	Gazipur
471	Identification of the source of infection of rice false smut disease	• To disclose whether the spores of *Ustilaginoidea virens* are in the air or not • To identify whether seeds are the carrier of the pathogen or not and • To identify whether soil is the carrier of the pathogen or not	Gazipur and Cumilla
472	Improvement of differential system for rice blast disease in Bangladesh using differential system and molecular marker	• To select new differential blast isolates • To identify candidate resistant gene(s) or source (s) and • To monitor regularly of the evolution of new races	Gazipur
473	Isolation of potential fungi for controlling major weeds of rice	• To identify potential fungi for controlling major weeds of rice	Gazipur
474	Production of afla toxin by storage fungi at different moisture level in storage condition	• To determine the population of different storage fungi and • To determine the production of afla toxin at different moisture level	Gazipur
475	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 and To introgress of known resistant genes and/or gene pyramiding to develop durable blast resistant variety	Gazipur
476	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
477	Introgression of blast resistant genes into BRRI dhan47	• To develop durable blast resistant variety harboring *Pi40* and *Pi9* genes	Gazipur
478	Identification of major blast resistant genes in jhum rice.	• To find out blast resistant source(s) of *Pi genes*	Gazipur

Sl. No.	Research Title	Objective (s)	Location
479	Exploring new source of blast resistance in native rice germplasms	• To identify new sources of resistance from upland rice germplasm and • To assess the diversity based on phenotypic reactions and molecular marker	Gazipur
480	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
481	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 and • To develop high yielding bacterial blight and blast resistant pre-breeding lines	Gazipur
482	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
483	Observational trial of blast resistant advanced lines	• To evaluate the blast resistance and yield	Gazipur and Cumilla (RS)
484	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
485	Screening of LST against BB and blast	• To identify resistant source(s) against BB and blast	Gazipur and Cumilla
486	Screening of rice germplasm against bakanae disease	• To identify the resistant sources against bakanae disease of rice.	Gazipur, Cumilla and Habiganj

Sl. No.	Research Title	Objective (s)	Location
487	Screening of land races against Sheath blight disease	• To identify the resistant source against sheath blight disease of rice.	Gazipur
488	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
489	Development of prebreeding materials for tungro resistance	• To develop tungro resistant advance lines.	Gazipur
490	Development of blast resistant varieties using differential system and molecular markers	• To develop blast resistant varieties for Bangladesh	Gazipur
491	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 and • To identify marker data for developing blast and gall midge resistant varieties through MAS	Gazipur
492	Linkage and QTL mapping of blast resistance in BR16	• To identify significant QTLs with linked marker for blast resistance in BR16	Gazipur
493	Disease reactions and characterization of upland rice germplasms	• To know the different disease status of germplasm and • To identify best genotype/s against diseases and for better yield	Gazipur
494	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
495	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

Sl. No.	Research Title	Objective (s)	Location
496	Diversity of blast resistance gene(s) in rice germplasm	• To find out resistance gene(s) among the germplasm through phenotypic reaction and molecular marker	Gazipur
497	Development of Rice Blast Resistance by CRISPR/Cas9-Targeted Mutagenesis of the *OsERF922*	• To develop durable blast resistant variety or line against the major races by targeted mutagenesis (CRISPR/Cas9).	Gazipur
498	Development of inoculation technique for false smut disease	• To develop artificial inoculation technique of rice false smut disease	Gazipur
499	Effects of rice false smut contaminated seeds on quality	• To see the effects of seed contamination on the attributes of seed quality	Gazipur
500	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
501	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
502	Yield loss assessment of rice caused by bacterial blight and sheath blight	• To estimate yield loss due to bacterial blight and sheath blight.	Gazipur and Cumilla
503	Development of a yield loss app	• To estimate yield loss due to diseases instantly	Gazipur
504	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	Gazipur
505	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	Gazipur
506	Isolation of effective bacterial isolate for management of sheath blight disease	• To isolate and identify the effective isolates against sheath blight disease	Gazipur

Sl. No.	Research Title	Objective (s)	Location
507	Management of sheath blight disease using *Trichoderma harzianum*	• To investigate the efficacy of *Trichoderma harzianum*	Gazipur and Rajshahi
508	Bakanae disease control with integrated approach	• To find organic amendments and chemicals for controlling bakanae disease	Gazipur Cumilla and Habiganj
509	Formulation of nano particles from plant parts against bakanae disease	• To formulate nano particles from organic sources for controlling bakanae disease and • To use nano particles for safe environment	Gazipur
510	Identification of potential bio-control agents and formulation of biopesticides against bakanae disease of rice	• To identify and confirm effective microbes through (*Bacillus* spp, *Pseudomonas* spp., *Trichoderma* spp.) *in vitro* and molecular approach for controlling bakanae disease and • To find out suitable carrier materials with prolong shelf life for biopesticide formulation	Gazipur
511	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 and • To identify time most conducive time for sheath rot disease development	Gazipur, Cumilla and Rajshahi
512	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
513	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 and • To manage the rice tungro disease in the field trough integrated approaches	Cumilla
514	Determination of residual effect in fungicides treated rice	• To find out the pesticide residue in pesticides sprayed rice	Gazipur

Sl. No.	Research Title	Objective (s)	Location
515	Digitalization of Pesticide Resister	• To provide the pesticide evaluation report in mobile phone.	Gazipur
516	Performance of Ankuri as a seed treating device	• To examine the efficacy of Ankuri in controlling seed borne diseases using Ankuri.	Gazipur
517	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 and Cumilla
518	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 Station (RS)
FARM MECHANIZATION & POST HARVEST TECHNOLOGY DIVISION WORKSHOP MACHINERY & MAINTENANCE DIVISION			
519	Evaluating and modifying of BRRI developed machines (Development of Agricultural Machines)	• To verify the quality of BRRI machines • To identify the functional problems of farm machines and • To improve the performance of farm machines	Gazipur
520	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 and • To compare the performance with the existing threshers	Gazipur
521	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 and • To obtain operator views regarding suitability of combine harvester	Gazipur

Sl. No.	Research Title	Objective (s)	Location
522	Design and development of head feed mini combine harvester	• To design a head feed combine harvester • To manufacture the designed combine harvester prototype and • To carryout field performance test of the developed combine harvester prototype	Gazipur
523	Design and development of remote control seed sower machine for raising mat type seedling	• To improve the existing manual seeds sower machine using electronic device and • To evaluate the performance of seeds sower machine	Gazipur
524	Development of a forward motion manual rice transplanter	• Design and fabrication of a manual operated forward motion rice transplanter and • Performance evaluation of the developed rice transplanter	Gazipur
525	Design and development of walking type power operated rice transplanter	• To design and develop a power operated rice transplanter and • To test performance of the developed rice transplanter	Gazipur
526	Design and development of a diesel engine operated high speed hydro-tiller for marshy land	• To design a variable power transmission 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 and • To evaluate the prototype in different soil condition	Gazipur
527	Postharvest loss assessment of whole and head feed combine harvester under different soil condition	• To assess the loss of grain and • To identify the suitable operation system to minimize the loss.	Gazipur

Sl. No.	Research Title	Objective (s)	Location
528	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 and • To test, evaluate and validate the technology in laboratory, research field and farmers' field	Gazipur
529	Determination of optimum seed rate for *Hybrid* rice variety for mechanical transplanting in Bangladesh	• To identify the optimum seed rate for different h*ybrid* rice variety to produce quality seedlings and minimize the missing hills of mechanical transplanting and • To identify suitable seedling adjustment options to dispense optimum number seedling per stroke (seedlings hill^{-1}) of the rotary picker of rice transplanter.	Gazipur
530	Development of mat type seedling using hydroponic technique	• To develop a mat type seedling using hydroponic technique and • Performance test of developed seedling for rice transplanter	Gazipur
531	Attachment of binding facilitiy in BRRI self-proplled reaper	• To evaluate the existing binding facility • To improve the binding facility and • To attach binding unit in existing BRRI self-propelled reaper	Gazipur
532	Design and development of solar dryer (Milling and Processing Technology)	• To design, fabricate and develop solar dryer and • To compare with traditional sun drying of paddy	Gazipur
533	Test, evaluation and modification rubber roll de-husker for commercial use	• To modify and development of a rubber roll de-husker and • To evaluate the performance of paddy de-husker	Gazipur

Sl. No.	Research Title	Objective (s)	Location
534	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	Gazipur
535	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 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	Gazipur
536	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 and • To observe the head rice recovery of different DOM	Gazipur
537	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	Gazipur
538	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	Gazipur
539	3.3 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 and • To determine the effect of length of storage time on the quality of milled rice	Gazipur

Sl. No.	Research Title	Objective (s)	Location
540	Study the briquette production from rice by product (Renewable Energy Technology)	• To prepare briquettes from rice straw and husk • Characterization of different briquettes originated from agricultural residue and • To measure the calorific value of the briquettes	Gazipur
541	Study on solar energy utilization for small agricultural machinery	• To design mechanism of solar energy utilization and • To evaluate the performance of the developed machine	Gazipur
541	Identification of agricultural residues for maximizing biogas production	• To identify the potential biogas material from agricultural residues and • To find out the best mixing ratio for maximum biogas production	Gazipur
542	Design and development of low cost Biochar production technology using different agricultural by product	• To develop a energy efficient biochar production technology • To produce biochar using different agricultural by product • To evaluate the quality of produced biochar and • To select the optimum biochar production technology	Gazipur
543	Feasibility study of solar energy use in agricultural machinery	• To study the suitability of solar energy use in agricultural machinery and • To evaluate the aptness of solar energy use in agricultural machinery	Gazipur
544	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 and • To determine the physical and combustion properties of the final product and • To evaluate the performance of the briquetting machine	Gazipur

Sl. No.	Research Title	Objective (s)	Location
545	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 and • To motivate the local entrepreneurs to manufacture BRRI developed machinery	Gazipur
546	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 and • To identify the limitations and prospects of engineering workshop at farm level.	Gazipur
547	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.	Gazipur
548	Development of machine vision approach in determination of paddy varieties **(Precision Agriculture)**	• To develop machine vision algorithm in determination of particular paddy variety and • To identify the variety analyzing image of paddy	Gazipur
AGRICULTURAL ECONOMICS DIVISION			
549	Farm level adoption and evaluation of modern rice cultivation in Bangladesh (Rural institution & economic consequences)	• Tetermine the region-wise adoption rate of rice varieties in different seasons and • Assess the yield of diverse rice varieties in different regions and seasons.	All over Bangladesh
550	Constraints to adoption of BRRI released modern rice varieties at Burichang upazila in Cumilla districts: a policy option	• To investigate the drivers of adoption of different rice varieties in different seasons and • To delineate the underlying causes and factors affecting adoption of BRRI varieties at the farm level.	Cumilla

Sl. No.	Research Title	Objective (s)	Location
551	Drivers influencing adoption decision of aromatic rice in some selected areas of Bangladesh: an econometric approach	• To evaluate the adoption situation of BRRI dhan34 and Tulshimala aromatic rice varieties • To assess the profitability of BRRI dhan34 and Tulshimala aromatic rice varieties and • To identify the factors influencing the adoption decision of aromatic rice varieties.	Dinajpur and Sherpur
552	Understanding climate variability and market insights of rice in *haor* ecosystems	• To assess the impact of climate variability on rice cultivation • To figure out farmers' coping and adaptation strategies to climate change and • To derive policy implication	Habiganj
553	Estimation of costs and return of mv rice cultivation at the farm level (Production Economics)	• To determine the level of inputs used in MV Aus, MV T. Aman, and MV Boro rice cultivation • To estimate the cost of MV rice cultivation in different seasons and • To evaluate the profitability of MV Aus, MV T. Aman, and MV Boro rice cultivation at the farm level.	Over all Bangladesh
554	Assessment of popular local rice varieties cultivated in different seasons of Bangladesh	• To analyze the comparative profitability of popular local and HYV rice varieties and • To identify the reasons for cultivating local rice varieties in the respective study areas.	Kishoreganj
555	An economic investigation of rice seed production status in a selected area of Bangladesh	• To find out the profitability of TLS production by both contract and non-contract growers and • To document the constraints of TLS production of rice in the study location.	Tangail

Sl. No.	Research Title	Objective (s)	Location
556	Present scenario of rice milling and branding practices and it's impact on pricing in Bangladesh (Rice Marketing and Price policy)	• To measure the volume of paddy processed in different types of rice mills (automatic, semi-automatic, and husking mills) in Bangladesh • To assess the different degrees of milling of paddy and recovery rate of out-turns and • To investigate the process of branding based on a different degree of milling and its effect on the price.	Mymensingh Sherpur and Netrakona
557	Economic assessment and utilization pattern of rice byproducts: a case of rice bran in Bangladesh	• To measure the production and recovery rate of rice bran of different types of rice mills in Bangladesh • To know the utilization patterns of these rice bran • To identify the dominant supply chains of rice byproducts rice bran	Mymensingh Sherpur and Netrakona
558	Spatial market integration and price transmission of rice in Bangladesh: co-integration and vector error correction model approach	• To find out the co-integration and price leadership among four spatially separated rice markets and • To determine the nature and speed of price adjustment among the studied rice markets.	Dhaka Rangpur Sylhet and Barisal
559	Resilience of rice value chain: recent transformation and vulnerabilities	• Revisiting rice value chains in the face of recent transformations and disturbances and • Scrutinizing the resilience and vulnerabilities of the rice value chain actors.	MymensingN etrakona and Sherpur
560	Market concentration of popular rice brands in Bangladesh	• To identify different types of rice brands available in the market and their concentration.	Sylhet Jamalpur and Kurigram
561	Comparative advantage of export potential aromatic rice (BRRI dhan50) variety in selected areas of Bangladesh (Agricultural Policy and Development)	• To examine the prospect of production of export potential aromatic rice (BRRI dhan50) variety in terms of import and export substitution and • To draw some policy guidelines.	Jashore

Sl. No.	Research Title	Objective (s)	Location
562	Understanding rice consumption patterns in Bangladesh: evidence from household survey	• Understanding the changes in rice consumption patterns by different groups over time and • To examining the factors influencing changes in rice consumption patterns in Bangladesh.	All over Bangladesh
563	Transforming rice breeding through capacity enhancement of BRRI: market analysis	• Segmenting the rice market from different locations and stakeholder preference analysis and • Developing product concepts and quality targets for varietal replacement.	Cumilla Faridpur Gopalgonj Habiganj and Panchagarh
AGRICULTURAL STATISTICS DIVISION			
564	Stability Analysis of BRRI varieties	• To determine the stability index of BRRI varieties • Season, year and location wise database on BRRI varieties and • To estimate location-wise stability index of BRRI varieties	Gazipur and all regional stations
565	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 and • To compare BRRI stability model with other stability models (Eberhard and Russel Model, AMMI Model etc.).	Gazipur and all regional stations
566	Scopes of Bioinformatics in Rice Research	• Review the application of bioinformatics in rice research and • Develop analytical skills on the application of bioinformatics in rice research.	Gazipur
567	Statistical Modeling and RNA-seq data Analysis	• To develop algorithms for quantification of the gene expression level • To identify the differential expression genes (DEGs) and • To identify which DEGs were significantly involved in each Gene ontology (GO).	Gazipur
568	Digitalized Salary Management System for BRRI HQ Employee	• To develop a digital salary management system for BRRI employee	Gazipur

Sl. No.	Research Title	Objective (s)	Location
569	Digitalized Labour Management System for BRRI HQ	• To update "Labour Management System (LMS) " of BRRI as user need • Update "digitalized Attendance system of BRRI Labour" as user need • Update "Digitalized and Automated Labour Wages System" as user need • Update "Digital Labour Data Centre"and • Modify the Web Application as user need	Gazipur
570	Digitalized Casual Leave Application System	• To digitalized casual leave application system of BRRI	Gazipur
571	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 eco-system of Bangladesh.	Gazipur andall regional stations
572	Maintenance of rice and related database	• To maintain up-to-date computerized information on rice and related crops • To determine year wise Growth Rate of Rice Production in Bangladesh • To maintain up-to-date computerized information on climatic factors and • To produce various climatic maps.	All over the country
573	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 and • 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 and • 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 and On-farm

Sl. No.	Research Title	Objective (s)	Location
574	Minimizing agro micro climatological risk factors for maximizing sustainable rice production in Bangladesh	• To forecast and validation of agro micro climatological factors in rice crop seasons through experimentation for sustainable rice production • To avert management risk and capacity development through weather forecasting information • To provide advisory services applying the tools of ICT in agriculture and • To create database on weather forecasting and agro meteorological advisory services	Gazipur and all regional stations
575	Simulating of Climate Change Impact on Rice Growth and Yield in Bangladesh using DSSAT Model	• To determine the genetic coefficient of rice varieties of Aus, Aman and Boro season. • To simulate the impact of climate change on rice growth and yield • To forecast the yield of selected rice varieties at changing climatic conditions and • To select suitable rice variety(s) as adaptation options at different climatic condition for regional rice farmers.	Gazipur and all regional stations
576	Suitability (Edaphic) Mapping of BRRI dhan90 to BRRI dhan92	• To construct suitability map of BRRI released rice varieties (BRRI dhan90 to BRRI dhan92)	All over the country
577	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 estimate the return period of extreme rainfall and high temperature.	All over the country
578	Land use and land cover mapping in some selected area of Bangladesh	• To identify the various objects of land use/land cover (agriculture land, fallow land, Forest, urban area, orchard, Submergence area, water body etc. of a specific area) and • To calculate the area of the objects of land use land cover.	All over the country

Sl. No.	Research Title	Objective (s)	Location
579	Flood mapping using Remote Sensing	• A flood map and • The area and extend of flood.	All over the country
580	Training program on experimental data analysis	• To train up BRRI scientists on experimental data analysis using different statistical software • To make BRRI scientists self-dependent on experimental data analysis and • To developed skills on research planning, program and report writing.	Gazipur and all regional stations
581	Training program on multivariate data analysis	• To train up BRRI scientists on multivariate data analysis using different statistical software • To give clear and straightforward guideline of how to conduct experimental design for MVA • To make BRRI scientists self-dependent on multivariate data analysis and • To developed skills on research planning, program and report writing.	Gazipur and all regional stations
582	Strengthening Cyber Security System for BRRI	• To develop Virtual Private Network (VPN) for BRRI • To develop VPN tunnel for BRRI • To develop secure remote connectivity for BRRI and • To manage and maintain cyber security system	Gazipur
583	BRRI Alapon" Telephone Directory Mobile App	• To develop telephone directory mobile app for BRRI • To communicate through mobile app via voice call, video call, email or SMS • To provide location sharing through mobile app. • To provide all types of meeting, seminar etc notice via SMS through mobile app.	Gazipur and all regional stations

Sl. No.	Research Title	Objective (s)	Location
584	Vehicle Requisition Management System of BRRI	• To develop vehicle requisition management system (VRMS) for BRRI • To inform through SMS, on the basis of demand vehicle at BRRI and • To provide SMS for drivers for confirming their upcoming duty and • To host VRMS at server.	Gazipur
585	Training on Innovation, Service Process Simplification (SPS) and e-Nothi management for enhancing capacity of BRRI employee	• To provide various training on public service innovation (PSI), SPS and e-Nothi management to BRRI scientists and officers for developing capacity • To bring qualitative changes in the internal research work process and service delivery in BRRI HQ and respective regional stations and • To compile various innovative idea through PSI and SPS training for piloting and replication activities.	Gazipur and all regional stations
586	Rice Doctor" Apps	• To develop rice doctor Apps for BRRI • To manage and maintain rice doctor apps.and • To host rice doctor Apps at server.	All over the country
587	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 and • To manage and maintain RKB through regular updating of the information and documents.	All over the country
588	BRKB website management	• To develop and modify the design of BRKB Website and • To manage and maintain BRKB Website through regular updating of the information and documents.	All over the country
589	Dynamic view connectivity system, Bangla searching system and inner banner system for BRKB Website	• To construct dynamic view connectivity system • To create Bangla searching system • To develop inner banner system and • To manage and maintain BRKB Website through regular updating of the information and documents.	All over the country

Sl. No.	Research Title	Objective (s)	Location
590	BRRI Web Mail and Group Mail	• To create Web mail and Group mail id with password for all scientists and officers of BRRI and • To manage, maintain and update regularly as routine work web mail and group mail of BRRI	Gazipur
591	Developing secure system for BRRI Web Mail and Group Mail	• To develop spamming filtering system (SFS) at BRRI web mail server and • To develop automatic active & close system (AACS) at BRRI web mail server and • To develop Secure Sockets Layer (SSL).	Gazipur and all regional stations
592	Online Application System of BRRI	• To develop "Online application system" for BRRI • To host "Online application system" at data center and • To manage and maintain "Online application system" through regular updating of the information and documents.	All over the country
593	e-File Management System of BRRI	• To setup "e-File Management Software" for BRRI Head Quarter and all Regional station(R/S) for establishing e-Governance and • To setup "e-File (Nothi) Management System" for ensuring faster movement of files, hassle less and paperless office system and • To setup "e-File (Nothi) Management System" for increasing transparency, accountability at BRRI.	All over the country
594	e-Tender System of BRRI	• To develop "e-Tender system "of BRRI as per requirement of the Ministry of Agriculture (MoA) • To introduce the online tendering system to facilitate the procurement process of BRRI • To participate in the local and international tender/procurement of BRRI and • To increase transparency, competition and minimize the processing time and effort.	All over the country

Sl. No.	Research Title	Objective (s)	Location
595	LAN and internet connectivity of BRRI regional station(R/S)	• To setup Local Area Network (LAN) for all regional station of BRRI • To setup Internet connectivity for all regional station of BRRI and • To manage and maintain LAN & Internet connectivity of BRRI regional station.	Gazipur and all regional stations
596	BRRI Web Portal Management	• To develop and modify the design of BRRI Web Portal and • To manage and maintain BRRI Web Portal through regular updating of the information and documents	All over the country
597	Management of BRRI HQ Local Area Network and Internet Connectivity	• To increase the infrastructure of BRRI local Area Network and • To increase the bandwidth connectivity from 60 Mbps to 70 Mbps or more and • To manage and maintain ICT Network of BRRI	Gazipur
598	BRRI Networks Update, Maintenance and Extension	• To increase and stimulate awareness to all visitors of facebook group through 'BRRI Networks' • To extend, manage, update and maintain 'BRRI Networks' regularly and • To promote all activities, where only official interactions, various problems and theirs solutions can be posted.	Gazipur and all regional stations
599	Personal Data Sheet of BRRI	• To develop "Personal Data Sheet (PDS)" database for all scientists, officers, clerks of BRRI • To develop "Personal Data Sheet (PDS)" database using user name & password and • To get BACKUP of "Personal Data Sheet (PDS)" database regularly.	Gazipur and all regional stations
600	Video Conference System of BRRI	• To develop "Video conference system of BRRI (Skype system)" for administration, all divisional head and regional station head of BRRI and • To develop "Video conference system of BRRI (Skype system)" for research, administration works and innovative interactions.	All over the country

Sl. No.	Research Title	Objective (s)	Location
601	New version of management Information System (MIS) of BRRI	• To develop new version of management Information System (MIS) Software for BRRI • To manage and maintain MIS of BRRI and • To host MIS software at Bangladesh computer council (BCC)	Gazipur and all regional stations
602	Integrating Digital Signature into e-File (Nothi) System of BRRI and its management	• To integrate digital signature into e-File (Nothi) System for every user in BRRI • To incorporate digital signature with e-File (Nothi) system helping by Access to Information (A2i) and Controller of Certifying Authority (CCA) jointly and • To provide training by Controller of Certifying Authority (CCA), Ministry of ICT (MoICT) for smooth using of digital signature in e-File (Nothi) system and other's.	Gazipur and all regional stations
603	Rice Pest Corner	• To develop Rice Pest Corner for BRRI Website • To develop a Web Application for Rice Pest Corner and • To manage and maintain Rice Pest Corner.	All over the country
604	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 and • To create and stimulate awareness amongst the present employees of BRRI about ex. Scientists and officer's great activity.	Gazipur
FARM MANAGEMENT DIVISION			
605	Effect of transplanting date and spacing on the yield and yield components of different short duration rice varieties in T. Aman and Boro season (Rice Production Management)	• To find out the optimum transplanting date and spacing of short duration rice varieties in T.Aman and Boro season	Gazipur

Sl. No.	Research Title	Objective (s)	Location
606	Yield maximization of rice through integrated nutrient management	• To find out the suitable management practice for yield maximization of rice and soil health.	Gazipur
607	Efficacy of mechanical seedling transplanter and deep placement of mixed fertilizer on rice yield	• To evaluate the efficacy of newly developed mechanical rice transplanter cum fertilizer applicator and • To observe the yield and yield contributing parameters.	Gazipur
608	Monitoring the laborers' wages rate for rice cultivation around BRRI Farms at different locations of Bangladesh (Survey and development of data base for labor management)	• To estimate rice production cost and thus determine the retailer price of rice for the market and • To document farmers' labor management practices for rice cultivation	Gazipur and Regional stations
609	Performance of Boro varieties in seed production plots (Rice seed production and management and utilization of land, labour and other resources)	• To help rice production by estimating rice yield	Gazipur
610	Ten activities were done on land and labor management and utilization, and different management activities like irrigation, drainage, beautification etc.	• To smooth running of research & development activities and • To proper utilization of farm resources	Gazipur
ADAPTIVE RESEARCH DIVISION			
611	Technology Validation	• To evaluate yield potential and adaptability of advanced rice genotypes at farmer's field • To get feedback information about advantages and disadvantages of the breeding lines from farmers and DAE personnel and To select promising rice genotypes for proposed variety trial (PVT)	

Sl. No.	Research Title	Objective (s)	Location
612	Advanced Line Adaptive Research Trial (ALART) for favorable environment (FE), T. Aus 2020	• To identify and select suitable T. Aus advanced line from the tested lines for PVT. Location: Barishal, Cumilla, Habiganj, Chattogram, Kushtia, Rajshahi, Rangpur, Faridpur, Mymensingh and Gazipur	
613	ALART for Non-saline tidal environment (NSTE) T. Aus, 2020	• To identify and select suitable advanced line for non-saline tidal environment in Aus season from the tested lines for PVT. Location: Barguna (3), Patuakhali (2), Jalkathi (Nalchiti), Pirojpur (kaokhali), Feni (Sonagazi), Chattogram (Mirsarai), Gazipur (West byde)	
614	ALART Deep Water Rice (DWR) Deep flooded (1 to 2 meter), B. Aman, 2020	• To identify suitable DWR variety for B. Aman season in deep flooded (1 to 2 meter water depth) condition. Location: Faridpur (Sadar), Gopalganj (Moksedpur), Cumilla (Homna), Brahmanbaria (Nabinagar), Habiganj (Baniachang), Manikganj (Sadar), Munsiganj (Sadar), Sirajganj (Tarash), Tangail (Sadar) and Gazipur (Shibbari Deep water tank)	
615	ALART Stagnant Water Rice (SWR) Shallow flooded (50 to 100 cm), Early T. Aman 2020	• To identify suitable SWR rice variety for early T. Aman season in shallow flooded (1 to 2 meter water depth) condition. Location: Faridpur (Sadar), Gopalganj (Moksedpur), Cumilla (Homna), Jashore (Keshabpur), Satkhira (Ashashuni), Habiganj (Baniachang), Munsiganj (Sadar), Sirajganj (Tarash), Tangail (Sadar) and BRRI Gazipur (Deep Water Tank)	
616	ALART, Rainfed lowland rice (RLR), T. Aman	• To identify rice genotype suitable for rainfed lowland ecosystem. • Outcome: Two advanced lines, BR9571-13-1-9-1-1 and BR9574-9-5-3-1-1 along with BRRI dhan49 and BRRI dhan87 as checks were tested at farmers' field in ten locations None of the advanced line was recommended for PVT Location: Pirojpur (Kaukhali), Faridpur (Bhanga), Satkhira (Sadar), Kushtia (Mirpur), Rajshahi (Paba), Rangpur (Mithapupur), Habiganj (Sadar), Cumilla (Chandina), Feni (Sonagazi) and Gazipur (West byde)	
617	ALART, Zinc enriched rice (ZER), T. Aman	• To identify more zinc enriched suitable rice genotype compared to existing ones for Aman season Location: Gazipur, Cumilla (Chandina), Pirojpur	

Sl. No.	Research Title	Objective (s)	Location
		(Kaokhali), Faridpur (Vanga), Rangpur (Mithapukur), Rajshahi (Paba), Kushtia (Mirpur), Feni (Sonagazi), Satkhira (Sadar) and Habiganj (Baniachanj)	
618	ALART, Insect Resistant Rice-Brown Plant Hopper (IRR-BPH) in T. Aman	• To identify rice genotype(s) tolerant or resistant to Brown plant hopper (BPH) at farmers' field. Location: Cumilla (Chandina), Dinajpur (Birganj), Feni (Sonagazi), Habiganj (Baniachang), Kushtia (Kumarkhali), Rajshahi (Tanore), Satkhira (Tala), Naogaon (Shaphahar), Sirajganj (Tarash)and Gazipur (BRRI)	
619	ALART Premium quality rice (PQR), T. Aman	• To identify Breeding lines having premium quality rice suitable for proposed variety trial (PVT) during T. Aman season. Location: Dinajpur (Sadar , Kaharul, Chirirbander), Bogura (Dupchachia), BRRI (Gazipur), Naogaon (Niamatpur), Rangpur (Birganj, Taragon), Thakurgaon (Pirganj) and Manda (Naogaon).	
620	ALART Premium Quality Rice (PQR), Boro	• To identify To identify Breeding lines having premium quality rice suitable for proposed variety trial (PVT) during Boro season. Location: Dinajpur (Chirirbander), Bogura (Dhunot), Gazipur (BRRI), Rangpur (Mithapukur), Gazipur (Kapasia), Feni (Fulgazi), Kushtia (Sadar), Rajshahi (Godagari, Poba) and Shatkhira (Sadar).	
621	ALART, Zinc enriched Rice (ZER), Boro	• To identify more zinc enriched suitable rice genotype compared to existing ones for Boro season. Location : Jalkathi (Nalchiti), Faridpur (Nagarkanda) Satkhira (Sadar), Habiganj (Baniachong), Kushtia (Sadar), Gazipur (Kapasia), Rajshahi (Poba), Rangpur (Mithapukur), Feni (Fulgazi) and BRRI research farm (Gazipur)	
622	ALART, Bacterial Blight Resistant Rice (BBRR-Bio), Boro	• To identify rice genotype resistance to Bacterial Blight disease at farmers' fields. Location: Jhalokathi (Nolchiti), Bogura (Sherpur), Feni (Fulgazi), Cumilla (Debidar), BRRI, Gazipur, Habiganj (Sadar), Rajshahi (Poba), Rangpur (Mithapukur), Satkhira (Sadar), Gazipur (Kapasia)	
623	ALART Favorable Boro Rice-Bhanga (FBR-Bhanga), Boro	• To identify rice genotype suitable for favorable Boro rice at farmers' field. Location : Jhalokathi (Nalchiti), Feni (Fulgazi), Faridpur (Nagarkanda), Habiganj (Baniachong), Kushtia (Sadar), Rajshahi (Paba), Rangpur	

Sl. No.	Research Title	Objective (s)	Location
		(Mithapukur), Satkhira (Sadar) and BRRI research farm Gazipur	
624	New model demonstration using 4-stakeholders for rapid dissemination of rice technology Technology Dissemination	• Technology Dessimination Location : Satkhira (Ashasuni) and Sylhet (South Surma)	
625	Seed Production and Dissemination Program	• Motivate farmers to cultivate the recently released varieties, produce and preserve good quality seeds of those varieties • Rapid dissemination of newly released rice varieties among the farmers and increase availability of quality seeds at farm level for • exchange seeds from farmers to farmers	
626	Seed Production and Dissemination Program (SPDP) during B. Aus, 2020 under GoB	• Technology Dessimination Location : Bhola Sadar, Borhanuddin, Doulatkhan, Lalmohon and Tazumuddin	
627	SPDP during T. Aus, 2020 under GoB	• Technology Dessimination Location; Tangail Patuakhali Bhola, B. Baria, Sylhet, Borguna and Gaibandha)	
628	SPDP in Jhum cultivation during Aus 2020	• Technology Dessimination Location: Sadar, Dighinala, Ramgarh and Matiranga, Khagrachari.	
629	SPDP in Valley of hills during T. Aus, 2020	• Technology Dessimination • Location: Khagrachari, Rangamati and Bandarban	
630	SPDP during T. Aman, 2020 under GoB	• Technology Dessimination Location: 27 upazilas of 13 districts (Tangail, Munshiganj, Netrakona, Mymensingh, Sherpur, B. Baria, Chattogram, Patuakhali, Gaibandha, Dinajpur, Jashore, Sunamganj and Nilphamari).	
631	SPDP in Valley of hill during Aman 2020 under GoB	• Technology Dessimination Location : 10 upazilas of 3 districts (Khagrachari, Rangamati and Bandarban)	
632	Dissemination of BRRI hybrid dhan4 and BRRI hybrid dhan6 in T. Aman 2020	• Technology Dessimination Location: 15 upazilas of 11 districts (Tangail, Khagrachari, Rangamati, Bandarband, Mymensingh, Dinajpur, Nilphamari, Jessor, Sunamganj, Netrakona and Sherpur).	

Sl. No.	Research Title	Objective (s)	Location
633	Performance of BRRI dhan71 and BRRI dhan75 in T. Aman – potato - Boro cropping pattern during T. Aman 2020	• To acquire awareness and knowledge about the varieties. Location : 9 upazilas of 5 districts (Nilphamari, Thakurgaon, Gaibanda, Joypurhat and Bogura	
634	Seed Production and Dissemination Program during T. Aman, 2020 under SPIRA	• Rapid dissemination of BRRI dhan87. Location: 10 upazilas of 6 districts (Dinajpur, Gaibandha, Nilphamari, Jashore, Gazipur and Manikganj)	
635	SPDP during T. Aman, 2020 under TTFP	• Technology Dessimination Location: Baluka and Muktagacha Mymensingh and Sadar and Sarishabari Jamalpur	
636	SPDPs in Aman 2020 under TRB project	• Technology Dessimination Location: 19 upazila of 16 districts (Netrakona, Mymensingh, Kishoreganj, Gazipur, Chuadanga, Jhenidah, Khulna, Bhola, Naogaon, Bogura, Chapai Nawabganj, Gaibandha, Lalmonirhat, Sylhet, Bandarban and Cox'sbazar)	
637	SPDP during Boro 2021	• Technology Dessimination Location: 36 upazilas of 18 districts (Khulna, Chittagong, Cox's Bazar, Manikganj, Munsiganj, Lalmonirhat, Thakurgaon, Tangail, Mymensingh, Khulna, Sherpur, Gaibandha, Nilphamari, Kisoreganj, Netrokona, Khagrachari, Rangamati, Bandarbon)	
638	Introducing BRRI dhan81 and 88 in T Aman-Potato-Boro Cropping Pattern during Boro 2021	• Technology Dessimination Location : 22 SPDPs in 11 upazila Nilphamari, Gaibandha, Bogura, Thakurgaon and Joypurhat.	
639	Introducing Double Transplanting method in Potato/Mustard-Boro-Fellow cropping pattern under GOB during Boro 2021	• Technology Dessimination Location: 16 SPDPs in 2 upazila of Manikganj districts (Singair, Harirampur) and Sirajdikhan, Munshiganj	
640	SPDP during Boro, 2021 under TRB	• Technology Dessimination Location : 31 SPDPs were conducted in 21 upazila of 15 districts (Netrakona, Mymensingh, Kishoreganj, Gaibandha, Lalmonirhat, Bagura, Joypurhat, Naogaon, Chapai Nawabganj, Khulna, Jashore, Jhenaidah, Chuadanga, Magura and Sylhet)	
641	Adaptive Trial (HHAT)	• Validate the adaptability of modern rice varieties in	

Sl. No.	Research Title	Objective (s)	Location
		different environments at farmers' field and investigate the performance of promising varieties compared to popular mega variety with select suitable variety(s) for target environments for rapid dissemination of promising rice varieties	
642	Head to Head Adaptive Trial (HHAT) during Aman 2020 under TRB	• Technology Dessimination 200 Head to Head Adaptive Trials (HHAT) in Location: 40 districts.	
643	Adaptive trial of BRRI varieties during Boro 2021	• Technology Dessimination 11 upazilas of (Rangamati , Khagrachari, Bandarban, Kishoreganj, Manikganj, Munshiganj, Narsingdi)	
644	Head to Head Adaptive Trial (HHAT) during Boro 2021 under TRB	• Technology Dessimination 40 districts	
645	Farmers' Training	• Technology Dessimination Location: 12 districts (Gaibandha, Rangpur, Dhaka, Mymensingh, Bagerhat, Jashore, Barishal, Sylhet, Chattogram, Rangamati, Khagrachori, Bandarban)	
646	Field day/Farmers' rally	• Technology Dessimination Location : 11 districts (Gaibanda, Rangpur, Dhaka, Mymensingh, Jashore, Barishal, Sylhet, Chattogram, Rangamati, Khagrachori, Bandarban)	
647	Distribution of plastic drum under GoB during Boro 2021	• 36 plastic drums were provided in 12 seed center of 7 districts. Around 80 kg seeds were preserved in each drum. Location : 12 seed center of 7 districts: Cox's Bazar, Bandarban, Norshindi, Munsiganj, Bogura, Gaibandha, Nilphamari and Thakurgoan	
648	Farmer seed center (FSC)	• Two farmers' seed centers were established during the reporting period. Netrokona (Sadar) and Gazipur (Kapasia)	
649	Seed support program (SSP)	• By the technical and financial support TRB-ARD component distributed 3.25 tons seeds among the farmers and stakeholders. Location: 40 districts	
650	Seed Production at BRRI Farm	• Enrichment of own seed stock. Location: Gazipur	

Sl. No.	Research Title	Objective (s)	Location
TRAINING DIVISION			
651	Training on Modern Rice Production Technologies for the SAAO of DAE	• Acquire and enrich knowledge on: Modern rice production technologies • Identification of field problems of rice cultivation and its solutions and • Quick dissemination of rice production technologies in the field	Gazipur
652	Training on Integrated Rice disease Management for the SA/SSA of BRRI	• To increase the knowledge of pest (insects, diseases and weeds) in rice ecosystem • To identify the pest in the field and • To increase ability to solve pest problems in rice field.	Gazipur
653	Training on Laboratory Accreditation for BRRI Scientists	• To increase the skill of scientists for handling and operate the laboratory equipments	Gazipur
654	Training on Scientific Report writing for BRRI Scientists	• To increase the efficiency of scientists for writing scientific article	Gazipur
655	Training on Transforming rice breeding for BRRI SA/SSA	• Enrich knowledge on transforming of rice breeding	Gazipur
656	Hands on training for using high throughput phenotypic system for C4 rice research for the BRRI Scientists	• Enrich the knowledge of scientists on C4 rice research	Gazipur
657	Two-month Rice Production & Communication Training Course for BRRI Scientists	• Acquire and enrich knowledge on: Modern rice production technologies • Identification of field problems of rice cultivation and its solutions and Quick dissemination of rice production technologies in the field	Gazipur

Sl. No.	Research Title	Objective (s)	Location
REGIONAL STATION: CUMILLA			
658	Advanced Yield Trial (AYT) Development of Transplanted Aus Rice	• To evaluate agronomic performance, specific and general adaptability under on station condition	Cumilla
659	Hybridization (Development of Transplanted Aman Rice)	• Introgression of genes from diverged genetic background into rice varieties/lines for the improvement of standard T. Aman varieties	Cumilla
660	Confirmation of F_1	• To confirm the crosses as true hybrid	Cumilla
661	Growing of F_2 population	• Selection of progenies with emphasis on earliness, plant type, grain type and high yield potential compared to standard varieties	Cumilla
662	Pedigree nursery	• Selection of progenies with improved plant type, earliness, acceptable grain quality and high yield potential compared to standard varieties	Cumilla
663	Observational Trial (OT)	• Initial yield evaluation of advanced lines compared to standard cks	Cumilla
664	Preliminary Yield Trial (PYT) Com	• Initial yield evaluation of advanced lines compared to standard checks	Cumilla
665	Secondary Yield Trial-1 (SYT1) (Favorable)	• Confirmation of potential of advanced lines compared to standard ckecks	Cumilla
666	Secondary Yield Trial-2 (SYT-2) (INGER)	• Confirmation of potential of advanced lines compared to standard checks	Cumilla
667	Secondary Yield Trial-3 (SYT-3) (INGER)	• Confirmation of potential of advanced lines compared to standard checks	Cumilla
668	Secondary Yield Trial-4 (SYT-4) (GSR	• Confirmation of potential of advanced lines compared to standard checks	Cumilla
669	Advanced Yield Trial-1 (AYT-1)	• Confirmation of potential of advanced lines compared to standard checks	Cumilla

Sl. No.	Research Title	Objective (s)	Location
670	Advanced Yield Trial-2 (AYT-2)	• Evaluation of advanced breeding lines for development of variety suitable for Cumilla region	Cumilla
671	Advanced Yield Trial-3 (AYT-3) (Water Stagnation)	• Evaluation of advanced breeding lines for development of variety suitable for Cumilla region	Cumilla
672	Advanced Yield Trial-4 (AYT-4) (Water Stagnation)	• Evaluation of advanced breeding lines for development of variety suitable for Cumilla region	Cumilla
673	Hybridization (Development of Boro Rice)	• To develop breeding population with high yield potential along with earliness and acceptable grain quality	Cumilla
674	F_1 Confirmation	• To confirm F_1 s as true crosses	Cumilla
675	Growing of F_2 population	• Selection of progenies with emphasis on earliness, strong culm, high yield potential and disease and insect resistance at field condition	Cumilla
676	Pedigree Nursery (F_3, F_4,F_5, F_6 and F_7)	• Selection of desirable segregates with emphasis on earliness, strong culm, high yield potential and disease and insect resistance at field condition	Cumilla
677	Observational Trial (OT	• To select genetically fixed lines/ homogenous lines with uniform plant height, heading, plant type and acceptable grain quality along with high yield potential	Cumilla
678	Preliminary Yield Trial (PYT)	• Initial yield evaluation and selection of desirable lines compared to standard checks	Cumilla

Sl. No.	Research Title	Objective (s)	Location
679	Secondary Yield Trial (SYT)	• Confirmation of yield evaluation in a replicated trial and selection of desirable lines compared with standard checks	Cumilla
680	Advanced Yield Trial	• To evaluate the advanced breeding lines for development of variety suitable in Cumilla region	Cumilla
Soil Science (Crop-Soil-Water Management)			
681	Long-term missing element trials for diagnosing the limiting nutrient in soil in BRRI R/S Cumilla	• To determine nutrient deficiency problems in soil through missing elements techniques. • To observe long-term yield trend of rice under different nutrients managements • To evaluate the changes in soil physical, chemical and biological properties under long-term fertilization.	Cumilla
682	Effect of N rates on the yield of BRRI dhan87 & BRRI dhan89	• To determine the N response behavior of BRRI dhan87 & BRRI dhan89.	Cumilla
683	Evaluation of bio-organic fertilizer in the soil plant soil system (BRRI dhan87 & BRRI dhan58).	• To evaluate efficiency of biofertilizer to promote rice plant growth and yield • To improve soil biology	Cumilla
684	Efficiency of DAP fertilizer for the supplementation of nitrogen	• To evaluate the efficacy of DAP fertilizer on reducing N fertilizer application	Cumilla
Agronomy			
685	Planting time effect on growth and yield of BRRI developed newly T. Aman varieties BRRI dhan93, BRRI dhan94 and BRRI dhan95	• To find out the appropriate time of planting for yield optimization	Cumilla

Sl. No.	Research Title	Objective (s)	Location
686	Effect of time of planting on growth and yield of newly BRRI released Boro variety BRRI dhan96	• To find out the appropriate time of planting for yield optimization	Cumilla
687	Performance of BRRI dhan76 and BRRI dhan77 rice varieties under stagnant condition	• To test the suitability of lowland rice varieties under stagnant water condition	Cumilla
688	Effect of polythene cover in seed bed during Boro season	• To find out effective time of covering rice seedbed using polythene	BRRI Cumilla
Pest Management			
689	Survey and yield loss assessment of rice blast disease in Cumilla district	• To know the prevalence of Major rice disease blast and • To assume the rice yield losses due to rice diseases	Cumilla (6 Upazila)
690	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
691	Varietal reaction and recovering ability of BRRI released rice varieties	• To know the varietal reaction against tungro disease of rice	Cumilla
692	Factors affecting rice tungro disease and its management in Cumilla region	• To find out the factors and a sustainable management practice of rice tungro disease in Cumilla region	Cumilla (Nangalkot, Debidwar)
693	Tracking the infection source(s) of rice false smut disease	• To identify whether the seed/soil and/ or the air is/are the carrier of the pathogen or not	Cumilla

Sl. No.	Research Title	Objective (s)	Location
694	Screening of Blast, BB and Tungro resistant monogenic lines in disease hot spot of Bangladesh	• To identify candidate gene(s) for durable disease resistant variety development	Cumilla (Debidwar)
695	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
696	Advisory services to the farmers	• To assist farmers for rice production and • To disseminate the direct services to the farmers problems for rice production	Cumilla Brahmanbaria and Chandpur
Economic and Policy			
697	Stability analysis of BRRI released rice varieties	• To demonstrate the suitability of BRRI varieties in Cumilla region	Cumilla
Technology Transfer			
698	Multi-location trial of new BRRI varieties in major cropping patterns	• To demonstrate and disseminate BRRI varieties in Cumilla region	Cumilla Brahmanbaria and Chandpur
699	Farmer's training on modern rice cultivation	• To increase farmers knowledge	Cumilla, Brahmanbaria and Chandpur
700	Field day on modern rice cultivation	• To increase farmers knowledge	Cumilla Brahmanbaria and Chandpur
701	Validation of yield performance of BRRI varieties compared to Binadhan-16, Binadhan-17, Binadhan-19	• To validate yield performance of BRRI varieties compared to Binadhan-16, Binadhan-17, Binadhan-19	Cumilla

Sl. No.	Research Title	Objective (s)	Location
REGIONAL STATION: HABIGANJ			
Varietal Development			
702	Growing of F_3 population in Field RGA	• To select progenies with emphasis on pigmentation, earliness, plant type, grain type and high yield potential compared to standard varieties	Habiganj
703	Hybridization	• To development of high yielding anti-oxidant enriched rice with aroma	Habiganj
704	Regional Yield Trial (Advanced Lines of Deep Water Rice)	• To identify advanced lines of deep water rice	Habiganj
705	Advanced Yield Trial (Deep Water Rice)	• To identify advanced lines of deep water rice	Habiganj
Crop soil water management			
706	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
707	Influence of N & K on performance of modern rice in Habiganj	• To find out suitable ratio of N & K for modern rice and • To study N & K dynamics in soil and plant	Habiganj
708	Carbon footprint and net carbon balance with organic and inorganic amended rice soil	• To assess the carbon footprint and net carbon balance	Gazipur
Disease and Insect pest			
709	Formulation of nano particles from plant parts against Bakanae disease	• To formulate nano particles from organic sources for controlling bakanae disease. • To use nano particles from organic sources for safe environment.	Habiganj

Sl. No.	Research Title	Objective (s)	Location
710	Pesticidal effect of different botanicals and chemical against rice weevil (*Sitophilus Oryzae* l.) and anguimous moth *(sitotroga sp.)*	• To assess the effectiveness of some botanicals and chemical for the management of Rice Weevil and Anguimous moth.	Habiganj
Socio-Economics and Policy			
711	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 Station, Habiganj.	Habiganj
Technology transfer			
712	Demonstration of wet direct seeding crop establishment technique	• To reduce irrigation and labour cost • To save irrigation water during transplanting and • Overcome the labor shortage problems in haor areas during transplanting time.	Habiganj
713	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
714	Breeders and TLS Seed production	• Production of breeder and TLS seed	Habiganj
715	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

Sl. No.	Research Title	Objective (s)	Location
REGIONAL STATION: RANGPUR			
Varietal Development			
716	Development of rice varieties suitable for Rangpur region	• High yielding (>=08 t/ha) rice varieties will be developed with tolerance to drought, resistance to major biotic stresses (insect and diseases) and acceptable grain quality	Rangpur
717	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
718	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
719	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
720	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
Crop-Soil-Water management			
721	Regional Yield Maximization Trial (RYMT) under recommended management practices	• Suitable genotypes with higher yield potential will be identified	Rangpur
722	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 developed.	Rangpur

Sl. No.	Research Title	Objective (s)	Location
723	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
724	Evaluation of BRRI dhan87 under double transplanting (DTP) condition	• The optimum seedling age and time of planting of BRRI dhan87 for double transplanting to get higher yield will be determined.	Rangpur
725	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
726	Long term missing element trial at BRRI regional station Rangpur	• Yield limiting nutrient will be identified	Rangpur
REGIONAL STATION: RAJSHAHI			
Pest Management			
727	Survey and Monitoring of Rice Diseases	• To determine the incidence and abundance patterns of diseases in different AEZs	Rajshahi (Different Upazilas)
728	Survey and Monitoring of Rice Insect Pests	• To determine the incidence and abundance of insect pests and their natural enemies at BRRI farm and in different AEZs	Rajshahi (Different Upazilas)
729	Incidence of rice insect pests and their natural enemies in light traps in relation to climate change	• To study the pests and their natural enemy's incidence pattern in light trap and to create a database	Rajshahi

Sl. No.	Research Title	Objective (s)	Location
730	Efficacy of New Chemicals in Controlling Grain Spot, Brown Spot and Narrow Brown Spot of BRRI dhan33	• To identify effective chemicals against minor diseases	Rajshahi
731	Integrated Approaches in reducing Sheath blight diseases in T Aman	• To control sheath blight disease	Rajshahi
732	Chemical control of Sheath Blight disease of rice	• To identify effective chemicals against sheath blight disease	Rajshahi
Variety Development			
733	Hybridization program	• To develop high yielding genotypes with earliness, tolerant to drought, diseases & insects and acceptable grain quality	Rajshahi
734	F1 and F2 confirmation	• Selection of desirable segregates with emphasis on earliness, strong culm, high yield potential and disease & insect resistance at field condition	Rajshahi
735	Regional Yield trial in Aus, Aman and Boro season	• To evaluate specific and general adaptability of the genotypes as compared with standard checks.	Rajshahi and On-Farm
736	Preliminary Yield trial in Aus, Aman and Boro	• To evaluate specific and general adaptability of the genotypes as compared with standard checks.	Rajshahi
737	Observational Yield trial in Aus, Aman and Boro season	• To evaluate specific and general adaptability of the genotypes as compared with standard checks.	Rajshahi
738	Estimation of breeding value of rice elite breeding pool (EBV) in T. Aman	• Determination of breeding value of T-Aman lines and estimation of effective population size.	Rajshahi

Sl. No.	Research Title	Objective (s)	Location
739	Establishment of breeding zone trial (BZT) in Bangladesh, IRRI-Irrigated rice breeding program, OYT in T. Aman	• To understand and select the best performing breeding lines with highest genetic merits across the multiple environments of Bangladesh.	Rajshahi
740	Establishment of AGGRi Network Trials for stressed ecosystem, Boro 2019-20	• The objective of the trial is to identify better adapted heat tolerance lines with high breeding value.	Rajshahi
741	Evaluation of Hybrid Rice Genotypes	• To identify the high yield hybrid rice variety	Rajshahi
Rice Farming Systems			
742	Evaluation of crop productivity and soil health under four crops cropping patterns in Rajshahi region	• To identify the profitable cropping patterns in Rajshahi region	Rajshahi
743	Evaluation of crop productivity and soil health under strip tillage system in maize-mungbean-rice cropping pattern	• To evaluate the productivity and profitability of strip tillage system	Rajshahi
744	Development of four crops cropping patterns to increase productivity in farmer's field	• To identify the suitable four crops cropping patterns to increase system productivity and cropping intensity	Alimganj, Paba (On-Farm)
745	Effect of time of planting on rice varieties in Boro Season	• To identify the suitable Boro varieties over time	Rajshahi
Socio-economics and Policy			
746	Determination of yield-limiting nutrients in soils by omission plot technique	• To identify the nutrient (s) that limit the rice yield in soils.	Rajshahi
747	Stablity analysis of Aus varieties	• To identify stable Aus varieties	Rajshahi

Sl. No.	Research Title	Objective (s)	Location
748	Stability analysis of Aman varieties	• To identify stable Aman varieties	Rajshahi
749	Stability analysis of ABoro varieties	• To identify stable Boro varieties	Rajshahi
Technology Transfer			
750	Seed production and distribution program	• To distribute newly released BRRI varieties at farmer's level of Rajshahi Region.	Rajshahi and different Upazilaas
751	Demonstration of newly released BRRI varieties at farmers field	• For popularization and rapid adoption of newly released varieties	Rajshahi and different Upazilaas
752	Training and Field Days	• To train up farmers of Rajshahi Region •	Rajshahi and different Upazilaas
REGIONAL STATION: BARISHAL			
753	Development of varieties for tidal submergence during T. Aman	• To develop better genotypes for tidal ecosystem	Barishal
754	Development of rice varieties for favorable ecosystem Boro	• To develop better genotypes for favorable ecosystem	Barishal
755	Introgression of dense and erect panicle gene into *indica* rice Boro	• To develop better genotypes with dense and erect panicle	Barishal
756	Characterization and utilization of local germplasm during T. Aman	• To develop better genotypes adaptive to tidal submergence ecosystem	Barishal
757	Observational trial (OYT) during during T. Aman	• Selection of better genotypes adaptive to tidal submergence ecosystem and genotypes with dense and erect panicle	Barishal
758	Observational yield trial (OYT) Boro	• Selection of better genotypes based on growth duration and yield performance.	Barishal
758	Preliminary yield trial (PYT)	• To identify better genotypes for further study	Barishal

Sl. No.	Research Title	Objective (s)	Location
86.	Screening of bottle gourd against salinity	• To assess the best bottle gourd varieties for saline areas of Bangladesh.	Benarpota, Satkhira
87.	Effect of mulch and days storage prior to seed extraction system on quality seed production of eggplant varieties	• To find out the suitable mulch and days storage prior to seed extraction for the production of quality eggplant seed.	Gazipur
88.	Effect of plant spacing and support system on quality seed production of dwarf yard long bean	• To evaluate the effect of quality seed production as influence by planting spacing and support system in dwarf yard long bean (var. BARI Barboti-2).	Gazipur
POMOLOGY DIVISION			
89.	Evaluation of Jackfruit germplasm	• To evaluate the jackfruit germplasm for release as variety.	Gazipur .
90.	Evaluation of Jackfruit germplasm	• To evaluate the performance of the selected jackfruit germplasm for developing variety.	Chapai-nawabganj (RHRS)
91.	Performance of BARI developed Jackfruit varieties at Gazipur	• To evaluate the performances of three BARI developed jackfruit at Gazipur condition.	Gazipur.
92.	Evaluation of jackfruit germplasm in the hill region	• To identify superior small sized jackfruit germplasm with high yield potentiality and edible qualities.	Khagrachari (HARS)
93.	Survey on identification and collection of year round and off-season Jackfruit germplasm	• To identify year round and off-season jackfruit germplasm and to increase the availability period of Jackfruit.	Gazipur
94.	Evaluation of exotic Jackfruit germplasm	• To evaluate red exotic jackfruit germplasm which are available in the local nursery and develop good variety.	Gazipur.
95.	Evaluation of year round off-season) Jackfruit germplasm in Cumilla region	• To evaluate year-round and off-season jackfruit in Cumilla region for release as variety.	Cumilla (RARS)
96.	Evaluation of existing superior Jackfruit germplasm	• To select desirable jackfruit germplasm with higher yield and qualities for release as variety.	Pahartali, Chattogram (ARS)
97.	Evaluation of off season Jackfruit germplasm	• To study the performance of off-season genotypes for release as variety.	Akbarpur, Moulvibazar (RARS)

Sl. No.	Research Title	Objective (s)	Location
98.	Evaluation of colour fleshed Jackfruit germplasm in the hilly region	• To evaluate the colour fleshed jackfruit germplasm for release as variety.	Ramgarh (HARS)
99.	Performance of BARI developed Jackfruit varieties at RHRS, Narsingdi	• To study the performance of BARI developed • 3 Jackfruit varieties at Narsingdi region.	Narsingdi (RHRS)
100.	Hybridization in mango	• To develop hybrids to meet the local and international demand.	Gazipur
101.	Hybridization in mango	• To develop hybrids to meet the local and international demand.	Rajshahi (FRS)
102.	Hybridization in mango	• To develop hybrids to meet the local and international demand.	Cumilla
103.	Characterization and evaluation of late mango germplasm	• To identify the late mango germplasm with good qualitative characters.	Rajshahi
104.	Morphological characterization of mango germplasm using dus testing	• To characterize the available diversity to a large extent.	Cumilla
105.	Inter-varietal hybridization of mango	• To develop hybrids to meet the local and international demand.	Chapai Nawabganj (RHRS)
106.	Inter-varietal hybridization of mango	• To develop hybrids to meet the local and international demand.	Burirhat, Rangpur (RARS)
107.	Performance of some mango hybrids	• To characterize the mango hybrids morphologically, physico-chemically along with growth and yield potentiality and • To study the incidence of insect-pests and diseases infestation of mango hybrids grown at Chapai Nawabgonj.	Chapai-Nawabganj.
108.	Characterization and evaluation of mango chance seedlings	• To identify the variability of character and select the late mango germplasm with good qualitative characters.	Chapai-nawabganj.
109.	Evaluation of off-season mango germplasm	• To select superior off-season mango lines and to make available our native fruits in off-season.	Chapai-nawabganj

Sl. No.	Research Title	Objective (s)	Location
110.	Evaluation of exotic mango germplasm	• To find out the suitable exotic mango germplasm for releasing as variety.	Burirhut, Rangpur
111.	Performance of BARI developed mango varieties in chattogram hill tracts	• To study the performance of some BARI developed mango varieties in Chattogram Hill Tracts.	Raikhali, Rangamati (HARS)
112.	Evaluation of mango germplasm for green consumption at hill valley in chattogram hill tracts	• To study the performance of kachamitha mango germplasm in Chattogram Hill Tracts and can be released as a superior kachamitha mango variety.	Raikhali, Rangamati
113.	Performance of kanchamitha mango germplasm at hilly region	• To assess the performance in respect to the fruit yield and quality as a green mango for recommendation as variety under the agro-chimatic conditions of Chattogram Hill Tracts.	Khagrachari (HARS)
114.	Evaluation of mango germplasm at Jamalpur region	• To select suitable mango germplasm	Jamalpur (RARS)
115.	Evaluation of newly collected mango germplasm	• To observe the performance of newly collected mango germplasm in Chattogram Hill Tracts.	Raikhali, Rangamati
116.	Evaluation of mango germplasm grown at coastal region of Satkhira	• To identify promising lines for higher yield and qualities.	Benerpota, Satkhira (ARS)
117.	Clonal selection of banana germplasm cv. Sabri kola	• To select Sobri kola with good shape, size, quality and yield.	Jaintapur, Sylhet (CRS)
118.	Evaluation of plantain germplasm	• To study the performance of collected germplasm aimed to get a good variety and to meet the consumer's demand.	Cumilla
119.	Hybridization in litchi	• To incorporate the desirable characters in the late and early litchi variety or cultivar for developing new variety.	Gazipur
120.	Hybridization of local guava with improved/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.	Gazipur

Sl. No.	Research Title	Objective (s)	Location
121.	Development of population for gynodioecious papaya variety	• To develop high yielding gynodioecious papaya variety(s).	Gazipur
122.	Purification of shahi papaya	• To purify the variety through sib-mating and selection and regain the original characteristics of Shahi Papaya.	Gazipur
123.	Purification of shahi papaya	• To purify the variety through sib-mating and selection and regain the original characteristics of Shahi Papaya.	Binodpur, Rajshahi.
124.	Evaluation of ber germplasm	• To develop high yielding varieties with soury sweet taste and release a new soury sweet ber variety.	Jamalpur
125.	Evaluation of existing ber germplasm at RARS, Akbarpur	• To develop a new ber variety for adapted in Akbarpur Moulvibazar soil and climatic condition for good nutrition and better economic return.	Akbarpur, Moulvibazar (RARS)
126.	Evaluation of sour type ber germplasm	• To select sour type ber germplasm with a view to release a new variety.	Binodpur, Rajshahi.
127.	Evaluation of local ber germplasm	• To select the promising germplasm for recommending at farmer's level as variety.	Binodpur, Rajshahi.
128.	Evaluation of indegenous ber germplasm at Khagrachari	• To select superior land races of ber for commercial cultivation in the hilly areas and release as variety.	Khagrachari (HARS)
129.	Survey, collection and evaluation of jamun germplasm	• To identify good Jamun lines for higher yield and quality and release as variety.	Binodpur, Rajshahi
130.	Evaluation of dwarf coconut in hilly area of Rangamati	• To identify the superior dwarf coconut varieties at Rangamati	Raikhali, Rangamati (HARS)
131.	Hybridization in citrus	• To incorporate desirable characters i.e. high yielder, very sweet, quick growing habit and resistance to insect pest and diseases through hybridization.	Jaintapur, Sylhet and Akbarpur, Moulvibazar
132.	Evaluation of lemon germplasm	• To study the performance in respect of yield and quality of the collected germplasm.	Cumilla.

Sl. No.	Research Title	Objective (s)	Location
133.	Evaluation of exotic lemon germplasm	• To study the performance of yield and quality of the collected germplasm and select suitable exotic lemon germplasm.	Binodpur, Rajshahi
134.	Evaluation of lime germplasm	• To screen the superior line and to develop new variety.	Jamalpur
135.	Evaluation of lime germplasm	• To study the performance in respect of yield and quality of the collected germplasm.	Cumilla
136.	Evaluation of kaghzi lime	• To select superior line with a view to release as a variety.	Rahmatpur Barisal (RARS)
137.	Physio-morphological characterization of mandarin and sweet orange in the hilly area of sylhet region	• To select superior line with a view to release as a variety.	Jaintapur, Sylhet
138.	*In-situ* evaluation of local mandarin lines under north-eastern hilly area of Bangladesh	• To find out suitable lines for releasing variety and • To enrich and conserve genetic resources	Jaintapur, Sylhet
139.	Evaluation of China mandarin germplasm in hill region	• To study the performance of China mandarin produce new germplasm of China mandarin for creating variation.	Ramgarh
140.	Evaluation of sweet orange germplasm in the hilly region	• To identify superior germplasm for developing variety.	Khagrachari
141.	Evaluation of variegated sweet orange genotypes in Chattogram region	• To find out the promising line of variegated sweet orange to release as a variety.	Pahartali, Chattogram
142.	Performance of exotic sweet orange germplasm	• To select suitable sweet orange line (s) for releasing as variety.	Jaintapur, Sylhet
143.	Evaluation of pummelo germplasm	• To find out superior pummelo germplasm for release as new variety (s) and conserve genetic resources.	Jashore (RARS)
144.	Evaluation of pummelo germplasm	• To evaluate the performance of collected pummelo germplasms in respect of yield and quality.	Cumilla
145.	Evaluation of year round	• To select the promising year	Cumilla

Sl. No.	Research Title	Objective (s)	Location
	pummelo germplasm in cumilla region	round pummelo germplasm.	
146.	Evaluation of pummelo germplasm	• To select superior pummelo lines and • To conserve genetic resources.	Jamalpur
147.	*In-situ* evaluation of year round pummelo germplasm	• To find out a suitable year round line(s) for the development of variety.	Khagrachari
148.	Evaluation of late season pummelo germplasm in the hilly region	• To select high yielding desirable line for off-season/late-season bearing for the development of variety.	Khagrachari
149.	Evaluation of local pummelo germplasm	• To select suitable pummelo line (s) for as variety.	Jaintapur, Sylhet
150.	Evaluation of pummello germplasms in Chattogram region	• To select superior pummelo line(s).	Pahartali, Chattogram
151.	Evaluation of pummelo in hilly region of Rangamati	• To find out superior pummelo germplasm in Chattogram Hill Tracts	Raikhali, Rangamati
152.	Evaluation of bael genotypes	• To find out a suitable bael genotypes for releasing a variety; and to maintain germplasm of bael.	Burirhat, Rangpur
153.	*In-situ* evaluation of bael germplasm	• To study the performance of the selected bael germplasm for release as a variety and to conserve fruit genetic resources.	Chapai-nawabganj
154.	Evaluation of existing bael germplasm	• To find out suitable, high yielding bael germplasm for releasing as a commercial variety.	Chapai-nawabganj
155.	Evaluation of bael germplasm	• To find out suitable, high yielding bael germplasm for releasing as a commercial variety.	Jaintapur, Sylhet
156.	*In-situ* evaluation of bael germplasm	• To find out superior germplasm of Bael for the commercial cultivation and to conserve genetic resources of fruits.	Jamalpur

Sl. No.	Research Title	Objective (s)	Location
157.	Evaluation of elephant foot apple germplasm	• To identify suitable elephant foot's apple (kadbel) germplasm for developing a year-round and off season variety for Bangladesh.	Debiganj, Panchagarh (BSP)
158.	Evaluation of golden apple germplasm in the hilly region	• To find out suitable line(s) for the development of variety.	Ramgarh
159.	Evaluation of burmese grape germplasm	• To find out a suitable line(s) for the development of variety.	Jaintapur, Sylhet
160.	Evaluation of sapota germplasm	• To select the superior sapota germplasm suitable for commercial cultivation and • To evaluate the lines in respect of yield and quality and release as a variety.	Rahmatpur, Barishal
161.	Evaluation of aonla genotypes in Chattogram region	• To evaluate aonla lines and to identify the best genotype.	Pahartali, Chattogram
162.	Evaluation of bullock's heart genotypes at Jashore	• To find out the promising line of variegated bullock's heart to release as variety.	Jashore.
163.	Evaluation of bullock's heart germplasm at Jamalpur	• To select suitable line of Bullock's heart, and to conserve germplasm.	Jamalpur
164.	Evaluation of bullock's heart germplasm at Debiganj	• To find out the promising line of variegated bullock's heart to release as variety.	Debiganj, Panchagarh (BSP)
165.	Evaluation of custard apple genotypes at Chapainawabganj	• To identify superior lines of custard apple and to conserve germplasm.	Chapai-nawabganj.
166.	Evaluation of custard apple germplasm at Rajshahi	• To identify superior lines of custard apple and to conserve germplasm.	Binodpur, Rajshahi.
167.	Evaluation of custard apple germplasm at Raikhali	• To identify superior lines of custard apple and to conserve germplasm.	Raikhali, Rangamati.
168.	Evaluation of indian dillenia germplasm in Jashore	• To study the performance of Indian dillenia germplasm with a	Jashore (HRC) and

Sl. No.	Research Title	Objective (s)	Location
		view to develop a variety.	RARS)
169.	Evaluation of indian dillenia germplasm at Ramgarh	• To find out a suitable line(s) for the development of variety.	Ramgarh.
170.	Evaluation of some pomegranate germplasm at Chapainawabganj	• To study the variability in pomegranate and to develop a variety for commercial cultivation.	Chapai-nawabganj.
171.	Evaluation of cowa germplasm at Rahmatpur	• To select the superior quality cowa line and to conserve and popularize among the people.	Rahmatpur, Barishal.
172.	Evaluation of cowa germplasm	• To select superior quality cowa germplasm at Southern region.	Lebukhali, Dumki, Patuakhali (RHRS)
173.	Evaluation of phalsa germplasm in hilly area of Rangamati	• To conserve and find out the superior phalsa genotypes in hilly area.	Raikhali, Rangamati.
174.	Evaluation of star gooseberry genotypes in chattogram region	• To select the superior quality star gooseberry genotypes, to conserve and popularize among the people.	Pahartali, Khulshi, Chattogram (ARS)
175.	Evaluation of rose apple germplasm in chattogram region	• To evaluate rose apple genotypes in order to identify the best genotype and to conserve and popularize among the people.	Pahartali, Khulshi, Chattogram.
176.	Performance of selected water chestnut germplasm in Satkhira	• To investigate in details of the water chestnut fruits using locally available two varieties (green and red).	Benerpota, Satkhira (ARS)
177.	Evaluation of Jaboticaba germplasm	• To find out the promising line of variegated jaboticaba release as variety.	Debiganj, Panchagarh (BSP)
178.	Evaluation of jaboticaba germplasm at Ramgarh	• To find out a suitable line(s) for the development of variety.	Ramgarh.
179.	Evaluation of water chesnut germplasm	• To investigate in details of the water chestnut fruits using locally available two varieties	Jamalpur

Sl. No.	Research Title	Objective (s)	Location
		• (green and red).	
180.	Evaluation of minor fruits germplasm at Jaintapur	• To find out superior lines suitable for the acidic soil of Sylhet region.	Jaintapur, Sylhet
181.	Evaluation of dragon fruit germplasm at Jaintapur	• To find out suitable lines for releasing variety (s) and • To enrich and conserve genetic resources.	Jaintapur, Sylhet
182.	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.	Raikhali, Rangamati
183.	Evaluation of promising cashewnut germplasm at Ramgarh	• To select suitable cashew lines in respect of yield and quality as well as strengthen the base of the fruit industry of our country.	Ramgarh
184.	Evaluation of coffee germplasm in chattogram region	• To evaluate coffee genotypes in order to identify the best genotype and • To conserve and popularize among the people.	Pahartali, Khulshi, Chattogram.
185.	Evaluation of coffee germplasm	• To select suitable coffee lines in respect of yield and quality.	Raikhali, Rangamati (HARS)
186.	Evaluation of promising coffee germplasm in the hilly region of Bangladesh	• To identify suitable avocado fruit germplasm for developing a variety for Bangladesh.	Khagrachari (HARS)
187.	Study on floral biology and pollen preservation of avocado *(Persea americana)*	• To know the floral biology of avocado to optimize yield and also perform appropriate crosses in avocado breeding programs for future.	Gazipur.
188.	Evaluation of avocado germplasm	• To identify suitable avocado fruit germplasm for developing a variety for Bangladesh.	Raikhali, Rangamati
189.	Evaluation of avocado germplasm	• To identify suitable avocado fruit germplasm for developing a variety for Bangladesh.	Debiganj, Panchagarh.
190.	Collection and evaluation of peach (*Prunus persica* L.)	• To Characterize and evaluate of peach fruit germplasm and	Debiganj, Panchagarh.

Sl. No.	Research Title	Objective (s)	Location
	germplasm	release as a variety	
191.	Effect of time of grafting on BARI developed jackfruit varieties	• To study the effect of time and variety on grafting success of jackfruit.	Horticulture Gazipur.
192.	Manipulation through grafting & pruning for dwarf shape of BARI released mango variety	• To identify suitable technique/technology for the development of dwarf tree.	Chapai-nawabganj.
193.	*In- vitro* propagation of guava	• To develop an efficient in vitro propagation protocol for rapid and mass propagation of guava.	Gazipur
194.	Micro propagation of papaya	• To develop a suitable protocol for *in vitro* clonal multiplication of papaya and make the plant materials available to the farmers for commercial cultivation.	Gazipur
195.	Influence of rootstock on the growth, yield and quality of satkara	• To find out suitable rootstock for better growth and to increase yield and quality of satkara.	Jaintapur, Sylhet
196.	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.	Gazipur
197.	Growth, yield and quality of mango as influenced by fertilizer and irrigation	• To investigate the effects of fertilizer and irrigation on fruit retention, yield and quality of mango.	Gazipur
198.	Organic production of mango	• To investigate the effects of organic fertilizers in mango and • To standardize the organic fertilizers for quality mango production.	Gazipur
199.	Effect of integrated fertilizer management on growth and yield of mango (cv. Harivanga)	• To find out optimum doses of organic and inorganic fertilizer on growth and yield of mango (Cv. Harivanga).	Burirhat, Rangpur.
200.	Effect of irrigation on mango fruit cracking in chattogram region	• To find out the critical stage of irrigation to mitigate fruit cracking of mango.	Hathazari, Chattogram (RARS)
201.	Effect of bagging and fruit thinning on the yield and quality of mango	• To study the effect of bagging and fruit thinning on the yield and quality of BARI Aam-3, to increase fruit size and to	Jamalpur

Sl. No.	Research Title	Objective (s)	Location
		improve fruit colour.	
202.	Study on the pollen viability of litchi during preservation	• To select the litchi genotypes with the objectives of enhancing the quality of collected pollen • To Maximize survival on transport, storage and thawin and. • To optimize retesting of pollen viability in the lab and • Safe transport to enable field pollinations.	Gazipur
203.	Effect of organic and inorganic fertilizers with different spacings on yield and quality attributes of guava	• To maximize the use of land and • To increase the yield and quality of guava.	Gazipur
204.	Application of fertilizer in coconut	• To find out the suitable fertilizer for coconut. • To increase the number of fruits and • To increase the yield of green coconut	Gazipur
205.	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.	Jamalpur
206.	Effect of fertilizer application on yield and quality of sweet orange	• To find out a suitable fertilizer dose for optimum yield and • To observe the quality of fruits in respect to fertilizer dose.	Gazipur
207.	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	Rahmatpur, Barisal
208.	Effect of rootstock and spacing on sweet orange	• To observe the performance of Rough lemon, Rangpur lime, Pummelo, Cleopetra and Calamansi as root stock on the growth and yield of sweet orange (BARI Malta-1).	Cumilla
209.	Effect of different doses of glufosinate-ammonium 88% (expert 88wdg) for controlling weed in citrus field	• Herbicide rationing of weed management in citrus orchards.	Gazipur
210.	Effect of split application of fertilizer on growth and yield of	• To investigate the effects of fertilizer dose and method of	Gazipur

Sl. No.	Research Title	Objective (s)	Location
	golden apple (var. BARI Amra-1)	fertilizer application on fruit retention, yield and quality of BARI Golden Apple-1	
211.	Growth, yield and quality as influenced by split application of fertilizer on BARI Amra-2	• To investigate the effects of fertilizer dose and method of fertilizer application on fruit retention, yield and quality of BARI Golden Apple-2	Gazipur
212.	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.	Gazipur
213.	Effect of fertilizer on flower and fruit drop in coconut	• To develop a recommendation of fertilizer dose for coconut on flowering, fruit drop and fruit set.	Rahmatpur, Barishal
214.	Response of strawberry to organic and inorganic fertilizer	• To find out the effective combination of organic and inorganic fertilizer dose for quality and yield maximization of strawberry.	Cumilla
215.	Effect of stem pruning on the growth and yield of dragon fruit	• To find out the effect of stem prunning on the growth and yield of dragon fruit.	Jamalpur
216.	Effect of light arrangement 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 light needed per unit area.	Pahartali, Khulshi, Chattogram.
217.	Development of a fertilizer management package for dragon fruit cultivation	• To develop a fertilizer management package for Dragon fruit cultivation in Bangladesh.	Jashore
218.	Intercropping of winter vegetables in mango orchard	• To find out the suitability of vegetables in mango orchard intercrop and • To evaluate the economic benefit of intercropping.	Jamalpur

Sl. No.	Research Title	Objective (s)	Location
219.	Effect of intercropping sweet gourd with dragon fruit in semi hilly Sylhet region	• To find out the suitability of sweet gourd intercropping in dragon fruit orchard and • To evaluate the economic benefit of intercropping.	Akbarpur, Moulvibazar
220.	Survey of floral malformation of mango in major mango growing regions of Bangladesh	• To assess the disease, evaluate cultivar status and simplify the scientific rating and estimation which provide a base for future experimental designing.	Chapai-nawabganj.
221.	Evaluation of new fungicides against anthracnose of mango	• To investigate the efficacy of some new fungicides against the post-harvest disease particularly anthracnose of mango fruits.	Chapai-nawabganj.
222.	Characterization of novel species for degradation of propiconazole fungicide in mango	• To find out the novel endophytic isolates, we highlighted only the endophytic *Bacillus* strains to degrade the propiconazole properties.	Hathazari, Chattogram.
223.	Survey and collection of pathogen isolates of panama disease of banana	• To collect the isolates, purify and preservation of the panama causing fungus *Fusarium oxysporum* f. sp. *cubense* for characterization in banana production.	Gazipur
224.	Fungi causal of post harvest fruit rot of fruit and vegetable crops	• To identify post harvest diseases of fruits and vegetables.	Gazipur
225.	Survey of floral malformation of mango in major mango growing regions of Bangladesh	• To assess the disease, evaluate cultivar status and simplify the scientific rating and estimation which provide a base for future experimental designing.	Chapai-nawabganj.
226.	Evaluation of new fungicides against anthracnose of mango	• To investigate the efficacy of some new fungicides against the post-harvest disease particularly anthracnose of mango fruits.	Chapai-nawabganj.
227.	Efficacy of different control measures against litchi mite (A*ceria litchi* keifer)	• To study the nature of damage by litchi mite and suitable control measures for	Binodpur, Rajshahi.

Sl. No.	Research Title	Objective (s)	Location
		management of this pest.	
228.	Efficacy of different types of baggs for management of mango fruit fly *Bactrocera dorsalis* attacking mango	• To develop effective management option (s) against mango fruit fly.	Binodpur, Rajshahi.
229.	Survey and documentation of different insect pollinators/ visitors in different fruit crops during flowering period	• To identify different pollinators in fruit orchard during flowering period.	Binodpur, Rajshahi.
230.	Development of management approach against litchi fruit borer *(Conopomorpha sinensis)*	• To develop management approach against litchi fruit borer, cost effective guidelines for managing against litchi fruit borer.	Rajshahi.
231.	Development of integrated management approach against wax apple fruit flies, *Bactrocera dorsalis*	• To standardize an integrated pest management (IPM) approach for managing *B. dorsalis* as well as the prevention of fruit drop of wax apple.	Rajshahi.
232.	Dissemination of mango bagging with double layer brown paper bag technology for controlling fruitfly, *Bactrocera dorsalis* in high rainfall and hilly areas of Bangladesh	• To disseminate and popularize the fruit bagging technology for controlling mango fruitfly in high rainfall and hilly areas.	Khagrachari and Rangamati
233.	Response of strawberry to organic and inorganic fertilizer	• To find out the suitable combination of organic and inorganic dose for quality and maximizing the yield of strawberry.	Gazipur
234.	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 and • To identify the storage time of prepared mango.	Gazipur
235.	Standardization of ethylene dose for uniform and safe ripening of fruits using developed low-cost	• To standardize the treatment doses of ethephon and • Uniform ripening of	Gazipur

Sl. No.	Research Title	Objective (s)	Location
	ethylene generator	commercially mature banana fruits.	
236.	Effect of edible coating on postharvest quality of fresh cut guava	• To study the effect of edible coating to retain postharvest quality of fresh cut (FC) guava stored in a refrigerator (5±1°C and 50±5% RH)	Gazipur
237.	Novel coconut oil and beeswax edible coating for postharvest quality maintenance of malta at ambient condition	• To study the effect of coating to retain postharvest quality of Malta at ambient storage.	Gazipur
238.	Standerdization of soil media for roof gardening of guava	• To find out the optimum soil media for guava cultivation on roof and • To plant and get higher yield from roof gardening as well as ensure family nutrition of the urban people.	Jamalpur
239.	Standardization of soil media for roof top gardening of dragon fruit	• To find out the optimum soil media for dragon fruit cultivation on roof and • To plant and get higher yield from roof gardening as well as ensure family nutrition of the urban people.	Jamalpur
240.	Adaptive trial of BARI developed Jackfruit varieties in different regions of Bangladesh	• To evaluate the performance of grafted jackfruit plants in the farmer's field.	Gazipur
241.	Baseline study on dissemination of BARI released fruit varieties at farmer's level for increasing farm productivity	• To know the existing fruit tree species grown in the homestead, pond and garde. • To identify the farmers' existing fruit tree management practices and to learn their benefits and suggestion for future research	Gazipur
242.	Maintenance of different fruit germplasm at HRC, RARS, Jamalpur	• To retain viability of germplasm of different horticultural crops for period and future use	Jamalpur
243.	Mother orchard establishment of BARI released/popular citrus fruit varieties	• For conserving varietal traits from degeneration and • For preparing breeder propagule for extension agencies (DAE	Jaintapur, Sylhet

Sl. No.	Research Title	Objective (s)	Location
		Horticulture Centers/BADC/ NGOs/private nurseries etc.	
244.	FT/ToT/Field day/Workshop	• To disseminate the technology of fruit crops	All HRC stations
245.	Grafts and seedlings of fruits produced and distributed during 2020-2021	• To disseminate BARI released high yielding and good quality fruit varieties • To increase fruit production	All HRC stations
246.	Collection, evaluation, characterization and maintenance of lilium	• To collect and characterize the different species of *lilium* available in Bangladesh and also from abroad and • To conserve the collected germplasm for future research	Gazipur
247.	Collection and evaluation of tuberose(*polianthes tuberosa* 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 and • To identify the suitable cultivars for commercial tuberose cultivation in Bangladesh.	Gazipur
248.	Collection and maintenance of cactus	• To select the superior line suitable for decorative and commercial purposes.	Jamalpur
249.	Collection and maintenance of succulents	• To collect and maintain succulents for decorative and commercial purposes.	Jamalpur
250.	Collection and maintenance of rose genotypes	• To collect, characterize and maintain rose germplasm.	Gazipur
251.	Evaluation of gerbera genotypes	• To find out the suitable line (s) for cut flower as well as for future breeding program.	Gazipur
252.	Collection and maintenance of carnation genotypes	• To evaluate of carnation genotypes for flowering.	Gazipur
253.	Performance on growth and flowering behaviour of	• To identify superior dendrobium orchid genotype(s) under	Gazipur

Sl. No.	Research Title	Objective (s)	Location
760	Regional yield trial (RYT) T Aus	• To identify better genotypes for further study	Ghatkhali and Amtali
761	Regional yield trial (RYT#IRR-1) during T Aman	• To identify better genotypes resistant to insect for further study	Barishal
762	Regional yield trial (RYT#IRR-2) during T Aman	• To identify better genotypes resistant to insect for further study	Barishal
763	Regional yield trial (RYT#STR-1) during T Aman	• To identify better genotypes having salinity tolerant trait for further study	Barishal
764	Regional yield trial (RYT#STR-2) during T Aman	• To identify better genotypes having salinity tolerant trait for further study	Barishal
765	Regional yield trial (Favorable ecosystem) during Boro	• To identify better genotypes for favorable ecosystem	Barishal
766	A regional yield maximization trial (RYMT) during Boro	• To identify better genotypes for further study	Barishal
767	Regional yield trial of zinc enriched rice genotypes during Boro	• To identify better genotypes for further study	Barishal
768	Regional yield trial of Green Super Rice lines during Boro	• To select better genotypes for further evaluation	Barishal
769	Regional yield trial of bacterial blight resistance rice genotypes during Boro	• To select BB resistant genotypes for further evaluation	Barishal
770	Regional yield trial of saline tolerant rice (STR-1) genotypes during Boro	• To identify better genotypes having salinity tolerant trait for further study	Kalapara, Patuakhali
771	Regional yield trial of saline tolerant rice (STR-2) genotypes during Boro	• To identify better genotypes having salinity tolerant trait for further study	Kalapara, Patuakhali
772	Regional yield trial of favorable rice genotypes (Cumilla-1) during Boro	• To identify better genotypes for further study	Barishal

Sl. No.	Research Title	Objective (s)	Location
773	Regional yield trial of favorable rice genotypes (Barishal-1) during	• To identify better genotypes for further study	Gazipur and All regional stations
774	Regional yield trial of favorable rice genotypes (Barishal-2) during Boro	• To identify better genotypes for further study	Gazipur and All regional stations
775	Advanced yield trial (AYT) of rice genotypes for favorable ecosystem in T. Aman	• To identify better genotypes for further study	Barishal
776	Advanced yield trial (AYT) of Standard Boro (SB-1) rice genotypes for favorable ecosystem in Boro	• To identify better genotypes for further study	Barishal
777	Advanced yield trial (AYT) of Standard Boro (SB-2) rice genotypes for favorable ecosystem in Boro	• To identify better genotypes for further study	Barishal
778	Advanced yield trial (AYT) of New Generation Rice (NGR) during Boro 2020-21	• To identify the promising rice genotypes for further study	Barishal
779	International Network for Genetic Evaluation of Rice (INGER), Boro	• To identify the promising rice genotypes for further study	Barishal
780	Development and validation of high iron and zinc rice in confined field trial(cft), Boro	• To identify the promising rice genotypes for further study	Barishal
781	Advanced line adaptive research trial (ALART) for non saline tidal ecosystem (NSTE) during T. Aus	• To identify the promising rice genotypes for further study	Amtali, Barguna Kolapara, Patuakhali and Kaukhali Pirojpur
782	Advanced line adaptive research trial (ALART) for favorable ecosystem (FE) during T. Aus	• To identify the promising rice genotypes for further study	Taltali, Barguna

Sl. No.	Research Title	Objective (s)	Location
783	Advanced line adaptive research trial (ALART) for rainfed lowland rice (RLR) during T. Aman	• To identify the promising rice genotypes for further study	Kaukhali, Pirojpur
784	Advanced line adaptive research trial (ALART) for zinc enriched rice (ZER) during T. Aman	• To identify the promising rice genotypes for further study	Kaukhali, Pirojpur
785	Advanced line adaptive research trial (ALART) for favorable boro rice-bhanga (FBR-bhanga) during Boro	• To identify the promising rice genotypes for further study	Nalsity, Jhalokathi
786	Advanced line adaptive research trial (ALART) for zinc enriched rice (ZER) during Boro	• To identify the promising rice genotypes for further study	Nalsity, Jhalokathi
787	Advanced line adaptive research trial (ALART) Bacterial blight resistant rice-biotechnology (BBRR-Bio) during Boro	• To identify the promising rice genotypes for further study	Nalsity, Jhalokathi
788	Stability analysis of BRRI released varieties during T. Aus	• To find out the stable rice variety(s) in T. Aus season for Barishal region.	Barishal
789	Stability analysis of BRRI released varieties during T Aman	• To find out the stable rice variety(s) in T. Aman season for Barishal region.	Barishal
790	Stability analysis of BRRI released varieties during Boro 2020-21	• To find out the stable rice variety(s) in Boro season for Barishal region.	Barishal
791	Monitoring of insect pests and natural enemies using light traps during three rice growing seasons.	• Database generates which may use to develop forecasting models.	Barishal
792	A comparative study of Yellow stem borer and Dark headed stem borer on BRRI released rice varieties during three rice growing seasons.	• To find out the infestation rate of Yellow stem borer and Dark headed stem borer on BRRI rice varieties.	Barishal

Sl. No.	Research Title	Objective (s)	Location
793	Survey of insect pest and natural enemy in seedbeds during three rice growing seasons	• To find out the incidence patterns of the major rice insect and their natural enemies in rice seedbed	Barishal
794	Survey of insect pests and natural enemies in Barishal region during three rice growing seasons	• To find out the incidence patterns of the major rice insect pest and their natural enemies in Barishal region	Barishal
795	Insecticide free rice production in BRRI RS farm, Barishal during three rice growing seasons	• Conservation of natural enemy	Barishal
796	Fall armyworm monitoring in BRRI, Barishal farm during Boro 2020-21	• To identify the incidence of fall armyworm population in rice field.	Barishal
797	Screening of available pesticides for controlling blast disease of rice, Aman	• To identify the best chemical to control the blast disease in Aman rice field.	Barishal
798	Survey and monitoring of rice diseases in selected areas of Barishal region	• To find out the disease prone area of the Barishal region.	Barishal
799	Screening of available pesticides for controlling blast disease of rice,	• To identify the best chemical to control the blast disease	Barishal
800	Varietal replacement through head to head trial in Boro 2020-21 under TRB project.	• To popularize the BRRI varieties in the Barishal region	Barishal
801	Demonstration under SPIRA Project	• To popularize the BRRI varieties in the Barishal region	Barishal
802	Seed support demonstration	• To popularize the BRRI varieties in the Barishal region	Barishal
803	Farmers' training under different projects/GoB	• Up gradation of the farmers knowledge on modern rice technologies.	Barishal

Sl. No.	Research Title	Objective (s)	Location
804	Farmers' field day under different projects/GoB	• To popularize the BRRI varieties in the Barishal region	Barishal
805	Workshops for T. Aman and Boro rice cultivation	• To bring more field under BRRI rice varieties cultivation in the Barishal region.	Barishal
806	Breeder seed and truthfully labeled seeds (TLS) production	• To support rice growers of the country to sustain our national food security.	Barishal
REGIONAL STATION: SATKHIRA			
Varietal Development			
807	Regional Yield Trial (RYT)	• To evaluate specific and general adaptability of advance breeding lines in on-station.	Satkhira
808	Advanced Line Adaptive Research Trial (ALART)	• To evaluate the performance of advanced line	Satkhira
809	Morphological and molecular characterization of newly collected rice germplasm	• To characterize newly collected rice germplasm using morphological traits	Satkhira and (On-farm)
810	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	Satkhira and (On-farm)
Crop-Soil-Water Management			
811	Long-term missing nutrient trial	• To find out long-term missing nutrient effect on rice yield	Satkhira
812	Evaluation of increased nitrogen rates for Boro rice cultivation in saline areas	• To find out optimum nitrogen dose for Boro rice production in saline affected area	On-farm
813	Evaluation of increased potassium rates for Boro rice cultivation in saline area	• To find out optimum potassium dose for Boro rice production in the saline affected area	On-farm
814	Effect of zinc fertilization on zinc biofortified rice in zinc-deficient soil	• To study the effect of Zn fertilization on Zn accumulation and uptake into grain, husk and straw of Zn fortified rice varieties.	Satkhira

Sl. No.	Research Title	Objective (s)	Location
815	Effect of seedling age and rate for transplanting of hybrid rice on growth duration and yield	• To find out the appropriate age and number of seedlings for transplanting of hybrid rice to obtain optimum yield in shortest period	Satkhira
816	Optimization of Nitrogen and Potassium requirements for Boro rice in gher system	• To find out optimum N and K requirements for Boro rice in gher areas	On-farm
Socio-Economic policy			
817	Stability analysis of BRRI rice varieties	• To make adoption and expansion of BRRI rice varieties to the farmers' field	Satkhira
818	Selection of suitable hybrid rice genotypes under saline prone areas	• To find out suitable hybrid rice in south western coastal region	On-farm
819	Head-to-Head Trail	• To evaluate the suitability of BRRI released rice varieties in different regions.	On-farm
820	Seed production and dissemination program (SPDP)	• To disseminate BRRI varieties among the farmers of this region.	Satkhira and On- Farm
821	Breeder Seed Production	• To produce Breeder seeds of BRRI released promising varieties and supply to GRS Division, BRRI Gazipur	Satkhira
823	Truthfully Labeled Seed (TLS) Production	• To produce TLS as per regional and national demand	Satkhira
824	Evaluation of local land race	• Collection of local rice germplasm and evaluation of yield potentiality of local genotypes	Satkhira\
Technology Transfer			
825	Development and evaluation of four-crop cropping pattern and sustainability	• To increase total productivity of unit area per year by increasing cropping intensity and • To compare the sustainability of four-crop cropping pattern with that of three-crop cropping pattern in terms of soil health and profit	On-farm
826	Improvement the productivity of gher system	• To increase total productivity and farm income	Satkhira

Sl. No.	Research Title	Objective (s)	Location
827	Adaptability of BRRI hybrid rice-based cropping pattern for the southern coastal ecosystem of Bangladesh	• To find out the adaptability and feasibility of BRRI hybrid rice-based cropping patterns for saline prone areas	On-farm
828	Sustainable farming model development for the southern coastal gher-ecosystem of Bangladesh	• To develop sustainable farming practices for maximizing the productivity of gher system and • To optimize the land and water use efficiency per unit area in order to increase the farm income	On-farm
829	Field days and farmers' training	• To disseminate and popularize BRRI varieties and rice production technologies	On-farm
Transforming Rice Breeding (TRB)			
830	Line Stage Testing (LST)	• Selection of uniformity of each line along with high heritable and key agronomic traits such as maturity, plant height etc.	Satkhira (On-Station and On-farm)
831	Observational Yield Trial (OT)	• Identification of genetically fixed lines from non-replicated trial suitable for saline areas	Satkhira (On-Station and On-farm)
832	Preliminary Yield Trial (PYT)	• Initial evaluation of yield, salt tolerance and other agronomic characteristics of selected materials in replicated trial.	Satkhira (On-Station and On-farm)
833	Secondary Yield Trial (SYT)	• Initial evaluation of yield, salt tolerance and other agronomic characteristics of selected materials in replicated trial.	Satkhira (On-Station and On-farm)
834	Advanced Yield Trial (AYT)	• Confirmatory yield evaluation of selected materials for salt tolerance and other agronomic traits replicated trial	Satkhira (On-Station and On-farm)
835	Regional yield trial (RYT)/Participatory Varietal Selection (PVS)	• Assessment of specific and general adaptability and selection of suitable and selection of suitable genotypes by participating farmers suitable for coastal saline environments.	Satkhira (On-Station and On-farm)

Sl. No.	Research Title	Objective (s)	Location
REGIONAL STATION: SONAGAZI			
836	Regional Yield Trial (RYT-1) in Aus	• To evaluate specific and general adaptability of the advance breeding lines as compared with standard checks in on-station.	Sonagazi, Feni
837	RYT-2 in Aus	• To evaluate specific and general adaptability of the advance breeding lines as compared with standard checks in on-station.	Sonagazi, Feni
838	Advanced Yield Trial (AYT) in Aus	• To evaluate specific and general adaptability of the advance breeding lines as compared with standard checks in on-station.	Sonagazi, Feni
839	RYT Zinc Enriched Rice-1 (ZER-1) during T. Aman	• To evaluate specific and general adaptability of advance breeding lines of zinc enriched rice as compared with standard checks in on-station.	Sonagazi, Feni
840	RYT Zinc Enriched Rice-2 (ZER-2) during T. Aman	• To evaluate specific and general adaptability of advance breeding lines of zinc enriched rice as compared with standard checks in on-station.	Sonagazi, Feni
841	RYT-1 Rainfed Lowland Rice in T. Aman	• To evaluate specific and general adaptability of advance breeding lines of Rainfed Lowland as compared with standard checks in on-station.	Sonagazi, Feni
842	RYT Salinity tolerant Rice-1 (STR-1) in T. Aman	• To evaluate specific and general adaptability of the advance salinity tolerant breeding lines as compared with standard checks in on-station.	Farmer's field of Chakoria, Cox'sbazar
843	RYT Salinity tolerant Rice-2 (STR-2) in T. Aman	• To evaluate specific and general adaptability of the advance salinity tolerant breeding lines as compared with standard checks in on-station.	Farmer's field of Chakoria, Cox'sbazar
844	Effect of Potassium and Sulphur on the performance of modern rice varieties during Boro season	• To find out the effect of Potassium and Sulphur on the performance of modern rice varieties during Boro season	Sonagazi and Guimara Khagrachari (On-Farm)
845	Effect of micronutrient Zinc on the performance of modern rice varieties	• To investigate the effect of Zinc on the performance of the rice varieties.	Sonagazi, Feni

Sl. No.	Research Title	Objective (s)	Location
846	Effect of polythene covering on seedling raising in Boro season	• To identify the most suitable technique for protecting Boro rice seedling from cold injury	Sonagazi, Feni
847	RYT Favorable Boro Rice-Medium Duration (FBR-MD) in Boro	• To evaluate specific and general adaptability of the advance breeding lines of favorable Boro rice-medium duration as compared with standard checks in on-station.	Sonagazi, Feni
848	RYT Favorable Boro Rice-Yield Maximization (FBR-YM) in Boro	• To evaluate specific and general adaptability of the advance breeding lines of favorable Boro rice for yield maximization as compared with standard checks in on-station.	Sonagazi, Feni
849	RYT Zinc Enrich Rice (ZER) in Boro	• To evaluate specific and general adaptability of advance breeding lines of zinc enriched rice as compared with standard checks in on-station.	Sonagazi, Feni
850	RYT Favorable Boro Rice (FBR) Barisal-1 in	• To evaluate specific and general adaptability of the advance breeding lines of favorable Boro rice as compared with standard checks in on-station.	Sonagazi, Feni
851	RYT Favorable Boro Rice (FBR) Barisal-2 in Boro	• To evaluate specific and general adaptability of the advance breeding lines of favorable Boro rice as compared with standard checks in on-station.	Sonagazi, Feni
852	RYT Salinity Resistant Rice-1 (STR-1) in Boro	• To evaluate specific and general adaptability of the advance salinity tolerant breeding lines as compared with standard checks in on-station.	Sonagazi, Feni
853	RYT Salinity Resistant Rice-2 (STR-2) in Boro 2020-21	• To evaluate specific and general adaptability of the advance salinity tolerant breeding lines as compared with standard checks in on-station.	Sonagazi, Feni
854	RYT Drought Resistant Rice (DRR-BB) Barisal-2 in Boro	• To evaluate specific and general adaptability of the advance drought tolerant breeding lines as compared with standard checks in on-station.	Sonagazi, Feni

Sl. No.	Research Title	Objective (s)	Location
855	RYT Green Super Rice (GSR) in Boro	• To evaluate specific and general adaptability of the advance breeding lines of green super rice as compared with standard checks in on-station.	Sonagazi, Feni
856	Confined Field Trial (CFT) of High Iron and Zinc Rice (HIZR) in in Boro 2020-21	• To develop and validate high Iron and Zinc enriched rice genotypes	Sonagazi, Feni
857	Survey and monitoring of rice diseases	• To monitor the disease prevalence at Chattogram and Rangamati region.	Feni, Noakhali Laxmipur Cox'sbazar Chattogram and Khagrachari (On-Farm)
858	Monitoring of insect pests and natural enemies by using light trap	• To monitor the insect incidence and its natural enemies.	Sonagazi
859	Stability Analysis of BRRI Developed Rice Varieties in Aus	• To investigate the stability of BRRI developed Aus rice varieties and • To find out location specific suitable variety(s)	Sonagazi
860	Stability Analysis of BRRI Developed Rice Varieties in Aman	• To investigate the stability of BRRI developed Aman rice varieties and • To find out location specific suitable variety(s)	Sonagazi
861	Stability Analysis of BRRI Developed Rice Varieties in Boro	• To investigate the stability of BRRI developed Boro rice varieties and • To find out location specific suitable variety(s)	Sonagazi
862	Advanced Lines Adaptive Research Trial (ALART) FE Aus	• To evaluate the yield potential and adaptability of the advanced rice genotypes for favorable environment at farmers' field during Aus season. • To get feedback information about the advantages and disadvantages of the selected materials from farmers and Extension personnel and • To select suitable material(s) for proposed variety trial (PVT).	Mirsarai, Chattogram

Sl. No.	Research Title	Objective (s)	Location
863	Advanced Lines Adaptive Research Trial (ALART) NSTE Aus	• To evaluate the yield potential and adaptability of the advanced rice genotypes for non-saline tidal ecosystem at farmers' field during Aus season. • To get feedback information about the advantages and disadvantages of the selected materials from farmers and Extension personnel and • To select suitable material(s) for proposed variety trial (PVT).	Mirsarai, Chattogram
864	Advanced Lines Adaptive Research Trial (ALART) ZER Aman	• To evaluate the yield potential and adaptability of the zinc enriched advanced rice genotypes of at farmers' field during Aus season. • To get feedback information about the advantages and disadvantages of the selected materials from farmers and Extension personnel and • To select suitable material(s) for proposed variety trial (PVT)	Sonagazi, Feni
865	Advanced Lines Adaptive Research Trial (ALART) RLR Aman	• To evaluate the yield potential and adaptability of the advanced rice genotypes for rainfed lowland rice at farmers' field during Aus season. • To get feedback information about the advantages and disadvantages of the selected materials from farmers and Extension personnel and • To select suitable material(s) for proposed variety trial (PVT).	Sonagazi, Feni
866	Advanced Lines Adaptive Research Trial (ALART) IRR-BPH Aman	• To evaluate the yield potential and adaptability of the Brown plant hopper resistant (IRR-BPH) advanced rice genotypes at farmers' field during Aus season • To get feedback information about the advantages and disadvantages of the selected materials from farmers and Extension personnel and • To select suitable material(s) for proposed variety trial (PVT).	Sonagazi, Feni

Sl. No.	Research Title	Objective (s)	Location
867	Advanced Lines Adaptive Research Trial (ALART) PQR Boro 1	• To evaluate the yield potential and adaptability of the premium quality advanced rice genotypes at farmers' field during Aus season • To get feedback information about the advantages and disadvantages of the selected materials from farmers and Extension personnel and • To select suitable material(s) for proposed variety trial (PVT)	Fulgazi, Feni
868	Advanced Lines Adaptive Research Trial (ALART) ZER Boro	• To evaluate the yield potential and adaptability of the zinc enriched advanced rice genotypes at farmers' field during Aus season. • To get feedback information about the advantages and disadvantages of the selected materials from farmers and Extension personnel and • To select suitable material(s) for proposed variety trial (PVT).	Fulgazi, Feni
869	Advanced Lines Adaptive Research Trial (ALART) FBR-Bhanga Boro	• To evaluate the yield potential and adaptability of the advanced rice genotypes for favorable ecosystem at farmers' field during Aus season. • To get feedback information about the advantages and disadvantages of the selected materials from farmers and Extension personnel and • To select suitable material(s) for proposed variety trial (PVT)	Fulgazi, Feni
870	Advanced Lines Adaptive Research Trial (ALART) BBRR Biotechnology Boro	• To evaluate the yield potential and adaptability of the bacterial blight resistant advanced rice genotypes at farmers' field during Aus season. • To get feedback information about the advantages and disadvantages of the selected materials from farmers and Extension personnel and • To select suitable material(s) for proposed variety trial (PVT)	Fulgazi, Feni

Sl. No.	Research Title	Objective (s)	Location
871	Head to Head Adaptive trial (HHAT) under TRB Project during Aman and Boro	• Generate information about the modern rice varieties • Validate the adaptability of modern rice varieties in different environments at farmers' field • Investigate the performance of promising varieties compared to popular mega variety and • Select suitable variety(s) for target environments	Sonagazi and Fulgazi, Feni
872	Seed Production and Dissemination Program (SPDP) during T. Aus	• 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 and • Collect feedback about the varieties from farmers and Extension personnel.	Feni Noakhali Chattogram and Khagrachari
873	Seed Production and Dissemination Program (SPDP) during T. Aman	• 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 and • Collect feedback about the varieties from farmersand Extension personnel."	Feni Noakhali Chattogram Laxmipur and Khagrachari
874	Seed Production and Dissemination Program (SPDP) during T. Aman under SPIRA project	• 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 and • Collect feedback about the varieties from farmers and Extension personnel.	Feni, Noakhali Chattogram Laxmipur and Khagrachari

Sl. No.	Research Title	Objective (s)	Location
875	Seed Production and Dissemination Program (SPDP) during Boro	• 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 and • Collect feedback about the varieties from farmers and Extension personnel.	Feni Chattogram Noakhali and Khagrachari
876	Seed Production and Dissemination Program (SPDP) during Boro under SPIRA project	• 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 and • Collect feedback about the varieties from farmers and Extension personnel.	Sonagazi, Fulgazi and Dagonbhuiyan, Feni
877	Farmers Training on Rice Technologies	• To update knowledge and skills of farmers and extension personnel on modern rice production technologies and • To enhance dissemination of new technologies among the farmers.	Noakhali Feni Chattogram Cox'sbazar and Khagrachari
878	Field Day	• Awareness building and create interest among the farmers and concerned extension agents about the modern rice production technologies.	Chattogram and Rangamati
879	Truthfully labeled Seed (TLS) Production	• Utilize quality seed for conducting Research (HHAT) and Demonstration (SPDP) and • Provide seeds to different stakeholders to enhance dissemination of modern rice varieties.	Sonagazi
880	Breeder Seed Production	• To be used to produce foundation seeds and • Multiply seeds of newly released rice varieties	Sonagazi

Sl. No.	Research Title	Objective (s)	Location
REGIONAL STATION: KUSHTIA			
881	ALART for Favorable Environment (FE), T. Aus	• To evaluate the yield potential and adaptability of the advanced lines at farmers' field in different agro-ecological zones.	Sadar, Kushtia.
882	Regional Yield Trial. Aus	• To evaluate specific and general adaptability of the advance breeding lines as compared with standard checks under on-station condition.	Kushtia.
883	ALART for Insect Resistant Rice (IRR-BPH), T. Aman	• To evaluate the yield potential and adaptability of the advanced rice genotypes at farmers' field in different agro-ecological zones.	Kushtia
884	ALART for Rainfed Lowland Rice (RLR), T. Aman	• To evaluate the yield potential and adaptability of the advanced rice genotypes at farmers' field in different agro-ecological zones.	Kushtia
885	ALART for Zinc Enriched Rice (ZER), T. Aman	• To evaluate the yield potential and adaptability of the advanced rice genotypes at farmers' field in different agro-ecological zones.	Kushtia
886	Regional Yield Trial (RYT-1, 2), Special Yield Trial (RLR-1, 2) T. Aman	• To evaluate specific and general adaptability of the some released varieties compared under on-station and on-farm conditions.	Baradi farm (BWDB) and Kushtia
887	Regional Yield Trial (RYT-3) RLR-3 T. Aman	• To evaluate specific and general adaptability of the advance breeding lines as compared with standard checks under on-station condition.	Kushtia.
888	Regional Yield Trial (RYT-4) RLR-4 T. Aman	• To evaluate specific and general adaptability of the advance breeding lines as compared with standard checks under on-station condition.	Kushtia.
889	Regional Yield Trial (RYT-5), Zinc Enriched Rice (ZER-1), T. Aman	• Evaluate of specific and general adaptability of the advance breeding lines as compared with standard checks under on-station condition.	Kushtia

Sl. No.	Research Title	Objective (s)	Location
890	Regional Yield Trial (RYT-6), Zinc Enriched Rice (ZER-2), T. Aman	• Evaluate of specific and general adaptability of the advance breeding lines as compared with standard checks under on-station condition.	Kushtia
891	Regional Yield Trial (RYT-7), Premium Quality Rice (PQR-1) T. Aman	• To evaluate specific and general adaptability of the advance breeding lines as compared with standard checks under on-station condition.	Kushtia.
892	Regional Yield Trial (RYT-8), Premium Quality Rice (PQR-2) T. Aman	• To evaluate specific and general adaptability of the advance breeding lines as compared with standard checks under on-station condition.	Kushtia.
893	Regional Yield Trial (RYT-9) for Disease Resistance Rice (BB), T. Aman	• Evaluation of the breeding lines for yield potential and adaptability test under different agro-climatic conditions of Bangladesh.	Kushtia.
894	Regional Yield Trial, Insect Resistant Rice (IRR-1), T. Aman	• Evaluation of promising breeding lines for their specific and general adaptability compared with standard checks in different agro-ecological conditions.	Kushtia.
895	Regional Yield Trial, Insect Resistant Rice (IRR-2), T. Aman	• Evaluation of promising breeding lines for their specific and general adaptability compared with standard checks in different agro-ecological conditions.	Kushtia.
896	Identification and screening of prospective aerobic rice from local and BRRI developed rice varieties, Boro	• To select the varieties with high yield potentials in aerobic conditions.	Kushtia
897	ALART for Zinc Enriched Rice (ZER), Boro	• To evaluate the yield potential and adaptability of the advanced rice genotypes at farmers' field in different agro-ecological zones.	Kushtia

Sl. No.	Research Title	Objective (s)	Location
898	ALART for Premium Quality Rice (PQR), Boro, 2020-21	• To evaluate the yield potential and adaptability of the advanced rice genotypes at farmers' field in different agro-ecological zones.	Kushtia
899	ALART Favorable Boro Rice-Bhanga (FBR-Bhanga), Boro, 2020-21	• To evaluate the yield potential and adaptability of the advanced rice genotypes at farmers' field in different agro-ecological zones.	Kushtia
900	Regional Yield Trial, Disease Resistant Rice (DRR-BB) lines, Boro, 2020-21	• To evaluate specific and general adaptability of the advance breeding lines as compared with standard checks in on-station condition.	Kushtia.
901	Regional Yield Trial (RYT-7), Favorable Boro Rice (FBR-MD) lines, Boro, 2020-21	• To select the best performing advanced breeding lines with higher grain yield over the existing HYVs in Kushtia site.	Kushtia.
902	Regional Yield Trial (RYT-7), Premium Quality Rice (PQR-1) Boro, 2020-21	• To evaluate specific and general adaptability of the advance breeding lines as compared with standard checks in on-station condition.	Kushtia.
903	Regional Yield Trial (RYT-5), Zinc Enriched Rice (ZER-1), Boro, 2020-21	• Evaluate of specific and general adaptability of the advance breeding lines as compared with standard checks in on-station condition.	Kushtia.
904	Regional Yield Maximization Trial (RYMT), Boro, 2020-21	• To evaluate fine grain high yielding breeding lines under integrated improved management practices in different agro-climatic conditions of Bangladesh and • To maximize proper filling of grains in a panicle under integrated management practices and by harvesting crop at 90% maturity (no shattering).	Kushtia.
905	Regional Yield Trial, Barishal-1, Boro	• On-station evaluation of the advanced breeding lines for adaptability along with the check varieties in different regional station and headquarter of BRRI	Kushtia.

Sl. No.	Research Title	Objective (s)	Location
906	Regional Yield Trial, Barishal-2, Boro	• On-station evaluation of the advanced breeding lines for adaptability along with the check varieties in different regional station and headquarter of BRRI	Kushtia.
907	Regional yield trial (RYT), Cumilla-1, Boro	• Evaluate of specific and general adaptability of the advance breeding lines as compared with standard checks under on-station condition.	Kushtia.
908	Regional yield trial (RYT), Cumilla-2, Boro	• Evaluation of specific and general adaptability of the advance breeding lines as compared with standard checks under on-station condition.	Kushtia.
909	Regional yield trial (RYT), GSR, Boro	• Evaluate of specific and general adaptability of the advance breeding lines as compared with standard checks under on-station condition.	Kushtia.
910	Multi Location Trial, Blast, Boro	• To evaluate specific and general adaptability of the advanced breeding lines as compared with standard checks	Kushtia
911	Yield response of rice to different rates of Nitrogen and Potassium fertilizer in Boro-Fallow T. Aman cropping pattern in Kushtia	• To find out the best dose combination of Nitrogen and Potassium fertilizer on basis of STB for maximum rice production	Kushtia.
912	Improvement of Mustard-T. Aus - T. Aman cropping pattern with variety replacement for sustainable productivity in Kushtia region	• 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	Khustia
913	Stability analysis of BRRI varieties	• To maintain season, year and location wise database on the yield performance of BRRI varieties.	Kushtia
914	Effect of time of planting on growth and yield of popular transplanted Aus varieties at Aus	• To find out the effect of time of planting on growth and yield of popular transplanted Aus varieties	Kushtia

Sl. No.	Research Title	Objective (s)	Location
915	Effect of irrigation on growth and yield of popular transplanted Aus varieties at Aus	• To find out the effect of irrigation on growth and yield of popular transplanted Aus varieties.	Kushtia
916	Effect of polythene covering on seedling raising in Boro season	• To find out the best seedling raising technique in Boro season to escape cold injury	Kushtia
917	Evaluation of drought tolerance ability of newly released BRRI variety (Aman) in drought prone area	• To evaluate drought response under different water stress conditions, effect of supplemental irrigation on yield and yield contributing parameters and suitability of newly released BRRI variety in drought prone area.	Kushtia
918	Determining minimum irrigation water requirement of rice at different regions of Bangladesh through water balance from on-farm demand and model simulation.	• To measure minimum rice crop water requirement at different regions • To measure yield response of rice to irrigation application base on on-farm demand and simulated irrigation requirement and • To figure out variation in irrigation water requirements among different treatments	Kushtia
919	Yield and water productivity affected by transplanting time and water management in Kushtia region	• To determine the effect of transplanting date on grain yield, yield response to water management and combine effect of transplanting date and irrigation management on the cultivar.	Kushtia
REGIONAL STATION: BHANGA			
920	Breeding for developing high yielding Transplanted Aman rice varieties (Hybridization)	• To develop desirable genotypes with high yield potential and acceptable grain quality	Bhanga
921	Breeding for developing high yielding shallow flooded Deepwater rice varieties (Hybridization)	• To develop breeding population with suitable traits for deepwater Aman	Bhanga
922	Breeding for developing high yielding Aus rice varieties (Hybridization)	• To develop breeding population with heat tolerance, short duration and good grain properties	Bhanga

Sl. No.	Research Title	Objective (s)	Location
923	Field Rapid Generation Advance (FRGA)	• To rapidly advance segregating population for shortening the breeding cycle	Bhanga
924	Breeding for developing high yielding rice varieties for single Boro cropping pattern (Hybridization)	• To develop breeding population with higher yield potential, tall plant along with earliness and acceptable grain quality for single boro cropping pattern of Faridpur	Bhanga
925	Collection and conservation of local Aus, Aman, Boro and Deep water rice (DWR) germplasm	• To collect local Aus, Aman, Boro and Deep water rice (DWR) germplasm for hybridization and also to be preserved in the BRRI gene Bank.	Shariotpur Madaripur Faridpur Rajbari and Gopalganj
926	Characterization of Deep water rice (DWR) germplasm	• To characterize rice germplasm and to be evaluated as per BRRI prescribed descriptor and UPOV convention for safeguarding from biopiracy.	Bhanga
927	Introduction of intercropping system in different farmer led cropping pattern for medium high land area in Faridpur region. (On going)	• To increase system productivity through increasing the cropping intensity in Faridpur region	Faridpur (On- farm)
928	Validation of improved fertilizer management option in *Aman* rice relayed with jute at farmers field in shallow flooded area	• To validate improved fertilizer management option at farmers' field and fine-tuning	Faridpur (On- farm)
929	Effect of polythene covering on seedling raising in Boro	• To identify the most suitable technique for protecting Boro rice seedling from cold injury	Bhanga
930	Effects of planting time on Aus rice in Charland area of Faridpur	• To adjust planting time for escaping the crop from flood	Faridpur (On -farm

Sl. No.	Research Title	Objective (s)	Location
931	Dissemination of newly released BRRI varieties in Aus, T. Aman and Boro seasons in greater Faridpur region	• To demonstrate newly released BRRI varieties in the farmers' fields to disseminate and gaining popularity.	On-Farm
REGIONAL STATION: SIRAJGANJ			
Crop-Soil-Water Management			
932	Performance of different organic manure for the amendment of Char land soil.	• Increasing organic matter and water holding capacity in char land soil.	Sirajganj
933	Improving soil water availability for crop production in char land by amendment practices.	• Improving the physical properties (texture) of Char land soil	Sirajganj
934	Effect of biochar on rice yield and soil health on problem soils	• Observing the effect of biochar on rice yield and nutrient use efficiency in problem soils	Sirajganj
935	Response of latest BRRI varieties in Char land areas of Sirajganj.	• Adaptation of newly released BRRI varieties in char land areas.	Sirajganj
936	Effect of transplanting date and spacing on the yield of different short duration rice varieties.	• Finding suitable transplanting date of short duration rice variety in terms of maximum benefit.	Sirajganj
Pest Management			
937	Insect pests and natural enemies in light trap	• Observing the incidence patterns of rice pest and their natural enemy in rice fields to develop a forecasting system.	Sirajganj
938	Study on entomogenous fungi to control BPH.	• Identifying the infection mechanism of entomogenous fungi on BPH.	Sirajganj
939	Evaluation of BPH NILs under selected hotspots of Bangladesh.	• Identifying BPH resistant lines under field conditions	Sirajganj
940	Establishment of prevention network for migratory pests in Asian region	• Exploring and sharing the real-time occurrence information to AMIVS for optimum timing to control of RPH (BPH, WBPH and SBPH)	Sirajganj

Sl. No.	Research Title	Objective (s)	Location
REGIONAL STATION: GOPALGANJ			
941	Collection of local rice landraces from Gopalganj, Narail and Bagerhat District	• Collected germplasm conserved safely in Genebank	Gopalganj
942	Characterization of local rice landraces from Faridpur region	• Data generated through morphological characterization would be helpful in future- breeding programme and to establish IPR of Bangladehi rice germplasm	Gopalganj
943	Breeder seed production	• Breeder seed production	Gopalganj

BANGLADESH JUTE RESEARCH INSTITUTE

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Sl. No.	Research Title	Major Objective (s)	Location
Gene Bank Department			
1.	Characterization of deshi jute (*Corchoruscapsularis*) germplasm	• To characterize the deshi jute germplasm for morpho-agronomic traits.	Manikganj Jute Agriculture Experimental Station (JAES)
2.	Characterization of tossa jute (*Corchorusolitorius*) germplasm	• To characterize the tossa jute germplasm for morpho-agronomic traits.	Manikganj
3.	Characterization of kenaf (*Hibiscus cannabinus*) germplasm	• To characterize the kenaf germplasm for morpho-agronomic traits.	Manikganj
4.	Characterization of mesta (*Hibiscus sabdariffa*) germplasm	• To characterize the mesta germplasm for morpho-agronomic traits.	Manikgan
5.	Regeneration and distribution of jute, kenaf, mesta and allied fibre germplasm	• To multiply the germplasm for replenishment of the seed stock of gene bank and to distribute germplasms for research.	Dhaka
6.	Monitoring the viability of jute, kenaf, mest and allied fibre germplasm conserved in short and long term condition and their maintenance	• To assess the germination percent of seeds under +4^{o}C and -20^{o}C storage condition.	Dhaka
Cytogenetics Department			
7.	Molecular characterization of jute germplasm through DNA fingerprinting	• To develop genetic fingerprints and to estimate genetic diversity of jute germplasm using molecular markers.	Dhaka (Genetic Resources and Seed division, BJRI)
8.	Assessment of Molecular level variation among kenaf (*H. cannabinus*) germplasm collected from different sources using molecular markers	• To study the variations at molecular level using molecular markers.	Dhaka (Genetic Resources and Seed division, BJRI)
9.	Optimization of plant regeneration system for *Corchorusolitorius* for establishing tissue culture plants into the field	• To establish an efficient plant regeneration system from the explants of *C. olitorius*, particularly, from the cotyledons (with attached petioles).	Dhaka (Genetic Resources and Seed division, BJRI)

Sl. No.	Research Title	Major Objective (s)	Location
10.	Optimization of plant regeneration system for Kenaf (*H. cannabinus*) for establishing tissue culture plants into the field	• To establish an efficient plant regeneration system from the explants of kenaf varieties, particularly, from the cotyledons (with attached petioles).	Genetic Resources and Seed division, BJRI, Dhaka.
Breeder Seed Department			
11.	Production of nucleus seed stock of jute and kenaf	• To maintain nucleus seed stock of released varieties of jute and kenaf.	Dhaka, Manikganj, Monirampur and Nasipur
12.	Production of breeder seed of deshi jute, tossa jute and kenaf	• To produce breeder seed of different varieties of jute and kenaf.	Manikganj, Rangpur, Kishoreganj , Chandina, Monirampur and Nasipur
13.	Assessment of yield and quality of deshi and tossa jute and kenaf breeder seed at different regions.	• To assess the kenaf seed quality of different sources.	Manikganj, Rangpur, Kishoreganj , Monirampur and Nasipur
14.	Monitoring of breeder and foundation seed production farms.	• To visit breeder and foundation seed plots at vegetative, flowering and maturity stages of seed producing agencies to ensure the quality of the produced seed and to provide advises to the seed producing agencies for improving the quality of the seed.	Manikganj, Rangpur, Kishoreganj , Monirampur , Chandina Nasipur and Kishoreganj (Private seed production farms)
15.	Seed yield and quality of tossa jute seed produced by different regions of Bangladesh.	• To find out the comparative seed yield performance of BJRI Tossa Pat-8, BJRI Tossa Pat-5 and O-9897.	Kishoreganj and Patuakhali research station (RS)
BREEDING DIVISION (Capsularis Department)			
16	Hybridization among the selected lines of white jute	• To select superior progeny for varietal improvementprogram	Dhaka
17	Confirmation of F_1s and estimation of heterosis of white jute	• To confirm the hybrids and collection of their seeds	Dhaka

Sl. No.	Research Title	Major Objective (s)	Location
18	Development of protocol for Rapid Generation Advancement (RGA) of white jute	• To shorten the breeding cycle for varietal development system	Dhaka
19	Evaluation of some genotypes of white jute for vegetable purpose	• To determinate leaf yield an various-associated traits and to develop variety as vegetable type jute	Manikganj and Dhaka (Central research field)
20	Anatomical studies of some advanced lines of white jute	• To evaluate the anatomical features of breeding lines	Dhaka
21	Preliminary yield trial of white jute for short day and low temperature tolerance	• To identify short day and low temperature lines coupled with disease resistance	Manikgonj, Rangpur and Kishoreganj and Monirampur
22	Screening of jute, kenaf and mesta germplasm for tolerant to drought	• To identify drought tolerant lines with high yield	Dhaka (Central Research field) Lalmonirhat and Rajshahi
23	Preliminary yield trial of high yielding white jute strains.	• To develop new varieties of white jute suitable for early and late sowing and with higher yield potential than the existing cultivars	Manikganj Faridpur Rangpur Manirampur and Kishoreganj
24	Advanced yield trial of early seeding breeding lines of white jute	• To develop new variety of white jute suitable for early sowing with higher yield potential	Manikganj Rangpur Faridpur and Chandina stations
25	Zonal yield trial of high yielding breeding lines of white jute	• To test higher yield and adaptability of three potential breeding lines at regional stations of BJRI under different agro-ecological zones.	Manikganj Faridpur Rangpur Kishoreganj Monirampur and Patuakhali stations
26	Maintenance of nucleus seed stock of white jute.	• To maintain the genetic purity of the varieties	Manikganj, Manirampur and Dhaka
27	Maintenance of advanced lines of white jute	• To maintain different strains already in use and to be used asparents in future breeding programs	Manikganj Manirampur and Dhaka

Sl. No.	Research Title	Major Objective (s)	Location
Olitorius Department			
28	Hybridization among the selected genotypes of tossa jute	• Creation of variability to develop new jute varieties for higher fiber yield and stress tolerance	Dhaka (Experimental field)
30	Confirmation of F_1s and estimation of heterosis, heterobeltosis in tossa jute	• To confirm the true F_1 plants, and estimation of **h**eterosis & heterobeltosis from the successful crosses	Dhaka
31	Evaluation of segregating materials and selection of superior lines of tossa jute	• To select superior genotype(s) from different generations based on desired characters	Dhaka
32	Evaluation of tossa jute mutants at M_5 generation	• Searching for variation and giving selection of some stress tolerance, quick mature, short duration, good fiber quality and high yielding jute mutant for new variety development	Manirampur, Jashore
33	Rapid generation advancement (RGA) protocol development in tossa jute to create breeding lines within short period of time	• To establish RGA protocol, speed up the breeding cycle in order to develop new variety within short time	Dhaka
34	Creation of variability through physical mutagen (Gamma ray) on jute and kenaf	• Creation of variability, development of mutants in jute and Kenaf	Dhaka
35	Creation of variability through chemical mutagen (EMS and Colchicine) on Jute, Kenaf and Mesta	• To create variability among the selected Jute, Kenaf and Mesta varieties	Dhaka (Research Lab. and Field)
36	Searching for CMS line in tossa jute to develop hybrid jute variety	• To identify the male sterile line for hybrid jute	Dhaka
37	Anatomical studies in tossa jute for quality fibers	• To select tossa jute genotypes having good anatomical features leading to fiber yield, compactness	Dhaka and Manikgonj
38	Screening of tossa jute germplasm for salinity tolerance	• To select salinity tolerant tossa jute genotypes for developing new varieties for coastal areas	Faridpur (RS)
39	Screening of tossa jute genotypes against salt during seed germination and seedling growth using petri plate method	• To assess salinity tolerance in eight tossa jute genotypes	Jashore (JRSS)
40	Screening of tossa jute germplasm against waterlogged condition	• To select waterlog tolerant tossa jute genotypes	Dhaka (Research Lab. and

Sl. No.	Research Title	Major Objective (s)	Location
			Field)
41	Screening of tossa jute germplasm for biotic and abiotic stress tolerance with higher fiber yield	• To select stress tolerant high yielding tossa jute genotypes	Dhaka (Experimental field)
42	Advancement of tossa jute lines for short day and low temperature tolerance	• To identify short day and low temperature tolerant jute lines	Dhaka (Experimental field)
43	Preliminary yield trial of promising lines of tossa jute	• To evaluate yield and yield contributing traits of breeding lines at different regional stations	Manikganj, Monirampur, Jashore Faridpur Rangpur and Kishoreganj
44	Preliminary yield trial of selected lines tolerant to water logged condition	• To screen out of waterlog tolerant tossa jute genotypes	Faridpur Regional Research Station (RRS)
45	Advanced yield trial of three breeding lines of tossa jute	• To evaluate the yield and adaptability of different advanced lines at farmer's field in different regions as well as stations.	Manikganj, Monirampur, Jashore Faridpur Rangpur and Kishoreganj
46	On farm yield trial of an advanced breeding line of tossa jute	• To evaluate the yield and adaptability of different advanced lines at farmer's field in different regions as well as on stations	Manikganj Monirampur, Jashore Faridpur Rangpur and Kishoreganj
47	Maintenance of nucleus seed stock of tossa jute	• To maintain a new nucleus seed stock of released tossa jute varieties from which breeder seeds will be produced	Manikganj and Monirampur
48	Maintenance of parents of tossa jute	• To maintain different strains already in use and to be used as parents in different experiments for breeding improved tossa jute varieties	Manikganj Dhaka and Monirampur
Kenaf- Mesta Department			
49	Hybridization in kenaf and mesta	• To transfer desirable traits from donor to the recipient parent, • To create variability and To	Dhaka

Sl. No.	Research Title	Major Objective (s)	Location
		isolate desirable progenies	
51	Confirmation of F_1s	• To confirm hybrids derived from different crosses comparing with parents and generation of F_2 seeds	Dhaka
52	Evaluation of segregating lines of kenaf and mesta	• To select desirable lines/plants from the segregating generation.	Dhaka
53	Screening of kenaf and mesta germplasm for higher fibre yield	• To select desirable lines/plants from the segregating generation	Dhaka (CS) Manikganj and (JAES)
54	Screening of Jute and kenaf germplasm for salt tolerance	• The experiment has been taken to isolate the saline tolerant lines from selected jute and kenaf germplasm	Dacop, Khulna
55	Preliminary yield trial (PYT) of kenaf breeding lines	• To develop new variety of Kenaf with higher fibre yield than the existing cultivars	Manikganj/ Dhaka and Monirampur
56	On Farm yield trial of Kenaf breeding lines	• To develop Quick growing, early maturing and high yielding kenaf variety • Location: Manikganj, Rangpur, Faridpur, Kishoreganj, Chandina and Monirampur (FF) and Stations	
57	On Farm yield trial of two promising lines of mesta: SM-2 and SM-5	• To develop Mesta varieties with higher yield, earliness, smoothness and other desirable attributes • Location: Manikganj, Rangpur, Faridpur, Kishoreganj, Chandina and Monirampur • (farmer's field)	
58	Maintenance of nucleus seed stock of kenaf and mesta	• To maintain the genetic composition of the varieties	Manikganj and Rangpur
59	Maintenance of parents of kenaf and mesta	• To maintain different strains already in use and to be used as parents in future breeding programs	Manikganj and Monirampur
AGRONOMY DIVISION (Crop Management Department)			
60	Determination of appropriate sowing date on fibre yield and yield attributes of evolved variety BJRI Tossa Pat-8 (Robi-1)	• To find out the optimum date of sowing for the maximum quality fibre yield of BJRI Tossa Pat-8 (Robi-1) •	Manikganj (JAES) Rangpur and Jashore (JRSS)

Sl. No.	Research Title	Major Objective (s)	Location
61	Effect of sowing date and harvesting age on fibre yield and yield attributes of salt tolerant white jute breeding line	• To find out the optimum sowing time and harvesting age of salt tolerant advanced breeding line • C-12221 for higher fibre yield	Patuakhali (JRSS)
62	Effect of seedling transplanting on fibre yield and yield attributes of BJRI tossa jute as influence by spacing	• To estimate the fibre yield performance of seedling transplanting of BJRI tossa jute as influenced by spacing	Kishoreganj (JRRS)
63	Efficiency of urea fertilizer management in Deshi Jute crop for weed control	• To identify the effective doses of urea top dressing and optimum application time for weed control	Kishoreganj
64	Study on the effect of weedicide samples for cultivation of jute seed crop in field condition	• To see the effectiveness of weedicide samples in the field of jute seed to reduce management cost	Manikganj and Tarabo (JAES)
65	Effect of date of sowing on seed yield and yield attributes of evolved variety BJRI Tossa Pat-8 (Robi-1) as influenced by spacing	• To determine the suitable sowing date and spacing for the maximum seed yield of BJRI Tossa Pat-8	Manikganj Rangpur (JRRS) and Jessore (JRSS)
66	Effect of different weed management technique on jute seed production.	• To optimize cost effective weed management technique for jute seed production through weeding and herbicide management.	Rangpur
67	Effect of sowing time and variety on leaf yield, seed yield and yield contributing characters of jute vegetables	• To identify an ideal vegetable jute variety to fulfill vegetable demand round the year	Rangpur
Soil Science Department			
68	Response of advanced olitorius breeding line of O-0512-6-2 to NPK and S fertilization	• Fertilizer recommendation for the advanced Tossa jute breeding line O-0512-6-2 will be generated	Manikganj (JAES)
69	Study the nutrient requirement of NPKS of newly released variety BJRI tossa pat-8	• To find out the nutrients for BJRI Tossa pat-8 to produce fiber	Dinajpur (JSPRS)
70	Influence the nutrients NPK and S on the advanced kenaf breeding line KBL-73	• To determine the NPK and S fertilizer requirements for fiber production of advanced kenaf breeding line KBL-73	Kishoreganj Manikganj and Dhaka

Sl. No.	Research Title	Major Objective (s)	Location
71	Study the nutrient requirement for seed production of NPKSZn& B of newly released variety BJRI Tossa pat-8	• To identify a combination dose for BJRI Tossa Pat-8 seed production for optimal growth and higher yield potential	Manikganj Monirampur and Dinajpur
72	Response of N P K S Zn & B nutrients for seed production of BJRI Kenaf -4	• To determine the suitable dose for BJRI Kenaf -4 seed production	Kishoreganj and Manikganj
73	Optimization of N P K S Zn & B nutrients for advanced olitorius breeding line O-043-7-9 to quality seed production	• For seed production, an appropriate dose for the advanced olitorius breeding line O-043-7-9 will be developed	Manikganj Dinajpur and Tarabo (JRSS)
74	Study the nutrient requirement of NPK & S on Salt tolerant advanced Deshi jute breeding line C- 12221	• To find the optimal NPKS combination dose for Deshi jute breeding line C- 12221 fiber production.	Patuakhali (JRSS)
Physiology Department			
75	Dry matter partitioning of advance breeding line O-043-7-9	• To find out dry matter distribution, appropriate harvest time and crucial growth period of advanced olitorius breeding line O-043-7-9	Manikganj
76	Screening and characterization of *C. olitorious*germplasm for drought tolerance	• To screened out drought tolerant jute genotype •	Manikganj
77	Screening of *C. olitorious*germplasm with erect leaf for higher fibre yield	• To screened out jute genotype having erect leaf •	Manikganj
78	Screening and evaluation of *C. olitorius* germplasm for water logging tolerance	• To screened out water logging tolerant jute genotype	Cumilla (JRRS)
79	Assessment of jute seed quality produced in different regional and sub-stations of BJRI	• To know the quality of produced seeds from different stations of BJRI	Dhaka (Physiology laboratory)
80	Study on White Jute seed crop growth, yield and quality potentials as affected by sowing times and locations of Bangladesh	• To get basic information about reproductive stages of white jute and to know appropriate sowing time for best quality White jute seed	Manikganj Rangpur Jashore Patuakhali and Cumilla

Sl. No.	Research Title	Major Objective (s)	Location
81	Study on Tossa Jute seed crop growth, yield and quality potentials as affected by sowing times and locations of Bangladesh	• To get basic information about reproductive stages of tossa jute and to know appropriate sowing time for best quality tossa jute seed	Manikganj Rangpur Faridpur Jashore and Patuakhali
82	Study on Kenaf seed crop growth, yield and quality potentials as affected by sowing times and locations of Bangladesh	• To get basic information about reproductive stages of kenaf and to know appropriate sowing time for best quality kenaf seed	Manikganj Rangpur Jashore Patuakhali and Kishoregonj
PEST MANAGEMENT DIVISION (Entomology)			
83	Study on the pest status of promising lines of jute and allied fibre crops in different locations	• To determine the pest status among the promising lines and existing standard variety and • To help the breeders to evolve pest tolerant/ resistant varieties	Manikganj, Faridpur, Kishoreganj Rangpur Cumilla and Jashore
84	Screening of jute germplasm for resistance against yellow mite and jute apion	• To find out the sources of tolerance/resistance against yellow mite and apion of jute and • To help the breeders to develop the high yielding tolerance/resistance varieties against jute yellow mite and apion	Rangpur Manikganj and Kishoreganj
85	Screening of Kenaf and mesta germplasm for resistance against Spiral borer and Mealybug	• To identify tolerant/resistant germplasm against spiral borer and mealy bug of kenaf and Mesta.	Rangpur, Manikganj and Kishoreganj
86	Effectiveness of new acaricides on jute yellow mite under field condition	• To determine the efficacy of new acaricides recommended by Sub-PTAC for standardization and • To evaluate the economic and effective acaricides for controlling Jute yellow mite	Dhaka Manikganj and Narayanganj
87	Evaluation of insecticides against jute hairy caterpillar under field & laboratory condition	• To determine the efficacy of new insecticides recommended by Sub-PTAC for standardization and • To evaluate the economic and effective insecticides for controlling Jute hairy	Dhaka Manikganj and Narayanganj

Sl. No.	Research Title	Major Objective (s)	Location
		caterpillar	
88	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 and • Confirmation of developed technology for jute growers	Manikganj
89	Effect of different date of sowing on spiral borer infestation in kenaf	• To find out the infestation of yellow mite at different sowing times and • To monitor the abundance of yellow mite at different environmental condition	Faridpur and Manikganj
90	Effect of nitrogenous fertilizer on yellow mite infestation in *Corchorus spp.*	• To study the infestation of yellow mites under variable regimes of nitrogenous fertilizers	Manikganj
91	Survey on insect and mite pest of fibre and seed crops of jute and allied fibre	• To collect information about the nature of incidence, intensity and peak period of insects and mite pest in the JAF crop for the development of forecasting system	All BJRI research stations and adjacent farmer's field
FIBRE QUALITY IMPROVEMENT DIVISION			
92	Isolation and Identification of jute retting bacterial strains from different natural sources and study of their retting properties	• To isolate promising pectinolytic bacterial strains and • To increase the retting performance.	Dhaka
93	Retting behavior and fibre properties of different advanced breeding lines of jute	• To evaluate the retting and fibre properties of new advanced breeding lines of deshi and tossa jute	Monirampu, Jashore
94	Retting and fibre properties of different advanced breeding lines of Kenaf	• To evaluate the retting and fibre properties of new advanced breeding lines of kenaf	Chandina and Kishoreganj (JRRS)
95	Improvement of the quality of jute retting water for second and third time retting in lab condition	• To improve the second time retting water for getting higher quality fibre from water scarce areas	Dhaka
96	Influence of harvesting age on the physical properties of jute	• To determine the physical properties of jute fibres at	Rangpur

Sl. No.	Research Title	Major Objective (s)	Location
		different ages of jute plants	
JUTE FARMING SYSTEMS DIVISION (Farming systems)			
97	Performance of farmers' Alternate Cropping Pattern: Boro rice –Jute –T. Aman against Farmers' Cropping Pattern : Boro rice –Fallow–T. Aman in medium high land	• To find out a suitable cropping pattern for these areas and • To increase productivity and income of the farmers in medium high land.	Rangpur
98	Performance of farmers' Alternate Cropping Pattern Wheat – Jute – T. Aman rice against existing Farmers' Cropping Pattern Fallow–Fallow–T. Aman rice in medium high land at Patuakhali	• To develop a profitable jute based cropping pattern and • To introduce improved technology for increasing productivity and income of the farmers	Patuakhali
99	Performance of Farmers' Alternate Cropping Pattern Maize–Pat shak–Jute–Okra against existing Farmers' Cropping Pattern Maize–Red amaranth–Brinjal in medium high land at Manikganj	• To increase cropping intensity and income of the farmers and • To introduce new crop/variety in the pattern	Manikganj
100	Development of jute based four-crop pattern	• To introduce new technology, increase crop productivity and farmers' income	Rangpur
101	Development of kenaf containing four-crop pattern at Char areas	• To increase the cropping intensity in Char areas and • To increase productivity and income of the farmers	Rangpur
102	Performance of four-crop pattern involving Boro–Jute–T. Aman–Mustard	• To increase productivity and income of the farmers and • To introduce improve technology and new crop	Jashore
103	On farm trial of jute seed production	• To make self-sufficient in jute seed production at farm level	Faridpur Rangpur Manikganj Kishoreganj and Monirampur
104	Study on cost and return of jute crop cultivation at farm level in different areas of Bangladesh	• To find out the area, cost and return of jute and to identify the socio-economic constraints for jute production	Faridpur Manikganj Rangpur Dinajpur Patuakhali Kishoreganj and Jashore

Sl. No.	Research Title	Major Objective (s)	Location
105	Study on cost and return of kenaf fibre production at farm level in different areas ofBangladesh	• To find out the area, cost and return of kenaf and to identify the socio-economic constraints for kenaf production	Rangpur and Kishoreganj
106	Study on cost and return of tossa jute seed crop at contract growers' level of BADC	• To assess the cost and return of late jute seed cultivation	Kushtia and Chapai-nawabganj
107	Technology transfer through BJRI Jute Villages and Jute Blocks	• To assess suitability of released recommended varieties and potential technologies in farmers' environment and • To identify farmers' constraints for adoption and generate feedback for further development of the technologies Location: Manikganj, Tangail, Faridpur, Rajbari Magura, Jashore, Gopalganj, Madaripur, Rangpur, Lalmonirhat, Dinajpur, Kishoreganj, Jamalpur, Sherpur and Chandpur	
108	On-farm trial of BJRI newly released variety	• To demonstrate newly released variety with existing varieties at farm Location : Faridpur, Rangpur, Manikganj, Kishoreganj, Monirampur, Cumilla, Dinajpur, Tarabo and Patuakhali	
109	Popularization of different JAF crop varieties of BJRI at farmers' level	• To make the variety popular among the farmers Location : Dhaka, Manikganj, Rangpur, Faridpur, Kishoreganj, Monirampur, Chandina, Nashipur, Tarabo and Patuakhali	
110	Estimation of fibre yield through crop cutting of JAF crops	• To introduce a crop cutting system to estimate the fibre yield of JAF crops at harvest through crop cutting method. Location: Rangpur Faridpur Monirampur and Kishoreganj	
111	Growth and development analysis of deshi and tossa jute for model simulation	• To develop a simulation model for jute crop Location : Dhaka, Manikganj, Kishoreganj, Jamalpur, Rangpur, Rajshahi, Faridpur, Jashore and Patuakhali	
TECHNOLOGY WING **TEXTILE PHYSICS DIVISION**			
112	Studies on the properties of Jute Fibre Reinforced Technical Textiles	• To increase diversified usages of jute fibres • To produce jute-cotton reinforced polymer technical textile and • To reduce the thermal conductivity of technical textile	Textile Physics Division
113	Effect of Nano-clay on	• To increase diversified usages	Physics

Sl. No.	Research Title	Major Objective (s)	Location
	Crystallinity index, Thermal and Mechanical properties of Jute composites	of jute fibres • To produce jute reinforced Polyester composite and • To increase thermal and mechanical properties jute reinforced Polyester composite	Department
114	Effects of harvesting time and cultivation area on the physico-mechanical properties of jute fibre of BJRI developed varieties	• To determine the physico-mechanical properties of different varieties of jute fibre produced in different regional stations of BJRI and different harvesting time • To analysis the test results and select the proper raw jute for diversified uses and • To optimize the quality and cost of end products	Physics Department
115	Effect of fibre loading and surface modification of jute fibre on the mechanical properties of jute fibre reinforced polypropylene / HDPE / PLA composites	• Fabrication of jute fibre reinforced composites with different weight proportion of fibres and using different matrices such as polypropylene, HDPE and PLA and • Finally, determination of the different mechanical properties of jute fibre reinforced composites for diversification of jute products	Testing and Standardiza-tion Department
116	Comparison of environmental criteria among jute and different natural fiber	• Development of data base for jute and other natural fib • Comparative analysis among the different natural fiber for designing a component of a product and • Selection of a material for a component of a natural bio-based product	Testing & Standardiza-tion Department
117	Effect of Hybridization (jute-sugarcane bagasse) on physico-mechanical and thermal properties of natural fibre reinforced polymer composites	• To evaluate the physico-mechanical properties of jute-sugarcane bagasse hybrid composites and • To evaluate the cost effectiveness of jute-sugarcane	Testing & Standardiza-tion Department

Sl. No.	Research Title	Major Objective (s)	Location
		bagasse hybrid composites	
118	Studies on the electrical properties of low temperatureplasma treated jute	• To see the changes of electrical properties of raw jute fibre by low temperature plasma treatment of jute in order to diversify the uses of jute • To see the changes of thermal properties of raw jute fibre by low temperature plasma treatment of jute in order to diversify the uses of jute • To see the changes of optical properties of raw jute fibre by low temperature plasma treatment of jute in order to diversify the uses of jute	Electrical & Equipment Development and Maintenance Department
119	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	Electrical & Equipment Development and Maintenance Department
CHEMISTRY DIVISION			
120	Chemical and physical studies on different samples of jute and allied fibres /sticks in order to increase diversified end uses of jute	• To prepare and characterize easily produced cost effective cellulose from jute in order to produce new area of jute materials for diversified uses in local and • international market for biodegradable, natural, environmental friendly jute based goods	Fibre Chemistry Department
121	Preparation of different types of Acoustics panels by using jute fibre and study their physico-mechanical and chemical properties to ascertain specific uses	• To create sound proof environment in School, Office, Conference room, Industry, Generator room etc. Institutions are a combination of many things. One of the most important factors is attaining optimal sound conditions in conjunction with aesthetic consideration and • Promoted as low-cost and lightweight alternatives to fiberglass, this agricultural product, including flax, jute, hemp and kenaf signaled the start of a "Green" industry with enormous potential.	

Sl. No.	Research Title	Major Objective (s)	Location
		• Location: Fibre Chemistry Department	
122	Extraction of various useful chemical products from jute and allied fibrous materials and their wastes.	• To extract and produce of useful chemicals from jute fibre, jute sticks, jute wastages to verify those produced chemicals with commercial ones.	Fibre Chemistry Department
123	Development of Jute Reinforced Polyester Composite Materials	• To develop environment-friendly and economically viable housing construction materials from natural fibre jute • The preservation of natural resources and recycling has led to renewed interest in biomaterials, focusing on renewable raw materials • Owing to this environmental consciousness and new restrictions from legislative authorities, the use and disposal of traditional composite material is now seen critically • To introduce renewable resources, Green technology with jute fibre (hessian cloth) reinforced unsaturated polyester (USP) resin along with additives; composites were prepared by simple hand lay-up technique at room temperature (25^0C) and • To prepare composite made of chemically modified jute fabrics shows better mechanical performances than that of synthetic composites. Location: Industrial Chemistry Department	
124	Improvement of flameproof process with waterproof and fire retardant on jute and jute fabrics for diversified uses.	• To develop textile finishing /proofing processes for jute products by chemical means and • To find out suitable finishing methods for imparting durable flameproof finishes on jute yarns and jute fabric.	Industrial Chemistry Department
125	Development of the physical and chemical properties of activated carbon, ink and charcoal from jute stick and applications in various fields.	• To develop an eco-friendly and economically viable activated carbon, ink and charcoal production methods from jute stick • To find out a suitable eco-friendly storage system for the management of jute stick and activated carbon, ink, and charcoal	Industrial Chemistry Department

Sl. No.	Research Title	Major Objective (s)	Location
		• To reduce the use of chemical for the production of activated carbon, ink and charcoal • To reduce the production cost activated carbon, ink, and charcoal from Jute stick • To find out the diverse use of activated carbon, ink, and charcoal as well as jute stick in the world market • To solve the deforestation problem as well as to save the environment	
126	Development of Pulp from Jute which are economically viable	• To develop an eco-friendly and economically viable pulp, paper and viscose production methods from jute • To find out a suitable eco-friendly storage system for management of jute • To reduce the use of chemicals for the production of pulp, paper and viscose. • To reduce the use of hard wood, soft wood and bamboo etc. • To find out diverse use of pulp as well as jute in the world market and • To save the environment from the pollution of synthetic fiber. Location: Industrial Chemistry Department	
127	Studies on the physico-chemical properties of various chemically modified jute fibre and blends with other natural and synthetic fibre for making fashionable clothes for widely textile uses.	• To prepare fashionable products and to reduce the cost of fashionable products • To develop entrepreneurship and transfer of technology for the purpose of pilot scale and commercial production of the newly evolved yarns and fabrics • To use of jute as textile fibers in place of other natural and synthetic fibers • To generate new technology and employment for rural people. Location: Industrial Chemistry Department	
128	Synthesis and characterization of functional Jute Fiber treated with Chitosan-metal oxide composite	• Development of functional jute fibers and fabric for anti-microbial application	Industrial Chemistry Department
MECHANICAL PROCESSING DIVISION			
129	A study on the physical and	• Use of jute will be increased as	Spinning

Sl. No.	Research Title	Major Objective (s)	Location
	mechanical properties of jute-banana blended yarn.	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.	section
130	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 section
131	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 fibre.	Spinning section
132	Development of different types of jute bags with Jute-cotton woven fabric of different weave design	• Jute can be used as diversified jute products as decorative, table clothes, wall covers, curtain, apparels, different types of jute bags etc. • To produce those items specially different types of jute bags, production and development of new jute fabrics are needed .From this point of view the project has been taken.	Weaving section
133	Study of making prayer mat from jute yarns/Jute-wool blended.	• 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 section
134	Studies on resin viscosity on the properties of jute fibre 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	Machinery developmen t & maintenance department
135	Modernization of hessian spinning frame by using a blower fan	• To produce better quality yarn uniform feeding is necessary. If the feeding system of the spreader machine can be controlled by a sensor then the yarn will be finer and more	Machinery developmen t & maintenance department

Sl. No.	Research Title	Major Objective (s)	Location
		regular. It will also increase the quality of the fabric.	
136	Visit the different Jute mills and organizations for sharing scientific processing techniques and methods for jute and jute goods.	• In this visit we will find the processing problem of existing jute mill physically for solving the problem of jute mills in scientific way	Mechanical Processing Division
137	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 undertaken for technical assistance to different organizations / institutions. • location: Mechanical Processing Division	
Microbiology & Biochemistry Department			
138	Screening, isolation, characterization and preservation of ligno-cellulolytic enzyme producing fungi and bacteria collected from different jute mills	• To improve softening quality of jute cutting • To make the fibre production process more efficient and • To reduce the production cost through improvement of batch economy in mills.	Faridpur (Jute Mills) Microbiology & Biochemistry Department
139	Application of cellulase on jute fabric for bio-finishing and bio-polishing.	• To develop suitable enzyme technology for bio-finshing of jute fabrics • To improve esthetic value of jute fabric and • To improve market potentiality of jute fabric through improvement of quality.	Microbology& Biochemistry Department
140	Production of xylanase and pectinase from collected jute retting bacteria and their application for jute retting	• To develop enzyme technology for jute retting • To reduce water requirement for jute retting • To reduce time for jute retting and • To produce quality fibre	Microbology& Biochemistry Department

Sl. No.	Research Title	Major Objective (s)	Location
		through improved retting.	
141	Formulation and application of microbial inoculums package for fibre extraction from dried jute bark	• To formulate microbial inoculums for fibre extraction of dried jute bark and • To develop method for sample preservation for extraction in future not undergoing obligatory seasonal retting.	Microbology& Biochemistry Department
142	Development of value added product from jute leaves	• To make pulp and paper with machine extracted fibre • To test the utility of this mechanically separated fibre and • To Improve technology for mechanization of fibre extraction process without undergoing traditional retting	Microbology& Biochemistry Department
143	Estimation of beta carotene (vitamin-A) content of jute leaves of different *olitorius* and *capsularis* varieties of BJRI	• To estimate the beta carotene content of jute leaves and • To provide information regarding to vitamin-A content of jute leaves for the common people who can consume *pat shak* knowing its' actual vitamin and nutrient level	Microbology& Biochemistry Department
144	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 and • To give the information about health potentiality of jute leaf tea	Microbology& Biochemistry Department
145	Investigation of antioxidant and medicinal activities of endophytes of fresh jute leaves and jute leaf tea.	• To isolate endophytes from jute leaves • To investigate the antioxidant activities of endophytes isolated from jute leaves and • To investigate medicinal effect of jute leaves endophytes	Microbology& Biochemistry Department
146	Production of bio-plastic from jute fibre	• To produce bioplastic from jute fibre and • To develop bio-based technology for making bioplastic	Microbology& Biochemistry Department

Sl. No.	Research Title	Major Objective (s)	Location
147	Application of commercial enzymes for modification of jute fibre, yarn and fabrics	• To improve fibre quality through biochemical process and • To make quality product by using improved fibre	Biochemistry Department
PILOT PLANT & PROCESSING DIVISION			
148	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 and • To assess the desired aesthetic and performance characteristics of those fabrics.	Pilot Plant & Processing Division and Bangladesh University of Textiles, Dhaka.
149	Study of the absorption of natural dyes on modified jute fabrics.	• To produce innovative natural color for jute products to get desired aesthetic products. • To do best absorption and fixation of natural color on jute products so that it will be unique from others colors and • To do economize for this type of leafs such as jackfruit leafs, teak leafs etc so that it will keep contribute the economy of the country particularly in the jute sector.	Pilot Plant & Processing Division
150	Studies on salt free dyeing of jute with a view to reducing process cost and environment pollution.	• To explore a novel dyeingprocedure of jute • To trim down the processing expenditure of jute colouration • To shrink the pollution rate due to jute dyeing and • To promote diversification of jute commodities.	Pilot Plant & Processing Division
151	Characterization 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	

Sl. No.	Research Title	Major Objective (s)	Location
		activated carbon fiber, fuel cake, absorbent material, insulation materials from jute waste and • Determination of the economic feasibility and environmental sustainability of diversified jute waste products Location: Pilot Plant & Processing Division, BJRI & Physics Division. and BUET	
152	Studies on jute hand-made paper from jute and jute waste for ecological conservation.	• To investigate a new method for jute handmade paper fabrication • To formulate the best use of jute waste • To discover a profitable and smart solution for jute waste management in jute mills an • To uphold environment by reducing the use of wooden pulp i.e. deforestation.	Pilot Plant & Processing Division
153	Manufacturing of dust resistant knitted jute fabric of different design and construction for improvement of jute knitted fabric uses.	• To produce different designed jute knitted products • To produce dust resistance jute fabrics and • To produce environment friendly jute products	Pilot Plant & Processing Division, BJRI and BUTEX, Dhaka
154	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.	• Development of indigenous and specific chemicals, dyes and auxiliaries for jute and jute products. •	Pilot Plant & Processing Division
DYEING & PRINTING DIVISION			
155	To investigate the effect of pigment dye and indigo dye on jute and jute blended fabrics	• To apply the pigment and indigo dyes on jute and jute blended fabrics • To investigate the effect of both colors on jute and jute blended fabrics as well as their characterization.	Dyeing department & JTPDC
156	To investigate the effect of block and screen printing on jute and jute blended fabrics	• To apply the pigment and rubber dye on jute and jute blended fabrics	Dyeing & Printing department

Sl. No.	Research Title	Major Objective (s)	Location
		• To investigate the effect block and screen printing on jute and jute blended fabrics after using the both color	
157	To investigate the effect of reactive dye on jute and jute blended fabrics	• To apply the reactive dye on jute and jute blended fabrics and • To investigate the effect of reactive dyes on jute and jute blended fabrics with its parametric study	Dyeing & Printing department
PRODUCT DEVELOPMENT DIVISION			
158	Study the development of jute, cotton, native wool and acrylic blended ladies shawl by using hand loom.	• To further development of ladies shawl	Product Developmen t Division
159	Study the jute, cotton and pineapple blended yarn.	• To produce jute, cotton and pineapple blended yarn	Product Developmen t Division
160	Study the development of jute, cotton and silk blended yarn through cotton spinning system.	• To further development of jute, cotton and silk blended yarn	Product Developmen t Division
161	Study the development of jute, cotton and polyester blended yarn through cotton processing system.	• To produce jute, cotton and polyester blended yarn	Product Developmen t Division
162	Effect of different variables on jute fiber chemical treatment.	• To make next operation easy and to reduce overall wastage •	Product Developmen t Division
163	Study the dyeing of jute-cotton blended fabrics with direct dyes.	• To increase properties of dyed fabrics	Product Developmen t Division
164	Study the different physical properties of jute-cotton blended home-textile check fabric.	• To produce Jute-cotton blended home-textile check fabrics and to study different physical properties	Product Developmen t Division
165	Study the fastness properties of jute-cotton blended (30:70) printed fabric	• To find necessary information on the fastness properties of jute-cotton (30:70) blended printed fabric.	Product Developmen t Division
166	Study the Jute, Cotton and viscose blended yarn	• To produce and develop the properties of Jute, Cotton and viscose blended yarn. •	Product Developmen t Division
167	Study the development of finer count and increasing the strength	• To develop yarn count and strength.	Product Developmen

Sl. No.	Research Title	Major Objective (s)	Location
	of the yarn produced in the cotton processing system by changing the parameters of the ring frame machine		t Division

BANGLADESH INSTITUTE OF NUCLEAR AGRICULTURE

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Sl. No.	Research Title	Objective (s)	Location
PLANT BREEDING DIVISION			
1.	On-farm and on-station trials of two salt tolerant M_9 rice mutants with better grain quality	• To identify salt tolerant rice lines for better grain quality	Sub-station : Satkhira On-farm: Ashashuni, Shyamnagar, Devhata and KaliganJ, Satkhira and Batiaghata and Dacop, Khulna
2.	On-farm and on-station trials of three short duration rice lines for Haor areas	• To asses earliness and yield performance	On Station: Mymensingh Sub-station: Cumilla and Sunamgonj On farm: B'Baria, Sunamgonj, Netrokona and Kishoregonj
3.	On-farm and on-station trials of rice lines for better grain quality and higher grain yield (MAGIC)	• To select desirable lines having better grain quality and higher yield	On-station: Mymensingh and Nalitabari, On-farm: Sunamganj, Jamalpur, Magura and Rangpur
4.	On-farm and on-station trials of rice lines for premium quality with earliness and higher grain yield (MAGIC)	• To select desirable lines having premium quality, earliness and higher yield	On-station: Mymensingh, Nalitabari Chpainawabganj On-farm: Magura, Ishurdi, Rangpur and Jamalpur
5.	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-Farm: Sadar, Devhata, Kaliganj and Shyamnagar, Satkhira

Sl. No.	Research Title	Objective (s)	Location
6.	Regional yield trial with one short duration premium quality M_9 rice mutant for Haor areas	• To asses earliness and yield performance	On station: Mymensingh Sub-station : Cumilla and Sunamgonj On farm: B'baria(Sorail), Kishorgonj and Netrokona (Dhormopasha)
7.	Regional yield trial with some iron and zinc rich M_9 rice mutant	• To select the lines with higher yield potential and iron and zinc content	On - Station: Mymensing Sub-station: Cumilla, Jamalpur, and Nalitabari On-Farm: Chandina and Sadar Daskhin of Cumilla
8.	Regional yield trial of two promising M_8 NERICA rice mutants	• To asses yield performance	On-Station: Mymensingh Sub-station: Magura and Chapainawabganj On-Farm: Rajshahi (Godagari) and Chapainawabganj (Nachole)
9.	Regional yield trial of five rice lines for better grain quality, earliness and higher grain yield	• To select desirable lines having better grain quality, earliness and higher yield	On-Station : Mymensingh Sub-station : Magura, Ishurdi, Nalitabari and Rangpur
10.	Advanced yield trial of five introgressed bacterial leaf blight resistant rice lines	• To identify bacterial leaf blight resistant rice lines	On-Station : Mymensingh Nalitabari, Jamalpur
11.	Advanced yield trial of three temperate nursery rice lines	• To select desired lines having tolerant to low temperature	On-Station : Mymensingh Sunamganj Rangpur and On-Farm: Sunamganj and Panchagarh

Sl. No.	Research Title	Objective (s)	Location
12.	Advanced yield trial of five M_8 rice mutants for better grain quality, earliness and higher grain yield	• To select desirable lines having short duration, higher grain yield and grain quality	On-Station: Mymensingh Cumilla, Jamalpur and Nalitabari
13.	Advanced yield trial of four BLB resistant rice lines (Collaboration with Plant Pathology Division)	• To identify blast resistant rice lines	On-Station: Mymensingh Rangpur Ishurdi and Jamalpur
14.	Advanced yield trial of Brown Plant Hopper (BPH) resistant four rice lines (Collaboration with Entomology Division)	• To identify brown plant hopper resistant rice lines	On-Station : Mymensingh Sub-station : Ishurdi and Rangpur
15.	Preliminary yield trial of 10 selected dual tolerant (salinity and submergence) M_6 rice mutant with better grain quality and earliness	• To identify dual tolerant (salinity & submergence) lines with better grain quality and earliness	On-Station : Mymensingh On-farm: Satkhira and Jamalpur
16.	Preliminary yield trial of 5 blast resistant rice lines (Collaboration with Plant Pathology Division)	• To select desired lines for blast resistance	On-Station: Mymensingh Sub-station: Jamalpur and Nalitabari
17.	Preliminary Yield trial of 7 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 and Sub -station: Jamalpur
18.	Preliminary yield trial of Bacterial Leaf Blight resistant rice lines (Collaboration with Plant Pathology Division)	• To identify blast resistant rice lines	On-Station: Mymensingh Sub-station: Rangpur
19.	Preliminary yield trial of 7 BN resistant rice lines (Collaboration with Plant Pathology Division)	• To identify blast resistant rice lines	On-Station: Mymensingh Sub-station: Rangpur
20.	Evaluation trial of one introgressed bacterial leaf blight resistant rice lines	• To asses BLB resistance and yield performance	On-Station: Mymensingh Sub-station: Jamalpur Rangpur Ishurdi and Sunamganj
21.	Observation trial of 15 bacterial blight nursery rice lines (Collaboration with Plant	• To select the desired rice lines for bacterial blight resistance with high yield	On-Station: Mymensingh Sub-station:

Sl. No.	Research Title	Objective (s)	Location
	Pathology Division)	potential	Nalitabari and Jamalpur
22.	Observation Yield Trial of 13 upland Aus rice lines	• To select desired lines for upland ecosystems	On-Station: Mymensingh Sub-station: Khagrachari.
23.	Selection among 24 elite rice lines for higher salt tolerance (AFACI Project)	• To identify suitable salt tolerant high yielding lines	On-Farm: Harodda, Satkhira Sadar, Kamarkati and Asashuni, Satkhira
24.	Screening 23 BLB introgressed BC3F4 rice lines for costal saline and submergence prone areas	• To identify BLB resistant rice lines	Sub-station : Sathkhira On farm: Jamalpur (Sharishabari) and Ashashuni (Satkhira)
25.	Growing M4 generation of coastal rice landraces for salt tolerance	• To identify high yielding salt tolerant rice lines for coastal saline prone areas	On-Station: Mymensingh
26.	Growing M3 populations of one rice cultivar for earliness and higher yield	• To select desirable mutants for earliness, grain quality and higher yield	On-Station: Mymensingh
27.	Growing M3 generation of rice for drought tolerance	• To create variability for selection of drought tolerant rice variety	On-Station: Mymensingh
28.	Growing M2 generation of rice for higher yield and earliness for Haor areas	• To identify high yielding and early maturing rice mutants suitable for Haor areas	On-Station: Mymensingh
29.	Growing M2 generation of rice landrace for higher grain yield	• To select desirable mutants for higher yield	On-Station: Mymensingh
30.	Growing M2 generation of sticky rice	• To select desirable mutant for stickyness	On-Station: Mymensingh
31.	Growing M1 generation of rice for premium grain quality, earliness and higher yield	• To create variability for earliness, higher yield and quality grain	On-Station : Mymensingh
32.	Growing M1 generation of rice for blast resistance	• To create genetic variability for higher yield, short duration and blast resistance	On-Station : Mymensingh
33.	Growing M1 generation of rice for higher yield and earliness	• To create variability for high yielding and early	On-Station: Mymensingh

Sl. No.	Research Title	Objective (s)	Location
		maturing rice mutants	
34.	Screening advanced rice mutants for higher salt tolerance	• To select desirable mutants for higher salt tolerance	On-Farm : Satkhira Sadar and Shyamnagar
35.	Screening dual tolerant rice lines	• To select desirable mutants for dual tolerance (salt & submergence)	On-Farm: Barishal, and Rangpur
36.	Screening BLB tolerant rice lines	• To select desirable BLB tolerant lines	On-Station: Mymensingh Sub-station: Nalitabari and Jamalpur
37.	Improvement of Binadhan-8 and 14 through Hybridization	• To introgress non-shattering grain trait and high yield performance	On-Station: Mymensingh
38.	Screening rice mutants for drought tolerance at seedling and reproductive stages (Collaboration with AED and CPD) (IAEA Project)	• To identify rice mutants for drought tolerance	On-Station: Mymensingh
39.	Accelerating the Genetic Gains in Rice (AGGRi) - IRRI Project: Breeding Zone Trials	• To identify the higher genetic advance and yield	On-Station: Mymensingh Sub-station and On-Farm: Barishal
40.	Accelerating the Genetic Gains in Rice (AGGRi-IRRI Project): Tricot Trials at Farmers' Field	• To identify the best variety(s)	On-Farm: Jamalpur
41.	Screening ozone stress and differential tolerance of field grown rice (*Oryza sativa* L.) in Bangladesh with ethylenediurea (EDU)	• To evaluate ozone tolerance and ozone sensitivity in rice varieties of Bangladesh	On-Station: Mymensingh Sub -station : Rangpur Sunamganj and Cumilla
42.	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
43.	Evaluation of introgressed drought tolerant rice lines through marker assisted selection	• To identify drought tolerant rice lines	On-Station: Mymensingh (Lab work)
44.	Evaluation of introgressed dual (salinity and submergence) tolerant rice lines through marker assisted selection	• To identify dual tolerant rice lines	On-Station: Mymensingh

Sl. No.	Research Title	Objective (s)	Location
45.	Growing BC_3F_4 population for drought tolerance	• To screen rice genotypes for drought tolerance and to develop abiotic stress tolerant rice varieties	On-Station: Mymensingh
46.	Growing BC_2F_3 population of rice	• To select desirable plants having blast resistance, short duration, higher grain yield and quality grain	On-Station: Mymensingh
47.	Growing BC_2F_4 population of rice	• To select desirable plants having blast resistance, short duration, higher grain yield and quality grain	On-Station: Mymensingh
48.	Molecular screening of rice germplasm collected from rice growing areas of Bangladesh	• To select blast resistant rice lines	On-Station: Mymensingh
49	Advance yield trial with some heavy ion beam irradiated 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 Chapainawabgonj Magura and Ishurdi
50.	Advance yield trial with three high yielding M_8 deepwater rice mutants	• To select higher yielding mutants with deepwater character.	On-stations: Gopalgonj Sunamganj and On-farm: Singra, Natore
51.	Advance yield trial with some mutants M_6 derived from Biroi	• To select mutants with lodging resistance, good grain quality and high yield potential	On-Station: Mymensingh Sub-station: Nalitabari and Jamalpur
52.	Screening F_3 population of Binadhan-7 × Biroi crosses	• To select high yielding, short duration, lodging resistant plant/progenies with Biroi type grains	On-Station: Mymensingh Sub-station: Sunamgonj
53.	Growing M_2 generations of BR22, BRRI dhan76 and BRRI dhan77	• To create variability for longer seedling height, taller plants, short duration with bolder seeds and higher grain yield.	On-Station: Mymensing
54.	Development of lodging resistant Biroi type mutants	• To introgress lodging resistant character to a lodging susceptible biotype mutant or vice-versa	On-Station: Mymensingh
55.	Field evaluation of a medium	• To assess for release as a	SCA

Sl. No.	Research Title	Objective (s)	Location
	duration high yielding premium quality rice mutant.	variety	
56.	Regional yield trial with two high yielding M_5 NERICA mutants	• To assess performance over regions On-Station: Mymensingh Sub-station: Ishwardi , Chapainawabganj , Magura, Rangpur, Jamalpur On-farm: Mymensingh, Ishwardi, Chapainawabganj, Magura, Rangpur and Jamalpur	
57.	Development of short duration and cold tolerance rice lines suitable for Haor area.	• To select desirable lines for earliness and cold tolerance	On-Station: Mymensingh
58.	Growing BC2F1generation of C-3 × Binadhan-17 cross	• To select desirable traits from BC2F1 and cross to produce BC3F1	On-Station: Mymensingh
59.	Growing BC1F1 generation of L-1, 3 × Binadhan-17 crosses	• To select desirable traits from BC1F1 and cross to produce BC2F1	On-Station: Mymensingh
60.	Growing head to row progeny (F2 generation) of Binadhan-17 × C-3, L-1, L-3, M-2, K-7 and K-9 cross	• To select desirable traits from the cross	On-Station: Mymensingh
61.	Growing BC1F2 generation of L-1, 3, and C-3 × Binadhan-17 cross	• To select desirable traits	On-Station: Mymensingh
62.	Growing M3 population of cold tolerant Boro rice (Jungli mashi)	• To select and evaluate cold tolerant mutants of Boro rice	On-Station: Mymensingh
63.	Growing M2 generation of rice for salinity and drought responses	• To identify salinity and drought response rice mutant suitable for saline and drought prone areas	On-Station: Mymensingh
64.	Evaluation of BC3F1 population BRAUS rice variety Binadhan-14	• To introgression non shattering grain trait for growing even under low temperature	On-Station: Mymensingh
65.	Growing BC1F3 population of Laksmi digha × Binadhan-18 cross	• To evaluate for short duration and higher yield characters in Laksmi digha for growing in Boro season	On-Station: Mymensingh
66.	Evaluation and selection of three M4 mutants derived from N ion beam irradiated NERICA-10	• To select mutants with tall plants, good grain quality and high yield potential	On-Station: Mymensingh
67.	Growing BC_1F_3 population of Kasalath mutant × Binadhan-18 cross	• To evaluate short duration and easy threshing characters in Kasalath	On-Station: Mymensingh

Sl. No.	Research Title	Objective (s)	Location
		mutant	
68.	Preliminary yield trial of M_6 rice mutants	• To develop variety with higher yield and heat tolerance	On-Station: Mymensingh Sub-station: Magura and Chapainawabgonj
69.	Growing M_1, M_2 and M_3 mutants of Binadhan-17	• To develop mutants with earliness and higher yield	On-Station: Mymensingh
70.	Improvement of Binagom-1 through hybridization	• To introgress short duration, heat tolerance, lodging resistance fine grain traits in Binagom-1	On-Station: Mymensingh
71.	Growing F_1/Confirmation of F_1 between Binagom-1 and BARI Gom-33	• To conform F_1 plant	On-Station: Mymensingh
72.	On-station and on-farm yield trial with two M_9 rapeseed (*B. rapa* var. yellow sarson) mutants	• To assess overall performance of the mutants for earliness and higher seed yield On-Station: Mymensingh Sub-station: : Nalitabari, Ishurdi, Satkhira, Rangpur and Magura) On-farm: Mymensingh, Jamalpur, Rangpur, Nalitabari, Manikganj, Tangail and Magura)	
73.	On-station and on-farm yield trial with one advanced M_8 rapeseed (*B. napus*) mutant	• To assess overall performance of the mutant for higher seed yield and reaction to *Alternaria* blight disease On-Station: Mymensingh Sub-station: Ishurdi, Barishal, Gopalganj and Magura) On-farm: Mymensingh, Rangpur, Nalitabari, Manikganj, Tangail and Magura)	
74.	Regional yield trial with three F_7 generation of rapeseed (*B. rapa var. toria*) lines	• To assess overall performance of the mutants for higher seed yield and reaction to *Alternaria* blight disease Sub-station: Ishurdi, Gopalgonj, Rangpur and Magura) On-farm: Rangpur, Manikganj, Khagrasari and Magura	
75.	Regional yield trial with M_6rapeseed (*B. napus*) mutants	• To select desirable mutants with early maturity with desirable yield attributes On-Station: Mymensingh Sub-station : Ishurdi, Nalitabari, Rangpur and Magura) On-farm: Mymensingh, Jamalpur, Rangpur, Nalitabari, Manikganj, Tangail and Magura	

Sl. No.	Research Title	Objective (s)	Location
76.	Screening of M_5 population derived from BARI Sarisha-14	• To select early maturing mutants with desirable yield attributes	On-station: Mymensingh
77.	Screening of M_4population derived from Tori-7	• To select early maturing mutants with desirable yield attributes	On-station: Mymensingh
78.	Screening of F_5 population derived from Binasarisha-10×Tori-7	• To select early maturing lines with desirable yield attributes	On-station: Mymensingh
79.	Screening of F_4population derived from BARI Sarisha-14 ×Binasarisha-4; Binasarisha-10 × Tori-7; and Binasarisha-4 × BARI Sarisha-17	• To select early maturing lines with desirable yield attributes	On-station: Mymensingh
80.	Screening of M_3 population derived from Tori-7 and BARI Sarisha-17	• To select early maturing mutants with desirable yield attributes	On-station:, Mymensingh)
81.	Screening of F_2 generation derived from BARI Sarisha-14 × Binasarisha-9	• To select early maturing lines with desirable yield attributes	On-station: Mymensingh
82.	Screening of M_2 populations used chemical mutagen to Tori-7 and BARI Sarisha-17	• To select early maturing mutants with desirable yield attributes	On-station: Mymensingh
83.	Growing of M_1 generation of rapeseed	• To create genetic variability regarding earliness	On-station: Mymensingh
84.	Crossing Binasarisha-9 with BARI Sarisha-14 and BARI Sarisha-17	• To develop early maturing and high yielding rapeseed lines	On-station: Mymensingh
88.	On-farm and on-station trial with some M_7 mutants of groundnut	• To acsess performance over location	Sub-station: Rangpur Khagrachari and Ishwardi;
89.	On-farm and on-station trial with some M_8 mutants of groundnut	• To assess performance over location • On-station Mymensingh • Sub-station: Rangpur, Khagrachari and Ishwardi • On-farm: Rangpur, Khagrachari and Ishwardi	
90.	Screening 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
91.	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

Sl. No.	Research Title	Objective (s)	Location
92.	Maintenance of groundnut mutant germplasm	• To maintain the mutant germplasm	On-Station: Mymensingh
93.	Preliminary yield trial with promising M_6 sesame mutants in kharif-II season	• To select mutants for with higher seed yield and earliness	Sub-station: Ishurdi Magura and Chapainowabgonj
94.	Preliminary yield trial with promising M_5 sesame mutants in kharif-I season	• To select mutants for higher seed yield and earliness	Sub-station: Magura and Chapainowabgonj
95.	Preliminary yield trial with promising M_5 sesame mutants Kharif-II and Kharif-I season	• To select mutants for higher seed yield and earliness	On-station: Sub-station: Ishurdi Magura and Chapainowabgonj
96.	Screening of M_3 and M_4 population	• To select early maturing lines with desirable yield attributes	Sub-station: Ishurdi and Magura
97.	Screening of M_2 populations derived from Binatil-4	• To select early maturing lines with desirable yield attributes	On-station: Mymensingh
98.	Growing of M_1 generation	• To select mutants for higher seed yield and earliness	On-station: Mymensingh
99.	Crossing of Binatil-1, Binatil-2 and 3, BARI Til-4, China white and China black	• To create variability for desirable yield traits	On-station: Mymensingh
100.	Regional yield trial with selected M_6 mutants	• To select early maturing and high yielding mutants • On-station: Mymensingh • Sub-station: • Magura and Rangpur • On-farm: Noakhali Sadar Subornochar, Ramgoti, Kamalnagar and Chandpur	
101.	Preliminary yield trial with selected M_5 mutants	• To assess overall performance of the genotypes in respect of earliness and higher seed yield • On-station: Mymensingh • Sub-station: Magura and Rangpur • On-farm: Noakhali Laxmipur and Chandpur	
102.	Evaluation of selected soybean genotypes at different soybean growing areas	• To assess overall performance of the genotypes in respect of earliness, seed yield and salinity tolerance • On-farm: Mymensingh Noakhali Sadar, Subornochar, Laxmipur Chandpur and Satkhira	
103.	Screening of salt tolerant genotypes in pot culture	• To assess overall performance of the genotypes in respect of	On-station: Mymensingh

Sl. No.	Research Title	Objective (s)	Location
		earliness, seed yield and salinity tolerance	
104.	Screening of M_4 & M_3 population	• To select desirable mutants in respect of earliness with higher yield	On-station: Mymensingh
105.	Screening of M_3 population	• To select desirable mutants in respect of maturity periods and salinity tolerance	On-station: Mymensingh
106.	Screening of M_2 population	• To select desirable mutants in respect of yield attributes, maturity periods and salinity tolerance	On-station: Mymensingh and Sub-station : Rangpur)
107.	Growing of M_1 generation	• To create variability for selection of desirable mutants in respect of earliness.	On-station: Mymensingh
108.	Crossing of Lokon with BU soybean-1	• To develop early maturing and high yielding soybean lines	On-station: Mymensingh
109.	Evaluation of sunflower germplasm for desirable lines	• To assess earliness, yield attributes and other morpho-physiological characters	On-station: Mymensingh and Sub-station: Ishurdi
110.	Screening of M3 generation	• To select early maturing mutants with shorter plants having droopy heads and desirable yield attributes	On-station: Mymensingh and Sub-station: Ishurdi
111.	Growing M1 populations	• To create variability of different traits	On-station: Mymensingh
112.	Maintenance of sunflower germplasm	• To maintain breeding materials	On-station: Mymensingh
113.	On-farm and on-station trial of some promising summer mungbean mutants	• To select desirable mutants and assess overall performance of the mutants for earliness, disease tolerance and seed yield	Sub-station: Ishurdi Magura On-Farm: Ishurdi and Natore
114.	Screening M5 population of mungbean	• To select desirable mutants for earliness, higher seed yield and disease tolerance	Sub-station : Ishurdi and Magura
115.	Evaluation of summer mungbean lines for synchronous pod maturity with yield	• To confirm the synchronous pod maturity with yield	Sub-station: Magura and Ishurdi

Sl. No.	Research Title	Objective (s)	Location
116.	Growing M3 generation of mungbean for synchronous pod maturity	• To select desirable mutants	Sub-station: Ishurdi
117.	Growing M4 generation of mungbean	• To select desirable mutants for earliness, higher seed yield and disease tolerance	Sub-station: Ishurdi
118.	Growing M1 generation of mungbean	• To identify salt tolerant mungbean lines	Mymensingh (Glasshouse)
119.	On-farm and on-station yield trial with three mutants/line	• To assess overall performance of the mutants in respect of earliness, higher seed yield and disease tolerance	Sub-stations: Magura Chapainawabganj On-Farm: Natore Magura Chapainawbganj
120.	Advanced yield trial of five promising mutants of lentil	• To select desirable mutants and assess overall performance of the mutants regarding earliness and seed yield	Sub-stations: Ishurdi and Magura
121.	Screening of M_4, M_5, population of lentil	• To select desirable mutants for earliness, higher seed yield and disease tolerance	On-Station: Mymensingh
122.	On-farm and on-station yield trial with three mutants/line	• To assess overall performance of the mutants in respect of earliness, higher seed yield and disease tolerance	Sub-stations: Chapainawabgonj Ishurdi Magura and Mymensingh
123.	Growing of M_5 population of grasspea	• To select desirable mutants for earliness and higher seed yield.	On-Station: Mymensingh
124.	Growing of M_4 generation of grasspea	• To select desirable mutants for earliness and higher seed yield	On-Station: Mymensingh
125.	On-station and on-farm yield trial with two mutants of blackgram	• To assess the yield potential of the lines on farmer's field condition	Mymensingh, Magura, Chapainawabganj, Gopalganj Sub-stations and On-Farm: Faridpur and Gopalganj,
126.	Preliminary yield trial with six promising mutants of blackgram	• To select desirable mutants and assess overall performance of the mutants regarding earliness and seed yield	Sub-station: Chapainawabganj

Sl. No.	Research Title	Objective (s)	Location
127.	Screening of M_6 population of blackgram	• To select desirable mutants for earliness, higher seed yield and disease tolerance	On-Station: Mymensingh
128.	Growing of M_1 population of blackgram	• To select desirable mutants for earliness, higher seed yield and disease tolerance	On-Station: Mymensingh
129.	On-station and on-farm trial with two chickpea mutants	• To select bold seeded, disesase tolerant and high yielding mutants	Sub-station: Chapainwabgonj Magura On-Station: Chapainawabgonj and Magura
130.	Screening M_4 population of chickpea	• To select desirable mutants for bolder seed size, higher seed yield and disease tolerance	Sub-station: Magura and Ishurdi
131.	Screening M_3 population of chickpea	• To select desirable mutants for bolder seed size, higher seed yield and disease tolerance	Sub-station: Magura and Ishurdi
132.	Growing M_2 generation of chickpea	• To create variability for selection of desirable mutants	Sub-station: Magura and Ishurdi
133.	Growing M_1 generation of chickpea	• To create variability for selection of desirable mutants	Sub-station: Magura and Ishurdi
134.	Germplasm collection and evaluation	• To assess yield potential and other morpho-physiological attributes	On-Station: Mymensingh
135.	Growing M_2 generation of pigeon pea	• To assess yield potential and other morpho-physiological attributes	On-Station: Mymensingh
136.	Growing M_1 generation of pigeon pea	• To assess yield potential and other morpho-physiological attributes	On-Station: Mymensingh
137.	Germplasm collection and evaluation of garden pea	• To assess yield potential and other morpho-physiological attributes	On-Station: Mymensingh
138.	Growing of M_2 / M_3 generation of garden pea	• To select desirable mutants for higher yield	On-Station: Mymensingh
139.	Growing of M_1 generation of garden pea	• To create variability for further selection	On-Station: Mymensingh
140.	Regional yield trial with some M_7 mutants of gamma irradiated JRO-524	• To assess maturity, fiber and stick yield over locations On-Station: Mymensingh Sub-station:	

Sl. No.	Research Title	Objective (s)	Location
		Magura and Rangpur On-Farm: Magura and Rangpur	
141.	Growing of M_2 generation of BJRI TOSA PAT-8 (RABI-1)	• To create variability for fiber and stick yield, maturity period and fiber quality parameter.	On-Station: Mymensingh
142.	Growing of rice landraces/exotic germplasm for seed multiplication	• Multiplication of collected PGR materials (rice)	On-Station: Mymensingh
143.	Collection and Growing of rice landraces for seed multiplication	• Preservation and Multiplication of collected PGR materials (rice)	On-Station: Mymensingh
144.	Morpho-molecular characterization of sesame germplasm	• To characterize the selected germplasm	On-Station: Mymensingh
145.	Morpho-molecular characterization of groundnut germplasm	• To characterize the selected germplasm	On-Station: Mymensingh
146.	Morpho-molecular characterization of okra germplasm	• To characterize the selected germplasm	On-Station: Mymensingh
BIOTECHNOLOGY DIVISION			
147	Expression and detection of salinity, drought and submergence induced genes through RT-PCR (Reverse transcriptase polymerase chain reaction)	• To identify salinity and drought induced novel genes of rice	On-Station: Mymensingh (Bio-tech lab)
148	Cloning of two salinity and drought tolerant genes *OsMGD* and *OsGGT* gene from FR13A through Gateway cloning technology	• To prepare gene constructs of *OsMGD* and *OsGGT* genes	On-Station: Mymensingh (Biotech lab)
149	Transfer of Os*DREB* and *OsMST6* genes in HYV rice	• To develop salinity and drought tolerant transgenic rice lines	On-Station: Mymensingh (Biotech lab)
150	Transfer of Os*DREB, OsNHX1/OsNHX2* and *OsMST6* genes in elite tomato cultivars	• To develop salinity and drought tolerant tomato lines	On-Station: Mymensingh (Biotech lab)
151	Transfer of Os*NHX1/OsNHX2, OsCAL* and *OsASR* genes in elite mustard cultivars	• To develop salinity tolerant mustard lines	On-Station: Mymensingh (Biotech lab)
152	Production of doubled haploids line through anther culture from rice F_1 hybrids	• To develop homozygous double haploid line with stress tolerant, high yield,	On-Station: Mymensingh (Biotech lab)

Sl. No.	Research Title	Objective (s)	Location
		earliness, fine grain and aroma through anther culture	
153 154	Transfer of salinity and drought tolerant genes into rice through *Agrobacterium* mediated gene transformation	• To develop salinity and drought tolerant transgenic rice lines	On-Station: Mymensingh (Biotech lab)
155	Effect of Gamma irradiation on embryogenic Calli for development of stress tolerant and high yield rice variety	• To create the extent of variability of embryogenic rice calli	On-Station: Mymensingh (Biotech lab)
156	Isolation and cloning of *Cry1Ac* genes from *Bacillus thuringiensis*	• To develop biotic stress antagonestic gene constructs • To develop biotic stress tolerant rice lines	On-Station: Mymensingh (Biotech lab)
157	Screening of tidal tolerant high yielding rice line on the basis of better plant type and yield performance	• To evaluate rice lines for tidal submergence tolerant for tidal flood prone areas	Sub-station: Barishal On-Station: Mymensingh
158	Screening of rice line for high yield, short duration and disease resistance on the basis of better plant type and yield performance	• To evaluate high yield and short duration rice variety	On-Station: Mymensingh
159	Improvement of salt tolerant rice varieties through marker assisted selection	• To evaluate salt tolerant, high yield, early maturing rice line for coastal region.	On-Station: Mymensingh
160	Development of high yield scented fine grain rice variety through MAS techniques	• To develop scented fine grain rice variety	On-Station: Mymensingh
161	Advance yield trial of early maturing and high yielding elite rice mutants	• To assess yield potentiality and growth duration in different regions of Bangladesh	On-Station: Mymensingh Sub-station: Sunamganj Jamalpur, On-Farm: Sunamganj and Mymensingh
162	Screening and selection of submergence and water stagnant tolerant rice genotypes by artificial tank.	• To select submergence tolerant mutant line and crossing materials	On-Station: Mymensingh
163	Introgression of *SUB1* QTL into HYV rice varieties	• To introgress *SUB1* QTL into some selected cultivars	On-Station: Mymensingh
164	DNA fingerprinting and confirmation of F_1 using *qSUB1A* based primers	• To confirm F1 at molecular level	On-Station: Mymensingh (Biotech lab)
165	Screening of cold tolerant rice for	• To select cold tolerant rice	On-Station:

Sl. No.	Research Title	Objective (s)	Location
	cold environments	line	Mymensingh
166	Introgression of *qCT* into HYV rice varieties for development of cold tolerant rice lines through marker-assisted backcrossing (BC_1F_3)	• To introgress cold tolerant genes/QTL into some cultivars	On-Station: Mymensingh
167	Molecular characterization and confirmation of F_1 using *using qCT* based primers	• To confirm F_1 at molecular level	On-Station: (Biotech Lab)
168	Characterization of BINA developed groundnut	• To characterize and to detect the extent of diversity of BINA developed crop varieties	On-Station: (Biotech Lab)
169	Evaluation of probiotics strains for controlling rice blast	• To find effective bacterial strains to use as probiotics and to characterize bacterial strains using biochemical test and molecular techniques	On-Station: (Biotech Lab)
170	Evaluation of probiotics strains for controlling wheat blast	• To find effective bacterial strains to use as bio control agent	On-Station: (Biotech Lab)
171	Evaluation of bio-fertilizers at different locations	• To evaluate the performance of common bio-fertilizers on growth and yield of lentil, grass pea and pea	sub-stations: Magura Ishurdi and Gopalganj
HORTICULTURE DIVISION			
172	Preliminary yield trial of M_7 mutants of eggplant	• To select shoot and fruit borer tolerant genotypes and phomopsis blight tolerant genotypes with high yield potential and also increase the nutritional quality	Mymensingh Ishurdi Cumilla and Magura
173	Evaluation of elite M6 mutants of Carrot	• To select desirable mutants of carrot for yield potential, desirable size, shape and color	Mymensingh Ishurdi Khagrachari and Rangpur
174	Preliminary yield trial of Bottle gourd M_7 mutants	• To select desirable mutants of bottle gourd for desirable size, shape, color with improved nutritional quality and high yield potential	Mymensingh Khagrachari Cumilla Ishurdi Sunamganj and Magura
175	Screening of exotic lines and growing of M_2 generation of	• To select soft and YMV tolerant lines of okra with	On-Station: Mymensingh

Sl. No.	Research Title	Objective (s)	Location
	Okra	improved nutritional quality and high yield potential	
176	Screening of M_2 generation of Cucumber and Rock melon	• To select desirable mutants on desirable size, shape and color with improved nutritional quality and high yield potential	On-Station: Mymensingh
177	Screening of winter tomato genotypes	• To identify the line(s) based on yield potential, size, shape and nutritional quality suitable for the summer and winter season	On-Station: Mymensingh
178	Evaluation of Cherry Tomato genotypes	• To identify the suitable lines based on yield potential, size, shape and nutritional quality	On-Station: Mymensingh
179	Growing of M_1 generation of Aroids (Panikachu and Mukhikachu)	• To create genetic variability for high yield potential and improve nutritional quality through identifying the optimum dose of gamma irradiation	On-Station: Mymensingh
180	Accelerated breeding of cucurbits through pollen irradiation techniques	• To develop haploid/double haploid production	On-Station: Mymensingh
181	Radio-sensitivity test and growing of M_1 generation of Tomatillo	• To identify suitable tomatillos line(s) based on yield potential, size, shape and nutritional quality	On-Station: Mymensingh
182	Maintenance of BINA released Tomato varieties	• To maintain the varietal purity and increase the breeder seed production	On-Station: Mymensingh, Rangpur Cumilla Rangpur, Khagrachari and Nalitabari
183	Collection and screening of different spices from home and abroad	• To collect, characterize and evaluate the germplasm for generating mutants and creating advanced lines with high yield and other desirable characters	On-Station: Mymensingh
184	Evaluation of promising M5 mutants of Garlic	• To assess the performances of garlic mutants for high yield potential and shelf life	On-Station: Mymensingh, Magura Rangpur and

Sl. No.	Research Title	Objective (s)	Location
			Natore (Chalan Bill)
185	Preliminary yield trial of M4 Ginger mutants	• To identify rhizome rot tolerant mutants with high yield potential	On-Station: Mymensingh Magura Rangpur and Khagrachari
186	Preliminary yield trial of promising M_5 Onion mutants	• To study the performance of different onion mutans • To select promising line(s) for releasing variety	On-Station: Mymensingh Magura Faridpur Ishurdi and Rangpur
187	Growing of M_1 generation of Onion derived through physical mutagen (gamma ray) and chemical mutagen (EMS)	• To develop high yielding abiotic and biotic stress tolerant mutants	On-Station: Mymensingh
188	Screening of M_3 generation of black cumin	• To select desirable mutants based on high yield potential and short duration	On-Station: Mymensingh
189	Evaluation of exotic chili germplasm	• To evaluate the performance of advance ornamental chilli lines and promising one(s) will be selected for releasing a variety	On-Station: Mymensingh
190	Radio-sensitivity test and growing of M1 generation of Fenugreek	• To develop high yield potential and nutritionally improved mutants of fenugreek	On-Station: Mymensingh
191	Maintenance of Binamorich-1, Binarashur-1, Binahalud-1, Binamorich-2	• To produce nucleus seed of these varieties Location: On-Station: Mymensingh, Magura, Barisal, Rangpur, Nalitabari, Jamalpur, Chalanbil (Natore), Magura, Rangpur, Nalitabari, Jamalpur, Satkhira, Barisal and Khagrachari	
192	Effects of fertilizers and manures on the root formation of Binapiaz-1 and Binapiaz-2	• To find out suitable ratio/s of organic fertilizers (Cowdung, mustard oil cake and vermi-compost) and inorganic fertilizers for growth and yield of Binapiaz-1 and Binapiaz-2	On-Station: Mymensingh
193	Assessing propagating methods and multiplication of Binalebu-1 and Binalebu-2	• To see the suitable method for propagation of Binalebu-1 and Binalebu-2 as well as multiplication for extend the varieties all over the country On-Station: Mymensingh, Cumilla, Magura,	

Sl. No.	Research Title	Objective (s)	Location
		Sherpur Jamalpur Barishal and Khagrachari	
194	Collection and screening of indigenous fruits germplasm	• Collection of seeds / propagating materials of different germplasm of indigenous fruits (Carambola, custard apple, jujube, velvate apple, hog plum, olive, aonla, starrgoose berry, burmese grape's, pummelo, guava, lemon and wood apple propagating materials) from different regions of the country On-Station: Mymensingh	
195	Screening of M1 population of Sweet orange, Sapota, Jamun and Pomegranate	• Collection and screening of local and exotic germplasm and irradiation of scions for generating mutants and evaluation of desirable mutants for developing varieties with high yield potential, sweetness and color On-Station: Mymensingh	
196	Collection, evaluation and improvement of indigenous Ber (Zyzyphus mauritiana) germplasm	• To select high yield, short duration, early fruit bearing, higher edible portion, best picking quality and longer shelf life Sub- station: Nalitabari	
197	Performance study of selected spices, fruits and vegetables for roof top gardening	• To study the performance of some selected spices, fruits and vegetable crops for a year-round supply of fresh spices, fruits and vegetables and effective utilization of space On-Station: Mymensingh	
198	Growing M2 generation of the collected gladiolus germplasm	• To develop gladiolus with various floret colours, long spikes with higher number of florets, and longer shelf life	On-Station: Mymensingh
199	Growing M1 generation of the collected lilium and rose	• To develop lilium and rose with various floret colours and longer shelf life	On-Station: Mymensingh
200	Effect of gamma radiation on shelf life and quality of onion and garlic under ambient condition	• To determine optimum dose of gamma irradiation for extend shelf life of onion bulbs and garlic cloves under ambient condition	On-Station: Mymensingh (Horticulture laboratory)
201	Effect of gamma irradiation on physico-chemical properties and shelf life of tomato	• To determine the optimum dose of gamma radiation and extend the shelf life of tomato	On-Station: Mymensingh (Horticulture laboratory)
202	Estimation of physico-chemical parameters and nutritional qualities of bottle gourd and brinjal	• To estimate the various quality parameters of bottle gourd & brinjal (advance lines)	On-Station: Mymensingh (Horticulture laboratory)

Sl. No.	Research Title	Objective (s)	Location
203	Extend the shelf life of mango and Litchi through gamma irradiation	• To determine the optimum dose of gamma radiation and extend the shelf life of mango and litchi	On-Station: Mymensingh (Horticulture laboratory
204	Molecular profiling of released varieties using SSR marker	• To find out genetic variation and • diversity of different varieties with molecular marker and • To develop molecular finger-printing of developed variety	On-Station: Mymensingh (Horticulture laboratory)
205	Development of hybrid variety of Okra, Sweet gourd and Tomato	• To develop high yielding hybrid variety	On-Station: Mymensingh (Horticulture laboratory
206	Screening of summer Tomato genotypes	• To identify the line(s) based on yield potential, size, shape and nutritional quality suitable for winter and summer season	On-Station: Mymensingh (Horticulture laboratory)
207	Radio-sensitivity test and growing of M1 generation of Bitter gourd, Pointed gourd, lettuce and Red amaranth	• To identify the optimum dose of gamma irradiation and create genetic variability for high yield potential, desirable size, shape and improve the nutritional quality	On-Station: Mymensingh (Horticulture laboratory) and Sub-station: Cumilla
208	Collection and screening of high value spices (summer onion, turmeric, stress tolerant chili, capsicum, black cumin, cumin, black pepper, fenugreek, fennel, dill, mint and plum) from home and abroad	• To collect, characterize and evaluate the germplasm for generating mutants and creating the best advanced lines with high yield and other desirable characters	On-Station: Mymensingh (Horticulture laboratory)
209	Growing of M1 generation of ginger through mutagenesis using gamma ray and EMS for development of rhizome rot tolerant mutants	• To develop mutants tolerant to rhizome rot disease of ginger	On-Station: Mymensingh (Horticulture laboratory)
210	Growing of M2 population of sweet pepper (Capsicum)	• To develop high yield potential and nutritionally improved mutants of sweet pepper	On-Station: Mymensingh (Horticulture laboratory)
211	Screening of cumin genotypes	• To identify the genotypes grown in the Bangladeshi climate and assess the yield	On-Station: Mymensingh (Horticulture

Sl. No.	Research Title	Objective (s)	Location
		potentiality and qualitative characters like fragrance, pungency etc	laboratory)
212	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, apple, cashew nut, grape, peace, chinese mandarin, rambutan, dragon fruits, langsat, pumello (yellow), mulberry, date palm, mango (alfanso, arwin, zinhong), seedless litchi, Thai jackfruit etc) based on sweetness, size, shape, color, dwarfness and high yield potential On-Station: Mymensingh (Horticulture laboratory)	
CROP PHYSIOLOGY DIVISION			
213	Effect of high temperature at flowering stage of Boro rice varieties	• To assess the effect of high temperature under different soil moisture levels of Boro rice varieties	On-Station: Mymensingh
214	Effect of high temperature at different growth stage of Aman rice genotypes	• To assess the effect of high temperature at PI, booting and flowering stage of Aman rice genotypes	On-Station: Mymensingh
215	Water stress tolerance of some lentil mutants	• To assess the effects of water stress on morphological attributes and yield of lentil mutants	On-Station: Mymensingh
216	Effect of temperature on mungbean genotypes at flowering stage under different soil moisture levels	• To assess the effect of high temperature under different soil moisture levels of mungbean genotypes	On-Station: Mymensingh
217	Evaluation of lentil genotypes in different locations	• To evaluate lentil genotypes at different locations	On Station: Ishurdi Magura and Jhenaidah
218	Effect of water logging period on morpho-physiological attributes and yield of sesame genotypes	• To assess the effect of different duration of water logging on morphological attributes and yield of sesame genotypes	On-Station: Mymensingh
219	Evaluation of mungbean genotypes in different locations	• To evaluate mungbean genotypes at different locations	On-Station: Ishurdi, Barishal and Magura
220	Screening of sesame genotypes in respect of morphological attributes and yield	• To evaluate sesame genotypes at different locations	On-Station: Magura and Ishurdi
221	Effect of chitosan on winter tomato genotypes	• To investigate the effect of foliar application of chitosan on growth and	On-Station: Mymensingh

Sl. No.	Research Title	Objective (s)	Location
		yield of tomato genotypes	
222	Grain shape, nutritional characters and cooking qualities of rice genotypes	• To study grain shape, size, nutritional properties and cooking qualities of rice genotypes	On-Station: Mymensingh
SOIL SCIENCE DIVISION			
223	Determination of critical limit of P & Mg for crops (Pot expt.)	• To determine the of critical limit of phosphorus for mustard	On-Station: Mymensingh
224	Response of cereal and oil seed crops to P and Mg applications (Field experiment)	• To validate the C. L. results from pot experiments by some field experiments	AEZ 9, 25, 26 And 27
225	Effect of different sources organic manures for vegetable and fruit production in rooftop gardening	• To find out suitable inorganic and organic fertilizer management practices for higher vegetable yield.	On-Station: Mymensingh
226	Effect of different rates organic manures for vegetable production in rooftop gardening	• To find out suitable rates of organic manure for higher vegetable yield.	On-Station: Mymensingh
227	Study on recycling composting with solid waste reducing green house gas emission	• To study recycling composting of solid waste	On-Station: Mymensingh
228	Carbon sequestration in soils using stable tracer techniques	• To determine carbon and nitrogen sequestration in different management practices	On-Station: Mymensingh
229	Benchmark survey to characterize bio-physicochemical properties of soil in the selected study areas	• Characterize the bio-chemical properties of soils of the climate vulnerable areas of Nachole, Chapainawabganj	Nachole, Chapainawabganj
230	Study on the mineralization rate of commonly used organic materials in Bangladesh under field capacity and CSW conditions	• Mineralization study of organic materials and assess the effect of organic materials on carbon sequestration	On-Station: Mymensingh
231	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 and Chapainawabganj
232	Effects of different organic wastes for the production of vermin-compost using ^{13}C tracer techniques.	• To select the suitable organic wastes for production of nutrient rich vermi-compost using ^{13}C and ^{15}N tracer.	On-Station: Mymensingh
233	Comparative study of vermin-	• To investigate the	On-Station:

Sl. No.	Research Title	Objective (s)	Location
	compost and different organic manures on rice –rice cropping sequence (Long term experiment) using ^{13}C tracer techniques	integrated effects of vermi-compost and other organic manures on T. Aman and Boro rice	Mymensingh
234	Mineralization of different organic manures/residues in laboratory condition using ^{13}C tracer tecniques	• To investigate the C and N mineralization from different organic manures/residues in various moisture condition using ^{15}N and ^{13}C tracer techniques	On-Station: Mymensingh
235	Effect of giant mimosa and banana plantation on soil fertility and crop yield under minimum tillage practices using ^{13}C and ^{15}N tracer techniques.	• To see the effect of giant mimosa residue on soil fertility and crop yield under minimum tillage practices using ^{13}C and ^{15}N tracer techniques.	Substation: Chapinawabgonj
236	Effect of various fertilizer dose 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 minimum tillage/zero tillage practices	Substation: Ishurdi and Satkhira
237	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	Substation: Ishurdi Gopalgonj and Satkhira.
238	Fertilizer recommendation for lentil in relay cropping system under zero tillage condition	• To determine the optimum fertilizer requirement for BINA developed lentil varieties.	Substation: Ishurdi, Gopalgonj
239	Fertilizer management for Boro-Jute / Fallow-groundnut / blackgram cropping pattern in charland of Brahmaputra river at Jamalpur and Mymensingh	• To determine soil nutrient status in different charlands of Mymensingh and Jamalpur	Char land Mymensingh and Jamalpur
240	Fertilizer management for Boro-T.Aman / Fallow-vegetable / Mastard cropping pattern in charland of Brahmaputra river	• To determine soil nutrient status in different charlands of Mymensingh and Jamalpur	Char land Mymensingh and Jamalpur
241	Effect of different crop production practices on fertility and erosion of soil	• To determine the degree of soil erosion from different crop practices	Khagrachhari
242	Effect of different land management practices on fertility and erosion of soil	• To determine the degree of soil erosion from different land management practices	Khagrachhari

Sl. No.	Research Title	Objective (s)	Location
243	Delineation of soil micronutrients 22.status in selected AEZs and crop response studies on the yield of crops	• To determine the micronutrients status in different AEZs	AEZ 2 and 3
244	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 11 and 13
245	Requirement of zinc and boron application for Wheat – Mungbean -T. Aman Cropping Patterns	• To determine the requirement of zinc and boron application for Wheat-Mungbean-T. *Aman* cropping patterns at Rangpur	Rangpur and Dinajpur
246	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	Rangpur and Dinajpur
247	Determination of optimum fertilizer requirement (major and micro) for sesame mutants	• To evaluate the fertilizer use efficiency and fertilizer requirement of the elite mutants developed at BINA.	Substation: Ishurdi and Magura
248	Determination of optimum fertilizer requirement (major and micro) for soybean mutants	• To evaluate the fertilizer use efficiency and fertilizer requirement of the elite mutants developed at BINA.	Substation: Ishurdi and Magura
249	Isotope aided studies on different nitrogen management practices for sustainable rice production	• To know the mean effect of different nitrogen management practices on the growth, N uptake and yield of rice	Sub-station: Barisal and Chapainobabgonj
250	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.	Satkhira
251	Characterization of efficient *Rhizobium* and *Bradyrhizobium* strains isolated from root nodule of pulse, oilseed and vegetables, and their effectiveness study on host crops	• To isolate effective N-fixing rhizobia strains from root nodules of different pulse, oilseed and vegetable crops.	On-Station: Mymensingh and different AEZs
252	Effects of rhizobia strains on growth, nodulation and yield of	• To determine the nodulation, plant growth,	On-Station: Mymensingh

Sl. No.	Research Title	Objective (s)	Location
	country bean and /french bean in pot condition	nitrogen fixing ability and yield of crops.	Mymensingh
253	Effect of salinity tolerant rhizobia strains on growth, nodulation and yield of country bean and groundnut in field condition	• To see the effect of salinity tolerant Brady rhizobium inoculation on growth, nodulation and seed yield of soybean and groundnut in field condition at different saline areas.	On-Station: Mymensingh Satkhira and Noakhali
254	Effects of micronutrients (Boron, zinc and molybdenum) in combination with inoculants on growth, nodulation and yield of Cowpea (Felon)	• To determine the nodulation, plant growth, nitrogen fixing ability and yield of crops.	Mymensingh and Noakhali
255	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.	AEZ-3, 7, 9, 12, 14, 17, 26, and 27
256	Effects of salinity tolerant rhizobia strains on growth, nodulation and yield of soybean in pot condition	• To determine the nodulation, plant growth, nitrogen fixing ability and yield of crops	On-Station: Mymensingh
257	Effect of salinity tolerant rhizobia strains on growth, nodulation and yield of soybean and ground nut in field condition	• To see the effect of salinity tolerant Bradyrhizobium inoculation on growth, nodulation and seed yield of soybean and groundnut in field condition at different saline areas.	On-Station: Mymensingh Satkhira, Chattogram and Noakhali
ENTOMOLOGY DIVISION			
258	Development of management approaches against red mites of chilli	• To develop suitable insect management technology against red mites of chilli	On-Station: Mymensingh and Sub- station: Rangpur
259	Comparative 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
260	Effectiveness of different management approaches against stem borer and leaf roller (*Cnaphalocrosis medinalis*) of rice	• To find out the appropriate management approaches against stem borer and leaf roller of rice	On-Station: Mymensingh and Sub-station: Nalitabair
261	Comparative evaluation of insecticides against red mites of	• To develop suitable insect	On-Station: Mymensingh and

Sl. No.	Research Title	Objective (s)	Location
	Jute	management technology against red mites of Jute	Sub-station: Jamalpur
262	Development of management approaches against fall armyworm (Spodoptera frugiperda) of maize	• To develop environment friendly management approach against maize fall armyworm	On-Station: Mymensingh and Sub-Station: Rangpur
263	management approaches against leaf roller (*Antigastra catalaunalis*) of sesame	• To fine out the appropriate management approaches for controlling leaf roller of sesame	On-Station: Mymensingh and Sub-station: Chapainawabganj
264	Development of integrated management approaches for the control of jassid of okra	• To develop environment friendly effective management approached against jassid of okra	On-Station: Mymensingh
265	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 and Sub-station: Barishal
266	Development of integrated management approaches for the control of thrips of garlic	• To develop suitable insect management technology against thrips of garlic	On-Station: Mymensingh Sub-sation: Ishurdi
267	Effectiveness of different management approaches against threatened Grasshopper (*Aularches miliaris*) of forest insects	• To develop suitable insect management technology against (*Aularches miliaris*) of forest insects	Modhupur (Forest area)
268	Development of forecasting, servilace and monitoring system on locust	• o develop forecasting, servilace and monitoring system	On-Station: Mymensingh
269	Screening cold tolerant rice lines against brown plant hopper under artificial infested condition	• To find out brown plant hopper resistant cultivar	On-Station: Mymensingh
270	Screening drought tolerant rice lines against yellow stem borer of rice	• To find out the yellow stem borer resistant cultivar	On-Station: Mymensingh
271	Determination of chlropyriphos residue in green chilli sample	• To determine chlropyriphos residue in chilli	On-Station: Mymensingh
272	Screening different jute mutants against hairy caterpillar, stem weevil and red mites	• To find out the resistant line against hairy caterpillar, stem weevil and red mites	Sub-station: Magura
273	Seasonal abundance of major insect pests of different crops by light traps	• To find out the abundance of insect pests of different crops in a year by light traps	On-Station: Mymensingh
274	Effect of gamma radiation for controlling fruit fly (*Bactrocera*	• To control the cucurbit fruit fly be applying Sterile	On-Station: Mymensingh

Sl. No.	Research Title	Objective (s)	Location
	cucurbitae) of cucurbit vegetables	Insect Technique (SIT)	

PLANT PATHOLOGY DIVISION

Sl. No.	Research Title	Objective(s)	Location(s)
275	Evaluation of advanced mutants of rice against major diseases	• To evaluate the level of field resistance/tolerance of advanced mutants/lines of rice against the major diseases under inoculated condition	On-Station: Mymensingh
276	Evaluation of wheat mutants (M_3/M4) to identify the source of resistant against wheat blast	• To grow and identified wheat mutants resistance to blast	On-Station: Mymensingh Magura and Ishurdi
277	Evaluation of mustard-rapeseed 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	Sub-station: Rangpur
278	Evaluation of groundnut mutants against major diseases	• To identify the sources of resistance in induced mutants/varieties of groundnut against the diseases	On-Station: Mymensingh
279	Evaluation of sesame mutants against foot rot, stem rot and yellow mosaic diseases	• To identify the sources of resistance in induced mutants of sesame against foot rot, stem rot and yellow mosaic	On-Station: Mymensingh Sub-stations: Ishurdi and Magura.
280	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 Sub-station: Noakhali
281	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 Sub-stations: Barishal Ishurdi and Magura
282	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	Sub-station: Magura, Chapainawabganj and Ishurdi
283	Evaluation of blackgram mutants against cercospora leaf spot, yellow mosaic and	• To identify the sources of resistance in mutants of blackgram to cercospora leaf	On-Station: Mymensingh Sub-station:

Sl. No.	Research Title	Objective(s)	Location(s)
	powdery mildew	spot, yellow mosaic and powdery mildew	Chapainawabganj and Magura
284	Management of wheat blast using fungicides, inducer and botanicals	• To reduce disease prevalence of wheat	On-Station: Mymensingh and Meherpur
285	Comparison of vermi-compost, bio-fertilizer, bio-pesticides and their integration against root rot of lentil	• To develop suitable disease management technology	On-Station: Mymensingh
286	Effect of salicylic acid, silica, sulfur and elicitor/chitosan for controlling powdery mildew and Sclerotinia of blackgram and mungbean	• To develop suitable disease management technology.	On-Station: Mymensingh
287	Evaluation of different fungicides against *Sclerotinia sclerotiorum* (white rot of mustard)	• To find out effective fungicide/fungicides against white rot of mustard.	On-Station: Mymensingh (Plant Pathology Lab.,)
288	Management of Damping-off diseases of onion seedlings	• To develop suitable disease management for onion seedlings	On-Station: Mymensingh
289	Management of stored seed diseases of jute, onion and pulse	• To reduce the prevalence of seed associated fungi in pulse (lentil, chickpea, mungbean, blackgram, grasspea), onion and Jute.	On-Station: Mymensingh (Plant Pathology Lab.,)
290	Integrated management of yellow mosaic of mungbean	• To develop effective yellow mosaic management technology	On-Station: Mymensingh Sub-stations: Barishal Ishurdi and Magura
291	Evaluation of different fungicides against blast of rice	• To find out effective fungicide/fungicides against blast of rice	On-Station: Mymensingh
292	Study on seed borne status of leaf curl virus of tomato	• To develop suitable disease management technology	On-Station: Mymensingh
293	Evaluation of different fungicides against false smut of rice	• To identify suitable fertilizer doses to avoid false smut disease	On-Station: Mymensingh
294	Development of wheat mutants (M_1)	• To induce blast resistance in wheat	On-Station: Mymensingh
295	Development of mungbean mutants	• To induce yellow mosaic resistance in mungbean	On-Station: Mymensingh
296	Development of mutants of okra	• To induce yellow mosaic resistance in okra	On-Station: Mymensingh

Sl. No.	Research Title	Objective(s)	Location(s)
297	Development of chili mutants (M_1)	• To induce anthracnose resistance in chili	On-Station: Mymensingh
AGRONOMY DIVISION			
298	Study of Aus rice mutants/variety on transplanting time, spacing and seedling age in different agro-ecological zones	• To find out optimum transplanting time, spacing, seedling age for maximizing yield of Aus rice	Sub-station: Sunamgonj Jamalpur and Comilla
299	Determination of optimum sowing time and seed rate for zoom cultivation (Aus) in Hill Tracts	• To find out optimum sowing time, seed rate for maximizing yield in zoom cultivation (Aus rice) in Hill Tracts	Khagrachari and Rangamati
300	Study of Aman rice mutant/variety on transplanting time, seedling age in different agro-ecological zones	• To find out optimum transplanting time, seedling age for maximizing yield of Aman rice	Sub-station : Rangpur Nalitabari Gopalganj and Khagrachari
301	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: Gopalgonj Sunamganj On-Farm: Singra, Natore
302	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: Gopalgonj Sunamganj On-Farm: Singra, Natore
303	Study of Boro rice mutant/variety on transplanting time, spacing and seedling age in different agro-ecological zones	• To find out optimum transplanting time, spacing, seedling age for maximizing yield of boro rice mutants	Sub-station Rangpur Ishurdi and Nalitabari
304	Study on seed rate of lentil mutants on yield and yield potentials at different AEZ of Bangladesh	• To find out optimum seed rate for maximizing yield of lentil	Sub – station: Magura and Chapainawabgonj.
305	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.	0n-Farm: Godagari, Rajshahi, Nachole and Chapainawabganj
306	Development of onion / garlic based cropping pattern for 400% cropping intensity at different AEZs	• To study the economic and increase the land use potentials with BINA released varieties and modified the cropping pattern	On- Farm: Rangpur Sathia (Pabna) Bogra and Singra (Natore)
308	Development of cropping pattern with improved technologies in Charland ecosystem	• To increase cropping intensity, soil health and farmer's income.	Kurigram Rangpur and Nilphamari

Sl. No.	Research Title	Objective(s)	Location(s)
309	Development of cropping pattern with Slopping Agricultural Land Technology (SALT) in Hill Tracts	• To increase cropping intensity, soil health and farmer's income.	Khagrachari / Rangamati.
310	Improving yield of Boro rice (Binadhan-10) by applying tillage operation and application of gypsum, salicylic acid and farm yard manure in saline prone zones	• To find out the suitable tillage, gypsum, salicylic acid and farm yard manure dose.	Shyamnagor, Satkhira.
311	Effect of zero/minimum tillage and fertilizer dose on mustard yield in different AEZs of Bangladesh	• To study the economic and increase the land use potentials with agronomic management of BINA mustard varieties with zero/minimum tillage.	Satkhira Gopalgonj Cumilla Tangail Manikganj and Sirajganj
312	Effect of relay cropping and fertilizer dose on wheat (Binagom-1) yield in different AEZs of Bangladesh	• To study the economic and increase the land use potentials with agronomic management of BINA wheat varieties with relay cropping.	Satkhira Borguna Borishal Gopalgonj and Bagerhat
313	Study of late sowing on yield and yield contributing characters of mustard varieties	• To find out suitable mustard varieties at delay sowing in respect of yield.	On- Station: Mymensingh Sub-station: Magura and Rangpur
314	Evaluation of field performance of primed nursery rice seedlings for their growth and yield performance under cold stress	• To find out the most suitable seed priming technique for combating cold stress.	On-Farm and On-Station: Rangpur
315	Evaluation of field performance of primed nursery rice seedlings for growth and yield performance under salinity stress	• To find out the most suitable seed priming technique for combating salinity stress.	Sub- station: Satkhira.
316	Determination of efficiency and residual effect of different herbicide on rice	• To select suitable herbicides for Boro/Aus and also identify residues in soils and plants.	On-Station: Mymensingh
317	Study on management of different herbicide for lentil, mungbean and chickpea	• To select suitable herbicides for lentil, mungbean and chickpea.	Sub-station: Ishurdi / Chapai Nawabganj /

Sl. No.	Research Title	Objective(s)	Location(s)
			Magura
318	Study on management of different herbicide for Jute	• To select suitable herbicide for jute	Sub-station : Gopalganj.
319	Measuring and quantifying greenhouse gas emission and carbon sequestration from agricultural activities in different ago-ecosystem	• To find out the status of emissions of greenhouse gases from agricultural activities	On- Station: Mymensingh Substation: Rangpur
320	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.	On- Station: Mymensingh and 13 sub-stations
AGRICULTURAL ENGINEERING DIVISION			
321	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
322	Automatic irrigation management system for Rice Production	• To asses water savings under automated irrigation system compared to normal practice and • To evaluate performance of automatic irrigation management system through wireless pump control device for rice production.	On- Station: Mymensingh
323	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 On-Farm: Jamalpur (Char-land)
324	Response of Rapeseed mutants to irrigation regimes	• To determine optimum irrigation requirement for higher yield of Rapeseed	Sub-station: Ishurdi
325	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
326	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
327	Irrigation management for	• To determine optimum irrigation	

Sl. No.	Research Title	Objective(s)	Location(s)
	sunflower mutants	requirement for higher yield and water productivity of sunflower mutants	
328	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
329	Irrigation management and soil moisture conservation practices for Chilli	• To determine optimum irrigation requirement for higher yield of Chilli	On- Station: Mymensingh Sub-station: Magura and Jamalpur
330	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
331	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 and • To asses water savings under automated irrigation system compared to normal practice	On- Station: Mymensingh
332	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
333	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 (Charnawbhangha) Sunamgonj (Sadar) Sherpur, (Nakla) Mymensingh (Lysimeter)
334	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	On- Station: Mymensingh and Sub- stations
335	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
336	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

Sl. No.	Research Title	Objective(s)	Location(s)
337	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
338	Development of Bio-char preparation machine	• To develop Bio-char preparation machine and • Utilization of hays and leafs etc as soil fertilizing element	On- Station: Mymensingh
339	Development of low-cost solar power operated garden/field mower	• To develop low cost solar power operated garden/field mower and • Utilization of solar energy in field activity to reduce noise and environment pollution.	On- Station: Mymensingh
340	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-1and • To develop of efficient irrigation practice for BINA developed citrus crop	Khagrachori and Cumilla
341	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	Khagrachori and Cumilla
ADAPTIVE RESEARCH AND EXTENSION DIVISION			
342	Adaptive trials with T. Aman and Boro mutant (BLB introgressed) of rice	• To assess the overall performance of • T. Aman and Boro mutant line in farmers field of different areas and • To provide feedback information to concerned scientist about the mutant lines	Rangpur Magura Jamalpur Mymensingh and Chapainawabganj
343	Adaptive trials with T. Aman Kasalath RM-80(c)-1 mutant of rice	• To assess the overall performance of T. Aman mutant line in farmers field of different areas and • To provide feedback information to concerned scientist about the mutant lines	Cumilla Barishal Mymensingh and Magura
344	Adaptive trials with T. Aman mutant (IZSD) of rice	• To assess the overall performance of Aman rice mutant line in farmers field of different areas and • To provide feedback information to concerned scientist about the mutant lines	Magura Cumilla Mymensingh and Barisal

Sl. No.	Research Title	Objective(s)	Location(s)
345	Adaptive trials with Boro mutant (E-02 and E-03) of rice	• To assess the overall performance of Boro rice mutant line in farmers field of different areas and • To provide feedback information to concerned scientist about the mutant lines	Magura Cumilla Mymensingh Rangpur and Sunamganj
346	Adaptive trials with Boro mutant (RM $(_2)$-40(c)-4-2-8) of rice	• To assess the overall performance of Boro mutant line in farmers field of different area and • To provide feedback information to concerned scientist about the mutant lines	Mymensingh Magura Cumilla Rangpur and Jamalpur
347	Adaptive trials with salt tolerant Boro mutant (SL-51 and SL-57) of rice	• To assess the overall performance of Boro mutant line in farmers field of different areas and • To provide feedback information to concerned scientist about the mutant rice lines	Bashkhali Chattogram, Cox's Bazar Jhalokathi and Satkhira
348	Adaptive trials with NERICA Mutant of rice	• To assess the overall performance of NERICA mutant line in farmers field of different areas and • To provide feedback information to concerned scientist about the mutant rice lines	Mymensingh Chapainawabganj and Kushtia
349	Farmers observation trials with iron and zinc enriched T. Aman rice	• To demonstrate the performance of Binadhan-20 to farmers field in different areas of Bangladesh and • To identify suitable areas for extensive promotional work and • To encourage the farmers for cultivation of Binadhan-20	Mymensingh and Manikganj
350	Farmers observation trials with T. Aman rice	• To demonstrate the performance of Binadhan-22 to farmers field in different areas of Bangladesh • To identify suitable areas for extensive promotional work and • To encourage the farmers for cultivation of Binadhan-22	Mymensingh Manikganj Tangail Rangpur Dinajpur and Nalitabari
351	Farmers observation trials with dual tolerant (salt and submergence) T. Aman rice	• To demonstrate the performance of Binadhan-23 to farmers field in different areas of Bangladesh • To identify suitable areas for extensive promotional work and • To encourage the farmers for cultivation of Binadhan-23	Mymensingh Chattogram Cox's Bazar Potuakhali Bagerhat and Satkhira

Sl. No.	Research Title	Objective(s)	Location(s)
352	Farmers observation trials with boro rice	• To demonstrate the performance of Binadhan-24 to farmers field in different areas of Bangladesh • To identify suitable areas for extensive promotional work and • To encourage the farmers for cultivation of Binadhan-24	Mymensingh Netrakona Kishoreganj Rangpur and Sunamganj
353	Farmers observation trials with newly released Aus rice	• To demonstrate the performance of Binadhan-21 to farmers field in different areas of Bangladesh • To identify suitable areas for extensive promotional work and • To encourage the farmers for cultivation of Binadhan-21	Mymensingh Netrakona and Sherpur
354	Block farming with submergence tolerant T. Aman rice	• To demonstrate the performance of Binadhan-11 in selected suitable areas • To encourage the farmers for extensive cultivation of Binadhan-11	Mymensingh Netrokona Tangail and Manikganj
355	Block farming with salt tolerant Boro rice	• To demonstrate the performance of Binadhan-10 in selected suitable areas and • To encourage the farmers for extensive cultivation of Binadhan-10	Bhola Jhalokhathi Pirojpur, Potuakhali, Chattagram Cox's Bazar Feni,Noakhali, Khulna and Bagerhat
356	Block farming with Aus rice	• To demonstrate the performance of Binadhan-19 to farmers in different areas of Bangladesh and • To encourage the farmers for extensive cultivation of Binadhan-19	Mymensingh Netrakona and Manikganj
357	Adaptive trials with Mustard/Rape mutant (RM-03, 10, 15, 18 and MMR-21) line	• To assess the overall performance of mustard mutant line in farmers field of different areas and • To provide feedback information to concerned scientist about the mutant lines	Tangail Sirajganj Manikganj Madaripur and Mymensingh
358	Adaptive trials with sesame mutant (SM-003 and SM-006) line	• To assess the overall performance of mustard mutant line in farmers field of different areas and • To provide feedback information to concerned scientist about the mutant lines	Faridpur Magura and Cumilla

Sl. No.	Research Title	Objective(s)	Location(s)
359	Adaptive trials with groundnut mutant (B-6/282/80 and B-6/282/64) line	• To assess the overall performance of groundnut mutant line in farmers field of different areas and • To provide feedback information to concerned scientist about the mutant lines	Kishoreganj Jhenaidah Lalmonirhat and Mymensingh
360	Adaptive trials with soybean mutant line	• To demonstrate performance of Binasoybean mutant (SBM-12,15,17 and 19) in different areas of Bangladesh and • To provide feedback information to concerned scientist about the mutant	Noakhali Chandpur and Laxmipur
361	Farmers' observation trials with sesame varieties	• To demonstrate performance of Binatil-3 and Binatil-4 in different areas of Bangladesh • To identify the suitable areas for large scale demonstration and • To encourage farmers for cultivation of Binatil-3 and Binatil-4	Mymensingh Kushti Manikganj Faridpur and Rajbari
362	Farmers' observation trials with salt tolerant groundnut varieties	• To demonstrate performance of Binachinabadam-8, 9 and 10 in different areas of Bangladesh • To identify the suitable areas for large scale demonstration and • To encourage farmers for cultivation of Binachinabadam-8, 9 and 10	Patuakhali Bhola Noakhali Feni and Laxmipur
363	Farmers' Observation trials with soybean varieties	• To demonstrate the performance of Binasoybean-5 & 6 in different areas of Bangladesh • To identify the suitable areas for large scale demonstration and • To encourage farmers for cultivation of Binasoybean-5 & 6	Noakhali Chandpur and Laxmipur
364	Block farming with mustard varieties	• To demonstrate performance of Binasarisha-9 in different areas of Bangladesh • To identify the suitable areas for large scale demonstration and • To encourage farmers for cultivation of Binasarisha-9	Mymensingh Manikganj Kishoreganj Netrokona and Madaripur
365	Block farming with sesame varieties	• To demonstrate performance of Binatil-2 in different areas of Bangladesh and • To encourage farmers for cultivation of Binatil-2	Mymensingh Kushtia Manikganj Faridpur and Rajbari
366	Adaptive trials with	• To assess the overall	Natore

Sl. No.	Research Title	Objective(s)	Location(s)
	mungbean mutant line	performance of mungbean mutant line in farmers field of different areas and • To provide feedback information to concerned scientist about the mutant rice lines	Dinajpur Thakurgaon Barguna Jhalokathi and Patuakhali
367	Adaptive trials with Chickpea mutant (CPM-8-300) line	• To assess the overall performance of chickpea mutant line in farmers field of different areas and • To provide feedback information to concerned scientist about the mutant rice lines	Rajbari Naogaon and Chapainawabganj
368	Adaptive trials with Blackgram mutant (BM-404 & BM-108) line	• To assess the overall performance of blackgram mutant line in farmers field of different areas and • To provide feedback information to concerned scientist about the mutant rice lines	Mymensingh Sherpur Jamalpur and Chapainawabganj
369	Adaptive trials with lentil mutant (LM-118-9 and LM-205-6) line	• To assess the overall performance of lentil mutant line in farmers field of different areas and • To provide feedback information to concerned scientist about the mutant rice lines	Mymensingh Magura Rajbari Faridpur Jashore and Chapainawabganj
370	Farmer's observation trials with lentil variety	• To demonstrate performance of Binamasur-10 & 11 in different areas of Bangladesh • To identify the suitable areas for large scale demonstration and • To encourage farmers for cultivation of Binamasur- 10 & Binamasur-11	Mymensingh Rajbari Faridpur Jashore Jhenaidah and Chapainawabganj
371	Farmers' observation trials with mungbean variety	• To observe the performance of Binamoog-9 in different areas of Bangladesh • To identify the suitable areas for large scale demonstration and • To encourage farmers for cultivation of Binamoog-9	Natore Dinajpur Thakurgaon Barguna Jhalokathi and Patuakhali
372	Block farming with lentil variety	• To demonstrate performance of Binamasur-8 in different areas of Bangladesh and • To encourage farmers for	Rajbari Faridpur Madaripur and Jashore,

Sl. No.	Research Title	Objective(s)	Location(s)
		cultivation of this newly developed varieties	
373	Block farming with mungbean variety	• To demonstrate performance of Binamoog-8 in different areas of Bangladesh and • To encourage farmers in adopting this variety at large scale	Natore Dinajpur Thakurgaon Barguna Jhalokathi and Patuakhali
374	Farmers' observation trials with newly released spices variety	• To demonstrate performance of Binamorich-1 in different areas of Bangladesh • To identify the suitable areas for large scale demonstration and • To encourage farmers for cultivation of Binamorich-1	Mymensingh Pabna Bogura and Jamalpur
375	Farmer's Observation trials with newly released spices variety	• To demonstrate performance of Binarasun-1 in different areas of Bangladesh • To identify the suitable areas for large scale demonstration and • To encourage farmers for cultivation of Binarasun-1	Mymensingh Natore Faridpur Rajshahi and Sirajganj
376	Farmers' observation trials with newly released spices variety	• To demonstrate performance of Binapiaj-1 & 2 in different areas of Bangladesh • To identify the suitable areas for large scale demonstration and • To encourage farmers for cultivation of Binapiaj-1 & 2	Mymensingh Magura Faridpur Kushtia and Rajshahi
377	Farmer's Observation trials with newly released Turmeric variety	• To demonstrate performance of Binahalud-1 in different areas of Bangladesh • To identify the suitable areas for large scale demonstration and • To encourage farmers for cultivation of Binahalud-1	Mymensingh Khagrachori and Tangail
378	Block farming with short duration T. Aman (var. Binadhan-7/17) - Mustard (Binasarisha-4/9) - Boro /Aus rice (Binadhan-14/19)	• To demonstrate the performance of Binadhan-7/17, Binasarisha-4/9 and Binadhan-14/19 in some selected areas • To encourage the farmers for extensive cultivation of Binadhan-7/17, Binasarisha-4/9 and Binadhan-14/19 and • To encourage the farmers for cultivation of following T. aman - Mustard - Late boro / Aus cropping pattern for increased cropping intensity and profitability • Location: Sadar, Mymensingh	
379	Block farming with short duration T. aman (Binadhan-11) - Mustard (Binasarisha-9) - Boro rice	• To demonstrate the performance of Binadhan-11, Binasarisha-9 and Binadhan-10 in some selected areas • To encourage the farmers for extensive cultivation of Binadhan-11, Binasarisha-9 and Binadhan-10 and	

Sl. No.	Research Title	Objective(s)	Location(s)
	(Binadhan-10)	• To encourage the farmers for cultivation of following T. aman - Mustard - Boro cropping pattern for increased cropping intensity and profitability • Location :Sadar, Mymensingh	
380	Block farming with short duration T. Aman (Binadhan-11) - Lentil (Binamasur-8) - Aus rice (Binadhan-14/19)	• To demonstrate the performance of Binadhan-11, Binamasur-8 and Binadhan-14/19 in some selected areas • To encourage the farmers for extensive cultivation of Binadhan-11, Binamasur-8 and Binadhan-14/19 • To encourage the farmers for cultivation of following T. aman - Lentil - Aus cropping pattern for increased cropping intensity and profitability • Location : Madhukhali, Faridpur	
381	Validation and up-scaling of BINA developed popular varieties / technologies	• 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 • To demonstrate field performance of BINA technologies to the visitors and • To extend promising mutant varieties among the farmers through seed exchange programme • location: Mymensingh	
382	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 and • To suggest policy guidelines or recommendations • Mymensingh Netrokona Kioreganj and Manikganj	
383	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 and • To suggest policy guidelines or recommendations • Cox's bazar, Chattagram Jhalokathi Bagerhat • location: Khulna and Satkhira	
384	Factors affecting adoption of Binasarisha-9 in some selected areas	• To ascertain the adoption of Binachinabadam-4 in some selected areas • To analyze the causes of adoption or rejection of Binachinabadam-4 by the farmer and • To suggest policy guidelines or recommendations • location: Mymensingh Manikganj. Tangail , Sirajganj and Jamalpur	
385	Factors affecting adoption of Binamoog-8 in some	• To ascertain the adoption of Binamoog-8 in some selected areas	

Sl. No.	Research Title	Objective(s)	Location(s)
	selected areas	• To analyze the causes of adoption or rejection of Binamoog-8 by the farmers • To suggest policy guidelines or recommendations • location: Barishal Jhalokhati Magura and Ishurdi	
386	Factors affecting adoption of Binamasur-8 in some selected areas	• To ascertain the adoption of Binamasur-8 in some selected areas • To analyze the causes of adoption or rejection of Binamasur-8 by the farmers and • To suggest policy guidelines or recommendations • location: Jhalokhati, Magura,, Rajbari and Faridpur	
387	Organize farmers training on BINA developed varieties/technologies	• To improved farmers knowledge about BINA developed varieties/ technologies and • To publicize BINA generated technologies to its end users • location: Mymensingh Netrokona Magura Rangpur Sunamganj Gopalganj and Sherpur	
388	Organize field days on BINA developed varieties / technologies	• To improved farmers knowledge about BINA developed varieties/ technologies and • To encourage farmers to adopt BINA generated technologies through field days • location: Mymensingh Netrakona Kishoreganj Patuakhali Borguna Bagerhat and Manikganj	
389	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 and • To publicize BINA generated technologies to its end users • location: Mymensingh Netrokona Tangail and Manikgonj	
AGRICULTURAL ECONOMICS DIVISION			
390	Yield gap of Aman rice variety Binadhan-17 in some selected areas of Bangladesh.	• To estimate the yield gap of Binadhan-17 among the study areas; • To identify the factor affecting the production of Binadhan-17 and • To suggest some policy guidelines to minimize the yield gap.	Pabna Gopalganj Sunamganj Rangpur and Sherpur.
391	Profitability and productivity of drought tolerant rice variety Binadhan-21 in some selected areas of Bangladesh.	• To estimate profitability and productivity of Binadhan-21 in the study areas • To determine the resource use efficiency in the Binadhan-21 cultivation and • To identify constraints of the variety cultivation.	Chapainawabgonj Rangpur Kustia Mymensingh and Magura
392	Yield gap of oilseed variety Binasarisha-9 in some selected areas of	• To estimate the yield gap of oilseed variety Binasarisha-9 among the study areas	Mymensingh Sherpur Rangpur

Sl. No.	Research Title	Objective(s)	Location(s)
	Bangladesh.	• To identify the factors affecting in the production of Binasarisha-9 and • To suggest some policy guidelines to minimize the yield gap.	Sunamganj and Gopalganj
393	Area coverage of BINA developed rice, pulse and oilseed varieties in collaboration with DAE and Sub-stations of BINA.	• To examine the area coverage of BINA developed rice, pulse and oilseed varieties at 2020-21 and • To suggest some policy guidelines.	64 districts in Bangladesh
SUB-STATION, RANGPUR			
394	Advanced yield trial of six BLB resistant rice lines.	• To select BLB resistant lines	Rangpur
395	Observation trial of bacterial blight nursery rice lines.	• To select desirable rice lines	Rangpur
396	Evaluation of Binadhan-17 for boro season.	• Performance of Binadhan-17 in Boro season	Rangpur
397	Regional yield trial with selected M_6 soybean mutants	• To identify the high yielding soybean variety	Rangpur
398	Preliminary yield trial with selected M_6 soybean mutants.	• To assess the field performance	Rangpur
399	Preliminary yield trial of an advanced cheery tomato lines with a check variety	• To evaluate the cheery type variety in winter season	Rangpur
400	Development if cold tolerant rice genotypes in the cold prone environments.	• To find out the location with yield and early maturity	Rangpur
401	Multi location yield trial of early maturing and high yielding elite rice mutants in three different seasons.	• To find out the location effect	Rangpur
402	Advanced yield trial with two high yielding M_5 NERICA mutants	• To assess the high yielding NERICA derivaties	Rangpur
403	On farm and on station of some rice lines for premium quality with earliness and higher grain yield	• To find the suitable rice lines with premium quality	Rangpur
404	Regional yield trial of some rice lines for better grain quality earliness and higher grain yield	• To assess the better grain size with higher yield performance	Rangpur
405	Development of cold tolerant rice lines suitable for northern part and haor areas of Bangladesh.	• To identify the cold tolerant rice lines variety	Rangpur

Sl. No.	Research Title	Objective(s)	Location(s)
406	Study of boro rice mutants on transplanting time and seedling age in different agro ecological zones.	• To assess the field performance	Rangpur
407	Advanced yield trial of temperate nursery rice lines.	• To select temperate nursery rice lines.	Rangpur
408	On farm and on station trial with some M_7 mutants of groundnut	• To assess the field performance	Rangpur
409	Evaluation of field performance of primed nursery rice seedling	• To evaluate the primed nursery rice seedling	Rangpur
410	Regional yield trial with two M_7 jute mutants of gamma irradiated JRO-524	• To assess the field performance	Rangpur
411	Comparison between Binadhan-24 and 14	• To assess the field performance	Rangpur
412	Advanced yield trial with some heavy ion beam irradiated mutants derived from Kasalath and NERICA-10	• To develop high yielding rice variety in haor areas	Rangpur
413	Preliminary yield trial of 10 rice mutants for drought tolerance	• To identify the drought tolerant rice lines	Rangpur
414	On farm and on station trial of rice lines for primium quality with earliness and higher grain yield.	• To assess the rice lines with premium quality having higher yield	Rangpur
415	Evaluation of one introgressed bacterial leaf blight resistance rice line	• To evaluate BLB resistant lines	Rangpur
416	Regional yield trial of four rice lines for better grain quality, earliness and higher grain yield.	• To develop high yielding rice variety with short duration	Rangpur
417	On farm and on station trial of rice lines for better grain yield	• To select fine quality rice lines	Rangpur
418	Advanced yield trial of seven M8 BLB resistant rice lines	• To identify BLB resistant lines	Rangpur
419	On farm and on station trial with some M_7 mutants of groundnut	• To identify the high yielding groundnut	Rangpur
420	Advanced yield trial with two high yielding M5 NERICA mutants	• To identify the high yielding rice lines	Rangpur
421	Advanced yield trial of temperate nursery rice lines (IRTON)	• To identify the temperate nursery rice lines	Rangpur

Sl. No.	Research Title	Objective(s)	Location(s)
422	Preliminary yield trial with M4 mutants of heavy ion (nitrogen) beam irradiated population of NERICA-4	• To assess the field performance	Rangpur
421	Regional yield trial of five rice lines for better grain quality and higher grain yield	• To assess the field performance	Rangpur
422	Preliminary yield trial with selected M5 Soybean mutants	• To identify the high yielding Soybean lines	Rangpur
423	Evaluation of selected rice genotypes against water stress tolerance	• To investigate the performance in drought condition •	Rangpur
424	Study on root and shoot traits of selected rice genotypes as affected by water stress	• To study the root and shoot growth behaviour under drought condition	Rangpur
425	Maintenance of germplasm of aromatic rice collected from greater Dinajpur	• To collect and maintain local aromatic cultivars for further improvement	Rangpur
426	Varietal performance of Binadhan-7 in Aus growing season	• To investigate the yield performance of Binadhan-7 in Aus season	Rangpur
427	Variety (Binadhan-22) Transfer to the Farmer's Through Block Demonstration and Quality seed production	• To encourage farmer's in adapting of the new variety (Binadhan-22) •	Rangpur
428	Crop improvement programme in charland through modified cropping pattern using high yielding varieties	• To increase the cropping intensity in charland through profitable cropping pattern	Rangpur
429	Preliminary yield trial with selected M_5 Soybean mutants	• To assess the field performance	Rangpur
430	Regional yield trial with selected M_6 soybean mutants	• To identify the high yielding soybean mutants	Rangpur
431	Regional yield trial with two M_7 jute mutants of gamma irradiated JRO-524	• To identify the high yielding jute mutants	Rangpur
SUB-STATION, ISHURDI			
432	Growing of M_1 generation of Lentil	• To select for early maturity and higher yield	On- Station: Ishurdi

Sl. No.	Research Title	Objective(s)	Location(s)
433	Validation of Binadhan-17, 18 and 24 in *Boro*season	• To demonstrate the performance of BINA and BRRI released Boro varieties at farmers' level	On-Farm: Ishurdi, Pabna
434	Study on the performance of 4 crops based cropping patterns in Pabna region	• To increase the cropping intensity • To include BINA released varieties in the existing cropping pattern • To improve farmers socio-economic status and achieve year-round food security and • To ensure maximum utilization of land and time.	On-Farm: Santhia, Pabna
435	Yield and morpho physical attributes of mustard varieties under zero tillage	• To popularize the conservation agriculture and reduce production cost and time	On-Station: Ishurdi.
436	Effect of integrated use of organic and inorganic fertilizer on Tomato-Mungbean-T. Aman Cropping Pattern	• To investigate the effect of inorganic and organic fertilizer on Tomato, Mungbean and T. Aman and • To determine the optimum fertilizer rate for whole cropping pattern.	Sub-station: Ishurdi.
437	Varietal demonstration of cereals, pulse and oil seed crops	• To rapidly disseminate the new varieties and • To achieve greater impact for technology transfer	On-Farm: Pabna and Bogura region
438	Quality seed production of potential BINA released crops	• To produce, procure, process, supply and distribute region specific seeds. • To make seeds easily available for stakeholders and farmers • To deliver good quality and pure seeds directly to the growers and • To disseminate seed multiplication work between farmers/seed	Sub-station and On-Farm: Pabna and Natore
SUB-STATION, MAGURA			
439	Determine dose and time of Boron foliar application for increasing yield of Brinjal	• To find out the effect of different doses of boron and time of application and recommended once	Sub-Station: Magura.
440	Growing of M_2 generation of country bean (cultivar - sitakundo)	• To select desirable mutants for earliness, high yielding and disease tolerance	Sub-Station: Magura.
441	Growing of M_1 generation of brinjal (Rangpur green brinjal)	• To select desirable mutants for earliness, high yielding, insect & disease tolerance	Sub-Station: Magura.
442	Growing of M_1 generation of chilli (local cultivar *khalkhulia*)	• To select desirable mutants for developing varieties with high yield potential & good pungency.	Sub-Station: Magura.

Sl. No.	Research Title	Objective(s)	Location(s)
443	Screening of different pests and effective IPM management approach for cultivation of different *Aus* variety (Binadhan-19, Binadhan-21 and BRRI dhan48).	• To identify the major pest that hamper the cultivation of Aus variety	On-Station: Mymensingh
444	Growing of M_1 generation of yellow seeded mungbean *(sonamug)*	• To select desirable mutant for earliness, sona moong type (sona moong with palatable and flavour), synchronized pod maturity, higher yield and disease tolerant	Sub-station: Magura
445	Growing of M_1 population of rice for earliness and higher yield	• To select desirable mutants for earliness, higher yield and blast disease tolerance	Sub-Station: Magura
446	Validation of Binadhan-17, Binadhan-22 and BRRI dhan87 and 90	• To demonstrate the performance of BINA and BRRI released Aman varieties at farmers' level • To identify suitable areas for extensive promotional work and • To assess the agronomic performance	On- Farm: Magura
447	Validation of Binatil- 3, 4 and BARI Til-4	• To demonstrate the performance of BINA and BARI released sesame varieties at farmers' field • To identify suitable areas for extensive promotional work and • To assess the agronomic performances	On-Farm: Magura
448	Block farming of Binamoog-8 and 9, BARIMung 6 and 8	• To evaluate the agronomic performance of different varieties • To analyze the oil content (%) and • To identify the most suitable variety for Magura region	On-Farm: Magura
449	Block farming of Binamasur-8, 9, 10 and BARI Masur-8	• To evaluate the agronomic performance of different varieties and • To identify the most suitable variety for Magura region	On-Farm: Magura
450	Study on the growth yield and quality of BINA released crop varieties on a 4 crop based cropping pattern	• To increase the cropping intensity • To include BINA released varieties in the existing cropping pattern	Salikha, Magura

Sl. No.	Research Title	Objective(s)	Location(s)
		• To improve farmers' socio-economic status and achieve year round food security and • To ensure proper utilization of land and time	
451	Establishment of BINA – technology village in Magura	• To include BINA technologies in the existing cropping pattern • To demonstrate field performance of BINA technologies to the visitors and • To extend promising mutant varieties among the farmers through seed exchange program	Moghi, Sadar, Magura
452	Dissemination of BINA Varieties /technologies	• To demonstrate field performance of BINA technologies to the visitors and • To extend promising mutant varieties among the farmers through seed exchange program	On-Farm: Jashore region
453	Truthfully labeled seed production of BINA released crop varieties	• To supply seeds for demonstration of BINA-village program, GOs and NGOs, farmers and other research purposes	Sub-Station: Magura
454	Providing training for crop management to extension personnel and farmers	• To improve farmers' knowledge about BINA developed varieties/ technologies and • To publicize BINA generated varieties/technologies to its end users	Sub-Station: Magura
SUB-STATION, CUMILLA			
455	Assessing optimum transplanting date for maximizing yield of Binadhan-14	• To develop proper agronomic production packages for optimizing yield	Sub-Station : Cumilla
456	Effect of late transplanting on the yield and yield contributing characters of *Aman* rice varieties	• To observe the effect of late transplanting of Aman rice varieties on the yield parameters.	Sub-Station : Cumilla
457	Feasibility of Binadhan-16 growing in *Boro* season as short duration variety	• To find out the feasibility of Binadhan-16 for boro season.	Sub-Station : Cumilla
458	Comparative study on wheat blast and yield contributing characters of modern wheat varieties in Cumilla region	• To find out the feasibility of modern wheat varieties for maximizing yield in Cumilla region	Sub-Station : Cumilla

Sl. No.	Research Title	Objective(s)	Location(s)
459	Effect of different insecticides available in the market for *Aman* and Aus rice	• To observe the performance of available insecticides in the market for boro and Aus rice and • To identify the residual effect of insecticides in soils and plants	Sub-Station : Cumilla
460	Development of cropping pattern with BINA released varieties in Cumilla region	• To study the adaptability of BINA released varieties for developing cropping pattern	Sub-Station : Cumilla
461	Development of cropping pattern with BINA released varieties in hoar areas of Brahmanbaria	• To increase cropping intensity by oil crops cultivation and farmers income.	Sub-Station : Cumilla
462	Comparative study on yield and yield attributing characteristics of BINA and BARI released high yielding mustard varieties against zero tillage	• To screen out the suitable mustard variety against zero tillage in Cumilla region.	Cumilla region
463	Performance of yield and yield contributing characteristics of different high yielding soybean varieties in Chandpur region	• To select the suitable soybean variety for Chandpur region.	Sub-Station : Cumilla
SUB-STATION, SATKHIRA			
464	Morpho-physiological characterization of different hybrid and HYVboro rice varieties in Satkhira.	• To find out suitable hybrid and HYV varieties in the boro season in Satkhira.	Sub-station: Satkhira
465	Comparative study of popular aus rice varieties based on cultivation method in Satkhira.	• To find outsuitable variety and cost effective rice production in aus season.	Sub-station: Satkhira
466	Impact of organic and inorganic fertilizers on yield of Binasarisha-9.	• To evaluate the effect of combined application of inorganic and organic fertilizers on yield of Binasarisha-9.	Sub-station: Satkhira
467	Development of profitable cropping patterns in Satkhira (Non-saline / low Saline).	• To increase the cropping intensity including BINA released varieties and • To ensure maximum utilization of land and time	Sub-station: Satkhira On - Farm: Khulna Satkhira and Bagerhat
468	Seed production of BINA released crop varieties popular in Khulna region	• To produce and distribute the quality seed of BINA released crop varieties	
469	Establishment of BINA technology in Satkhira 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 and • To improve farmer's socio-	On - Farm: Satkhira Khulna and Bagerhat

Sl. No.	Research Title	Objective(s)	Location(s)
		economic status in Khulna region.	
SUB-STATION, JAMALPUR			
470	Effect of different submergence duration on the growth and yield of Binadhan-11.	• Showing the submergence ability of Binadhan-11, Regenerate from the rest stem and produce higher yield.	Sub-station: Jamalpur
471	Evaluation of eco-compost organic fertilize for vegetable production.	• To grow organic food using organic fertilizer	Sub-station: Jamalpur
472	Development of improved cropping pattern in Jamalpur region.	• To increase crop production as well as farmer's income	Sub-station: Jamalpur
SUBSTATION, NALITABARI			
473	Growing of M1 generation of Pajam and Chinishail.	• To develop variety for better grain quality and higher yield.	Sub-station, Nalitabari, Sherpur
474	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, Sherpur
475	Regional yield trial with some introgressed bacterial leaf blight resistant rice lines.	• To develop bacterial leaf blight resistant rice varieties.	Sub-station, Nalitabari, Sherpur
476	On-farm and on-station trials of two rice lines for better grain quality and higher yield.	• To develop variety for better grain quality and higher yield.	Sub-station, Nalitabari, Sherpur
477	On-farm and on-station trials of some rice lines with earliness and higher grain yield (MAGIC) for Haor areas.	• To develop variety for earliness and higher grain yield for Haor areas.	Sub-station, Nalitabari, Sherpur
SUB-STATION, SUNAMGANJ			
478	Growing of M_1 generation of Kataribhog and Chinigura	• To create variability in the genetic background of kataribhog and chinigura for higher yield with fine grain and aroma	Sub - station: Sunamganj
479	Hybridization of Kataribhog/ Chinigura × Binadhan-17	• To develop an introgression line with premium quality traits (physical appearance, satiety and aroma of the grain) in the genetic background of Binadhan-17	Sub - station: Sunamganj
480	Growing of M_1 and M_2 generation of purple rice	• To create genetic variability in the background of purple rice	Sub - station: Sunamganj
481	Hybridization of purple rice × Binadhan-17	• To develop an introgression line with higher yield	Sub - station: Sunamganj

Sl. No.	Research Title	Objective(s)	Location(s)
482	Selection of male sterile lines from a gamma irradiated rice line	• To select new source of male sterile line	Sub - station: Sunamganj
483	Hybridization of F_1 of Binadhan-7/ Binadhan-17 × IRBB60 line	• To develop an introgression line with BLB /blast resistance	Sub - station: Sunamganj
484	Establishment of BINA Technology village	• To assess suitability of BINA technologies in farmer's environmental across agro-ecological zones	Sunamganj Sylhet Habiganj Moulavibazar
485	Up-scaling of BINA developed varieties & Quality seed production in Sunamganj region	• To encourage farmers in adopting BINA developed varieties	On-station and On-farm : Sylhet region
SUB-STATION, GOPALGANJ			
486	Growing M_1 generation of soybean	• To create variability for selection of desirable mutants in respect of earliness and seed yield	Sub-station: Gopalganj
487	Characterization of local rice variety	• To identify the attributing character of those variety	Sub - station: Sunamganj
488	Effect of different sowing methods and irrigation condition of the performance of Binadhan-19	• To find out suitable sowing method under irrigation condition	Sub - station: Sunamganj
489	Performance of some selected rice varieties under System of Rice Intensification (SRI) and conventional cultivation method in Boro season	• To find out suitable cultivation method	Sub - station: Sunamganj
490	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
491	Block farming with Binadhan-16 in collaboration with DAE	• To demonstrate the performance of Binadhan-16 in selected suitable areas and • To encourage the farmers for extensive cultivation of Binadhan-16	Sub-station: Gopalganj
492	Block farming with Binadhan-19 in collaboration with DAE	• To demonstrate the performance of Binadhan-19 in selected suitable areas and • To encourage the farmers for extensive cultivation of Binadhan-19	Sub-station: Gopalganj

Sl. No.	Research Title	Objective(s)	Location(s)
493	Block farming with Binadhan-20 in collaboration with DAE	• To demonstrate the performance of Binadhan-20 in selected suitable areas and • To encourage the farmers for extensive cultivation of Binadhan-20	Sub-station: Gopalganj
494	Development of BINA-technology village in Gopalganj	• To include BINA technologies in the existing cropping pattern • To demonstrate field performance of BINA technologies to the visitors and • To extend promising mutant varieties among the farmers through seed exchange programme	Sub-station: Gopalganj
495	Dissemination of BINA-Varieties / technologies	• To demonstrate field performance of BINA technologies to the visitors and • To extend promising mutant varieties among the farmers through seed exchange program	Sub-station: Gopalganj
496	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, KHAGRACHARI			
497	Growing of M_2 generation for drought tolerance and high yielding sticky rice	• To identify high yielding drought tolerant sticky rice lines	Sub-station: Khagrachari
498	Observational yield trial of upland rice lines (International Upland Rice Observation Nursery)	• To select desired lines for upland ecosystems	Sub-station: Khagrachari
499	Evaluating the yield performance of mustard varieties with and without (zero) tillage	• To observe the yield potentiality	Sub-station: Khagrachari
500	Growing of M_2 generation for development of high yielding zinger lines	• To identify rhizome rot tolerant high yielding zinger lines	Sub-station: Khagrachari
501	Growing of M_2 generation for development of high yielding turmeric lines	• To identify rhizome rot tolerant high turmeric lines	Sub-station: Khagrachari
502	Farmers observation trails with T. Aman rice	• To demonstrate the performance of Binadhan-12 to farmers field in different areas of Bangladesh	Khagrachari (Sadar, Panchari and

Sl. No.	Research Title	Objective(s)	Location(s)
		• To identify suitable areas for expensive promotional work and • To encourage the farmers for cultivation of Binadhan-12	Manikchari)
503	Farmers observation trails with Aus rice in jhum	• To demonstrate the performance of Binadhan-19 in jhum • To identify suitable areas for extensive promotional work and • To encourage the farmers for cultivation of Binadhan-19	Khagrachari, Rangamati and Bandarban
504	Farmers observation trails with mustard	• To demonstrate the performance of Binasorisha-9 to farmers field in different areas of Bangladesh • To identify suitable areas for expensive promotional work and • To encourage the farmers for cultivation of Binadhan-12	Khagrachari (Sadar, Panchari and Manikchari)
505	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 and • To encourage the farmers for cultivation	Sub-station: Khagrachari
506	Observational trails of four mustard varieties	• To observe the performance • To identify the promising characters in hill areas and • To encourage the farmers for cultivation	BINA Sub-station: Khagrachari
507	Development of improved cropping pattern in Chattogram Hill Tracts	• To increase the cropping intensity (%) • To develop a profitable cropping pattern • To increase the land use efficiency and • To conserve soil health • Location: Sadar, Khagrachari, Dighinala, Khagrachari • Panchari, Khagrachari, Mohalchari, Khagrachari • Matiranga, Khagrachari , Manikchari, Khagrachari • Rangamati and Bandarban	
SUB-STATION, NOAKHALI			
508	Screening of some advanced Mungbean mutants/lines/varieties against Mungbean pod borer and white fly in Noakhali Region	• To find out tolerant mutant(s) / line(s) /variety(ies) in Noakhali region	Sub-station and On-Farm: Noakhali
509	Screening of some advanced Soybean mutants/lines/varieties	• To find out tolerant mutant(s) /line(s)/varieties in Noakhali region	Sub-station and On-Farm: Noakhali

Sl. No.	Research Title	Objective(s)	Location(s)
	against hairy caterpillar and pod borer		
510	Performance of some selected soybean varieties/lines in Noakhali and Laxmipur Region	• To find out suitable variety(ies) / line(s) in Noakhali and Laxmipur Region	Sub-station and On-Farm: Noakhali and Laxmipur
511	Development of salt tolerant rice variety(ies) through marker assisted selection	• Development of salt tolerant, high yielding, early maturing rice variety(ies) for greater Chattogram region	Sub- station and On-Farm: Noakhali
512	Mitigation of salinity stress on boro rice using organic amendments	• To quantify the effect of OM along with N fertilizer in reduction of salinity and • To quantify the change(s) of soil nutrients due to combined application of OM and N in Saline soil	Sub- station and On-Farm: Noakhali
513	Nutrients dynamics in rice-rice cropping system in salt affected soil	• To quantify the variation of nutrient availability in salt affected soil in two rice growing season and • To assess the nutrient use efficiency in rice-rice cropping system of saline soil	Sub- station and On-Farm: Noakhali
514	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
515	Block farming using Binadhan-19 in collaboration with DAE	• To demonstrate the performance of Binadhan-19 in selected suitable areas and • To encourage the farmers for extensive cultivation of Binadhan-19	On-Farm: Noakhali
516	Block farming using Binadhan-16 in collaboration with DAE	• To demonstrate the performance of Binadhan-16 in selected suitable areas and • To encourage the farmers for extensive cultivation of Binadhan-16	On-Farm: Noakhali
517	Block farming using Binachinabadam-6 in collaboration with DAE	• To demonstrate the performance of Binachinabadam-6 in selected suitable areas and • To encourage the farmers for extensive cultivation of Binadhan-16	On-Farm: Noakhali
518	Block farming using	• To demonstrate the performance	On-Farm:

Sl. No.	Research Title	Objective(s)	Location(s)
	Binachinabadam-8 in collaboration with DAE	of Binadhan-16 in selected suitable areas and • To encourage the farmers for extensive cultivation of Binadhan-16	Noakhali region
519	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 and • To extend promising mutant varieties among the farmers through seed exchange programme	Noakhali
SUB-STATION, BARISHAL			
520	Effect of seedling age on yield and yield contributing characters of BINA released *Aman* rice varieties cultivated in Barishal region.	• To investigate the effect of seedling age on yield contributing characters and its impact on grain yield.	Sub-station : Barishal.
521	Evaluation and development of cold tolerance *Boro* rice through advanced breeding techniques.	• Introgression of cold tolerance gene into high yielding rice.	Sub-station : Barishal.
522	Characterization and evaluation of some selected rice genotypes for drought tolerance at reproductive stage.	• To identify rice genotypes tolerant to drought stress at reproductive phase.	Sub-station : Barishal.
523	Improvement of tidal submergence rice variety for Barishal region through induced mutation and advanced breeding techniques	• To assess the morpho-physiological causes for lower grain yield and • To select the early maturing submergence tolerant mutant lines with higher grain yield	Sub-station : Barishal.
524	Improvement of local rice for higher yield and palatability.	• To develop an introgression line with higher grain yield and palatability traits.	Sub-station : Barishal.
525	Germplasm collection and varital development of Guava through induced Mutation Suitable for Barishal region (Collaboration with Horticulture Division).	• Collection of seeds / propagating materials of different germplasm of indigenous guava fruits from Barishal region and • Screening of those fruit species on the basis of Sweetness, shape, size, color, dwarfness and high	Sub-station : Barishal

Sl. No.	Research Title	Objective(s)	Location(s)
		yield potential.	
526	Varietal Improvement of Malta through induced Mutation Suitable for Saline Areas of Bangladesh.	• Collection and irritiated of Malta seeds and • Screening of different mutant lines considering the yield, sweetness, and fruit bearing capacity	Sub-station : Barishal.
527	Development of dwarf sunflower variety through induced mutation (Collaboration with Plant breeding Division).	• To develop mutant lines having short plant height, higher seed yield and oil content.	Sub-station : Barishal.
528	Establishment of BINA technology 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 and • To improve farmer's socio-economic status in Barishal region.	Sub-station : Barishal.
529	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 : Barishal.
SUB-STATION, CHAPAINAWABGANJ			
530	Studies on groundwater dynamics in Barind areas	• To determine long-term trend of WT for sustainable management	Sub-station: Chapainawabganj
531	Studies on groundwater dynamics in Barind areas	• To determine long-term trend of WT for sustainable management	Sub-station: Chapainawabganj
532	The effect of supplemental irrigation for higher yield and water use efficiency of the early on rice yield	• To study the effect of different water management practices on the yield and water use efficiency in Aman season	Sub-station: Chapainawabganj
533	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
534	Development of profitable cropping pattern in Chapainawabganj area.	• To increase cropping intensity	Sub-station: Chapainawabganj Rajshahi and Naogaon
535	Technology Transfer to the farmer's through block demonstration and quality seed production.	• To demonstrate the technologies / released varieties • To demonstrate the field performance of BINA technologies to the visitors and • To encourage farmers in adopting the varieties	Sub-station: Chapainawabganj Rajshahi and Naogaon

Sl. No.	Research Title	Objective(s)	Location(s)
536	Establishment of BINA Technology Village.	• To establish BINA developed technologies to the souring villages of BINA sub-station • To include BINA varieties/technologies anc • To improve farmers socio-economic level by adopting high yielding BINA varieties	Chapainawabganj, Rajshahi and Naogaon

Bangladesh Institute of Nuclear Agriculture

BANGLADESH SUGARCROP RESEARCH INSTITUTE

Sl. No.	Research Title	Objective(s)	Location
BREEDING DIVISION (VARIETAL IMPROVEMENT)			
1.	Collection, evaluation and conservation of indigenous and exotic germplasm of sugarcane	• Collecting and conserving indigenous and exotic germplasm for using as parent materials and commercial varieties	On-Station: Ishurdi, Pabna
2.	Characterization and documentation of selected sugarcane germplasm	• Assessing the genetic diversity and • Identifying the accession	Ishurdi, Pabna
3.	Morphological characterization of stevia germplasm	• Determining the morphological diversity among selected stevia gemplasm and • Evaluating biomass accumulation and physiological indices for assessing its breeding potential	Ishurdi and Thakurgaon (RSRS)
4.	Breeding for high sugar, high yielding and short duration varieties of sugarcane	• Developing improved varieties of sugarcane for higher cane (100 t/ha), sugar (pol% cane >13) and goor yield • Selecting short duration (10 months) and lodging tolerant variety of sugarcane and • Selecting self-detrashing variety of sugarcane	Ishurdi, Pabna
5.	Breeding for drought tolerant varieties of sugarcane	• Developing varieties tolerant to drought stress	Ishurdi, Pabna and Rajshahi
6.	Breeding for salt tolerant varieties of sugarcane	• Developing varieties tolerant to salinity (12-15 dS /m) stress	Ishurdi, Pabna and Khulna
7.	Sugarcane varietal improvement through mutation breeding	• Developing variety having high sucrose content and • Developing varieties tolerant to red rot and smut diseases	Ishurdi, Pabna
8.	Evaluation of promising sugarcane clones under different yield trials at varying agro-climatic conditions of Bangladesh	• Determining the performance of the clones under varying agro-climatic conditions • Selecting location specific variety and • Determining the ratooning potential of the clones	Ishurdi, Pabna Rajshahi (RSRS) Thakurgaon Panchagor (RSRS) Gazipur Carew & Co., Joypurhat and Jamalpur

Sl. No.	Research Title	Objective(s)	Location
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.	Selection of sugarcane clone as chewing variety	• Developing location specific chewing variety and • Selecting and evaluating different clone(s) for the development of chewing variety	Chapai-Nawabgonj Kurigram and Gazipur
11.	Evaluation of sugarcane clones as goor variety for Barishal region	• To select location specific goor variety	Barisal and Madaripur
12.	Creation of genetic variability in sugarcane using somatic tissue	• Induce flower in non-flowering genotypes and • Getting variability from somatic tissue	Ishurdi, Pabna
13.	Improvement of local date palm using artificial pollination and molecular breeding	• Developing improved date palm varieties for quality juice and fruit yield	Ishurdi, Pabna
14.	Breeder seed multiplication of promising clones/ varieties of sugarcane	• Supplying seeds of the promising clonesfor setting up of different experiments and further multiplication • Producing clean seed for nucleus seed program and • Maintaining the source of clean seed of released varieties	Ishurdi, Pabna
BIOTECHNOLOGY DIVISION (Biotechnology and Frontier Research)			
15.	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 soma clones using molecular markers and • Tagging of marker against identified character and • Developing Marker Assisted	Ishurdi, Pabna and BAU Lab.

Sl. No.	Research Title	Objective(s)	Location
		Selection (MAS) method for sugarcane	
16.	Genetic Enhancement of Sugarcane through Development of Stress Tolerant Soma clones and their Field Evaluation	• Development of soma clones under selection pressure using NaCl, polyethylene glycol and mutagenic agents and • Evaluation and selection of soma clones for salinity and drought as well as sugarcane somaclones with desirable traits.	BSRI BAU and BJRI Lab.
17.	Genetic Transformation of Salt And Drought Tolerant Genes in Sugarcane	• Collection and maintenance of *Agrobacterium* 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 BAU DU and BARI Lab.
18.	Micro-propagation for Vegetative Seed Production of Sugarbeet	• Identifying the suitable sources of explants for micro-propagation • Finding out the suitable media for micro-propagation • Developing tissue culture protocols for micro- propagation of Sugarbeet and • Hardening plantlets for transplanting	Ishurdi, Pabna BSRI Lab. (Pot and Field)
19.	Micro-propagation of Sugarcane Varieties for Rapid Multiplication and High Quality Seeds Production	• Optimizing variety specific media for micro-propagation • Production of micro-propagated plants for high quality seed • Evaluating field performances of micro-propagated plants and • Evaluating genetic stability in micro-propagated plants using DNA Fingerprinting	Ishurdi, Pabna BSRI (Lab. and Field)
20.	Tissue Culture for Multiplication of Arabian Date Palm and Palmyra Palm	• Identification of suitable sources of explants • Finding out the suitable media; • Production of plantlets and	Ishurdi, Pabna BSRI Lab. (Pot and Field) Khulna

Sl. No.	Research Title	Objective(s)	Location
		• Developing tissue culture protocols for Arabian Date Palm and Palmyra Palm.	Patuakhali and Valuka
21	Development of Somaclones of Stevia Through Tissue Culture Techniques and Subsequent Molecular Diversity Analysis	• Identification of suitable sources of explants • Finding out the suitable media; • Production of plantlets and • Developing desirable non flowering stevia plantlets and molecular diversity analysis.	Ishurdi, Pabna BSRI Lab. (Pot and Field)
PHYSIOLOGY AND SUGAR CHEMISTRY DIVISION (Varietal Improvement)			
22	Screening Sugarcane Genotypes under ZYT-I, 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	Ishurdi, Pabna (Pot & Field) Sirajgonj /Jamalpur and Gazipur (RSRS)
23	Screening Sugarcane Genotypes under ZYT-I, II & III against Flood Stress	• Selecting clones with superior tolerance to flood stress • Finding out morphological and physiological basis for flood tolerance to sugarcane and • Identifying parents to use in further crossing programme to develop flood tolerant varieties	Ishurdi, Pabna (Pot), Paksey (Sirajgonj and Chunarughat (Habiganj)/ Sunamganj
24	Screening Sugarcane Genotypes under ZYT-I, II & III against Drought Stress	• Selecting sugarcane clones with superior tolerance to 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.	Ishurdi, Pabna (PVC pipe), RSRS (Thakurgaon) and Godagari (Rajshahi).
25	Screening Sugarcane Genotypes under ZYT -I, II & III against Salinity Stress	• Selecting sugarcane clones with superior tolerance to salinity • Identifying morphological and physiological characters of salinity tolerance and	Ishurdi, Pabna (Concrete tank) and Shatkhira.

Sl. No.	Research Title	Objective(s)	Location
		• Identifying parents to use in further crossing programme to develop salinity tolerant varieties	
26	Studies on Growth and Development of Date Palm and Palmyra Palm	• To investigate the mechanism, and to find methods to break dormancy for achieving rapid, uniform and high germination and • To observe the growth and development phase of date palm and palmyra palm trees	Ishurdi, Pabna
Crops and Soil Management			
27	Influence of Physiological Management on Growth, Yield and Quality of BSRI Bred Sugarcane Varieties	• Maximize sugarcane productivity and quality through different physiological management	Ishurdi, Pabna
28	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.	Ishurdi, Pabna
Sugar Chemistry Section (Varietal Improvement)			
29	Screening Sugarcane Clones Based on Maturity Behaviour and *Goor* Manufacture under ZYT-I, II & III Test Stages	• Determining maturity behaviour of sugarcane varieties/clones and find out peak maturity period and • Screening sugarcane clones suitable for *goor* production. Determining the quality of *goor* after preparation	Ishurdi, Pabna
30	Screening Sugarbeet Based on Maturity Behaviour and Goor Maufacture	• Determining maturity behaviour of sugarbeet varieties and find out peak maturity period • Determining suitable process of *goor* production from sugarbeet and • Determining the quality of *goor* after preparation.	Ishurdi, Pabna
Sugar and Goor Processing			
31	Studies on Preservation Technique of Sugarcane juice	• Optimizing the techniques for preservation of ready-to-serve bottled sugarcane juice of consumer acceptability and	Ishurdi, Pabna (Physiology and Sugar Chemistry

Sl. No.	Research Title	Objective(s)	Location
		• Observing shelf life of preserved sugarcane juice.	Laboratory)
AGRONOMY & FARMING SYSTEMS DIVISION (Varietal Improvement)			
32	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 and • To generate agronomic information to meet up the requirement of National Seed Board.	Ishurdi, Pabna
Crop and Soil Management			
33	Ratooning Potentiality of Newly Released Sugarcane Varieties in High Ganges River Floodplain Soils (AEZ 11)	• Selecting suitable cane variety (s) for ratoon in High Ganges River Floodplain Soil and • Increasing profitability of sugarcane cultivation by ratooning	Ishurdi, Pabna
34	Increasing Farm Productivity through Sequential Intercropping of three crops with sugarcane	• To select the suitable sequences of intercrop in sugarcane and • To lift up farmers income through increase cropping intensity	Ishurdi, Pabna
35	Effect of Spacing on Yield and Quality of Chewing Cane Varieties	• To identify suitable line spacing for chewing cane	Ishurdi, Pabna Sirajgonj Rajshahi Gazipur Jashore Khulna Satkhira and Chunarughat
36	Livelihood Improvement through Chewing Cane Cultivation Homestead area in Southern Region	• To select suitable chewing varieties for homestead cultivation • To select location specific chewing varieties for southern regions and • To increase earning through chewing cane cultivation	Ishurdi, Pabna and Satkhira
37	Weed Control Efficiency of Some Herbicide in Sugarcane	• To study the performance of herbicides in controlling weeds in sugarcane field and • To find out the economic advantage of weed control by	Ishurdi, Pabna Gazipur and Thakurgaon (RSRS)

Sl. No.	Research Title	Objective(s)	Location
		herbicide.	
Varietal Improvement			
38	Agronomic Performance of Different Tropical Sugarbeet Genotypes	• To evaluate the performance of different sugarbeet genotypes and • To select the suitable genotypes of sugarbeet based on agronomic performance	Ishurdi, Pabna
39	Effect of Planting Methods, Weed Management Practices and Date of Harvest on Yield and Quality of Sugarbeet	• To find out the combined effect of planting methods and weed managements for sugarbeet yield • To compute the economic analysis of planting method and weed management on yield and quality of sugarbeet under different harvesting time.	Ishurdi, Pabna and Thakurgoan (RSRS)
SOILS & NUTRITION DIVISION			
Soil Fertility			
40	Nutrient Requirement for Sustainable Sugarcane Production under Different AEZs	• Finding out the optimum and economic nutrient requirement for sustainable sugarcane production in different AEZs	Thakurgaon Jaipurhat and Chunarughat
41	Effect of Neem Coated Urea on Sugarcane Growth, Yield and Quality	• Improving N use efficiency in sugarcane compare with prilled urea • Determining the optimum dose of NCU for higher sugarcane yield and • Minimizing the cost of production and environmental pollution	Ishurdi, Pabna and Thakurgaon
42	Recommendation of Fertilizers for Late Planting Sugarcane	• To identify proper time of top dressing of fertilizer for late planting sugarcane	Ishurdi, Pabna and Thakurgaon
43	Nutrient Management for Sugar Date Palm Cultivation in Bangladesh	• Developing appropriate nutrient management packages for profitable cultivation of date palm.	Ishurdi and Chuadanga (Sub-station)
44	Site Specific Fertilizer Requirement for Sugarbeet Production	• Determining the appropriate rate of N, P, K, S and B fertilizer for sugarbeet production	Ishurdi, Pabna Thakurgoan and Rangpur
45	Nutrient Requirement for Sugarcane Cultivation in Char	• To develop appropriate nutrient management practices for	Gangachara, Rangpur

Sl. No.	Research Title	Objective(s)	Location
	Land of Bangladesh	sustainable cultivation of sugarcane in char land soils of Bangladesh	Kurigram and Subarnochar, Noakhali
46	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 and • Minimizing the cost of production and environmental pollution.	Ishurdi, Pabna
47	Salinity and Fertility Management for Cultivating Chewing Cane in Saline Prone Areas of Bangladesh	• To develop appropriate fertility and salinity management practices for sustainable cultivation of Chewing Varieties of sugarcane in saline prone soils of Bangladesh	Noakhali Bagerhat and BSRI farm (Pot)
48	Effects of boron on sugarcane yield, quality parameters and cracking in Hill Tracts.	• To find out the effects of boron to check the growth cracks of sugarcane stem • To assess the superiority of boron application between soil application and foliar application and • To compare solubor as effective source of boron	Bandarban Khagrachhari and Ishurdi, Pabna
59	Effect of Nutrient Management on Juice Yield and Quality of Palmyra Palm	• Developing appropriate nutrient management packages for profitable cultivation of Palmyra palm.	Ishurdi, Pabna
Soil Microbiology			
50	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	Ishurdi, Pabna
51	Isolation and Characterization of Phosphate Solubilizing Bacteria from Sugarcane Rhizosphere	• Isolating phosphate solubilizing bacteria from sugarcane an • Characterizing of promising phosphate solubilizing bacteria	Ishurdi, Pabna (BNF Lab.,)

Sl. No.	Research Title	Objective(s)	Location
		on the basis of morphological and biochemical characteristics for making biofertilizer	
52	Biological N_2-fixation by Free-living and Associative Bacteria in Sugarcane Genotypes of Bangladesh	• To identify / screen out suitable sugarcane genotypes favoured with biological N_2-fixing system under N-stressed field condition • To investigate the occurrence of diazotrophic bacteria in sugarcane genotypes and • To estimate the input of N, via BNF, into the sugarcane genotypes under study.	Ishurdi, Pabna
ON-FARM RESEARCH DIVISION			
Crop Production and Management			
53	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 and • To obtain farm reaction about the advanced clones/lines.	Thakurgaon Joypurhat Rajshahi (Barind Tract) Jamalpur Chuadanga and Barishal
54	Performance of Newly Released BSRI Sugarcane Varieties in Char land Ecosystem	• To identify suitable BSRI released varietie(s) for Charlands and • To assess the economic profitability of BSRI released varieties in the Charlands	Ishurdi, Pabna
55	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 and • Ensuring food and nutrition, employment opportunity of chewing cane growers	Rajshahi Gaibandha Khulna Bagerhat Satkhira and Ishurdi, Pabna
56	Performance of Different Weed Management Practices in Sugarcane Field	• To identify the weed infestation behavior in sugarcane field and • To evaluate the performance of non-chemical and chemical methods for controlling weeds in sugarcane field	Ishurdi, Pabna
57	Performance of Insecticides against Sugarcane Stem Borer	• To evaluate the performance of selected insecticides against sugarcane stem borer and	Lalpur, Natore

Sl. No.	Research Title	Objective(s)	Location
		• To compare the effectiveness of new insecticides	
58	Performance of Selected Cropping Patterns Under Date Palm Based (*Phoenix sylvestris*) Agro-Forestry Systems	• To evaluate the performance of selected crops in association with date palm tress throughout the year • To identify suitable cropping patterns to fit under date palm based agroforestry systems and • To increase the productivity of date palm based cropping systems.	Rajshahi and Chudanga
AGRICULTURE ENGNEERING DIVISION			
Farm power and Machinery			
59	Design and Development of a Sugarcane Detrasher	• Designing and development of a sugarcane detrasher and • To perform low cost and timeliness operation of sugarcane detrashing.	Ishurdi, Pabna (BSRI Workshop)
60	Design and Development of a Climber for Date Palm Tree	• To design and development of a mechanical climber and • To make easy and risk free juice harvesting for sustainable cultivation of date palm tree	Ishurdi, Pabna (BSRI Workshop) / other agricultural machinery workshop
61	Design and Development of a Mini Power Weeder for Sugarcane	• To design and develop a low cost mini sugarcane power weeder and • 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, Pabna (BSRI Workshop) / other agricultural machinery workshop
62	Developing Cost-Effective Cultivation System for Sugarcane: Approaching Conservation Agriculture	• To reduce cost of investment in cultivation of sugarcane and • To increase productivity through intercropping with suitable crop and • To develop ratooning practice for profitability.	Ishurdi, Pabna (On-Station and On-Farm and sugar mills & non-mill zone areas
Transfer of Technology			
63	Demonstration of BSRI Developed Technologies for	• To design and develop an MHAT plant	Ishurdi, Pabna

Sl. No.	Research Title	Objective(s)	Location
	Sugarcane in Mill and Non-Mill Zone Areas	• To perform test of BSRI developed MHAT plant and • Performing economic analysis of the machine	
PATHOLOGY DIVISION			
Varietal Improvement			
64	Screening of sugarcane genotypes under ZYT-III, ZYT-II, ZYT-I, AYT, PYT and tissue culture derived clones to red rot	• To identification and selection of the sugarcane genotypes having higher level of resistance against red rot disease • To Recommendation of new resistant varieties/tolerant clones for final release to the growers and • To preserve in the gene bank for breeding purposes	Ishurdi,Pabna (BSRI) and Thakurgaon (RSRS)
65	Screening of sugarcane genotypes to wilt disease	• Identifying and selecting of the sugarcane genotypes having superior resistance to wilt disease and • Recommending of new resistant varieties/tolerant clones for final release to the growers	Ishurdi, Pabna and Thakurgaon
66	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, Pabna
67	Screening of sugarcane genotypes to pineapple disease	• Identifying and selecting of the sugarcane germplasms having superior resistance to pineapple disease and • Recommending of resistant varieties/tolerant clones for variety development	Ishurdi, Pabna
68	Investigation on disease incidence of different genotypes of tropical sugarbeet in Bangladesh	• Identifying and selecting of the sugarbeet genotypes having higher level of resistance/ tolerance against major diseases and • Recommending of new resistant varieties/tolerant genotypes of	Ishurdi, Pabna

Sl. No.	Research Title	Objective(s)	Location
		sugarbeet for final release to the growers	
Disease Management			
69	Performance of different sett treating chemicals in controlling sett rot disease of sugarcane	• To Determination the performance of new chemicals over existing recommended sett treating fungicides in controlling sett rot disease of sugarcane and • To Recommendation more fungicides in controlling sett rot disease of sugarcane	Ishurdi, Pabna and Thakurgaon (RSRS)
70	Exploring the suitable soaking time of sugarcane setts for chemical treatment	• To Determination the suitable longer period of sett soaking with carbendazim fungicide and • To find out the toxic effects if any for longer period of sett soaking with carbendazim fungicide.	Ishurdi, Pabna
71	Integrated management of sclerotium root rot of tropical sugarbeet through cultural, chemical and biological means	• To Investigation of effective fungicides/bio-agents against *Sclerotiumrolfsii*under field condition and • To Find out the appropriate control measures for sclerotium root rot of sugarbeet	Ishurdi, Pabna
72	Integrated management of red rot of sugarcane through cultural, chemical and biological means	• To find out the appropriate management practices of red rot diseases under field condition and • To Find out an eco-friendly package against red rot management.	Ishurdi, Pabna
73	Management of *Orobanche* in sugarcane cultivation	• Finding the appropriate management practices of controlling *orobanche* parasite under field condition and • Finding an eco-friendly package against*orobanche* parasite management.	Faridpur (Sugar Mill area)
Seed Technology			

Sl. No.	Research Title	Objective(s)	Location
74	Production, quality control and distribution of disease free clean seed of sugarcane	• To supply the disease free clean seeds for the requirement of different divisions of BSRI and out-station experiments • To distribute the disease free clean seeds to the mills and non-mill zones for further multiplication and • To minimize the disease incidence of sugarcane throughout the country	Ishurdi, Pabna RSRS : Thakurgaon Rajshahi Chapai-nawabganj, Khagrachhari Rangamati Banderban Barishal Joypurhat Jamalpur and Sirajganj
ENTOMOLOGY DIVISION			
Varietal Improvement			
75	Screening of selected sugarcane clones in ZYT -I, II & III for resistance against some major 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 and • Comparing selected clones with the standard varieties to fulfill the requirement of National Seed Board (NSB).	Ishurdi, Pabna Thakurgaon (RSRS)
Pest Management			
76	Evaluation of some selected bio-agents against major insect pest of sugarcrop	• Rearing of alternate host *Corcyra and Galleria* throughout the year • Rearing of egg parasitoid *Trichogramma* throughout the year and releasing in sugarcane field from May to October and • Rearing of *Bracon hebetor* throughout the year and releasing in sugarbeet field from February to April	Ishurdi, Pabna
77	Evaluation of new molecules for management of some major insect pests of sugarcane	• 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	Ishurdi, Pabna

Sl. No.	Research Title	Objective(s)	Location
		insect pests of sugarcrop	
78	Evaluation of bio-intensive pest management (BIPM) components against sugarcane stem borer	• Compare the effectiveness of new insecticides • Document intensity of insect pests infestation against different insecticides and • Finding suitable and effective insecticides and chemical control measure for the farmers	Ishurdi, Pabna Thakurgoan (RARS) Bhabanipur Farm, NBSM Ltd, Natore and On-Farm:
79	Bio-efficacy of insecticides against the incidence of sugarcane scale insect	• Finding effective management practices for sugarcane scale insect and • Estimating the effects of scale insect on yield and sugar recovery.	Ishurdi, Pabna Faridpur (FSM) and Panchagor (PSM)
80	Observation trial on Radiation biology and inherited sterility for control on sugarcane stem borer	• Managing of *Chilo tumidicostalis* through gamma radiation and • Monitoring the population of *Chilo tumidicostalis* in different treatments	Savar, Dhaka (AEC) and Ishurdi, Pabna
81	Eco-friendly management practices in controlling sucking pests of sugarcane by using botanical products	• Finding the effective management practice(s) against different Sucking pests • Improvement of soil through application of botanical products inhibiting attack of these pests and • Monitoring of population abundance in different treatment regime	Ishurdi, Pabna
82	Screening of different insecticides in controlling sugarbeet caterpillar	• Managing of *Chilotumidicostalis* through gamma radiation and • Monitoring the population of *Chilotumidicostalis* in different treatments	Savar, Dhaka (AEC) and Ishurdi, Pabna
83	Development of integrated management approaches against sugarbeet caterpillar	• Finding out suitable insecticides against sugarbeet caterpillar and • Finding out alternative & cheaper insecticides against sugarbeet caterpillar.	Ishurdi, Pabna
84	Effects of different water sources on the growth of honeybee, *Apis mellifera*	• Finding water requirement of honeybee colony and • Finding different types of water	Ishurdi, Pabna (Biological Control

Sl. No.	Research Title	Objective(s)	Location
	population	they preferred most.	Laboratory)
85	Management of Varroa mite in honeybee, *Apismellifera* colonies	• Development of effective management practice(s) against Varroa mite and • Assessing of different management options	Entomology Division, BSRI and Honey Growers field, Pabna
86	Management of Small hive beetle in Honeybee, *Apis mellifera* colonies	• Development of effective management practice(s) against Small hive beetle and • Assessing of different management options	Entomology Division, BSRI and Honey Growers field, Pabna
87	Effects of different management approaches in controlling red palm weevil in date palm	• Finding the effective management practices and • Monitoring of population abundance in different treatments.	Ishurdi, Pabna MujibNagar, Meherpur
AGRICULTURAL ECONOMICS DIVISION			
Socio-Economic and TOT			
88	Profitability and Use of Farm Level Fertilizer ind Pesticides In Sugarcane In Some Selected Mill Zones	• To estimate cost and return of sugarcane at farm level • To identify the factors which are influenced sugarcane production; • To know the existing level of fertilizers & pesticides use at farm level and • To identify the problems and constraints and also make recommendation for higher production. •	TSM RJSM PBSM and NBSM
89	Estimating the cost of production of Sugar Beet and its prospect In Bangladesh	• To estimate the cost of production of sugar beet cultivation • To determine the possible price of sugar beet • To estimate returns from sugar beet • To find out the scope and possibilities and • To find out the constraints of sugar beet cultivation.	Ishurdi, Pabna Regional station, Mills farms and farmers' field
TRAINING AND TECHNOLOGY TRANSFER DIVISION			
Socio-Economics & Technology Transfer			

Sl. No.	Research Title	Objective(s)	Location
90	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 (TSM, NBSM and Carew & Co) Non-Mill Zone (C. Nawabgonj Manikgonj and Gazipur)
91	Monitoring of Technology Based Subsidy Program in Sugarcane	• o monitor, review and identify the gaps (if any) in implementing the subsidy based technology transfer program • o identify the mid-term success to the govt./authority about the subsidy based technology transfer program and • o establish a linkage between program planner and implementers	Sugar Mills Zones of Bangladesh (15)
92	Adoption of BSRI Akh 42 Production Technologies by the Farmers in the Hill Tracts of Bangladesh	• To determine the extent of adoption of chewing cane production technologies in the hill districts • To assess sugarcane farmers knowledge on BSRI recommended chewing cane production technologies and • To identify the problems that retard adoption of chewing cane production technologies.	Bandarban, Khagrachari and Rangamati
Training			

Sl. No.	Research Title	Objective(s)	Location
93	Modern Technologies of Sugar Crop Production for Agriculture Extension Officers of DAE	• To increase trainee's capacity to advise their subordinate extension workers as well as sugarcane growers (both mills and non-mill zones) on the modern sugar crop production technologies • To support the participants forguiding the sugarcane growers to produce intercrops methodologically and • To capacitatethe trainee officers to advise the goor processors to produce quality goor hygienically.	Ishurdi, Pabna
94	Modern Technologies of Sugar Crop Production for Sub Assistant Agriculture Officers (SAAO) of DAE	• To updatethe trainees for improvement of capacity to advise the sugar crop farmers on the modern sugar crop production technologies • To enhanceparticipants capacity to suggest the sugarcane farmers to produce intercrops methodologically and • To capacitatethe trainee to provide efficient advise the goor processors to produce goor hygienically.	Ishurdi, Pabna
95	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	Ishurdi, Pabna and Sub-Stations: (Joypurhat, Chuadanga, Rahmatpur and Jamalpur), Sugar Mills and Different Locations in Non- Mill Zone
Demonstration			
96	Demonstration of BSRI Bred	Location: Ishurdi, Jamalpur, Pabna, Joypurhat,	

Sl. No.	Research Title	Objective(s)	Location
	Latest Sugarcane Varieties	Kushtia, Chuadanga, Sobarnochar, Gaibandha, Barishal, Hobigonj, Bandarban, Khagrachari, Rangamati (**21**)	
97	Demonstration of BSRI Sugarcane Varieties with Intercropping	Location : Ishurdi, Jamalpur, Pabna, Joypurhat, Kushtia, Chuadanga, Sobarnochar, Gaibandha, Barishal, Hobigonj, Bandarban, Khagrachari, Rangamati (25)	
98	Demonstration of Quality Goor Production Technique	Location : Khagrachari, Bandarban, Rangamati, Chunarughat, Sobarnochar, Gaibandha, Barishal, Sherpur (10)	
Regional Sugarcrop Research Station (RSRS) and Quarantine Station, Gazipur			
Crop Protection			
99	Quarantine Follow-Up of Imported Germplasms	• To remain vigilant about the entry and introduction of new pathogens and insect pests carried along with the germplasms brought from abroad	Gazipur (Quarantine Station)
100	Quarantine Follow-Up of Local Germplasms	• To remain vigilant about the entry and introduction of new pathogen or insect pests from one location to other carried along with the varieties/ clones during collection.	Gazipur (Quarantine Station)
101	Maintenance of BSRI Released Sugarcane Varieties at Quarantine Station	• Conserving the BSRI released sugarcane varieties for producing disease free seed cane for local use as well as foreign exchange.	Gazipur (Quarantine Station)
Regional Sugarcrop Research Station (RSRS)			
Crop Improvement			
102	Ratooning Potentiality of Sugarcane Varieties at Madhupur Tract	• To find out most suitable varieties having rationing potentiality at agro-ecological zone under Madhupur tract and • Evaluating suitable sugarcane varieties for profitable cane cultivation through ratooning	Gazipur (RSRS farm)
103	IPNS Based Nutrient Management for Cultivation of Chewing Cane	• To determine IPNS based nutrient management packages for chewing sugarcane and • To study the impact of IPNS based nutrient management packages on soil fertility status.	Gazipur (RSRS farm)

Sl. No.	Research Title	Objective(s)	Location
104	Combined Application of Organic and Inorganic Fertilizer on the Growth, Biomass Yield, Quality and Nutrient Content of Stevia (*Stevia Rebaudiana* Ber.)	• Finding out the economically optimum level of nutrients for stevia production in Bangladesh	Gazipur (RSRS farm) Ishurdi, Pabna
105	Production of Vermicompost As A Source of Organic Manure	• To produce quality vermicompostas a source of organic manure and • To Study the impact of vermicompost on soil fertility.	Gazipur (RSRS farm)
Crop Production			
106	Yield Performance of Arabian Date Palm at Gazipur Region	• To find out the growth pattern of Arabian date palm year to year and • To find out the sequence of yield potential	Gazipur (RSRS farm)
Crop Protection			
107	Survey On Pest Status and Incidence of Arabian Date Palm (*Phoneix Dactylifera*) Insect Pests at Gazipur Region	• To find out and document Arabian date palm insect pest status at Gazipur region and • To monitor severity and populations in individual tree to inform grower treatment decisions •	Gazipur (RSRS and BRRI Farm, Perugali)
Tot & Socio Economics			
108	Production of Disease Free Clean Seed Cane	• To introduce and extend disease free seeds of recommended varieties in non mill zone • To ensure disease free seed cane for experiment and demonstration purpose to be used by BSRI and DAE for next season and • To motivate the farmers in adapting new varieties and accelerate its dissemination.	On -Farm (Gazipur and Bawalmirzapur)
Demonstration			
109	Demonstration of chewing sugarcane with Intercrop		Gazipur
110	Demonstration of BSRI released chewing sugarcane varieties	Location : Mymensingh, Norshindi, Manikgonj and Gazipur	
Training			
111	Farmer's Training	Location : Gazipur, Mymensingh, Munsigonj and Manikgonj	

Sl. No.	Research Title	Objective(s)	Location
112	SAAOTraining	Location : Gazipur and Norshindi	
	Other Activities		
113	Seed preparation of chewing sugarcane (BSRI Akh 42 & CO 208)	Gazipur (RARS farm)	
114	Preparation & maintenance stevia seedlings	Gazipur (RSRS farm)	
115	Application of fertilizers in talkhezurbagan	Gazipur (RSRS farm)	
116	Title:Museum Plot		
REGIONAL SUGARCROP RESEARCH STATION (RSRS) THAKURGAON			
Varietal improvement			
117	Performance of BSRI Bred Sugarcane Varieties under Water-Logging and Flood Stress Condition at Northern Region of Bangladesh	• To select sugarcane varieties with superior tolerance to water-logging and flood stress condition and • To find out morphological and physiological basis for water-logging and flood tolerance to sugarcane	Panchagarh, Thakurgaon and Setabganj
118	Yield Performance of Latest Sugarcane Varieties Grown in Different Locations in Old Himalayan Piedmont Plan and Active Tista Floodplain Soils	• Selecting suitable latest varieties for increasing the yield and quality of sugarcane in AEZ I & AEZ II and • Increasing farmers' earning through latest sugarcane cultivation.	TSM PSM STSM and SHSM
119	Ratooning Potentiality of BSRI Bred Newly Released Sugarcane Varieties In Different Locations of Old Himalayan Piedmont Plan and Active Tista Floodplain Soil	• To screen out the ratooning potentiality of BSRI released varieties for AEZ I andAEZ II and • To popularize ratooning practice in AEZ I andAEZ II	TSM PSM STSM and SHSM
Crop and soil management			
120	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 and • To increase productivity and interim economic benefit per unit area and time in sugarcane field.	TSM PSM STSM and SHSM
121	Intercropping of Fodder Crops	• Finding out the suitable fodder	Thakurgaon

Sl. No.	Research Title	Objective(s)	Location
	with Sugarcane	crop as intercrop with sugarcane and • Estimating economic profitability of fodder crop intercropping with sugarcane	(RARS)
122	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 and • To assess the soil nutrient content changes under different levels of liming and PGRs during stevia cultivation	Thakurgaon (RARS)
123	Influence of Different Planting Methods and Spacing on Plant And Ratoon Crops of Stevia in Old Himalayan Piedmond Plain Soils	• To find out the best cultivation method of stevia • To find out the suitable row spacing of stevia and • To investigate growth dynamics and yield potential of stevia under different cultivation methods.	Thakurgaon (RARS)
124	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	Thakurgaon (RARS)
125	Maximization of total Crop Production from Sugarcane Field with Some Short Duration Crops as Intercrop in Late Planting Season	• To find out total crop production and economic return from sugarcane field planted in late season and • To select suitable intercrops with sugarcane in late planting season.	Thakurgaon (RARS)
Socio-Economics & Technology Transfer			
Training			
126	Farmers training course	Location :Thakurgaon,Panchagarh,Setabganj, Shampur	
127	CDAs/ training course	Location: Thakurgaon (RARS)	
128	SAAO training course	Location : Thakurgaon (RARS)	
Demonstration			

Sl. No.	Research Title	Objective(s)	Location
129	Demonstration of BSRIbred latest sugarcane varieties	Location : Thakurgaon, Panchagarh, Setabganj, Dinajpur, Sayedpur, Nilphamari, Shampur and Rangpur	
130	Single/Paired row sugarcane with intercropping	Location : Thakurgaon, Panchagarh, Setabganj and Shampur	
Joypurhat (Sub-Station)			
Crop and soil management			
131	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 Farmers	Joypurhat
132	Selection of sugarcane clone as juice variety	• Selecting sugarcane juice variety	Bogura
133	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 and • To study the comparative performance of different latest sugarcane varieties	Joypurhat
Rajshahi (Sub-Station)			
Crop production and Management			
134	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 and • To study the comparative performance of different latest varieties	Rajshahi
135	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 and • To study the suitability of Chewing cane with different winter crops combination for higher economic benefit and • To sustain sugarcane cultivation ensuring higher production and maximum profit through cultivation of intercrops	Rajshahi
136	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	Rajshahi (Char land)

Sl. No.	Research Title	Objective(s)	Location
		• To identify suitable BSRI released varieties for location specific recommendation and • To find out the economic profitability of BSRI released varieties in the Char land of Rajshahi.	
137	Selection of Suitable Varieties for Goor Production in Chapai-Nawabganj	• Evaluating the performance of BSRI released sugarcane varieties in non- mill zone and • Recommending the location specific sugarcane varieties for goor production	Sibganj, Chapai Nawabganj
Technology Transfer			
Demonstration			
138	Production of disease free Clean seed cane	Location: Rajshahi (Mill Zone and Non Mill Zone)	
139	Demonstration of BSRI Latest Sugarcane varieties	Location: Rajshahi (Mill Zone and Non Mill Zone)	
140	Demonstration of Paired Row Sugarcane with Double Intercrop	Location: Rajshahi (Mill Zone and Non Mill Zone)	
Training			
141	Farmers Training	Location: Rajshahi (Mill Zone and Non Mill Zone)	
Field day			
142	Field day on the production of BSRI latest Sugarcane varieties	Location: Rajshahi (Mill Zone and Non Mill Zone)	
143	Field day on the paired row sugarcane with double Intercrop	Location: Rajshahi (Mill Zone and Non Mill Zone)	
Chuadanga (Sub-Station)			
Crop Production			
144	Performance of Different High Value Rabi Crops-Summer Coriander Sequential Intercropping with Sugarcane in AEZ 11	• To find out the suitable rabi crop as first intercrop with sugarcane for obtaining higher economic return at farmer level in AEZ 11 and • To investigate the feasibility of summer coriander as second intercrop with sugarcane	Chuadanga
Crop Improvement			
145	Comparative Performance of Some BSRI Bred Cane Variety and Promising Clone in Plant	• Observing the suitability of BSRI released varieties in AEZ 11 and	Chuadanga

Sl. No.	Research Title	Objective(s)	Location
	Cane Under AEZ-11	• Studying the comparative performance of released varieties and promising clones	
Seed Technology			
146	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 and • Reducing the disease incidence throughout the mill zone	Jibonnagar and Damurhuda
Technology Transfer			
147	Production and Distribution of Date palm seedling	• Location : Chuadanga	
Rahmatpur, Barisal (Sub-Station)			
Varietal Improvement			
148	Selection of Sugarcane Varieties Suitable for Goor Production in Saline Belt under Southern Region	• To select suitable cane varieties with high yield and recovery for goor production in saline belt of southern region.	Pathorghata, Barguna
Crop and Soil Management			
149	Performance of Chewing Varieties in Saline Belt Under Southern Region	• To select suitable cane varieties for chewing in saline area of southern region and • To popularize chewing varieties in saline area of southern region.	Barisal Region
150	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 and • Popularizing the BSRI varieties in coastal belt under southern region	Patuakhali
151	Effect of Different Planting Methods and Seedling age on Growth and Yield of Tropical Sugarbeet	• Reducing the crop duration in the field and • Seleting suitable method for sugarbeet cultivation	Barisal (Sub-station)
152	Efficacy of organic materials on sugarcane varieties in practicing organic farming	• Selecting the suitable combination for better yield without use of chemical pesticides and fertilizer.	Barisal (Sub-station)
153	Sugarcane Based Integrated Farming in Sorjon System	• Increasing sugarcane productivity through Sorjan	Barisal (Sub-station)

Sl. No.	Research Title	Objective(s)	Location
	Under Southern region	system and • To popularize sugarcane based Sorjan farming under southern region	
Jamalpur (Sub-Station)			
Crop and Soil Management			
154	Effect of Vermicompost on Sugarcane Yield and Carbon Accumulation in Soils	• To quantify the effect of vermicompost on sugarcane growth and yield and • To determine the carbon accumulation in soils from vermicompost application	Jamalpur
155	Performance of Different Intercrops with Sugarcane in Paired Row System	• To find out suitable intercrops for sequential intercropping in paired row sugarcane and • Study the effect of sequential intercropping on growth, yield and quality of sugarcane	Jamalpur and Sherpur (Nakla and Dobarchar)
Chunarughat, Hobigonj (Sub-Station)			
Varietal Improvement			
156	Ratooning Potentiality of BSRI Bred Newly Released Sugarcane varieties at Akhaura Terrace	• Determining the ratooning • potentiality of BSRI newly released sugarcane varieties and • Popularizing the ratooning practice at Akhaura Terrace	Gorgao, Ladia and Raki (Chunarughat)
157	Yield Performance of BSRI Bred Newly Released Sugarcane Variety for Goor Production at Akhaura Terrace	• To find out suitable sugarcane varieties for goor production from plant cane in this area and • To identify the potentiality of these variety for yield and goor production as plant cane	Gorgao and Ladia, (Chunarughat)
Crop and Soil Management			
158	Performance of Different Chewing cane varieties with Sequential Intercropping at Akhaura Terrace	• Finding out the growth, yield and quality of suitable chewing cane varieties with intercrops and • Maximizing the productivity and economic return from chewing cane	Chunarughat
Sirajgonj (Sub-Station)			
Varietal Improvement			
159	**Title:** Performance of some newly released BSRI bred sugarcane varieties as plant and ratoon cane under AEZ 4	• Studying the performance of newly released BSRI sugarcane varieties at non mill zone • Identifying the suitable newly	Sirajgonj (2)

Sl. No.	Research Title	Objective(s)	Location
		released sugarcane varieties for specific location purposes and • Screening the ratooning potentiality of BSRI released sugarcane varieties	
Crop and Soil Management			
160	Performance of BSRI bred sugarcane varieties under flood stress condition at char land in Sirajgonj	• Identifying the sugarcane varieties suitable for Jamuna char land in flood stress condition and • Popularising the flood stress tolerent varieties among the farmers in Sirajgonj	Sirajgonj (2)
Crop Production			
161	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	Sirajgonj (3)

BANGLADESH WHEAT AND MAIZE RESEARCH INSTITUTE

BANGLADESH WHEAT AND MAIZE RESEARCH INSTITUTE, NASHIPUR, DINAJPUR

Sl. No.	Research Title	Objective (s)	Location
CENTRAL STATION, DINAJPUR			
Wheat Breeding			
1	Hybridization	• Development of wheat variety suitable for the condition of Bangladesh	Dinajpur
2	Confirmation of F1s (single, top & back crosses)	• Development of wheat variety suitable for the condition of Bangladesh	Dinajpur
3	Selection in F_2 to F_6 generations	• Development of wheat variety suitable for the condition of Bangladesh	Dinajpur
4	Evaluation of F_2 derived F5 lines for 2NS translocation	• Development of wheat variety suitable for the condition of Bangladesh	Dinajpur
5	Estimation of genetic distance of bread wheat parental stock	• Development of wheat variety suitable for the condition of Bangladesh	Dinajpur
6	Bangladesh wheat screening nursery (ITS & ILS)*	• Development of wheat variety suitable for the condition of Bangladesh	Dinajpur
7	Preliminary yield trial (ITS, ILS & IVLS)**	• Development of wheat variety suitable for the condition of Bangladesh	Dinajpur
8	Advanced yield trial (ITS & ILS)	• Development of wheat variety suitable for the condition of Bangladesh	Dinajpur
9	Candidate variety demonstration (ITS & ILS)	• Development of wheat variety suitable for the condition of Bangladesh	Dinajpur
10	On-station demonstration (ITS & ILS)	• Development of wheat variety suitable for the condition of Bangladesh	Dinajpur
11	Distinctness, uniformity and stability (DUS) test	• Development of wheat variety suitable for the condition of Bangladesh	Dinajpur
12	Germplasm maintenance	• Development of wheat variety suitable for the condition of Bangladesh	Dinajpur
13	Early heat tolerant wheat screening nursery	• Development of wheat variety suitable for the condition of Bangladesh	Dinajpur
14	Genetic gain of wheat varieties in	• Development of wheat variety	Dinajpur

Sl. No.	Research Title	Objective (s)	Location
	Bangladesh	suitable for the condition of Bangladesh	
15	Varietal purification for on-station demonstration	• Development of wheat variety suitable for the condition of Bangladesh	Dinajpur
16	Development of blast resistant variety	• Development of blast resistant wheat variety	Dinajpur
18	Molecular Screening of blast resistant wheat genotypes using 2NS markers	• Development of blast resistant wheat variety	Dinajpur
19	Selection of blast resistant individuals from different filial generations through MAS	• Development of blast resistant wheat variety	Dinajpur
20	Screening of wheat genotypes under artificial salt stress condition	• Development of saline tolerant wheat variety	Dinajpur
21	Durum yield trial	• Development of durum wheat variety suitable for the condition of Bangladesh	Dinajpur
22	Triticale yield trial	• Development of triticale variety suitable for the condition of Bangladesh	Dinajpur
23	Evaluation of selected triticale lines	• Development of triticale variety suitable for the condition of Bangladesh	Dinajpur
24	Maintenance of 1st and 2nd year lines and production of pre-breeder seed of WMRI Gom 1, BARI Gom 30, BARI Gom 32 and BARI Gom 33	• New variety maintenance and breeder seed production	Dinajpur
25	Maintenance of 1st year lines of WMRI Gom 2 and WMRI Gom 3	• New variety maintenance and breeder seed production	Dinajpur
26	Breeder seed production of WMRI Gom 1, WMRI Gom 2, WMRI Gom 3, BARI Gom 30 and BARI Gom 32,	• New variety maintenance and breeder seed production	Dinajpur
27	Seed multiplication of WMRI Gom 1, WMRI Gom 2, WMRI Gom 3, BARI Gom 25, BARI Gom 28, BARI Gom 30, BARI Gom 32 and BARI Gom 33 and pre-released wheat varieties	• New variety maintenance and breeder seed production	Dinajpur
28	Nucleus seed production of varieties and lines included in the nurseries and trials of wheat, triticale and durum	• New variety maintenance and breeder seed production	Dinajpur

Sl. No.	Research Title	Objective (s)	Location
Maize Breeding			
29	Maintenance of exotic inbred lines of maize.	• Development of maize variety suitable for the condition of Bangladesh	Dinajpur
30	Development of base population in maize.	• Development of maize variety suitable for the condition of Bangladesh	Dinajpur
31	Advancing S1 to S2 generation of field corn.	• Development of maize variety suitable for the condition of Bangladesh	Dinajpur
32	Advancing S6 to S7 generation of field corn and baby corn.	• Development of maize variety suitable for the condition of Bangladesh	Dinajpur
33	Genetic diversity of locally developed inbred lines.	• Development of maize variety suitable for the condition of Bangladesh	Dinajpur
34	Evaluation of inbred lines of field corn through line × tester method over locations.	• Development of maize variety suitable for the condition of Bangladesh	Dinajpur
35	Study on combining ability and heterosis in field corn over locations.	• Development of maize variety suitable for the condition of Bangladesh	Dinajpur
36	Evaluation of promising hybrids of field corn hybrids at different agro-ecological regions (3 sets).	• Development of maize variety suitable for the condition of Bangladesh	Dinajpur
37	Comparative yield trial of imported & local maize hybrids.	• Development of maize variety suitable for the condition of Bangladesh	Dinajpur
38	Phenotyping of the HTMA hybrids during rabi season (3 Sets).Production of single cross fall army worm resistant hybrids through diallel mating.	• Development of maize variety suitable for the condition of Bangladesh	Dinajpur
39	Seed production of promising maize hybrids of field corn and popcorn (4 Sets).	• New variety maintenance and breeder seed production	Dinajpur
40	Maintenance and seed increase of the parental lines of different released maize hybrids.	• New variety maintenance and breeder seed production	Dinajpur
41	Maintenance and seed production of promising composite color maize genotype	• New variety maintenance and breeder seed production	Dinajpur
42	Seed production of parental (male) line of WMRI Hybrid Baby Corn 1	• New variety maintenance and breeder seed production	Dinajpur
43	Maintenance and seed production	• New variety maintenance and	Dinajpur

Sl. No.	Research Title	Objective (s)	Location
	of composite maize variety (BARI Sweet Corn 1)	breeder seed production	
44	Seed production of parental (female) line of BARI Hybrid Maize 16	• New variety maintenance and breeder seed production	Dinajpur
45	Seed production of parental (male) line of WMRI Hybrid Maize 1	• New variety maintenance and breeder seed production	Dinajpur
Crop and Soil Management			
46	Integrated fertilizer management on soil fertility and productivity of wheat-T.Aus-T.Aman cropping pattern	• Integrated nutrient management for improving yield and soil fertility	Dinajpur
47	Evaluation of different herbicides to control weeds in maize field	• To find out the suitable herbicides for weed control in maize	Dinajpur
48	Development of fertilizer recommendation for hybrid maize in Kharif season	• To findout suitable fertilizer recommendation for hybrid maize in Kharif season	Dinajpur
49	Effect of time and pattern of leaf cutting on maize yield	• To find out appropriate time of leaf-cutting for using fodder	Dinajpur
50	Determination of seed rate of wheat for late sown conditions	• To find out the actual seed rate of wheat for late sown wheat	Dinajpur
51	Response of maize-legume intercropping as push-pull technique for controlling Fall Army Worm (FAW)	• To find out suitable method for controlling Fall Army Worm	Dinajpur
Disease Management			
52	Evaluation of wheat germplasm against Bipolaris leaf blight under field condition	• To develop of wheat variety against Bipolaris leaf blight	Dinajpur
53	Evaluation of wheat genotypes for resistance to Bipolaris leaf blight under inoculated condition	• To develop of wheat variety against Bipolaris leaf blight	Dinajpur
54	Evaluation of wheat germplasm for resistance to leaf rust under inoculated condition	• To develop of wheat variety against leaf rust of wheat	Dinajpur
55	Efficacy of fungicides in controlling Bipolaris leaf blight of wheat	• To find out the suitable fungicides for leaf rust control in wheat	Dinajpur
56	Efficacy of fungicides in controlling leaf rust of wheat	• To find out the suitable fungicides for leaf rust control in wheat	Dinajpur
57	Adaptation of wheat genotypes for tolerance to terminal heat stress and Bipolaris leaf blight	• Development of wheat variety tolerant to heat stress and also against leaf blight	Dinajpur
59	Evaluation of promising wheat germplasm against wheat blast	• To develop of wheat variety tolerant to heat stress and also	Dinajpur

Sl. No.	Research Title	Objective (s)	Location
	under field condition	against leaf blight	
60	Determining status of seed-borne fungi including *Magnaporthe oryzae* (MoT) causing wheat blast (Lab)	• To develop of wheat variety tolerant to wheat blast	Dinajpur
61	Surveillance of rusts and blast of wheat in Bangladesh	• To develop of wheat variety tolerant to wheat blast and leaf rust	Dinajpur
62	Surveillance and monitoring of diseases of maize in Bangladesh	• To Monitor of diseases of maize and their control measures	Dinajpur
63	Efficacy of fungicides in controlling leaf blight of maize	• To find out the suitable fungicides for leaf blight control in maize	Dinajpur
64	Molecular detection of wheat blast fungus Magnaporthe oryzae pathotype triticum using MoT3 assay collected from different locations of Bangladesh (Lab)	• To develop of wheat variety tolerant to wheat blast	Dinajpur
Insect Management			
65	Survey of insect pests and natural enemies in wheat and determination of damage potential due to insect pests	• To Determine of the damage potential due to insect pests and their control measures	Dinajpur
66	Yield loss assessment of wheat due to the aphid infestation	• To determine of the damage potential due to aphid and their control measures	Dinajpur
67	Monitoring and scouting of insect pests on maize and its natural enemies	• Determination of the damage potential in maize due to insect pests and their control measures	Dinajpur
68	Development of management package(s) to control FAW on maize	• Development of management packages for controlling FAW in maize	Dinajpur
69	Effect of seed treatment with Fortenza to control FAW on maize	• Development of management packages for controlling FAW in maize	Dinajpur
70	Observation of FAW infestation intensity on maize and yield loss in different planting date	• Development of management packages for controlling FAW in maize	Dinajpur
71	Agro-ecological approaches to control FAW on maize	• Development of management packages for controlling FAW in maize	Dinajpur
Agricultural Engineering			
72	Battery operated low cost maize planter cum weeder	• Development of battery-operated low-cost maize planter cum weeder	Dinajpur
73	Improvement of two wheel tractor operated strip-till planter	• Improvement of two-wheel tractor operated strip-till planter for	Dinajpur

Sl. No.	Research Title	Objective (s)	Location
	for upland crops	upland crops	
74	Development of tractor operated multi crop seeder	• Improvement of the four-wheel tractor as a multiple crops seeder	Dinajpur
Variety Development			
75	Elite spring wheat yield trial (41st ESWYT)	• Development of wheat variety suitable for Bangladesh condition	Dinajpur
76	International bread wheat screening nursery (53rd IBWSN)	• Development of wheat variety suitable for Bangladesh condition	Dinajpur
77	High temperature wheat yield trial (19th HTWYT)	• Development of wheat variety suitable against heat stress	Dinajpur
78	High rainfall wheat yield trial (28th HRWYT)	• Development of wheat variety suitable against high rainfall	Dinajpur
79	Wheat yield consortium yield trial (8th WYCYT)	• Development of wheat variety for high yield potential	Dinajpur
80	Collaborative wheat yield trial (3rd CWYT)	• Development of wheat variety for high yield potential	Dinajpur
81	Stress adaptive traits yield nursery (10th SATYN)	• Development of wheat variety tolerant to biotic and abiotic stress	Dinajpur
82	HarvestPlus yield trial (11th HPYT)	• Development of micronutrients enriched wheat variety	Dinajpur
83	HarvestPlus south Asia nursery (12th HPAN)	• Development of micronutrients enriched wheat variety	Dinajpur
Crop and Soil Management			
84	Response of newly evolve wheat varieties to sowing dates	• To find out the variety-specific sowing time for multiple locations	Dinajpur
85	Evaluation of conservation agriculture practices on irrigation and nitrogen use efficiency of rice-maize-mungbean crop rotation	• To know the irrigation and nitrogen use efficiency in rice-maize crop rotation	Dinajpur
Disease Management			
86	Helminthosporium leaf blight screening nursery (12th HLBSN)	• Development of wheat variety tolerant to leaf blight	Dinajpur
87	Stem rust resistance screening nursery (15th STEMRRSN)	• Development of wheat variety tolerant to stem rust	Dinajpur
88	SAARC disease monitoring nursery	• Development of wheat variety tolerant to diseases	Dinajpur
Miscellaneous			
89	Identification and expression of heat tolerant genes at reproductive stage and their inheritance in wheat	• Development of wheat variety tolerant to heat stress	Dinajpur
REGIONAL STATION, GAZIPUR			

Sl. No.	Research Title	Objective (s)	Location
Wheat Breeding			
90	Hybridization	• Development of wheat variety suitable for the condition of Bangladesh	Gazipur
91	Selection in F_2 to F_6 generations	• Development of wheat variety suitable for the condition of Bangladesh	Gazipur
92	Bangladesh wheat screening nursery (ITS & ILS)*	• Development of wheat variety suitable for the late sown condition	Gazipur
93	Advanced yield trial (ITS & ILS)	• Development of wheat variety suitable for the condition of Bangladesh	Gazipur
94	Candidate variety demonstration (ITS and ILS)	• Development of wheat variety suitable for the condition of Bangladesh	Gazipur
95	On-station demonstration (ITS and ILS)	• Development of wheat variety suitable for the condition of Bangladesh	Gazipur
96	Distinctness, uniformity and stability (DUS) test	• Development of wheat variety suitable for the condition of Bangladesh	Gazipur
97	Early heat-tolerant wheat screening nursery	• Development of wheat variety suitable for the heat stress condition	Gazipur
98	Molecular Screening of blast resistant wheat genotypes using 2NS markers	• Development of wheat variety tolerant to wheat blast	Gazipur
Maize Breeding			
99	Advancing S_3 to S_4 generation of waxy maize.	• Development of maize variety suitable for the condition of Bangladesh	Gazipur
100	Advancing S_5 to S_6 generation of field sweet corn.	• Development of maize variety suitable for the condition of Bangladesh	Gazipur
101	Advancing S_6 to S_7 generation of field and baby corn.	• Development of maize variety suitable for the condition of Bangladesh	Gazipur
102	Evaluation of inbred lines of field corn through line × tester method over locations	• Development of maize variety suitable for the condition of Bangladesh	Gazipur
103	Evaluation of selected single cross hybrids of field corn	• Development of maize variety suitable for the condition of Bangladesh	Gazipur
104	Phenotyping of the HTMA hybrids during rabi season (3	• Development of maize variety suitable for the condition of	Gazipur

Sl. No.	Research Title	Objective (s)	Location
	Sets).Production of single cross fall army worm resistant hybrids through diallel mating.	Bangladesh	
105	Maintenance and seed production of promising composite color maize genotype	• To maintain and seed production of promising composite color maize genotype	Gazipur
Crop and Soil Management			
106	Study on the performance of some selected wheat genotypes in southern Bangladesh	• To find out the suitable wheat genotypes suitable to grow in southern coastal regions of Bangladesh	Gazipur
107	Evaluation of wheat genotypes against salinity at seedling stage	• To find out the suitable wheat genotypes suitable to grow in southern coastal regions of Bangladesh	Gazipur
REGIONAL STATION, RAJSHAHI			
Wheat Breeding			
108	Evaluation of F_2 derived F5 lines for 2NS translocation	• Development of wheat variety suitable for the condition of Bangladesh	Rajshahi
109	Preliminary yield trial (ITS, ILS and IVLS)**	• Development of wheat variety suitable for the early and late sown condition of Bangladesh	Rajshahi
110	Advanced yield trial (ITS and ILS)	• Development of maize variety suitable for the early and late sown condition of Bangladesh	Rajshahi
111	On-station demonstration (ITS and ILS)	• Development of wheat variety suitable for the early and late sown condition of Bangladesh	Rajshahi
112	Early heat tolerant wheat screening nursery	• Development of wheat variety suitable for late sown heat stress condition of Bangladesh	Rajshahi
Crop and Soil Management			
113	Long-term bed planting trial for improving crop and soil productivity in rice-wheat-mungbean cropping pattern	• To improve soil health and also increase the crop productivity in rice-wheat-mungbean cropping pattern	Rajshahi
114	Weed management of wheat-mungbean-rice cropping pattern in conservation agricultural system in drought prone Rajshahi region	• To find out the appropriate weed management practices in wheat-mungbean-rice cropping systems	Rajshahi
115	Effect of fertilizer doses with biochar on soil fertility and productivity in wheat-maize-rice cropping pattern in drought prone	• To check the necessacity biochar for improving productivity and soil soil in wheat-maize-rice cropping pattern	Rajshahi

Sl. No.	Research Title	Objective (s)	Location
	Rajshahi region		
116	Effect of different doses of vermi-compost in combination with chemical fertilizers in a wheat-maize-T.aman rice cropping pattern	• To check the appropriate combination of vermicompost and chemical fertilizers on the productivity and soil health of wheat-maize-T.aman rice cropping pattern	Rajshahi
Insect Management			
117	Agro-ecological approaches to control FAW on maize	• To find out the appropriate management approach for controlling FAW	Rajshahi
REGIONAL STATION,JAMALPUR			
Wheat Breeding			
118	Hybridization	• Development of wheat variety suitable for the condition of Bangladesh	Jamalpur
119	Selection in F_2 to F_6 generations	• Development of wheat variety suitable for the condition of Bangladesh	Jamalpur
120	Advanced yield trial (ITS and ILS)	• Development of wheat variety suitable for late sown heat stress condition of Bangladesh	Jamalpur
121	On-station demonstration (ITS and ILS)	• Development of wheat variety suitable for late sown heat stress condition of Bangladesh	Jamalpur
Maize Breeding			
122	Seed production of parental (female) line of BARI Hybrid Maize 16	• Development of maize variety suitable for the condition of Bangladesh	Jamalpur
123	Seed production of parental (male) line of WMRI Hybrid Maize 1	• Development of maize variety suitable for the condition of Bangladesh	Jamalpur
Disease Management			
124	Monitoring and evaluation in international wheat disease nurseries	• Development of wheat cultivars tolerant to diseases	Jamalpur
125	Surveillance of rusts and blast of wheat in Bangladesh	• Development of wheat cultivars tolerant to rusts and blast diseases	Jamalpur
126	Surveillance and monitoring of diseases of maize in Bangladesh	• Development of maize cultivars tolerant to diseases	Jamalpur
REGIONAL STATION, JASHORE			
Wheat Breeding			
127	Selection in F_2 to F_6 generations	• Development of wheat variety suitable for the condition of Bangladesh	Jashore

Sl. No.	Research Title	Objective (s)	Location
128	Bangladesh wheat screening nursery (ITS & ILS)*	• Development of wheat variety suitable for late sown heat stress condition of Bangladesh	Jashore
129	Preliminary yield trial (ITS, ILS & IVLS)**	• Development of wheat variety suitable for late sown heat stress condition of Bangladesh	Jashore
130	Advanced yield trial (ITS & ILS)	• Development of wheat variety suitable for late sown heat stress condition of Bangladesh	Jashore
131	Candidate variety demonstration (ITS & ILS)	• Development of wheat variety suitable for late sown heat stress condition of Bangladesh	Jashore
132	Development of blast resistant variety	• Development of wheat cultivars tolerant to wheat blast	Jashore
133	Molecular Screening of blast resistant wheat genotypes using 2NS markers	• Development of wheat cultivars tolerant to wheat blast	Jashore
134	Selection of blast resistant individuals from different filial generations through MAS	• Development of wheat cultivars tolerant to wheat blast	Jashore
Maize Breeding			
135	Phenotyping of the HTMA hybrids during rabi season (3 Sets).Production of single cross fall army worm resistant hybrids through diallel mating.	• Development of maize variety suitable for the condition of Bangladesh	Jashore
136	Seed production of parental (female) line of BARI Hybrid Maize 16	• Development of maize variety suitable for the condition of Bangladesh	Jashore
137	Seed production of parental (male) line of WMRI Hybrid Maize 1	• Development of maize variety suitable for the condition of Bangladesh	Jashore
Disease Management			
138	Efficacy of fungicides in controlling wheat blast	• To find out the suitable fungicides for controlling wheat blast disease	Jashore
139	Evaluation of promising wheat germplasm against wheat blast under field condition	• Development of wheat cultivars tolerant to wheat blast	Jashore
140	Determining status of seed-borne fungi including Magnaporthe oryzae (MoT) causing wheat blast (Lab)	• Development of wheat cultivars tolerant to wheat blast	Jashore
141	Surveillance of rusts and blast of wheat in Bangladesh	• Development of wheat cultivars tolerant to wheat blast and leaf rust	Jashore
142	Surveillance and monitoring of diseases of maize in Bangladesh	• Development of maize cultivars tolerant to diseases	Jashore

Sl. No.	Research Title	Objective (s)	Location
143	Molecular detection of wheat blast fungus Magnaporthe oryzae pathotype triticum using MoT3 assay collected from different locations of Bangladesh (Lab)	• Development of wheat cultivars tolerant to wheat blast	Jashore
Insect Management			
144	Monitoring and scouting of insect pests on maize and its natural enemies	• To find out the insect pests in maize for proper management	Jashore
145	Agro-ecological approaches to control FAW on maize	• To find out the approach for controlling FAW in maize	Jashore

SOIL RESOURCE DEVELOPMENT INSTITUTE

SOIL RESOURCE DEVELOPMENT INSTITUTE

Sl. No.	Research Title	Objective (s)	Location
SALINITY MANAGEMENT AND RESEARCH CENTER, BATIAGHATA, KHULNA			
1	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 (Salinity Management and Research center)
2	Effect of different doses of vermi-compost on soil salinity and yield of sweet gourd	• To find out the effect of different doses of vermi-compost on soil salinity and yield of sweet gourd in coastal area.	Batiaghata, Khulna
3	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
4	Yield performance of red amaranth, green amaranth and indian spinach through poly and straw bed	• To find out yield of different leafy vegetable in saline soil under poly and straw bed and • To increase cropping intensity	Batiaghata, Khulna
5	Yield performance of three maize varieties through transplanting technology in coastal saline soil	• To find out the best maize varieties grown through transplanting technology in coastal saline soil.	Batiaghata, Khulna
6	Study on the effect of different type of seedling on yield of maize in coastal saline soil	• To find out the effect of different types of seedlings on yield of maize in coastal saline area.	Batiaghata, Khulna
7	Performance of different varieties of water melon in coastal saline soil	• To select suitable water melon varieties managing saline soil and water for coastal saline area and • To take seasonally fallow land under crop production.	Batiaghata, Khulna

Sl. No.	Research Title	Objective (s)	Location
SOIL CONSERVATION AND WATERSHED MANAGEMENT CENTER, BANDARBAN			
08	Up scaling of quesungual slash and mulch agroforestry 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 and • To create awareness about soil conservation and watershed management among hill dwellers	Bandarban
09.	Study on management and economic value of *Schumannianthus dichotoma* (*murta*/ patibet) in hilly jhiri land at Chtrogram	• To study the suitability and yield or productivity of Murta in Hilly Region of Bangladesh. • To ensure the fallow lands of hilly Jhiri in to productive and minimize soil erosion hazard and • To strengthen the economical efforts of the hill dwellers by increasing off farm activities & to supplement the traditional Jhum Practices.	Bandarban
10.	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 and • To determine soil loss in peg method.	Bandarban

Sl. No.	Research Title	Objective (s)	Location
11.	Studying broom grass for controlling soil erosion and its economic value	• To find out a significant source of income • To prevent frequent landslides, retain ground moisture and to increase soil fertility • To provide green forage for livestock and • To rehabilitate the endangered animals and to keep ecological balance.	Bandarban
12	Effect of plantation of bamboo for erosion control and its economical purposes. MULI/PAIYA: G*gigantochloa robusta* and ORA: *Fargesia robusta*.	• Reclamation of gullied land by minimizing erosion hazard for Landscape, aesthetic and economic purposes, environmental and ecological conservation • To mitigate the demand of food and fodder and • To introduce handy craft as a part off-farm activities for livelihood.	Bandarban
13	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 and • To collect sedimentation and to recharge the water table.	Bandarban

Sl. No.	Research Title	Objective (s)	Location
14.	Effect of indigenous and zero tillage cultivation methods of pineapple on soil erosion, run off, nutrient mining in hilly areas.	• To estimate and 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 and • To create awareness about soil conservation & watershed management among hill dwellers.	Bandarban
15	Studying effect of natural vegetative strip (NVS) for minimizing soil erosion in cultivation of vegetables.	• To examine the effect of NVS on the maintenance of soil fertility and reducing soil erosion in moderate hill slope and • To examine the effect of NVS on vegetables productivity in hill slope.	Bandarban

BANGLADESH TEA RESEARCH INSTITUTE

BANGLADESH TEA RESEARCH INSTITUTE

Sl. No.	Research Title	Objective (s)	Location
SOIL SCIENCE DIVISION			
1	Response of dolomitic lime and its effect on the changes of soil properties and yield of mature tea	• To estimate the optimum dose of dolomitic lime • To evaluate the changes of physico-chemical properties of tea soil and • To observe the effect of dolomite on the yield of mature tea	Srigobindpur, Moulvibazar (Tea Estate)
2	Effect of vermi-compost on soil properties, growth and yield of mature tea	• To evaluate the dose and efficiency of vermi-compost on tea production and • To minimize the use of chemical fertilizer.	Bilashcherra, Srimangal (Experimental Farm, BTRI)
3.	Status of Micronutrients (B, Mo, Zn, Mn, Fe & Cu) in some selected tea soils & its effects on the growth and yield of young tea and mature tea	• To know the status of micronutrients (B, Mo, Zn, Mn, Fe and Cu) in tea soils of Bangladesh.	Bilashcherra Experimental Farm (BEF) and different tea gardens
4.	Evaluation of physical properties of some selected tea soils of Bangladesh and their influence on chemical properties and yield of tea	• To assess the long-term impact of growing tea on soil physical properties and how it correlates with crop yield	Bilashcherra (Experimental Farm and different tea gardens)
0	Present status of toxic heavy metals (Pb, Cd, Hg,Cr) in tea soils, green leaves and made tea in Bangladesh.	• To evaluate the status of toxic heavy metals in tea soils, green leaves and made tea	Bilashcherra (Experimental Farm and different tea gardens)
6	Performance of Bio chars as a soil amendment and its effect on tea soil properties.	• To evaluate the effect of Bio char on tea soil properties	Srimangal. (BTRI Farm)
7.	Determination of critical values of nutrients in tea soil and plant leaf in Sylhet, Chittagong and Panchagarh region.	• To estimate critical values of essential elements in tea soil as well as tea plant leaves on the basis of present scenario of tea soils of Bangladesh	Bilashcherra (Experimental Farm and different tea gardens)

Sl. No.	Research Title	Objective (s)	Location
PLANT PATHOLOGY DIVISION			
8	Management of Red rust disease of tea with Plant Growth Promoting Rhizospheric microbes (PGPR)	• To isolate potential rhizospheric microbes from tea soil and • To evaluate rhizospheric microbes for controlling parasitic and epiphytic red rust.	Srimangal (Main farm)
9	Identification of potential infection source of Red rust disease (Epiphytic and parasitic) of tea.	• To find out the potential source of epiphytic red rust infection in case of field factors and • To develop sustainable cultural control measures of epiphytic red rust effectively.	Bilashcherra (Experimental Farm of BTRI)
10	Effect of Leaf Reduction in MSK/ LSK sections on the incidence & severity of Red rust and Black rot diseases of tea.	• To find out the best cultural practices for controlling the Red rust and Black rot diseases of tea	Srimangal (BTRI Main farm)
11	Studies on Integration and Economics of Nitrogen fertilizer and Integrated Weed Management in young mature tea.	• To optimize of N fertilizer rate for young tea in different growth stages of weeds and • To find out the effect of different N rates on tea- weed competition.	Srimangal (BTRI Main farm)
12	Reduction of weed infestation through integrated weed management practices in mature tea plantations	• To reduce the intensity of tea weeds with different components and • To find out the effect of different integrated approaches on tea production.	Srimangal (Bilashcherra Experimental farm of BTRI)
13	Screening of new fungicides and herbicides against different diseases and weed in tea.	• To evaluate and standardize new fungicides and herbicides against different tea diseases and weeds.	Srimangal (Bilashcherra Experimental farm of BTRI)
BOTANY DIVISION			
14	B1-27: Selection of Vegetative Clones at Shumshernugger T. E., Section Doublecherra-13 and 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,	Shumshernugger, Moiulvibazar (T. E., Main Div. Sec. No. 9)

Sl. No.	Research Title	Objective (s)	Location
		disease and drought and • To observe rooting ability of the selected mother bushes.	
15	B1-28: Selection of Vegetative Clones at Amo T. E., Section No. 1.	• 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 and • To observe rooting ability of the selected mother bushes.	Chandpur and Habiganj (Amo T. E., Section No. 1)
16	B1-31: Selection of Vegetative Clones at Baraoorah T. E., Section No. 8.	• 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 and • To observe rooting ability of the selected mother bushes.	Baraoorah T. E., Srimangal (Section No. 8)
17	B2-36: Yield and Quality Trial of Test clones Selected from Amo T. E. Test clones A/8/01, A/17/22, A/22/27 and A/22/40 against Control BT1.	• 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 pest and • 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.	Srimangal (BTRI Experimental Farm)
18	B2-38: Yield and Quality Trial of Test clones Selected from Chandpore,	• To select promising test clones having desirable characteristics i.e. either yield or quality or both	Srimangal (BTRI

Sl. No.	Research Title	Objective (s)	Location
	Shumshernugger and Amo T. Es.; Test clones C/J1/10, Sh /B/ 6/9, Sh /B/ 6/ 62 and A/8/24 against Control BT2.	• To identify stress tolerant test clones such as drought tolerant • To identify test clones which are less susceptible to pests and • 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,	Experimental Farm)
19	B2-39: Yield and Quality Trial of Four Test clones Selected from Shumshernugger T.E. Test clones Sh/B/6/36, Sh /B/6/38, Sh/B/6/55 and Sh/B/6/67 against Standard BT1.	• 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 and • 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.	Srimangal (BTRI Experimental Farm)
20	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 and • 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.	Srimangal (BTRI Experimental Farm)
21	B2-41: Yield and Quality Trial of Four Test clones	• To select promising test clones having desirable characteristics i.e.	Srimangal (BTRI

Sl. No.	Research Title	Objective (s)	Location
	dendrobium genotypes	Gazipur condition for commercial production.	
254.	Performance of exotic ornamental gourds lines	• To develop ornamental gourd variety	Gazipur and Burirhat, Rangpur
255.	Collection, evaluation and maintenance of water lily	• To collect water lily germplasm from different sources • To evaluate and characterize water lily germplasm and • To conserve the collected germplasm for future research	Gazipur
256.	Hybridization in gladiolus flower	• To develop new hybrid varieties og gladiolus.	Gazipur
257.	Standardization of substrates for lilium bulb production through scaling	• To find out the suitable substrate for propagation of lilium bulb through scaling.	Gazipur
258.	Bulb production of lilium from bulblets influenced by growing media	• To standardize a suitable growing medium for bulb production of lilium through bulblets.	Gazipur
259.	Production of quality lilium bulb influenced by different layer of scales	• To determine the influence of scale position to produce quality bulb for specific genotypes of Lilium.	Gazipur
260.	Effect of growth regulators on growth and flowering of chrysanthemum	• To find out the optimum concentration of growth regulators as foliar spray to improve yield and quality of chrysanthemum flowers.	Gazipur
261.	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.	Gazipur
262.	Effect of substrates on yield and quality of anthurium in soilless culture	• To study the performance of different substrates on growth and flowering of anthurium.	Gazipur
263.	Effect of different growing media on growth and yield of pot grown rose	• To identify best media for rose in pot culture.	Gazipur

Sl. No.	Research Title	Objective (s)	Location
264.	Effect of management practice and bulb sizes for quality lilium bulb production	• To standardize the management practice to produce quality lilium bulbs and • To determine the optimum bulb size for quality bulb and bulblet production.	Gazipur
265.	Effect of pinching and boron on quality flower production of carnation	• To study growth, flowering and quality in carnation.	Gazipur
266.	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.	Gazipur
267.	Effect of corm treatment in controlling seed borne fungal disease of gladiolus	• To control seed-borne disease and yield in gladiolus.	Gazipur
268.	Effect of soil amendments in controlling soil borne fungal disease of gladiolus	• To study the effect of different biological and chemical measures on seed-borne disease, seed quality and yield in gladiolus.	Gazipur
269.	Effect of preharvest sprays of hormones on flower quality and vase life of gladiolus	• To extend the post-harvest life of flowers by spraying of different hormones.	Gazipur
270.	Breeder's seed/propagule production of flower crops	• To produce breeder propagules of different flower crops for distribution among the growers and nurserymen. • To maintain genetic purity.	Gazipur
271.	Adaptive trial of different varieties of gladiolus, tuberose, marigold, lilium, and gypsophila at farmers field	• To evaluate the performance of the varieties in farmer's field.	Gazipur
TUBER CROPS RESEARCH CENTRE			
272.	Hybridization in Potato	• To create variants for subsequent variety selection and • To improve the genetic base of the parent population.	Gazipur and Debiganj
273.	Production of Seedling Tubers of the Potato Hybrid Populations (F_1C_0)	• Production of F_1 seedling tubers for selection and variety development for export and processing.	Debiganj and Gazipur
274.	Field Evaluation of F_1 seedling tubers (F_1C_1)	• Selection of superior plants for processing variety development.	Debiganj
275.	Preliminary Observation Trial	• Selection of superior plant-rows	Debiganj

Sl. No.	Research Title	Objective (s)	Location
	with Clonal Potato Hybrids (F_1C_2)	for processing variety development.	
276.	Secondary Observation Trial with Clonal Potato Hybrids (F_1C_3)	• Selection of superior genotypes (one clone per one plot) for processing variety development.	Debiganj
277.	Seed Multiplication with Clonal Potato Hybrids (F_1C_4 &F_1C_5)	• To increase seed and evaluation of clones by crop cutting in nethouse.	Debiganj
278.	Preliminary Yield Trial with Clonal Potato Hybrids (F_1C_5)	• To select the superior genotype (s) for secondary yield trial of variety development process.	Debiganj and Gazipur
279.	Secondary Yield Trial with Clonal Potato Hybrids (F_1C_5)	• Selection of superior genotypes for advanced yield trial (open field).	Debiganj Gazipur and Jamalpur
280.	Advanced Yield Trial with Clonal Potato Hybrids (F_1C_6)	• To identify clones suitable for export and processing. Location: Bogura, Debiganj, Gazipur, Jamalpur, Jashore and Munshiganj	
281.	Participatory Variety Selection of AYT materials(F_1C_6)	• To select suitable clones in collaboration with farmers and other • stakeholders for releasing varieties. Location: Bogura, Debiganj, Gazipur, Jamalpur, Jashore and Munshiganj	
282.	Regional Yield Trial with Clonal Potato Hybrids (F_1C_7)	• Selection of suitable varieties for release. Location: Bogura, Debiganj, Gazipur, Jamalpur, Jashore and Munshiganj	
283.	Participatory Variety Selection of Regional Clonal Potato Hybrids (F_1C_7)	• To select suitable varieties in collaboration with farmers and other stakeholders for releasing varieties. Location :Bogura, Debiganj, Gazipur, Jamalpur, Jashore and Munshiganj	
284.	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 for Table, Export and Processing Purposes.	Gazipur and Debiganj
285.	Secondary Yield Trial of Exotic Potato Varieties	• To select superior varieties for Table, Export and Processing Purposes. Location :Bogura, Debiganj, Gazipur, Jamalpur, Jashore and Munshiganj	
286.	Regional Yield Trial of Exotic Potato Varieties	• Selection of suitable varieties for Table, Export and Processing Purposes. Location: Bogura, Debiganj, Gazipur, Jamalpur, Jashore and Munshiganj	

Sl. No.	Research Title	Objective (s)	Location
287.	Participatory Variety Selection of RYT Exotic Potato Varieties for Table, Export and Processing Purposes	• To select suitable varieties in collaboration with farmers and other stakeholders for releasing varieties. Location : Bogura, Debiganj, Gazipur, Jamalpur, Jashore and Munshiganj	
288.	Regional Yield Trial of Late Blight Tolerant Exotic Potato Variety	• Selection of suitable late blight tolerant varieties for release. Location :Gazipur, Bogura, Jamalpur and Burirhat, Rangpur	
289.	Participatory Variety Selection for Late Blight Tolerant Exotic Potato Variety	• Selection of suitable varieties in collaboration with farmers and other organization. Location :Gazipur, Bogura, Jamalpur and Burirhat, Rangpur	
290.	Evaluation exotic varieties and advanced hybrid clones for Early Heat Tolerance	• To identify varieties suitable for early planting.	Debiganj
291.	Screening of Potato Varieties for Export Potential and processing qualities	• To identify potato varieties suitable for Export and Processing. Location: Bogura, Gazipur, Jashore, Munshiganj, Rangpur (OFRD), Debiganj, Faridpur, Thakurgoan, Patuakhali	
292.	Production of Seedling Tubers of the CIP supplied TPS Progenies (F_1C_0)	• Production of F_1 seedling tubers for selection and variety development.	Debiganj and Gazipur
293.	Secondary Yield Trial of CIP Biofortified Potato Clones	• To identify high yielding and commercially important clones and • To enrich the germplasm for breeding program.	Debiganj
294.	Secondary Yield Trial of CIP Late Blight Potato Germplasm	• To develop late blight resistant varieties and • To enrich the germplasm for breeding program.	Gazipur Debiganj and Rangpur
295.	Preliminary Yield Trial of CIP Heat Tolerant Potato Germplasm	• To develop heat tolerantvarieties and • To enrich the germplasm for breeding program.	Gazipur and Debiganj
296.	Secondary Yield Trial of Colored Flesh Potato Varieties	• To develop color flesh nutrient rich potato varieties. Location : Bogura, Debiganj, Gazipur, Jamalpur, Jashore, Munshiganj	

Sl. No.	Research Title	Objective (s)	Location
297.	Regional Yield Trial of Anthocyanin Rich Potato Germplasm	• To select superior anthocyanin rich variety in contest of Bangladeshi environment. • Location: Gazipur, Debiganj, Jamalpur, Bogura, Jashore, Jamalpur, Munshiganj and Cumilla	
298.	Participatory Variety Selection of RYT Anthocyanin Rich Potato Germplasm	• To select suitable varieties in collaboration with farmers and other stakeholders for releasing varieties. • Location : Gazipur, Debiganj, Jamalpur, Bogura, Jashore, Jamalpur, Munshiganj and Cumilla	
299.	Morphological Characterization of Advanced Breeding Lines of Potato	• To fulfil the DUS test requirement • To characterize the advanced breeding lines and released varieties and • To develop photographic monograph with descriptors.	Gazipur and Debiganj
300.	Screening of Parental Lines for TPS Production Under Extended Photoperiod	• To identify the genotypes capable of producing flowers and berries under extended photoperiod.	Gazipur and Debiganj
301.	Production of Seedling Tubers of the Selfed Populations (F_1S_o)	• Production of seedling tubers for evaluation and inbred line selection.	Gazipur
302.	Selfing in Diploid Potato Germplasm	• To develop an inbred line of potato and • To develop hybrid potato at the diploid level.	Gazipur Debiganj (BPPS)
303.	Maintenance of Released Potato Varieties, Germplasm, Lines and TPS Parents	• To maintain the released potato varieties, germplasm and lines for future breeding programme.	Debiganj
304.	Seed Multiplication of Potato Breeding Materials	• To increase seed for fulfilment the requirement of research	Debiganj
305.	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 and Hathazari, Chattogram
306.	Hybridization of Sweet Potato using Polycross Method	• To create variability and diversity over the existing genotypes of sweet potato and • To develop high yielding, dry fleshed and carotene containing, early bulker, weevil tolerant sweet potato varieties.	Gazipur
307.	Collection and Maintenance of	• To find out the diversity of	Gazipur

Sl. No.	Research Title	Objective (s)	Location
	Sweet Potato Germplasm	collected germplasms and • To select high yielding, dry fleshed and carotene containing, early bulker, weevil tolerant sweet potato varieties.	
308.	Observational Trial of Orange Fleshed CIP Sweet Potato Germplasm	• To find out promising genotypes of CIP germplasms and • To develop early bulker and high yielding sweet potato varieties.	Jamalpur and Bogura
309.	Observational Trial of Purple Fleshed CIP Sweet Potato Germplasm	• To find out promising genotypes of purple fleshed CIP germplasms and • To develop high yielding, dry fleshed and carotene containing sweet potato varieties.	Gazipur and Debiganj
310.	Preliminary Yield Trial of Hybrid Clones of Sweet Potato	• To find out promising genotypes of hybrid Clones and • To develop high yielding, dry fleshed and carotene and anthocyanin containing sweet potato varieties.	Gazipur
311.	Regional Yield Trial of CIP Clones of Sweet Potato	• To select high yielding sweet potato clones and • To select dry fleshed and carotene containing sweet potato clones.	Gazipur Bogura Jamalpur and Jashore
312.	Regional Yield Trial of Hybrid Clones of Sweet Potato	• To select high yielding sweet potato clones and • To select dry fleshed and carotene containing sweet potato clones.	Gazipur Jamalpur Pahartali Bogura and Jashore
313.	Participatory Variety Selection Trial of Hybrid Clones of Sweet Potato	• Selection of suitable varieties obtained from RYT in collaboration with farmers and • To know the farmers choice and opinion.	Gazipur Jamalpur and Bogura
314.	Participatory Variety Selection Trial of CIP Clones of Sweet Potato	• Selection of suitable varieties obtained from RYT in collaboration with farmers and othe organizations and • To know the farmers choice and opinion.	Gazipur Jamalpur and Bogura
315.	Collection and Maintenance of	• To increase the genetic resources	All over

Sl. No.	Research Title	Objective (s)	Location
	Aroids	of aroids and • To maintain aroids germplasm for future use in breeding programme.	Bangladesh
316.	Hybridization of Panikachu	• To incorporate stolon and rhizome in same lines and quality development.	Gazipur
317.	Advanced Yield Trial of Mukhikachu Lines	• To evaluate the Mukhikachu lines and • To select high yielding Mukhikachu line(s) for utilization in next year.	Gazipur
318.	Regional Yield Trial of Mukhikachu Lines	• To select high yielding Mukhikachu line(s) for releasing variety.	Gazipur Jamalpur Jashore Bogura and Barishal
319.	Regional Yield Trial of Rhizome Producing Panikachu Lines	• To evaluate the selected lines and • To select high yielding rhizome producing Panikachu line(s) for utilization in next year as a better one(s) for release.	Gazipur Bogura Jamalpur Jashore and Barishal
320.	Regional Yield Trial of Stolon Producing Panikachu Lines	• To evaluate the selected lines and • To select high yielding stolon producing Panikachu line(s) for utilization in next year as a better one for release.	Gazipur Bogura Jamalpur Jashore and Barishal
321.	Participatory Variety Selection Trial of Stolon Producing Panikachu Lines	• To evaluate the selected lines and • To select high yielding stolon producing Panikachu line(s) for utilization in next year as a better one for release with farmers' participation.	Gazipur Bogura Jamalpur and Munshiganj
322.	Participatory Variety Selection Trial of Rhizome Producing Panikachu Lines	• To evaluate the selected lines and • To select high yielding rhizome producing Panikachu line(s) for utilization in next year as a better one for release with farmers' participation.	Gazipur Jamalpur Bogura and Munshiganj
323.	Secondary Yield Trial of	• To evaluate the line and	Gazipur and

Sl. No.	Research Title	Objective (s)	Location
	Ghataman Kachu in Relation to Spacing	• To select high yield performance of Ghataman Kachu with optimum spacing.	Barishal
324.	Secondary Yield Trial of Panchamukhi Kachu in Relation to Spacing	• To evaluate the line and • To select high yield performance of Panchamukhi Kachu with optimum spacing.	Gazipur and Jamalpur
325.	Regional Yield Trial of Yam (*Dioscorea* Spp.) Germplasm	• To identify high yielding and commercially important genotype and • To enrich the germplasm in breeding program.	Gazipur Bogura and Jessore
326.	Regional Yield Trial of Some Exotic Cassava (*Manihot esculenta*) Lines	• To identify high yielding and commercially important genotype and • To enrich the germplasm in breeding program.	Gazipur and Cumilla
327.	Regional Yield Trial of Some Local Cassava (*Manihot esculenta*) Lines	• To identify high yielding and commercially important genotype and • To enrich the germplasm in breeding program.	Gazipur and Cumilla
328.	Effect of Legume intercrop and Conventional Methods of Weed Suppression on Tuber Yield of Potato	• To select suitable mulching materials for quality potato production as well as improvement of soil health.	Munshiganj (TCRSC)
329.	Controlling of Potato Common Scab Development by Sulphur and Irrigation Regimes in Munshiganj Region	• To evaluate the cultural management of potato common scab using irrigation regimes and application of sulphur-containing fertilizers.	Gazipur
330.	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 (TCRSC)
331.	Effect of Spacing and Mulching on Weed Infestation and Yield of Potato	• To identify suitable mulch materials for potato production and • To find out the effect of spacing and mulching on yield of potato.	Munshiganj (TCRSC)
332.	Dry Matter Partitioning and Yield of Processing of Potato Varieties	• To find out growth, dry matter partitioning and yield performance of processing	Munshiganj (TCRSC)

Sl. No.	Research Title	Objective (s)	Location
		potato varieties.	
333.	Productivity And Profitability Study Of Farmers Managed And Research Managed Potato Production System.	• To compare the productivity, yield andprofitability between the farmers practice and research managed production system. between the farmers' practice and research practice and • To find out the better economic output of potato production system.	Munshiganj (TCRSC)
334.	Sensory Evaluation of Sweet Potato Shoot as Leafy Vegetables	• To evaluate the selected improve germplasm suitable for as a leafy vegetables.	Gazipur
335.	Effect of Biochar with Compost and Fertilizer on Growth and Yield of Potato	• To evaluate the effect of Biochar with Fertilizeron, growth, and tuber yield of potato and • To explore the effect of Biochar and Compost on soil properties and nutrients status.	Gazipur
336.	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 and • To evaluate the effects of tuber size and plant spacing for enhancing the productivity of BARI Alu 90.	Bogura (TCRSC)
337.	Effect Of Planting Times And Fertilizer Levels On Growth And Yield Of Beta-Carotene Content Sweet Potato	• To find outthe 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
338.	Effect Of Planting Time And Varieties On Yield Of Mukhikachu In Level Barind Tract (AEZ-25)	• To find outthe optimum date of sowing for desirable growth and yield of mukhikachu. • To determine a suitable variety for enhancing the productivity of	Bogura

Sl. No.	Research Title	Objective (s)	Location
		Mukhikachu and • To evaluate the combined effects of sowing date and variety for growth and yield of mukhikachu.	
339.	Effect of Spacing on Yield of Rhizome Producing Panikachu Varieties	• To evaluate the performance of rhizome producing Panikachu varieties and • To find out optimum plant spacing of rhizome producing Panikachu varieties.	Gazipur and Jamalpur
340.	Effect of Spacing on the Yield of Mukhikachu	• To select the appropriate Spacing for maximum Mukhikachu yield. • To find out optimum land use in cultivating mukhikachu.	Gazipur and Bogura
341.	Performance Of Late Blight Resistant Potato Varieties In Joypurhat Area	• To evaluate the performance of LB resistance varieties in late blight prone areas and • To collect the feedback of the newly released varieties.	Joypurhat
342.	Validation Trial Of Newly Developed Red Skin Potato Varieties In The Farmers Field	• Dissemination of red skin new variety (s) among the farmers and • To increase production and income through technology dissemination.	Joypurhat
343.	Performance Of Newly Developed High Yielding Early Potato Varieties In Banana-Potato Intercropping System	• Dissemination of early variety (s) among the farmers and • To increase production and income.	Shibganj, Bogura
344.	Effects of Seed Tuber Size and Variety on Yield and Quality Performance of Processing Potato Varieties Under Field Conditions	• To find out the effect of seed size and varieties growth performance and yield response of processing potato varieties and • To find out optimum seed tuber size for maximum yield of processing potato varieties.	Debiganj
345.	Effect of Seed Tuber Size and Spacing on Yield and Processing Quality of Potato Varieties.	• To determine optimum tuber size and spacing for maximum yield and quality of processing potato	Debiganj
346.	Effect of integrated Fertilizer management on Productivity	• To select safe and profitable potato production system	Gazipur.

Sl. No.	Research Title	Objective (s)	Location
	and Profitability of organic Potato Production	through application of biofertilizers	
347.	Effect of Different Botanical Pesticides to Control Potato Tuber Moth (PTM) under Storage Conditions	• To evaluate the potentials of some plant extract as organic pesticides for protecting the organic potato tubers from PTM infestation during storage condition.	Munshiganj and Bogura
348.	Effects of Botanicals to Control Late Blight Disease in Organic Potato Production under laboratory and Field Conditions.	• To identify the potential alternatives among the botanicals for controlling late blight in organic potato cultivation.	Gazipur
349.	Effects of Some Botanicals to Control Soft Rot Disease of Potato under Laboratory and Storage Conditions	• To evaluate some plant materials for the management of tuber soft rot bacteria caused by *Erwinia carotovora*	Gazipur and Munshiganj
350.	Efficacy of botanicals to control virus diseases transmitted by aphids in organic potato production.	• To find out the superior materials to reduce the virus infection in organic potato field.	Gazipur
351.	Effect of Botanical Pesticides to Control Selected Weeds and the Yield of Potato	• To find out the superior botanicals minimizing the impact of weed in organic potato field.	Gazipur
352.	Screening of Sweet Potato Varieties for Organic Cultivation System	• To identify the superior sweet potato varieties under low input organic production systems	Gazipur
353.	Integrated Nutrient Management for Potato –Groundnut- T.Aman cropping Pattern	• To develop a suitable fertilizer package for the cropping pattern and • To increase crop productivity and sustain soil health	Debiganj and Gazipur
354.	Determination of Fertilizer dose for BARI Panikachu-2 using missing element treatment	• To observe the response of panikachu to different nutrients and • To update and optimize the fertilizer package of panikachu matching the soil and agro climatic condition and • To maximize yield and quality panikachu	Gazipur and Bogura
355.	Effect of Thiovit on the Yield and Quality of Potato Through	• To evaluate the effect of thiovit as a source of sulphur in	Gazipur and Debiganj

Sl. No.	Research Title	Objective (s)	Location
	Controlling Scab Diseases.	controlling *Streptomyces scabies* in potato and • To find out the suitable dose of thiovit for maximizing the yield of potato.	
356.	Effect of Zinc on Biochemical Parameters, Processing Quality and Zinc Bio-Fortification in Potato Tuber	• To increase zinc concentration in potato tuber as bio-fortification. • To find out the suitable dose of zinc for potato and • To study the influence of zinc on the quality of potato tuber.	Gazipur and Debiganj
357.	Effect of Irrigation on the Growth, Yield and Quality of Potato Varieties	• To evaluate the influence of irrigation on the yield and quality of potato and • To find out optimum time of irrigation for reducing scab disease of potato	Debiganj
358.	Response of Potato to Phosphorous in Old Himalayan Piedmont Plain Soil	• To determine the optimum dose of phosphorus for maximizing the yield and quality of potato and • To evaluate the effect of P fertilizer on P uptake, fertilizer P recovery (FPR) and applied P use efficiency (APUE)of potato.	Debiganj
359.	Determination of Fertilizer Dose for Sweet Potato Vine Production	• To determine the optimize fertilizer dosefor sweet potato vine production	Gazipur and Bogura
360.	Assessment of Atmospheric Carbon Absorption Through Potato	• To find out suitable potato variety in respect of carbon absorption and • To assess the total carbon absorption trough potato cultivation in Bangladesh in climate change aspect. • To estimate the organic carbon adding in soil through potato residues.	Gazipur and Debiganj
361.	Effect of Cowdung and Nitrogen on the Quality and Shelf-Life of Potato Tubers	• To develop a suitable fertilizer package for optimum potato yield • To evaluate theimpactof combinedapplicationof inorganicfertilizerand organic manure on the post-harvest	Gazipur and Debiganj

Sl. No.	Research Title	Objective (s)	Location
		qualityand shelf-life of potato tubers and • To increase crop productivity and sustain soil health	
362.	Effect of Cow dung and Phosphorus on the Quality and Shelf-Life of Potato Tubers	• To develop a suitable fertilizer package for optimum potato yield • To evaluate theimpactof combinedapplicationof inorganicfertilizerand organic manure on the post-harvest qualityand shelf-life of potato tubers and • To increase crop productivity and sustain soil health	Gazipur and Debiganj
363.	Effect of Salinity on Growth, Yield and Quality of Some Selected Sweet Potato Genotypes	• To find out the thresh hold level of salinity tolerance of promising sweet potato genotypes and • To select salt tolerant promising sweet potato genotypes	Gazipur
364.	Screening of Sweet Potato Lines/CIP Clones for Salt Tolerance	• To select high yielding salt tolerant sweet potato lines/ CIP clones	Gazipur
365.	Determination of Fertilizer Dose for Cassava Production in Grey Terrace Soil	• To observe the response of cassava to different nutrients • To develop a suitable fertilizer package for the cassava production and • To increase crop productivity and sustain soil health	Gazipur
366.	Effects of Organic Manure and Inorganic Fertilizer on Anthocyanin Rich BARI Mishtialu-17	• To develop a suitable fertilizer package in combination of organic manure and chemical fertilizers • To study the quality components and storability of sweet potato root under different nutrient management and • To study the post-harvest soil properties	Gazipur and Jamalpur
367.	Survey and Monitoring of New Tuber Crops Diseases in Bangladesh	• To assess the abundance and severity of tuber crops diseases and • To identify the new disease with their causal organisms	

Sl. No.	Research Title	Objective (s)	Location
		Location: Gazipur, Munshiganj, Chattogram, Jamalpur, Jessore, Debigong, BADC seed production and On-farm: Rangpu, Bogura, Cumilla and other locations	
368.	Survey, Isolation and Identification of *Candidatus liberibacter* sp. Causing Zebra chips (ZC) Disease of potato	• To identify the pathogens using morphological characters and • To isolation and purification of the pathogen AND Location: Panchagarh, Thakurgaon, Dinajpur, Rangpur, Debiganj, Nilphamari, Lalmonirhat Kurigram, Jamalpur, Joypurhat and Bogura	
369.	Survey and Morphological Characterization of *Helmonthosporium solani* Causing Silver Scurf Disease of Potato	• To Identify incidence and severity the diseases • To collect the sample and characterize associated organisms and • To assess the market preferences Location: Panchagarh, Thakurgaon, Dinajpur, Rangpur, Debiganj, Nilphamari, Lalmonirhat, Kurigram, Jamalpur Joypurhat And Bogura	
370.	Evaluation of Potato Varieties and Advanced Lines against Late Blight Disease *in vitro* (Detached Leaf Methods) and *in vivo*.	• To find out the resistance level of potato varieties and advance lines against late blight disease.	Gazipur
371.	Screening of Selected Potato Varieties and Germplasm against Late blight Disease under field condition	• To confirm the resistant ability of varieties / germplasms and • To reduce the yield loss due to disease	Burirhat, Rangpur and Debiganj, Panchagarh
372.	Efficacy of Fungicides against Leaf Blight of Panikachu and Mukhikachu	• To select effective fungicides against P*hytophthora* leaf blight. • To reduce the yield due to the disease	Debiganj, Panchagarh and Burirhat Rangpur
373.	Effect of different organic matter for managing soil borne diseases (common scab and stem canker and black scurf) of potato	• To select effective organic amendment(s) for potato cultivation.	Debiganj, Panchagarh and Burirhat Rangpur
374.	Study on the effect of Different organic products against major disease causing pathogen of Potato	• To identify the effective organic products against major disease causing pathogen of Potato *in vitro.*	Gazipur
375.	Monitoring of disease status of BARI released potato varieties against common scab	• To study the tolerance level of BARI released potato varieties against common scab disease.	Gazipur and Debiganj, Panchagarh

Sl. No.	Research Title	Objective (s)	Location
376.	Screening of Early Potato Varieties/Germplasm against bacterial wilt and black leg Diseases	• To select the bacterial wilt and black-leg disease tolerant early varieties/germplasm and • To increase the early potato yield.	Debiganj and kishoreganj, Nilphamari (On-Farm)
377.	Management of Bacterial wilt disease on early potato varieties	• To find out the effective chemical against the disease.	Debiganj and kishoreganj, Nilphamari (On-Farm)
378.	Effect of sowing date on the incidence of bacterial wilt disease of early potato varieties/germplasm.	• To find out the suitable sowing date in early season and • To find out total yield in early situation.	Debiganj (On-Farm)
379.	Evaluation of Potato Varieties/Germplasm against PLRV and PVY	• To find out the virus disease resistant potato varieties/germplasm.	Gazipur
380.	Observational trial of Sweet Potato Varieties/Germplasm against virus diseases	• To identity the resistant or tolerant sources of germplasm.	Gazipur
381.	Detection of Potato Viruses (PLRV, PVY, PVX, PVM and PVS) in the Supplied Sample of Different Companies through DAS-ELISA	• To identify the potato viruses (PLRV, PVY, PVX, PVM and PVS) from samples of different companies for enhancing virus free seed potato production.	Gazipur
382.	Monitoring of Different Released Potato Varieties against Post-Harvest Diseases	• To find out the suitable varieties for long term storage under natural environmental condition.	Gazipur
383.	Development Of Biorational Based Management Approach Against Root Aphid (*Pemphigus* Sp.) Attacking Potato	• To find out the most effective management option for root aphid on potato and • To know the damage severity of the pest.	Joypurhat
384.	Evaluation Of Advanced Materials Of Potato Against Potato Cutwrom (*Agrotis Ipsilon*) in Field Condition	• To evaluate advanced lines of potato against cut worm in the field.	Bogura and Debiganj
385.	Development Of Management Package Against Sweet Potato Weevil in Field Condition	• To develop eco-friendly, cost effective and compatible IPM measures for the management of sweet potato weevil	Bogura
386.	Integrated Management Of Cutworm (*Agrotis Ipsilon*) In Potato	• To find out an effective management approach for potato cutworm.	Bogura
387.	Management Of Potato Tuber	• To find out an effective	Bogura

Sl. No.	Research Title	Objective (s)	Location
	Moth (Ptm) In Storage Condition	management approach for potato tuber moth (PTM) in storage and • To estimate the extent of damage by PTM.	
388.	Field Efficacy Of Attract And Kiil Method Against Potato Tuber Moth In Field Condition	• To know the effectiveness of attract and kill method against potato tuber moth in field. • To monitor of the population of PTM in the field condition and their extent of damage.	Bogura Munshiganj and Debiganj
389.	Survey And Monitoring Of New Pest Arthropods Infesting Tuber Crops	• Identification of insect pests attacking tuber crops and • Determination of damage severity of insect pests. Location: Gazipur, Bogura, Debiganj, Jamalpur, Rajshahi, Cumilla, Jeshore and Munshiganj	
390.	Screening Of Different Sweet Potato Varieties/Lines Against Potato Weevil *(Cylas Fromicarius Fab.)*	• To identify the suitable varieties/lines resistance/tolerant to sweet potato weevil infestation and • To determine the effects of sweet potato weevil infestation on the yield.	Bogura Munshiganj and Debiganj
391.	Survey, Monitoring And Documentation Of Major Insect Pests Of Mukhikachu	• Identification of insect pests attacking aroid and • Determination of damage severity of insect pests	Bogura
392.	Studies On Succession Of Insect-Mite Pests On Yam	• Identification of insect pests attacking yam. • Determination of damage severity of insect pests over time.	Bogura
393.	Studies On Succession Of Insect-Mite Pests On Cassava	• Identification of insect pests attacking cassava. • Determination of damage severity of insect pests.	Bogura
394.	Production, Distribution and *In Vitro* 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.	Gazipur and Debiganj
395.	Production of Minituber (G_0) of Popular BARI Released Potato Varieties at Net House and	• To produce G_0 generation seeds in net house and green house conditions from disease free	Gazipur (Tissue culture lab, net house

Sl. No.	Research Title	Objective (s)	Location
	Selected from Amo T. E.; Test clones – A/8/37, A/8/55, A/8/62 and A/8/66 against Standard BT2.	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 and • 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.	Experimental Farm)
22	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.	• 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 and • 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.	Srimangal (BTRI Experimental Farm)
23	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.	• 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 and • In order to release clones for cultivation 24from the test clones under trial which have desirable characteristics of commercial importance i.e. yield, cup quality, tolerant to insect, disease, drought etc.	Srimangal (BTRI Experimental Farm)

Sl. No.	Research Title	Objective (s)	Location
24	B2-44: Yield and Quality Trial of Three Test clones Selected from Amo and Phulcherra T. Es.; Test clones– A/8B/1, Ph/9B/1, Ph/9/11 and against Standard BT1.	• 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 and • 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.	Srimangal (BTRI Experimental Farm)
25	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.	• 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 and • 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.	Srimangal (BTRI Experimental Farm)
26	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.	• 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 and • 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,	Srimangal (BTRI Experimental Farm)

Sl. No.	Research Title	Objective (s)	Location
		tolerant to insect, disease, drought etc.	
27	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.	• 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 and • 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.	Srimangal (BTRI Experimental Farm)
28	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 A/11/38 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 and • 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.	Srimangal (BTRI Experimental Farm)
29	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.	• 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 and • In order to release clones for cultivation from the test clones under trial which have desirable	Srimangal (BTRI Experimental Farm)

Sl. No.	Research Title	Objective (s)	Location
		characteristics of commercial importance i.e. yield, cup quality, tolerant to insect, disease, drought etc.	
30	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 .	• 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 and • 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.	Srimangal (BTRI Experimental Farm)
31	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.	• 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 and • 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.	Srimangal (BTRI Experimental Farm)
32	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	• 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 and • In order to release clones for	Srimangal (BTRI Experimental Farm)

Sl. No.	Research Title	Objective (s)	Location
	(BTRI, 2017-2034).	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.	
33	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).	• 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 and • 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.	Srimangal (BTRI Experimental Farm)
34	B2-54: Yield and Quality Trial of Four 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).	• 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 and • 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.	Bilashcherra Experimental Farm
35	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	• 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	Bilashcherra Experimental Farm

Sl. No.	Research Title	Objective (s)	Location
	Clones– P/RJG/6/57, P/KRM/11/46, P/RJG/6/48 and P/CHM / 18 /79 against Standard BT2 (BTRI, 2019-2032).	susceptible to pests and • 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.	
36	B2-56: Long term Yield and Quality Trial of Four Test Clones (Multi-location trail) at Amo Tea Estate against Standard BT2 (2019-2032).	• 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 and • 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.	Srimangal (BTRI Experimental Farm)
37	B2-57: Long term Yield and Quality Trial of Four Test Clones (Multi-location trail) at Hafiz Tea Estate against Standard BT2 (2019-2032)	• 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 and • 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.	Srimangal (BTRI Experimental Farm)
38	B3-1.1: Controlled Pollination between Selected Clones/Agro-types and Selection of Generative	• To study compatibility between different clones and agro-types. • To observe seed setting ability of different cross combinations. • To observe hybrid vigour of seed	Srimangal (BTRI Experimental Farm)

Sl. No.	Research Title	Objective (s)	Location
	Clones for the Establishment of Clonal Seed Reserve (1964-)	progeny. • 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.	
39	B-1.3: Establishment of polyclonal seed baries according to the proposed model by the Institute and observation on the open pollinated progenies.	• To study compatibility between different clones and agro-types • To observe seed setting ability of different cross combinations • To observe hybrid vigour of seed progeny • To identify suitable generative clones or agro-types for hybrid seed (bi-clonal seed) production in order to select vegetative clones from hybrid progeny having desirable characters and • To evaluate indigenous and exotic bi-clonal seeds	Srimangal (BTRI Experimental Farm)
40	B3-1.5: Establishment of a Biclonal Seed with Clones TV18 and BT3.	• To study compatibility between different clones and agro-types • To observe seed setting ability of different cross combinations • To observe hybrid vigour of seed progeny • To identify suitable generative clones or agro-types for hybrid seed (bi-clonal seed) production in order to select vegetative clones from hybrid progeny having desirable character and • To evaluate indigenous and exotic bi-clonal seeds.	Srimangal (BTRI Experimental Farm)
41	B3-1.8: Comparative Yield and Quality Trial of BTRI Released Biclonal Stock BTS1, Biclonal Stock T18B3, Allynugger Polyclonal Stock (ANPS),	• To study compatibility between different clones and agro-types • To observe seed setting ability of different cross combinations. • To observe hybrid vigour of seed progeny. • To identify suitable generative	BTRI Experimental Farm

Sl. No.	Research Title	Objective (s)	Location
	Phulbari General Seed Stock (PBS) and Clone BT1 (BTRI, 1999-2020)	clones or agro-types for hybrid seed (bi-clonal seed) production. • In order to select vegetative clones from hybrid progeny having desirable characters. • To evaluate indigenous and exotic bi-clonal seeds.	
42	B3-1.9: Comparative Trial of 4 Bi-clonal Seed Stocks (BTS1, BTS3, TV18 × BT3 & TS463) and 3 Parental Clones (BT1, TV1 and TV19) (2002-2020)	• To study compatibility between different clones and agro-types • To observe seed setting ability of different cross combinations. • To observe hybrid vigour of seed progeny. • To identify suitable generative clones or agro-types for hybrid seed (bi-clonal seed) production. • In order to select vegetative clones from hybrid progeny having desirable characters	BTRI Experimental Farm
43	B3-8: Survey and Conservation of Gene Resources of Tea in Bangladesh (BTRI, 1981-)	• To study compatibility between different clones and agro-types • To observe seed setting ability of different cross combinations. • To observe hybrid vigour of seed progeny. • To identify suitable generative clones or agro-types for hybrid seed (bi-clonal seed) production. • In order to select vegetative clones from hybrid progeny having desirable characters	BTRI Experimental Farm
44	B3-11: Detailed survey and assessment of tea seed baries in Bangladesh (1985-). a. Survey and isolation of mother bush of breeding value in Parkul Tea Estate Seed Barie (2019-2020).	• To survey and assessment of tea seed baries	Parul Tea Estate

Sl. No.	Research Title	Objective (s)	Location
45	B3-11: Detailed survey and assessment of tea seed baries in Bangladesh (1985-).	• To survey and assessment of tea seed baries	Monipore Tea Estate
46	B3-11: Detailed survey and assessment of tea seed baries in Bangladesh (1985-).	• To survey and assessment of tea seed baries	Merina Tea Estate
47	B3-12: Morphological characterization of BTRI released clones, some test clones and wild genotypes.	• Classify groups of genotypes using IBPGR criteria as descriptor related tea • Identify accessions with desired traits and select entries for more precise evaluation • Develop interrelationships between, or among traits and between groups of genotypes and • Estimate the extent of variation in the genotypes.	Srimangal (BTRI Experimental Farm)
AGRONOMY DIVISION			
48	Development of a new pruning cycle for higher sustainable tea yield in the context of present climate change.	• To identify the best pruning cycle in the context of present climate change. • To find out a standard pruning cycle for specific bush architecture.	Srimangal (BTRI Experimental Farm)
49	Development of a tool for easy and effective transplanting of tea saplings in the nursery.	• To innovate different transplanting tools for the tea nursery. • To identify the best tool for easy and effective transplanting of tea saplings in the nurse	Srimangal (BTRI Experimental Farm)
50	Effects of different types of compost on growth and development of clonal tea	• To know the impact of different types of compost on growth, development of young tea plants which might also reduce the impact	Srimangal (BTRI Experimental

Sl. No.	Research Title	Objective (s)	Location
		of drought.	Farm)
51	Effects of foliar application of different chemical fertilizers on growth, development and yield of tea	• To know the effect of Drastic and sudden reduction of yield may be due to excess application of macronutrients containing chemical fertilizers on foliage of tea bushes.	Srimangal (BTRI Experimental Farm)
52	Mechanization in pruning and its impact on the yield of tea.	• To check the impact of pruning mechanization on the yield of tea and • To find out the best pruning policy using pruning/trimming machines.	Srimangal (BTRI Experimental Farm)
53	Implementation of grafting technique to produce composite tea plant in the nursery for increasing yield and drought resistance capacity of the plant	• To develop drought resistant tea plants as well as to increase the yield.	Srimangal (BTRI Experimental Farm) and BTRI V.P nursery
STATISTICS AND ECONOMICS DIVISION			
54	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 and • 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.	Tea Estates of Bangladesh (166)
55	Economic efficiency of some selective test clones and standard clones of BTRI	• Study the economic efficiency of the test clones in respect of yield • To find out the economic efficient test clone(s) comparing internal rate of return and • Use of economic performance as a parameter for suitable selection of significant clone(s).	Srimangal (BTRI Experimental Farm)

Sl. No.	Research Title	Objective (s)	Location
BIOCHEMISTRY DIVISION			
56	Assessing biochemical and sensory changes of tea during standardization of a modern green tea production unit for manufacturing quality green tea.	• To standardize the green tea production technique using the modern green tea production unit and • To identify the major chemical constituents, present in the final product.	Newly established green tea factory and in the tea testing room of BTRI.
57	Development of different value-added products using the tea flavor.	• To invent different diversified products using the tea flavor and • Develop standard protocols for the production of diversified tea products.	Biochemistry division of BTRI
ENTOMOLOGY DIVISION			
58	Bio-pesticides as promising alternatives to chemical pesticides for sustainable management of tea insect pests	• To determine the effects of bio-pesticides against looper caterpillar in tea and • To find out the comparative efficacy of micro-bials and chemicals to looper caterpillar	Entomology Laboratory, BTRI and BEF experimental farm
59	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 and V.P nursery, BTRI
60	Screening of pesticides against *Helopeltis*, Red spider mites, Termites, Looper caterpillar, Thrips & Nematodes in tea	• To evaluate the effectiveness of commercial formulations of different insecticides against major insect pests in tea	BTRI main farm and Bilashcherra experimental farm

BANGLADESH FOREST RESEARCH INSTITUTE

BANGLADESH FOREST RESEARCH INSTITUTE

Sl. No.	Research Title	Objective (s)	Location
AGRICULTURE(BOTANY DIVISION)			
01	Floristic composition and regeneration status of Lawachara National Park, Moulvibazar and Dudpukuria-Dhopachari Wildlife Sanctuary, Chattogram	• To prepare a checklist of forest flora of Lawachara National Park and Dudhpukuria-Dhopachori Wildlife Sanctuary • To assess the regeneration status of tree species in different habitats of Lawachara National Park and Dudhpukuria-Dhopachori Wildlife Sanctuary and • To develop a data base on regeneration status of Lawachara National Park and Dudhpukuria-Dhopachori Wildlife Sanctuary.	Chattogram
02	Vegetation Status and Natural Regeneration of Rema-Kalenga Wildlife Sanctuary of Bangladesh	• To prepare a checklist of forest trees, woody shrubs and climbers of Rema-Kalenga Wildlife Sanctuary • To observe the regeneration status of tree species in different habitats of Rema-Kalenga Wildlife Sanctuary and • To develop a data base on regeneration status of Rema-Kalenga Wildlife Sanctuary.	Chattogram
MANGROVE SILVICULTURE DIVISION			
03	Impact of climate change on floral biodiversity in the Sundarban.	• 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 Sundarban and • To assess the floral biodiversity of the Sundarban	Khulna

Sl. No.	Research Title	Objective (s)	Location
04	Conservation of mangrove species in the three arboretum areas of three salinity zones in the Sundarban	• To conserve and demonstrate floral species in natural habitat in the Sundarban • To centralize threatened mangrove species and • To enrich the biodiversity of the Sundarban.	Khulna
Wildlife Section			
05	Avian species diversity of Dhanmondi Lake Areas, Dhaka and role of its green space for the conservation of Birds	• To identify the avian species of Dhanmondi Lake Areas • To determine the avian species abundance of Dhanmondi Lake areas and • To find out the existing feeding, nesting and cover facilities of the habitat for the birds Dhanmondi Lake areas, Dhaka	Dhaka
06	Wildlife diversity of Mohamaya Eco-Park,Mirshari, Chattogram	• 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 and • To identify the major threats to the wildlife species of Mohamaya Eco-Park.	Chattogram

Sl. No.	Research Title	Objective (s)	Location
FOREST INVENTORY DIVISION			
07	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 ES • To measure the importance of ES of the park to public and decision makers and • Recommend the necessary measures for conservation of the park to sustain the ecosystem services	Chattogram
08	Economic impact assessmer rubber wood (*Hevea brasilie* Bangladesh.	• To estimate tree volume of the matured rubber plantations raised in various year and locations. • To collect previous harvested trees of rubber plantations that recorded converting potential timber from rubber wood and • To assess the relative profitability of potential timber from rubber wood with rubber wood as fuel-wood. To determine reducing GHG emission due to converting timber from rubber wood.	Chattogram
09	Impact analysis of Nursery Pest and Disease Management Technology of BFRI	• To evaluate economic benefit from nursery using nursery pest and disease management technique and • To assess local farmer's attitude towards adopting the technology.	Chattogram

Sl. No.	Research Title	Objective (s)	Location
10	Growth, Yield and Carbon Storage of Rubber tree, (*Hevea brasiliensis.* 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 and • 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 and • To assess carbon stock (above and below ground) in home garden.	Chattogram
FOREST PROTECTION DIVISION			
12	Biological control of bacterial and fungal diseases of three plants[Ghritkumari (*Aloe barbadensis*), Bashok (*Adha* and Kalmegh (*Andrographis* in Bangladesh	• To survey the disease incidence % of three medicinal plants at major medicinal plant cultivation areas of Bangladesh and identify the causal organism • To identify biological control agents against bacterial and fungal pathogens and • To find out a management strategy for biological control of important bacterial and fungal diseases of three medicinal plants.	Chattogram

Sl. No.	Research Title	Objective (s)	Location
13	Neem (*Azadirachta indica* mortality in Northern part of and its management	• To find out the spread and also the extent of damage in the Neem plantation area • To find out the primary cause of Neem mortality and • To determine suitable control measures of mortality of Neem.	Chattogram
14	Identification and Evaluation of Entomo-pathogenic Fungi to ControlLepidopteran Pests of Important Forest Tree species [Teak (*Tectonagrandis*L.), Koroi (*Albizia*spp.) and Agar *(Aquilariamalacce* L.)]	• To evaluate the bio-efficacy of entomopathogenic fungal species on the lepidopteran pests of Teak, koroi and Agar tree and • To evaluate the suitability of different substrates for mass multiplication of entomopathogenic fungi	Chattogram
MANGROVE SILVICULTURE DIVISION			
15	Vegetation dynamics and regeneration pattern in relation to salinity and siltation of the Sundarban	• To determine the species composition. • To determine the natural regeneration status of major mangrove species • To understand the vegetation dynamics in the Sundarban over time and • To assess the impact of salinity and siltation on the change of vegetation.	Chattogram
Sl. No.	**Research Title**	**Objective (s)**	**Location**
16	Nursery and plantation techniques of Moth goran (*Ceriops tagal*) in the Sundarbans.	• To develop nursery and plantation techniques of moth goran and • To conserve the species and biodiversity.	Khulna
SEED ORCHARD DIVISION			

Sl. No.	Research Title	Objective (s)	Location
17	Development of Vegetative Propagation techniques of important forest tree species of Gutgutya and Banderhola.	• To develop a suitable vegetative propagation technique for Gutgutia and Banderhola and • To produce and supply of quality planting materials of Gutgutia and Banderhola to the planter	Chattogram
18	Development of seed Sources of Boilam,Dharmara Civit and Gutgutya through establishment of seedling seed orchard	• To establish seed source of five endangered species and • To conserve five endangered indigenous species.	
SILVICULTURE GENETICS DIVISION			
19	Molecular characterization o forest tree species viz. boilan (*Anisoptera scaphula*), shada *(Dipterocarpus costatus*) and (*Dipterocarpus turbinatus*) through DNA ba	• To identify the plant species based on extracting a DNA sequence from a tiny tissue sample and • To make a distinction from particular species, varieties or even inter varieties.	Chattogram
20	Micro-propagation and genet of variation in regenerated Plants of. African Teak oak (*Chlorophora excelsa*), Boilam (*Anisoptera scaphula* Taxodium (*Taxodium mucronatum)*.	• To develop high micro-propagation efficiency for the selected species • Production of quality planting stock in a short time and • Replication of improve genetic material through medium to long term conservation.	Chattogram
Sl. No.	**Research Title**	**Objective (s)**	**Location**
21	Development of tissue cultur for four new bamboo species viz., *Dendrocalamus asper*, *D. sinicus*, *D. latiflorous,* and *D. edulis*.	• To develop *in vitro* protocol for the new bamboo species • Production of quality bamboo seedlings for largescalecultivationand • Toconserve i*n vitro* plants	Chattogram

Sl. No.	Research Title	Objective (s)	Location
22	Development of improved protocols for *in vitro* plant regeneration of selected rubber (*Hevea brasiliensis*). clones.	• To establish embryogenic callus culture and plant regeneration protocol via somatic embryogenesis from potential explants of *H. brasiliensis* • To evaluate the *in vitro* micro-propagation capacity of somatic embryo derived plants and • To produce a homogenous plant population of selected rubber clone.	Chattogram
SEED ORCHARD DIVISION			
23	Early evaluation and Production of quality planting materials of nin forest tree species.	• To evaluate, produce and supply of quality planting materials to the planters and • To develop Linkage with planters for awareness about the importance and benefits of quality seedlings.	Chattogram
Sl. No.	**Research Title**	**Objective (s)**	**Location**
24	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 and • To strengthen the BFRI seed testing laboratory.	Chattogram
25	Development of nursery techniques of four important endangered indigenous forest tree species.	• To standardize the nursery techniques of selected indigenous forest tree species and • To provide quality seedlings to planters for successful plantation establishment.	
Sl. No.	**Research Title**	**Objective (s)**	**Location**
MANGROVE SILVICULTURE DIVISION			

Sl. No.	Research Title	Objective (s)	Location
26	Ex-situ conservation of major mangrove species at the adjacent char land areas of the Sundarban.	• To ex-situ conservation major mangrove species in the adjacent char land of the Sundarban and • To expand the mangrove ecosystem and biodiversity	Khulna
MINOR FOREST PRODUCTS DIVISION			
27	Nursery techniques of three medicinal plants: ankor kanta (*Alangium salvifolium*), sindur (*Mallotus philippinensis*) and kau (*Garcinia cowa*).	• To develop nursery techniques for production of planting materials. • To develop plantation and management techniques for sustained yield and • To popularize cultivation and use of those medicinal plants.	Chattogram
28	Germplasm conservation and management practices of different medicinal plants	• To authenticate correct identification of 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 and • To determine management techniques for maximum yield of medicinal plants.	Chattogram
29	Screening of host /nurse plants for raising chandan (*Santalum album*) plantation	• To select suitable host plants for raising chandan plantation and • To develop plantation and management techniques for sustain yield..	Chattogram
30	Development of vegetative propagation technique for cashew nut (*Anacardium occidentale* L.)	• To develop a vegetative propagation technique and • To facilitate the production of planting materials to improve the yield of cashew.	Chattogram
Sl. No.	**Research Title**	**Objective (s)**	**Location**

Sl. No.	Research Title	Objective (s)	Location
SILVICULTURE GENETICS DIVISION			
31	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 and • To develop linkage with different stakeholders of BFRI.	Chattogram
PLANTATION TRIAL UNIT DIVISION			
32	Growth performance of bamboo and rattan in the coastal raised lands of Bangladesh	• To investigate the possibility for introduction of bamboo and rattan inside the older keora plantations • To select suitable bamboo and rattan species in the coastal areas and • To increase the productivity of bamboo and rattan in the coastal areas.	Chattogram
33	Plantation techniques of some understoried mangrove associates inside keora plantations in the coastal belt of Bangladesh	• To develop better techniques for raising nursery and plantations of some important understoried mangrove species inside keora plantations and • To select suitable mangrove species for coastal areas of Bangladesh.	Chattogram
34	Standardization of plantation techniques and site suitability of palm species in the Eastern zone of Bangladesh	• To standardize the plantation techniques of mainland palm species for large scale plantation in the eastern zone of Bangladesh. • To enrich palm biodiversity in the coastal areas for reducing climate change induced problems and • To select site-suitable palm species in the eastern coastal areas of Bangladesh	Chattogram

Sl. No.	Research Title	Objective (s)	Location
35	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 and • To develop future seed sources for sustainable coastal forest management.	Chattogram
36	Growth performance of *Avicennia alba* and *Avicennia marina* in the western coastal belt of Bangladesh	• To select site suitability of two *Avicennia* species in the western coastal areas of Bangladesh and • To asses the growth performance of two baen species in the western coastal belt of Bangladesh	Chattogram
SILVICULTURE RESEARCH DIVISION			
37	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 and • To determine the factors influencing the growth performance. To determine the silvics of different forest tree species.	Chattogram
38	Growth performance of three indigenous fast growing tree species Gamar (*Gmelina arborea*), Toon (*Toona ciliata*), and ShilKoroi (*Albizia procera*).	• To select plantation technique for timber and fuel wood production for native fast growing tree species • To find the site suitability and • To assess the growth performance.	Chattogram
39	Development of plantation technique for Jigni (*Trema orientalis*) for pulpwood production.	• To standardize nursery technique of *T. orientalis and* • To standardize suitable plantation technique of *T. orientalis*	

Sl. No.	Research Title	Objective (s)	Location
PLANTATION TRIAL UNIT DIVISION			
40	Successional change of vegetation and growth in coastal plantations.	• To observe the changes of vegetation and natural regeneration in the coastal man-made forests and • To determine the impact of related climatic factors, which are responsible for the change of vegetation in the coastal forest.	Chattogram
SOIL SCIENCE DIVISION			
41	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 • and • To involve the local communities for sustainable land management	Chattogram and Badarban
42	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 and • To assess the growth and survival of different bamboo species in the coastal areas of Chattogram	Chattogram
FOREST CHEMISTRY DIVISION			
43	Super-hydrophobic coating of finished wood for more durability and self-cleaning.	• To develop a super hydrophobic coating for finished wood	Chattogram
44	Extraction of agar oil by steam distillation	• Rapid processing and extraction of agar oil by steam-distillation to ensure higher yield.	Chattogram

Sl. No.	Research Title	Objective (s)	Location
PULP AND PAPER DIVISION			
45	Improvement of strength properties of recycled packaging fiber materials	• To determine the optimum ratio of virgin pulp and reuse pulp in mixture with respect to quality pulp and • To reduce environment pollution from conventional pulping process. To increase strength properties of packaging materials.	Chattogram
46	Response of hydrogen peroxide, environment friendly bleaching agent, on gamar wood (*Gmelina arborea*) pulp	• To investigate the bleaching response of H_2O_2 on gamar wood pulp and • To determine the optimum condition for pulp bleaching.	Chattogram
WOOD PRESERVATION DIVISION			
47	Effect of preservative treatment on physical and mechanical properties of Am (*Mangifera indica*), Rubber *(Hevea brasiliensis*) and Rajkoroi (*Albizia richardiana*) wood.	• To find out the effect of preservative treatment on physical and mechanical properties of wood. • To determine the treatability and natural durability of wood species and • To disseminate the information to the end-users.	Chattogram
48	Treatability and natural durability of kala-koroi (*Albizia lebbeck*) (L.) Benth and pitali (*Trewia nudiflora*) wood.	• To evaluate treating schedule of preservative treatment for kala-koroi and pitali wood • To determine outdoor service life of wood after preservative treatment and • To disseminate the information to the end-users.	Chattogram

Sl. No.	Research Title	Objective (s)	Location
49	Effectiveness of Disodium OctaborateTetrahydrate (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 and • To disseminate the information to the end-users.	Chattogram
FOREST BOTANY DIVISION			
50	Anatomical variation of lambu (*Khaya anthotheca*) and mahogany (*Swietenia macrophylla*) tree in relation to three selected aro-ecological regions of Bangladesh	• To determine the detail gross and minute anatomical features of the lambu and mahogany species grown in Bangladesh and • To develop a database on anatomical properties of the species for determining better utilization of the wood.	Chattogram
SEASONING AND TIMBER PHYSICS DIVISION			
51	Determination of physical and mechanical properties of Brandisi bansh (*Dendrocalamus brandisii)* andThai bansh *(Thyrsostachys siamensis)*.	• To investigate the effect of heat treatment on physical and mechanical properties of wood and • To asses the suitability of wood for making furniture and construction materials.	Chattogram
52	Determination of Physical and mechanical properties of Rangoon bansh *(Thyrsostachys olivery)*.	• To assess the suitability of bamboo species for various uses.	Chattogram
53	Effect of heat treatment on physical and mechanical properties of Mahogani (*Swietenia machrophylla*) and *Acacia* Hybrid	• To investigate the effect of heat treatment on physical and mechanical properties of wood • and • To asses the suitability of wood for making furniture and construction materials.	Chattogram

Sl. No.	Research Title	Objective (s)	Location
54	Determination of physical and mechanical properties of Gamar (*Gmelina arborea*), Mango *(Mangifera indica)* and Silkoroi (*Albizia procera*) through heat treatment.	• To investigate the effect of heat treatment on physical and mechanical properties of wood • and • To asses the suitability of wood for making furniture and construction materials.	Chattogram
VENEER AND COMPOSITE WOOD PRODUCTS DIVISION			
55	Suitability of manufacturing medium density fiberboard (MDF) made from borak (*Bambusa balcooa*) bamboos.	• To determine the suitability of medium density fiberboard made from borak (*Bambusa balcooa*) bamboos.	Chattogram
56	Suitability of medium density fiberboard (MDF) made from Mahogany *(Swietenia macrophylla)* wood	• To determine the suitability of medium density fiberboard made from *Swietenia macrophylla* wood.	Chattogram
WOOD WORKING AND TIMBER ENGINEERING DIVISION			
57	Potential uses of Toon (*Toona ciliata*) wood for furniture and construction materials.	• To assess the suitability of Toon (Toona ciliata) wood for furniture and other utilization purposes and • To decrease the pressure on traditional timber species.	Chattogram
58	Characterization of Tetuya Koroi (*Albizia odoratissima)* wood for working and finishing properties.	• To assess the suitability of Tetua Koroi (Albizia odoratissima) for furniture and other utilization purposes and • To decrease the pressure on traditional timber species.	Chattogram

COTTON DEVELOPMENT BOARD

COTTON DEVELOPMENT BOARD

Sl. No.	Research Title	Objective(s)	Location
BREEDING DISCIPLINE			
1	Non-Replicated Progeny Row Trial of Upland cotton	• To select the superior genotypes for new acquisition trials.	Mahigonj (Cotton Research Center)
2	Screening of upland cotton *(Gossypiumhirsutum*) in hilly area	• To identify the suitable variety for hilly area	Balaghata, Bandarban (CRC)
3	Replicated Progeny Row Trial of Upland cotton	• To select the superior genotypes for New acquisition trials	Mahigonj (CRC)
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.	Rangpur Dinajpur Jessore and Gazipur (CRC)
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.	Rangpur Dinajpur Jessore and Gazipur(CRC)
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 • Location : Jashore,Jhenaidha,Chuadanga,Kushtia,Bogura,Rajshshai,Thakurgaon, • Dhaka,Mymensingh,Rangamati,Khagrachari andBandarban.	
Hybridization			
7	Development of Colored Cotton Varieties	• To develop cotton hybrid variety and • To develop short duration cotton variety	Sreepur, Gazipur (Cotton Research, Training and Seed Multiplication Farm)
8	Development of Short Duration Cotton Variety (F_4 Generation)	• To develop cotton hybrid variety and • To develop short duration cotton variety	Sreeepur, Gazipur
Germplasm maintenance			

Sl. No.	Research Title	Objective(s)	Location
10	Collection, Characterization and Conservation of Cotton Germplasm	• To increase the genetic resources a • To know the qualitative and quantities characters of the collected germplasm for future use.	Mahigonj (CRC)
11	Evaluation of Introduced Chinese Hybrid Cotton	• To test the adaptability and yield potentiality of the hybrids	Jagodishpur, Jashore (CRF)
12	Evaluation of Introduced Chinese Hybrid Cotton	• To test the adaptability and yield potentiality of the hybrids	Jagodishpur, Jashore.
Mutation Breeding			
13	Evaluation M4 mutant population.	• To select desirable mutants	Sreepur, Gazipur
14	Evaluation of the Cotton Mutant Varieties Obtained from IAEA	• To know the performances of the mutant varieties obtained from IAEAin comparison with CDB developed varieties by reducing plant spacing	Jagadishpur
AGRONOMY DISCIPLINE			
15	Effects Of Potassium And Fungicide On Cotton Leaf Spot Disease And Yield	• To study the effect of granular potassium applied prior to planting, and/or a fungicide application at mid-bloom, on the development of Alternaria Leaf Spot and cotton yield.	Sreepur, Gazipur.
16	Impact of salinity on seed germination and seedling growth of Cotton	• To find out the effects of salinity stress on seed germination and seedling growth and • To identify salt tolerant varieties	Sreepur, Gazipur.
SOIL SCIENCE DISCIPLINE			
17	Effect of Lime on yield and Yield Contributing Characters of Upland cotton	• To determine the optimum dose of lime for cotton cultivation	Sreepur, Gazipur
18	Testing of Some Control Measures in Indigenous	• To observe the efficiency used of different doses treatments in killing nymph stages of Red Cotton Bug(RCB).	Balaghata, Bandarban (CRC)

	Technology Knowledge (ITK) on Red Cotton Bug.		
20	Documentation of Insect Pests on Upland Cotton Grown in Hilly Area.	• To set up an experiment to run at different times, to record insect biodiversity on upland cotton and • To study the nature of insect pests infesting upland cotton.	Balaghata, Bandarban
21	Efficacy of fungicide to control Ball Rot of cotton	• To identify effective fungicide to control ball worm	

BANGLADESH SERICULTURE RESEARCH AND TRAINING INSTITUTE (BSRTI), RAJSHAHI

BANGLADESH SERICULTURE RESEARCH AND TRAINING INSTITUTE

Sl. no.	Research Title	Objective (s)	Location
MULBERRY SECTION (MULBERRY BREEDING)			
1 2 3	Collection conservation and evaluation of mulberry genetic resources. Selection of developed mulberry varieties from open pollinated seeds. Development of mulberry varieties through hybridization.	• To increase the genetic materials of mulberry for further varietal development • To select the develop varieties from open pollinated seeds • To available the mulberry genotype superior to the existing genotype and to develop the high yielding mulberry varieties.	Rajshahi
MULBERRY PATHOLOGY			
4 5 6. 7	Study on the occurrence of major mulberry disease and pest in the aspect of changing climate Study on the acute infestation period for different diseases and pests in the aspect of changing climates. Study of the impact of bio-organic amendments / botanical extracts on the infestation of major pests diseases and leaf productively. Study of the impact of different plantation systems on the infestation of major pests and foliar disease	• To identify the major disease and pest of mulberry plant • To identify the acute infestation period of mulberry disease and pest. • To estimate the impact of bio-organic amendments/ botanical extracts on the infestation of major pests diseases and leaf productively and • To estimate the impact of the mulberry plantation system on infestation of major pests and foliar disease.	Rajshahi
SILKWORM SECTION (SILKWORM BREEDING)			
8 9	Screening of high yielding multi × bivoltine hybrids suitable for Agrohayoni season. Screening of high yielding multi × bivoltine hybrids suitable for Chaita season.	• To select season wise hardy hybrid combinations in favorable condition of Bangladesh.	Rajshahi
SERI CHEMISTRY (MULBERRY NUTRITION)			
10	Study on nutritional properties of	• To find out mulberry leaf	Rajshahi

Sl. no.	Research Title	Objective (s)	Location
11	mulberry varieties at drought condition. Study on nutritional properties of mulberry varieties at water logging condition.	nutrition at drought condition • To find out mulberry leaf nutrition at water bogging condition.	
SILK TECHNOLOGY (SILK QUALITY IMPROVEMENT)			
12 13	Fabrication of spinning machine with re-reeling devices Comparative study of reeling performance of multi-end reeling machine and cottage basin reeling machine for qualitative and quantitative improvement of raw silk production.	• Suitable spinning machine will be developed • To find out suitable reeling methods/ devise for improving productivity of quality raw silk production.	Rajshahi
MULBERRY SECTION (MULBERRY AGRONOMY)			
14	Fertilizer dose recommendation mulberry variety BM-9, BM-10 and BM-11	• To updating the fertilizer doses for newly developed mulberry varieties	Rajshahi
SILKWORM PATHOLOGY			
15 16 17	Screening of effective chemicals/disinfectants against bacterial diseases of silkworm Screening of effective chemicals / disinfectants against viral diseases of silkworm Screening of effective chemicals/disinfectants against silkworm pests.	• To screening effective disinfectants for controlling silkworm diseases and pest	Rajshahi

BANGLADESH FISHERIES RESEARCH INSTITUTE

BANGLADESH FISHERIES RESEARCH INSTITUTE

Sl. No.	Research Title	Objective (s)	Location
MYMENSINGH (FRESH WATER STATION)			
01	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 and • To identify freshwater fishes at the species level based on DNA barcoding data	Mymensing
02	Conservation and Seed Production of important endangered fish species in Bangladesh	• To refine breeding technique of Dhela (Osteobrama cotio) and Rani (B. dario) for mass seed production • To develop nursery and culture technique of Dhela (O. cotio) and Rani (B. dario) in ponds under different stocking density • To collect and domesticate Hiralu (Barilius bendelisis), Gang tengra (Gagata youssoufi) and Garua (Clupisoma garua) • To investigate the efficacy of different hormones doses for induced breeding of Hiralu (Barilius bendelisis), Gang tengra (Gagata youssoufi), Mohashoal (T. tor) and Garua (Clupisoma garua) • To collect indigenous freshwater fish species from different regions for live gene-bank	Mymensing
03	Improvement of freshwater pearl culture techniques in Bangladesh	• Improving existing techniques for producing different types of freshwater pearls and • Estimating economics of pearl culture	Mymensing
04	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	Mymensing

Sl. No.	Research Title	Objective (s)	Location
		• To determine the antibiotic resistivity of isolated pathogens and • To find out the protective measures against diseases	
05	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 (haor & beel) 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 and • To assist for farming or formulating ecosystem based management approach for inland open waters with emphasizing to increase productivity and conservation of fisheries resources	Mymensing
06	Culture of Indigenous Small Fishes in Biofloc Aquaculture System (Component-A)	• To optimize the stocking density of Shing, Heteropneusteus fossilis and Pabda, Ompok pabda / Gulsha, Mystus cavasius in Biofloc system • To evaluate the growth and production of Prawn, M. rosenbergii in Biofloc system • To evaluate the growth & production of Magur, Clarias batrachus in Biofloc system and • To analyse the economic benefits of Biofloc system	Mymensing
07	Refinement of breeding and culture technology of Cuchia, M. Cuchia	• To refine fry to fingerling of Monopterus cuchia 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 and • To disseminate control breeding and baby eel rearing technology	Mymensing

Sl. No.	Research Title	Objective (s)	Location
08	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 • Todevelop feed formulation and quality from conventional and non-conventional feed ingredients for fish farming and • To recommend the potential limiting amino acids as feed additives in the formulated diet	Mymensing
09	Production performance of hairy river prawn, Macrobrachium rude 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, M. dayanum • Development of poly-culture technique of Gura chingri, Mola and Jaitputi fish and • To produce improved quality post larvae (PLs) of Macrobrachium rosenbergii through proper genetic techniques and disseminate to the fish farmer/hatchery owners	Mymensing
10	Development of induced breeding and culture techniques for Mekong giant catfish, Pangasianodon gigas	• Study on application of vitamins A, D & E and diets containing C for augmenting gonadal maturation of Pangasianodon gigas • Development of induced breeding technique for Pangasianodon gigas and • Development of rearing technique for Pangasianodon gigas	Mymensing
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	Mymensing

Sl. No.	Research Title	Objective (s)	Location
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 and • To develop breeding technique and culture system of mollusk in confined condition and pond ecosystem	Mymensing
13	Development of Breeding Technique of Snakehead Species	• Collection and domestication of various types of Snakeheads • Study of the reproductive biology of Snakeheads and • Development of control & induced breeding technique of Snakehead	Mymensing
14	Improved germplasm production of carps, white pangus and pure-line breeding of Kalibaus (Labeo calbasu)	• To upgrade and produce Quality seeds of carps, Suborno Rui, Catfish and 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 and • To evaluate the growth performance of selected pure breeds with non-selected breeds of Kalibaus (Generation to generation)	Mymensingh
SANTAHAR, BOGURA (FRESHWATER SUB-STATION)			
15	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 and • To assist for framing or formulating	Bogura

Sl. No.	Research Title	Objective (s)	Location
		ecosystem-based management approach for inland open waters with emphasizing to increase productivity and conservation of the fisheries resources	
16	Development of induced breeding and culture techniques of Gangetic endangered fish species	• Refinement of induced breeding techniques of the Batashi and Pialy • Development of induced breeding technique of the Kajoli and • Development of nursing and culture technique of Batashi and Pialy	Bogura
17	Species availability and develop a suitable technology of value-added dried fish product (Shidol) in flood plain region of Bangladesh	• Survey of the available SIS species for Shidol production • To analyze the proximate composition and nutritive value of Shidol. • To develop suitable technology of Shidol production	Bogura
JASHORE (FRESHWATER SUB-STATION)			
18	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 and • To develop culture technique of Kakila and Tatkini fish in captive condition	Jashore
19	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 and • To assist for framing or formulating	Jashore

Sl. No.	Research Title	Objective (s)	Location
		ecosystem-based management approach for inland open waters with emphasizing to increase productivity and conservation of the fisheries resources	
SYEDPUR (FRESHWATER SUB-STATION)			
20	Culture of indigenous small fishes in Biofloc aquaculture system (Comp. B) (July 2019 - June 2022)	• 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	Syedpur
21	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.	Syedpur
22	Culture Suitability of Barilius barila, Labeo angra and Colisa fasciatus under Polyculture in Farmers Pond of Northern Region of Bangladesh	• To evaluate the production potential of Barilius barila, Labeo angra and Colisa fasciatus with 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	Syedpur

Sl. No.	Research Title	Objective (s)	Location
		techniques of Barilius barila Labeo angra and Colisa fasciatus in different aqua-ecological zones in the northern part of Bangladesh.	
CHANDPUR (RIVERINE STATION)			
23	Niche Characterization using integrated eco-morphological and hydrodynamic modeling at Meghna river basin: A GIS approach	• To formulate GIS-based models to picterize 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 and • To produce GIS-based models for characterization of entire niche to assess suitability	Chandpur
24	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 haor and beel resident fishes) • To assess bio-physicochemical properties of some selected inland water bodies (haors and beels) 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, Detrivores, Carnivores & Omnivores based on catch and CPUE data • To formulate ecosystem-based management approach of some major inland open water bodies (especially haors and beels) with emphasizing to increase productivity, stock	Chandpur

Sl. No.	Research Title	Objective (s)	Location
		enhancement and conservation of the fisheries resources	
25	Population dynamics and stock assessment of Tenulosa ilisha 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 and • To estimate the MSY, Biomass and stock of hilsa in Bangladesh	Chandpur
26	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 and • To update hilsa management interventions and policy guidelines	Chandpur
27	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 and • To assess the carrying capacity of nursey grounds of hilsa	Chandpur

Sl. No.	Research Title	Objective (s)	Location
28	Sanctuary management for sustainable Hilsa production in Bangladesh	• Reassess the previously identified spawning and nursery grounds and • Identification of spawning and nursery grounds of Hilsa	Chandpur
RANGAMATI (RIVERINE SUB-STATION)			
29	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 and • To analyze cumulative length frequency	Rangamati
30	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 and Herbivores, Detrivores, Carnivores and Omnivores based on catch and CPUE data • To assess bio-physicochemical properties of above water bodies including seasonal variation and • To formulate ecosystem based management approach for Kaptai Lake with emphasizing to increase productivity, stock enhancement and conservation of the fisheries resources	Rangamati
31`	Development of Cuchia Breeding and Dissemination of Culture Technology in Hill Tract Districts	• To develop breeding technique of M. cuchia • To disseminate the M. cuchia culture in Chittagong Hill Districts and • To popularize cuchia culture in Hill tract area	Rangamati

Sl. No.	Research Title	Objective (s)	Location
KHEPUPARA (RIVERINE SUB-STATION)			
32	Domestication, breeding and culture potentiality of Green Mussel and Oyster in mid-southern coast of Bangladesh (Comp. B)	• To domesticate important mollusks i.e., green mussel (Pernaviridis) and oyster (*Crassostrea sp.*). • To know the breeding biology of green mussel (Pernaviridis) and oyster (*Crassostrea sp.*) and • To develop the breeding and culture techniques of green mussel (Pernaviridis) and oyster (*Crassostrea sp.*).	Khepupara
33	Development of mariculture practice of Seabass (Lates calcarifer) 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 and • To study growth and survival of Seabass in net cage	Khepupara
34	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 and • To investigate bioactive compounds and their activity of certain seaweed	Khepupara
KHULNA (BRACKISHWATER STATION)			
35	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	Khulna

Sl. No.	Research Title	Objective (s)	Location
		• To identify vulnerable size groups of fishes /shellfishes in the Sundarbans	
36	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 and micro elements) of important aquatic weed • To examine the potentials of explored weed as dietary ingredients in fish feed and • To know the effect of aquatic weed in fish immune system	Khulna
37	Breeding, seed production and culture of indigenous Brackish water prawns (Macrobrachium villosimanus, M. rude and M. dayanum) under captive conditions	• To domesticate brackish water prawns under captive condition for brood stock development • To investigate the reproductive biology (fecundity, GSI, breeding time, embryonic development, etc.) of the prawns and • To develop breeding and larvae rearing protocol of the prawn	Khulna
38	Enhancement of brood stock development of mud crab (Scylla olivacea)	• To develop gonad maturation of mud crab, Scylla olivacea both in earthen ponds and hatchery conditions • To uplift the survival of crab larvae at different larval stages and improvement of crab seed production and • To enhance culture and fattening of mud crab in coastal areas	Khulna
39	Improvement of soft-shell culture technique of mud crab (Scylla olivacea) 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-	Khulna

Sl. No.	Research Title	Objective (s)	Location
		shell shedding between hatchery produced and natural crablets	
40	Domestication, Breeding and Seed Production of Some Commercially Important Brackishwater Fin fishes (Scatophagus argus; Pomadasys hasta; Mugil cephalus; Datnioides polota; Plotosus canius, Glossogobius giuris and Polynemus paradiseus)	• To domesticate the commercially important fishes of brackish water environment. • To observe the feeding habit and reproductive biology of the fishes and • To develop induced breeding, seed production and nursery management technique of the fishes	Khulna
41	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 and • To utilize the isolated microalgae as a live feed supplement for fish/shellfish larvae culture	Khulna
BAGERHAT (SHRIMP RESEARCH STATION)			
42	Influencing Haemocytic Defence in Black Tiger Shrimp (Penaeus monodon) 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 and • To assess the efficacy of algal supplement on survival and metamorphosis of Macrobrachium rosenbergii larvae into Post Larvae (PL)	Bagerhat
43	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 and • To assess the risk of pesticides residues on human health	Bagerhat
44	Reviling the natural strategies: in reference to iimmunity boost up and biochemical aactivities of submerged aquatic Plant,	• To assess the primary productivity and soil, water quality of pond • Comparative study on microbial community and shrimp health status	Bagerhat

Sl. No.	Research Title	Objective (s)	Location
	Najas sp. in Shrimp (P. monodon) aquaculture	and • To assess the bioactivity of Najas sp.	
45	Refinement of existing organic shrimp (Penaeus monodon) farming using eco-friendly management protocol in southwest region of Bangladesh	• To assess the present status of organic shrimp (P. monodon) farming compare to standard protocol and • To improve the management practice of organic shrimp (P. monodon) culture in aspect of Bangladesh	Bagerhat
46	Development of mariculture practice of seabass fish (Lates calcarifer) 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 and • To study growth and survival of Seabass in net cage	Bagerhat
COX'S BAZAR (MARINE FISHERIES AND TECHNOLOGY STATION)			
47	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 in-vitro tissue culture technique of some selected seaweed species • To develop value added products from selected seaweeds and • Genetical identification of seaweeds available in our coast	Cox's Bazar
48	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 in vitro condition • To utilize the isolated microalgae as a live feed supplements for fish/shellfish larvae in culture system and • To investigate the cause of water	Cox's Bazar

Sl. No.	Research Title	Objective (s)	Location
		quality deterioration in the live feed habitat at the coastal region of Cox's Bazar.	
49	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 and • To standardize Spawning Potential Ratio (SPR) of Tuna and Mackerel	Cox's Bazar
50	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 and • To develop larval rearing techniques of oyster	Cox's Bazar
51	Domestication and breeding of blue swimming crab (Portunus pelagicus) and Horseshoe crab (Tachypleus gigas) of the Bay of Bengal Bangladesh	• To domesticate the Blue Swimming crab (Portunus pelagicus) and Horseshoe Crab (Tachypleus gigas) brood stock under captive/ hatchery condition. • To develop breeding technology of Blue Swimming crab (Portunus pelagicus) in captive/hatchery condition • To develop larval and nursery management technique of Blue Swimming crab and • To isolate commercially important microalgae from Bay of Bengal and investigate its habitat.	Cox's Bazar
52	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 (Mullets, Seabass). • To optimize stocking density and evaluate production performance in	Cox's Bazar

Sl. No.	Research Title	Objective (s)	Location
		cage culture and • To develop suitable species (Mullets, Seabass) cage culture co-management practice through pilot project.	
53	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 and fatty acid composition of certain commercially important seaweed species and • To compare the biochemical composition based on localities and season	Cox's Bazar
54	Development of Breeding, Seed Production and Nursery Techniques of Seabass, Lates calcarifer	• 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 and • To develop the nursery technique of Seabass.	Cox's Bazar
MYMENSINGH			
55	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

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Sl. No	Research Title	Objective (s)	Location
ANIMAL PRODUCTION RESEARCH DIVISION			
01.	Strategic development of beef cattle and their qualities in Bangladesh	• To develop suitable beef breed (s) using selective exotic beef sire (s) and native dams • To develop feeding and management system for crossbred beef progeny and • To determine meat production efficiency and quality of different beef genotypes at certain ages.	Savar, Dhaka
02.	Conservation and improvement of Munshiganj cattle	• To conserve, characterize phenotypically and morphometrically and improve MC in ex-situ • To collect potential MC cows and bulls from their breeding tracts and introduce into BLRI nucleus herd • To produce and multiply superior progeny of MC by using superior sires and dams and • To characterize genetically and establish MC as a recognized breed	Savar, Dhaka
03.	Determination of best practice management of Napier grass to doubling the milk production of cows.	• To increase the yield and nutritive value of Napier grass (cut and carry system) by determine the cutting height and severity for optimal re-growth • Comparative study on the production performance and physiological characteristics of available Napier cultivars in BLRI under the similar agronomic management practices and • To identify the optimum plant density level of Napier grass on biomass yield and its quality • To increase the milk production of cows by feeding Napier grass managed with best management practice	Savar, Dhaka
04.	Collection, conservation, multiplication of high yielding fodder and evaluation of their production performances under different climatic conditions.	• To conserve different high yielding varieties of fodder germplasms in Germplasm Bank in BLRI • To validate a mutant lines Napier cultivars at saline areas in Bangladesh • To optimize yields and nutritive values of fodder by mixed cropping system and • To ensure year round availability of fodder cutting or seeds for distribution of	Savar, Dhaka.

Sl. No	Research Title	Objective (s)	Location
		farmers.	
05.	Evaluation of Moringa (sajna) feed for livestock production	• To evaluate of production performance and nutritional quality of different moringagermplasm at different season • To evaluate production performance and nutritional quality of different moringagermplasms through different agronomic management practices (densities and cutting interval) and • To evaluate Moringa foliage as Silage and evaluate physical, chemical and nutritional value.	Savar, Dhaka.
06.	Carbon footprint of different livestock production systems in Bangladesh	• To know the feed baskets of beef cattle at farm levels and • To estimate the CF of beef cattle production.	Khulna Chittagong andSirajganj
07.	Low Cost and Sustainable Model Development of Bio-slurry management	• To develop simultaneous separation system of bio-slurry solid and liquid mechanically and • To develop sustainable commercialization model of bio-slurry management.	Savar, Dhaka.
08.	Identification of existing management approaches of both commercial and traditional cattle fattening in some selected area of Bangladesh.	• To identify the existing management approach of both commercial and traditional cattle fattening in some selected region of Bangladesh.	Dhaka (Savar, Dhamrai, HemayetpurGabtoli) Rajshahi and Khustia (Meherpur)
09.	Development of a system generated database for cattle and buffalo research farm at BLRI.	• To develop a computer based smart data recording system for cattle and buffalo research farm at BLR • To find out performance data for genetic evaluation of individual animal in the herd and • To find out actual feed requirements for cattle and buffalo herd based on population size, age and production status.	Savar, Dhaka.
10.	Up-gradation and diversification of value addition technologies of livestock products and by-products.	• To determine the keeping quality or shelf life or canned beef using common salt, Na-nitrite and Kalojira oil (Nigella sativa) and • To evaluate the nutritional, microbial and sensory quality of canned meat during	Savar, Dhaka.

Sl. No	Research Title	Objective (s)	Location
		preservation.	
POULTRY PRODUCTION RESEARCH DIVISION			
11	Conservation and Improvement of Native Chicken: performance of ninth generation.	• To assess the performance 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 ninth generation birds and • To determine carcass characteristics, free amino acid content, fatty acid composition, bioactive components and nucleotide content of meat.	Savar, Dhaka
12	Conservation and Improvement of Quail: Performance (growth and meat quality) of tenth generation.	• To increase the sixth week body weight of Dhakai and BB-white quail through selective breeding and • To select parental birds (males and females) and breed them using best to best mating plan for the production of 10^{th} generation birds and • To determine carcass characteristics, free amino acid content and fatty acid composition	Savar, Dhaka
13	Measurement of noxious greenhouse gases at the poultry shed and their possible remedies.	• To develop, low-protein diets supplemented with particular amino acid in poultry feeds • To isolate, identification, and Quantification of Trichoderma spp. • To observe the possible effects of Trichodermaspp to reduce odor and noxious gas emission from poultry litter and • To develop an odor reducing model for poultry farms.	Savar, Dhaka
14	Conservation and improvement of locally adopted exotic germ plasm for the development of egg and meat type chicken.	• To conserve and strengthen production of four pure lines of chicken • To refine and optimize feeding and management standard of MCTC parent line and • Production and evaluation of cross breeding (two and three way) using native with locally adopted exotic germ plasms	Savar, Dhaka
15	Conservation and	• To evaluate the productive, reproductive	Savar, Dhaka.

Sl. No	Research Title	Objective (s)	Location
	improvement of native duck and geese genotypes.	performance and egg quality parameter of 7th generation of two native duck genotypes under intensive management condition and • To investigate nutrient requirement of two native duck genotypes under intensive management condition.	
16	Performance and meat quality of BLRI improved Hilly chicken in different production systems.	• To know the productivity of BLRI improved Hilly chicken under different production systems and • To know the meat quality of BLRI improved Hilly chicken in different rearing systems	Savar, Dhaka.
BIOTECHNOLOGY DIVISION			
17	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. • To increase availability of unconventional roughages beyond their harvest period through better ensiling assisted by microbial inoculants.	Savar, Dhaka.
18	Efficient management of livestock and poultry farm wastes for pollution control	• To study the effect of livestock and poultry manure on water pollution and • To reduce odor and microbial pollution from poultry manure.	Savar, Dhaka GazipurBaghabari andMunshiganj
19	Whole genome re-sequencing of Gayal(*Bosfrontalis*) and genome annotation to unveil genetic variations to explore the evolution and adaptation at genome level	• To develop whole genome of Gayal (*Bosfrontalis*) with high sequence coverage (15X) using state of the art next generation sequencing (NGS) approach and other modern computational biology tools. • To describe genotypic variation and genome wide association (GWA) studies with different phenotypes, evolution and adaptation • To foster comparative genomics in	Savar, Dhaka

Sl. No	Research Title	Objective (s)	Location
		regard to identify gene(s) associated with different important traits (adaptation, muscle strength) of Gayal and • To strengthen national and international collaboration towards capacity building and human resource development to promote Gayal conservation	
20	Establishment of semen bank for conservation of BLRI improved germplasm	• To conserve indigenous germplasm developed at Bangladesh Livestock Research Institute (BLRI) and • To provide inputs required for animal breeding programme at farmers' level.	Savar, Dhaka
GOAT AND SHEEP PRODUCTION RESEARCH DIVISION			
21	Ex-situ conservation and improvement of native sheep at Bangladesh Livestock Research Institute	• To improve native sheep at BLRI and • To develop of superior native sheep germplasm and their improvement	Savar, Dhaka
22	Exotic sheep adaptation and their crossbreds production in Bangladesh	• To evaluate the productive and reproductive performances of different crossbred genotypes and • To produce suitable crossbred sheep genotype in our country.	Savar, Dhaka
23	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 candidate genes or mutations as the causal markers associated with productive and reproductive traits and • Improve Jamunapari goat through selective breeding using identified causal markers as a molecular tools	Savar, Dhaka.
ANIMAL HEALTH RESEARCH DIVISION			
24	Surveillance and molecular evolution of highly pathogenic	• Detection, isolation and molecular evolution of avian influenza viruses circulating in Bangladesh and	Savar. Dhaka

Sl. No	Research Title	Objective (s)	Location
	avian influenza virus (HPAIV) in Bangladesh	• Monitoring of avian influenza viruses from migratory birds.	
25	Investigation of Lumpy skin Disease (LSD) in Bangladesh.	• Isolation, identification and molecular characterization of Lumpy skin disease virus and • Animal trail of BLRI developed Lumpy skin disease vaccine.	Savar. Dhaka
26	Monitoring and evaluation of peste des petis Ruminants (PPR) virus isolates circulating in Bangladesh.	• To monitor PPR control program in the selected areas of Bangladesh • To detect and characterize PPR virus from recent outbreak in Bangladesh and maintain PPR virus repository at different passage of isolation. • Further attenuation of BAU-BLRI attenuated PPR virus isolates as vaccine seed and determination of its immunogenicity and residual pathogenicity and • To evaluate the efficacy of various diluents in live attenuated PPR vaccine.	Savar. Dhaka
27	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 (ARGs) in faecal commensal enteric bacteria in finisher livestock and poultry • To determine the source and level source and level of contamination of milk along the value chain analysis and • To assess spatio-temporal variation in antimicrobial resistance profile in retail finisher products of livestock and poultry.	Savar. Dhaka
28	Adaptation and attenuation of duck plague virus in chicken embryo fibroblast cell as vaccine seed.	• To isolate, identify and characterize DPV from suspected ducks samples • To adapt the virulent strain of DPV by several passages in suitable host syestems like iin developing duck embryo and chicken embryo fibroblast cell and • To develop live attenuated vaccine strain from local circulating DPV isolate.	Savar. Dhaka
SOCIOEC-ONOMIC RESEARCH DIVISION			
29	COVID-19 pandemic – Impact on livestock sector of Bangladesh.	• To assess the economic losses of COVID-19 pandemic in livestock sector in Bangladesh	Sirajganj Pabna, Sunamganj

Sl. No	Research Title	Objective (s)	Location
		• To evaluate livestock farmer's income vulnerability due to COVID-19 pandemic and • To identify the pathway of post-COVID-19 resilience of the livestock sector.	Rangpur Jashore Mymensingh Gazipur Jamalpur, Kishoregonj and Tangail.
30	Consumer's preference and perception between broiler and indigenous chicken meat in Bangladesh.	• To evaluate socio-economic factors influencing consumption frequency of broiler and indigenous chicken • To assess the attributes of broiler and indigenous chicken meat that influences consumers choice and willingness to pay (WTP) and • To analyze the influence of broiler and indigenous chicken meat attributes on price level.	Savar, Dhaka Mymensingh and Dinajpur
31	Impact of recent outbreak of lumpy skin disease (LSD) on northern dairy dominate areas in Bangladesh.	• To measure the direct costs (economic costs) of lumpy skin disease (LSD) by livestock keepers in Northern Bangladesh • To measure the indirect costs of lumpy skin disease (LSD) by livestock keepers and • To formulate policy recommendation.	Pabna Sirajganj Bogura Rangpur Rajshahi Dinajpur and Dhaka
SYSTEM RESEARCH DIVISION			
32	Conservation and improvement of farm Animal Genetic Resources (FAnGR) at Hilly Region at Naikhongchari.	• To evaluate the productive and reproductive performances of Brown Bengal goats, Native sheep, Hilly chickens, Jungle fowl and other animal genetic resources • To find out a suitable variety of chicken that can meet the demand of customer. • To reduce the morality of livestock and poultry in the community level through eradicating viral disease • To popularize Brown Bengal goat and validate its genetic superiority • To find out a suitable Napier variety that will grow better in the hill tracts areas and • To reinforce the research activities at BLRI< Regional station, Naikhongchari, Bandarban.	Naikhongchari, Bandarban.

Sl. No	Research Title	Objective (s)	Location
33	Development of Model village through BLRI Technologies at Dhamrai areas.	• To disseminate BLRI developed livestock technologies for increasing productivity • To observe the impact of technological interventions on socioeconomic status of farm families. • Identification of constraints to adoption and determine the causes circumscribing the sustainability of technologies and their adaptation • To acquaintance with the technologies and their adaptation and • To assess household economics, nutritional availability, asset possession and wealth capability of the farming community.	Dhamrai, Dhaka
34	Dissemination and Adaptation of BLRI developed technologies at Regional station of BLRI.	• To disseminate of BLRI development technologies for increasing productivity at farm level.	Regional stations of BLRI
35	Production and adaptation of Bio-char as Soil amendment and C-sequestration for sustainable improvement of soil fertility in Sandy Soil.	• Production of bio-char from cow dung which is a new management strategy and nutrient-rich organic amendment for improving soil nutritional status and • Improvement of soil fertility and soil quality and • Improvement of soil moisture conservation and soil carbon content.	Savar, Dhaka
TRAINING, PLANNING AND TECHNOLOGY TESTING DIVISION			
36	Studies on the Farmers Innovative Technologies for Livestock production in Bangladesh.	• Identification of farmer's innovative techniques for livestock production and management system in different locations in Bangladesh • Assessment of these techniques in view on income and employment and • Screening the most suitable techniques for refinement and feed back to the scientist for future research	Sirajganj Jashore and Bandarban
37	Intervention of BLRI Technology; adoption and improvement of livelihood of trained farmers in different zone of Bangladesh.	• To examine the extents of transfer of livestock technologies through training and • To explore the socioeconomic impact of training on livestock technologies for livelihood improvement.	Different zones of Bangladesh

Sl. No.	Research Title	Objective (s)	Location
	Green House Conditions and Tuberization Behavior Study at Green House	plantlets. • To increase the amount of nucleus seed and off- season multiplication • To see the tuberization behavior of potato in green house and • To use the minituber for the production of Breeder's seed.	and green house)
396.	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 and • To see yield performance between the virus free cultivars and conventional cultivars.	Gazipur
397.	*In Vitro* Propagation of Cassava (*ManihotesculentaCrantz*)	• To establish an efficient *in vitro* regeneration protocol and • To enrich high quality planting materials of cassava and • To see the regeneration efficiency.	Gazipur
398.	Standardization of *In Vitro* Protocol for Short, Medium and Long-Term Conservation in Potato	• To conserve tuber crops for long time and • To conserve advanced breeding lines for future use.	Gazipur
399.	*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 in TCRC. • To produce high quality potato breeder seeds year-round and • To get clean and disease-free potato seed.	Gazipur and Debiganj
400.	*In vitro* Propagation Technique Development for Mukhi-Kachuand Olkachu	• *In vitro* multiplication of MukhiKachu and Olkachu and • To validate plantlets at field conditions.	Gazipur
401.	Validation of Tissue Culture Based Apical Rooted Cuttings (ARC) Technology to Enhance Seed Potato Production	• Adoptation of ARC technique in Bangladesh as an alternative to minitubers in current seed potato production system.	Gazipur and Debiganj
402.	Molecular Characterization and Finger Printing of BARI Released Potato Varieties Using SSR/SNP Marker	• To study the genetic variation and diversity of Potato varieties. • DNA fingerprinting and documentation • Phylogenetic tree establishment among the varieties and	Gazipur and Molecular marker lab, MSU, USA

Sl. No.	Research Title	Objective (s)	Location
		• To know the genetic linkage mapping among the varieties.	
403.	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 and • To examine the level of genetic diversity within the released varieties	Gazipur
404.	Chloroplast Genome Sequencing and QTL Analysis of Heat Tolerant and Latr Blight Resistant Potato Varieties	• To know the genetic makeup of the genotypes. • To know the genetic variation and phylogenetic relationship among the varieties and • To identify the stress tolerant gene and genetic linkage mapping.	Gazipur Rangpur Debiganj and Ishordi, Pabna (OFRD), Barendra/ Shampur, Rajshahi
405.	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 and • To improve germplasms of potato.	Gazipur, Debiganj and Rangpur
406.	Secondary Yield Trial (SYT) of Combined PVY and PLRV Resistance Germplasm	• To select superior genotype (s) for subsequent program of PVY and PLRV resistance variety development and • To improve germplasms of potato.	Gazipur and Debiganj
407.	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 and • To develop platform of developing PVY and PLRV resistance variety development using PVY and PLRV strains in the breeding program.	Gazipur and Burirhat, Rangpur
408.	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.	Gazipur and Debiganj

Sl. No.	Research Title	Objective (s)	Location
		• To identify virus diseases resistance potato germplasms and • To characterize germplasms of potato.	
409.	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 and • To characterize CIP germplasms of potato.	Gazipur and Rangpur
410.	Introgression and Marker Assisted Selection (MAS) of Disease Resistance R-genesin tetraploid potato for late blight	• To develop resistance variety of potato against late blight disease. • Varieties with R-genes could be used in the breeding program and • To pyramid R-genes for durable resistance of late blight.	Gazipur and Rangpur
411.	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 and • To know the genetic linkage mapping among the varieties.	Gazipur
412.	Determination of diversity and molecular characterization of advanced breeding lines of potato using SSR markers	• To assess the genetic diversity and polymorphism of advanced breeding lines of potato which can be used in future breeding program. • To develop parental stock for gene pyramiding.	Gazipur
413.	Morpho-molecular characterization of Causal Agent of Zebra Chip Disease of Potato in Bangladesh	• To Identify the pathogens (including strains/bio-var level) through morpho-molecular characterization and PCR based detection. Location : Panchagarh,Thakurgaonn, Dinajpur, Rangpur, Debiganj,NilphamarI, Lalmonirhat, Kurigram, Jamalpur Joypurhat, Bogra, Jamalpur, Rahmatpur, Jessore and Chottogram	

Sl. No.	Research Title	Objective (s)	Location
414.	*In vitro* Regeneration Protocol Development in Sweet Potato (*Ipomoea batatas* L) for Transgenic Development	• To develop an efficient plant regeneration protocol for genetic transformation of sweet potato in future.	Gazipur
415.	Development of Cost-Effective Nutrient Solution for Aeroponic Culture	• Cost effective nutrient solution development for Aeroponic.	Gazipur
416.	Production of Quality Potato Seeds	• Ensuring the demand of quality seeds throughout the country and • Producing breeder seed for BADC.	Debiganj
417.	Production and Preservation of Sweet Potato Vines	• Ensuring the demand of quality seeds throughout the country and	All RARS
418.	Production and Preservation of Aroids Seeds	• Ensuring the demand of quality seeds throughout the country.	
419.	Production and Maintainance of Minor Crops Seed	• Ensuring the demand of quality seeds throughout the country.	Gazipur
420.	Studies on Storage Behavior of Potato Varieties/Germplasm under Natural Storage Conditions	• To assess the keeping quality of tubers, which is one of the major criteria for selection of varieties/germplasms and • To observe the marketability of the different varieties/ germplasm under storage.	Gazipur
421.	Evaluation of Potato Varieties and Germplasm/Lines for Processing Qualities	• To select suitable varieties and germplasm lines for chips, French fries and Dried chips and • To select the optimum colour and texture of the chips and French-fries	Gazipur
422.	Determination of Nutritional Status of Panikachu Genotypes	• To analyze the crude fibre, carbohydrate, β-carotene, Vitamin A, C, anthocyanin, Mineral : Zinc, iron, calcium, potassium, phosphorus etc.	Gazipur (PHT and SSD)
423.	Determination of nutritional status of Panikachu genotypes	• To analyze the crude fibre, carbohydrate, β-carotene, Vitamin A, C, anthocyanin, Mineral: Zinc, iron, calcium, potassium, phosphorus etc.	Gazipur (PHT and SSD)
424.	Adaptive Trial with Newly Released Potato Varieties	• To popularize the newly released improved potato varieties and • To collect the feedback of the newly released	

Sl. No.	Research Title	Objective (s)	Location
		varieties. Location: Barishal, Bhola, Borguna, Bogura, Chittagonj (Pahartoli & RARS), Chandpur, Coxesbazar, Cumilla, Dinajpur, Faridpur, Gibandha, Gopalgonj, Gazipur, Jamalpur, Jashore, Jhenaidah, Khulna, Kishoregonj, Kushtia, Madaripur, Manikgonj, Munshiganj, Mymensing, Norshindi, Noakhali, Panchogor, Patuakhali, Rajshahi, Rangpur, Sherpur, Satkhira, Tangail and Thakurgoan, Four-Ten trials in each of the above districts	
425.	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 and • To increase the production as well as income of the growers . • Location : Dinajpur, Rangpur, Bogura, Jamalpur, Rajshahi, Niphamary, Panchagarh, Thakurgoan, and Jashore	
426.	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 and • To increase the production as well as income of the growers. Location ; Barishal, Patuakhali, Barguna, Khulna, Satkhira, Chattagram, Cox's Bazar, Noakhali, Bhola and Jashore (10-20 trials in each of the above districts)	
427.	Adaptive Trials with Sweet Potato Varieties	• To popularize the newly released improved sweet potato varieties and • To collect the feedback of the newly released varieties. Location : Gazipur, Bogura, Gaibanda, Jamalpur, Sherpur, Kishoregong, Sylhet and Barishal	
428.	Adaptive Trials with BARI Released Varieties of Panikachu	• To test the adaptability of the improved varieties of Panikachu at farmers' level. Location: Gazipur, Narsingdi, Bogura/Joypurhat, Gaibanda, Rangpur, Jamalpur, Sherpur, Kishoregong Jashore, Habigonj/Sylhet and Barishal	
429.	Adaptive Trials with BARI Released Varieties of Mukhikachu	• To test the adaptability of the improved varieties of Mukhikachu at farmers' level. Location ; Gazipur, Bogura, Gaibanda, Jamalpur,	

Sl. No.	Research Title	Objective (s)	Location
		Sherpur, Kishoregong, Jashore, Kushtia and Habigonj/Sylhet and Barishal	
430.	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 and Jessore
431.	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 and Jessore
432.	Training of Farmers and Related Personnel	• To give idea about the quality seed production technique, data recording, good agricultural practice and seed preservation technologies of tuber crops.	Gazipur
433.	Training of Scientist, DAE Officers, BADC and NGO Personnel's on Improved Production Technologies of Tuber Crops	• To update the knowledge and skill on improved production technologies of tuber crops and • To get the feedback about the national oriented problem of tuber crops production in Bangladesh.	Gazipur
434.	Training of SA, SSA, SAAO and Field Personnel's on Improved Production Technologies of Tuber Crops	• To update the knowledge and skill on improved production technologies of tuber crops and • To get the feedback about the field oriented problem of tuber crops production in Bangladesh.	Gazipur
435.	Review workshop on Research Report (2021-22 and future Research Programme 2022-23)	• To review the research activities of the TCRC and TCRSC of BARI, Gazipur.	Gazipur
PULSES RESEARCH CENTRE			
436.	Hybridization of blackgram	• Creation of genetic variation for desired characters and development of varieties having early and synchronous maturity, disease resistance and better yield component.	Ishurd, Pabna
437.	Confirmation of blackgram F_1 generation	• Identifying confirmed cross materials and selection of	Ishurd, Pabna

Sl. No.	Research Title	Objective (s)	Location
		desired genotypes with high yield potential, early maturing and resistant to insect and diseases.	
438.	Growing and evaluation of blackgram F_2 generation	• Selection of desired segregating genotypes with high yield potential, early maturing and resistant to insect and diseases and attaining towards homozygosity.	Ishurd, Pabna, Pabna
439.	Growing and evaluation of blackgram F_3 generation	• Selection of desired segregating genotypes with high yield potential, early maturing and resistant to insect and diseases and attaining towards homozygosity.	Ishurd, Pabna
440.	Growing and evaluation of blackgram F_4 generation	• Selection of desired segregating genotypes with high yield potential, early maturing and resistant to insect and diseases and attaining towards homozygosity.	Ishurd, Pabna
441.	Growing and evaluation of blackgram F_5 generation	• Selection of desired segregating genotypes with high yield potential, early maturing and resistant to insect and diseases and attaining towards homozygosity.	Gazipur
442.	Regional Yield trial of blackgram	• Selection stable genotypes over different locations which are prerequisite for variety development.	Ishurd, Pabna Gazipur Jamalpur and Madaripur (RPRS)
443.	Studies of genetic variability of blackgram germplasm	• To study the association between phenotype and genotype for marker development.	Ishurd, Pabna
444.	Screening of blackgram germplasm under waterlogging stress at germination	• To identify waterlogging tolerance at germination and to optimize methodology for the screening of germplasm to develop waterlogged tolerant variety.	Ishurdi, Pabna
445.	Evaluation of blackgram germplasm in charland areas of gaibandha	• To identify the best material with direct involvement of the farmers for the specific area or	Gaibandha

Sl. No.	Research Title	Objective (s)	Location
		region.	
446.	Hybridization of lentil	• Creation of genetic variation for desired characters and development of varieties having early and synchronous maturity, disease resistance and better yield component.	Ishurdi, Pabna
447.	Confirmation of lentil F_1 generation	• Identifying confirmed cross materials and selection of desired genotypes with high yield potential, early maturing and resistant to insect and diseases.	Ishurdi, Pabna
448.	Growing and evaluation of lentil F_2 generation	• Selection of desired segregating genotypes with high yield potential, early maturing and resistant to insect and diseases and attaining towards homozygosity.	Ishurdi, Pabna
449.	Growing and evaluation of lentil F_3 generation	• Selection of desired genotypes towards homozygosity.	Ishurdi, Pabna
450.	Growing and evaluation of lentil F_4 generation	• Selection of desired genotypes and attaining towards homozygosity.	Ishurdi, Pabna
451.	Growing and evaluation of lentil F_5 generation	• Selection of desired genotypes and attaining towards homozygosity and also find out high yield potential, early matured, disease resistant or tolerant genotypes.	Ishurdi, Pabna
452.	Observation trial of lentil	• Selection of genotypes for Preliminary Yield Trial which are prerequisite for variety development.	Ishurdi, Pabna
453.	Preliminary yield trial of lentil	• Selection of stable genotypes for Regional Yield Trial which are prerequisite for variety development.	Ishurdi Gazipur Madaripur (RPRS) Jamalpur and Jessore
454.	Regional yield trial of lentil	• Selection of stable genotypes over different locations for PVS which are prerequisite for variety development.	Ishurdi, Pabna Gazipur (PRSS) Jamalpur Barishal and Jessore

Sl. No.	Research Title	Objective (s)	Location
455.	Participatory varietal selection of lentil	• Selection of farmers' preferred stable genotypes over different locations which are prerequisite for variety development.	Pabna (OFRD Jessore Madaripur Gazipur Barishal and Jamalpur
456.	Hybridization of chickpea	• Creation of genetic variation for desired characters and for the development of high yielding, short duration, heat tolerant and BGM resistant chickpea varieties.	Ishurdi, Pabna
457.	Confirmation of chickpea F_1 generation	• Identifying confirmed cross materials and selection of desired genotypes with high yielding potential, short duration, heat tolerance and BGM resistance.	Ishurdi, Pabna
458.	Growing and evaluation of chickpea F_3 generation	• Selection of desired genotypes towards homozygosity.	Ishurdi, Pabna
459.	Growing and evaluation of chickpea F_4 generation	• Selection of desired genotypes towards homozygosity.	Ishurdi, Pabna
460.	Growing and evaluation of chickpea F_5 generation	• Selection of desired genotypes and attaining towards homozygosity and also find out high yield potential, early matured, disease resistant or tolerant genotypes.	Ishurdi, Pabna
461.	Observation trial of Chickpea	• Selection of genotypes for Preliminary Yield Trial which are prerequisite for variety development.	Ishurdi, Pabna
462.	Regional yield trial of Chickpea	• Selection of stable genotypes over different locations for PVS which are prerequisite for variety development.	Ishurdi, PabnaJessore Madaripu Gazipur Barisal and Barind(OFRD)
463.	Evaluation of chickpea exotic germplasm	• Few of them were missed out due to germination failure in the first year trial. From the above set, 21 genotypes were selected for further trial to find out most suitable genotypes under Bangladesh condition.	Ishurdi, Pabna

Sl. No.	Research Title	Objective (s)	Location
464.	Performance of chickpea genotypes under optimum and late	• To evaluate chickpea genotypes under late sown condition.	Ishurdi, Pabna and Jashore
465.	Hybridization of fieldpea	• Creation of genetic variation for desired characters and for the development of high yielding, disease resistance, short duration variety with strong root system having bold seed.	Ishurdi, Pabna
466.	Growing and evaluation of field pea F_2 generation	• Selection of desired genotypes towards homozygosity.	Ishurdi, Pabna
467.	Growing and evaluation of field pea F_4 generation	• Selection of desired genotypes and attaining towards homozygosity.	Ishurdi, Pabna
468.	Growing and evaluation of fieldpea F_5 generation	• Selection of desired genotypes and attaining towards homozygosity and also find out high yield potential, early matured, disease resistant or tolerant genotypes.	Ishurdi, Pabna
469.	Observation trial of Fieldpea	• Selection of genotypes for Preliminary Yield Trial which are prerequisite for variety development.	Ishurdi, Pabna
470.	Participatory varietal selection of fieldpea	• Selection of farmers' preferred stable genotypes over different locations which are prerequisite for variety development.	Pabna (OFRD) Jashore Madaripur Gazipur and Barishal
471.	Hybridization of grasspea	• Creation of genetic variation and development of high yielding grasspea genotypes having low toxin content, salinity tolerance and disease tolerance	Ishurdi, Pabna
472.	Confirmation of grasspea F_1 generation	• Identifying confirmed cross materials and selection of desired genotypes with high yield potential, short duration variety with strong root system having bold seed.	Ishurdi, Pabna
473.	Growing and evaluation of grasspea F_2 generation	• Selection of desired segregating genotypes with high yield potential, early maturing and resistant to insect and diseases	Ishurdi, Pabna

Sl. No.	Research Title	Objective (s)	Location
		and attaining towards homozygosity.	
474.	Growing and evaluation of grasspea F_3 generation	• Selection of desired segregating genotypes with high yield potential, early maturing and resistant to insect and diseases and attaining towards homozygosity.	Ishurdi, Pabna
475.	Evaluation of grasspea (Set I and Set II) genotypes	• Selection and evaluation of stable early and low ODAP content genotypes for future breeding trials	Ishurdi, Pabna Barishal and Madaripur
476.	Preliminary yield trial of grasspea	• To find out the yield performance of promising line at multi-locations of grass pea growing areas.	Ishurdi, Pabna Gazipur Sathkhira and Madaripur
477.	Evaluation of grasspea genotypes in charland areas	• To evaluate the grasspea genotypes in char land areas	Saghata, Gaibandha Sariakandi, Bogura and Jamalpur
478.	Screening of grasspea germplasm under waterlogging stress at germination	• To identify waterlogging tolerance at germination and • To optimize methodology for screening waterlogging tolerance from a large number of germplasm/population.	Barisal
479.	Adaptation of cowpea genotypes for southern region	• To evaluate advance cowpea germplasm for cowpea varietal improvement in southern agro-climatic conditions.	Rahmatpur, Barishal Madaripur and Noakhali (OFRD)
480.	Evaluation of IITA cowpea genotypes	• To evaluate cowpea genotypes for cowpea varietal improvement in southern agro-climatic conditions.	Rahmatpur, Barishal Madaripur and Hathazari
481.	Screening of cowpea germplasm for salinity	• To evaluate advance cowpea germplasm for cowpea varietal improvement in southern agro-climatic conditions.	Gazipur
482.	Hybridization of mungbean	• Creation of genetic variation for desired characters and development of varieties having	Ishurdi, Pabna

Sl. No.	Research Title	Objective (s)	Location
		early and synchronous maturity, disease resistance and better yield component.	
483.	Confirmation of mungbean F_1 generation	• Identifying confirmed cross material and selection of desired genotypes	Ishurdi, Pabna
484.	Growing and evaluation of mungbean F_2 generation	• Selection of desired genotypes and attaining towards homozygosity.	Ishurdi, Pabna
485.	Growing and evaluation of mungbean F_4 generation	• Selection of desired genotypes and attaining towards homozygosity.	Ishurdi, Pabna
486.	Growing and evaluation of mungbean F_5 generation	• Selection of desired genotypes and attaining towards homozygosity.	Ishurdi, Pabna
487.	Observation Trial of Mungbean	• Selection of genotypes for Preliminary Yield Trial which are prerequisite for variety development.	Ishurdi, Pabna
488.	Interspecific hybridization involving *Vigna radiata* with *Vigna mungo*	• To generate variability through interspecific hybridization and • To develop uniform maturity and awn in pod suface for mungbean and early maturity for blackgram.	Ishurdi, Pabna
489.	Evaluation of mungbean minicore genotypes	• To evaluate exotic Genotypes from AVRDC to find out MYMV free high yielding suitable promising lines of mungbean.	Madaripur
490.	Evaluation of AVMU mungbean lines	• To evaluate AVMU lines from AVRDC to find out suitable promising high yielding and resistance to pest and disease lines of mungbean.	Madaripur
491.	Adaptive trial with mungbean varieties	• To evaluate the performance of existing mungbean varieties in southern region of Bangladesh.	Rahmatpur, Barishal
492.	Performance of different legumes as forage in southern region of Bangladesh	• To evaluate the performance of different pulses as forage in southern region of Bangladesh	Babuganj, Barishal
493.	Weed control in mungbean cultivation in late rabi season	• To know the effective and economic weed control method for mungbean cultivation in late	Rahmatpur, Babuganj, Barishal

Sl. No.	Research Title	Objective (s)	Location
		rabi season in Southern belt.	
494.	Effect of different mulch materials on soil salinity and yield of cowpea	• To determine the effect of different mulch on the growing of cowpea cultivation under field situation in the saline area of Bangladesh.	Kalapara, Patuakhali
495.	Effects of seeding method and seed rate on yield and yield attributes of field pea	• To find out the sowing method and optimum seed rate of BARI Motor 3 for better crop growth and yield.	Gazipur
496.	Performance of different varieties/genotypes of pea as affected by shoot picking for vegetable and grain production	• To find out the suitable adapt variety for the higher production of vegetable, grain and economic net return.	Gazipur
497.	Effects of seeding time on yield and yield component of promising pea genotype	• To find out the optimum sowing time on growth and yield for this promising pea genotype BP001.	Gazipur and Ishurdi
498.	Effect of *rhizobium* inoculant on nodulation and yield of lentil	• To evaluate performance of commercial Rhizobia inoculant on nodulation and nitrogen fertilizer use efficiency on lentil.	Gazipur and Ishurdi
499.	Effect of *rhizobium* inoculant on nodulation and yield of chickpea	• To evaluate the performance of highly selective commercial Rhizobia inoculant on nodulation and nitrogen fertilizer use efficiency on Chickpea.	Gazipur and Ishurd, Pabna
500.	Performance of mixed cropping of grass pea and mustard under relay cropping system	• To verify the suitable combination of grass pea as mixed crop with mustard under relay cropping.	Gazipur and Ishurdi, Pabna
501.	Effects of pulse-based cropping pattern on crop performance and soil health	• To observe the crop performance,soil nutrients and economics through pulse-based cropping pattern and • To develop the pulse-based cropping pattern through short duration pulse varieties.	Ishurdi, Pabna and Madaripur
502.	Selection of suitable herbicides for controlling *parthenium* weed in field pea	• To find out the suitable herbicide to control Parthenium weed in field pea.	Gazipur and Ishurdi
503.	Screening of pigeon pea genotypes for higher yield	• To find out the suitable short duration genotype for higher yield.	Ishurd, Pabna
504.	Growth and yield performance	• To investigate the growth and	Jashore

Sl. No.	Research Title	Objective (s)	Location
	of BARI Chola-10 as influenced by nipping practices at different growth stages	yield performance of BARI Chola-10 as influenced by nipping practices at different growth stages.	
505.	Determination of dose and spray schedule of tebuconazole and trifloxystrobin fungicides for controlling stemphylium blight disease of lentil	• To evaluate the efficacy of Nativo and Folicur fungicide dose and spray schedule in controlling Stemphylium blight disease.	Gazipur and Ishurdi, Pabna
506.	Biological control of root rot disease of lentil and chickpea in the field condition.	• To find out the most effective biological control product in controlling root rot disease of lentil and chickpea.	Ishurd, Pabna
507.	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.	Ishurd, Pabna
508.	Screening of lentil germplasm against stemphylium blight	• To continue search for resistant genotypes against SB disease of lentil in natural inoculation condition.	Ishurdi, Pabna
509.	Foliar application of commercially available micro and macro nutrients for the management of flower thrips and pod borers of mungbean	• To evaluate the influence of the application of micro and macro nutrients on flower thrips and pod borers of mungbean with higher yield.	Ishurdi, Pabna and Barishal
510.	Evaluation of some integrated management packages against flower thrips and pod borers of mungbean	• To develop and evaluate safe and effective integrated management package using blue sticky trap, bio and synthetic insecticides.	Ishurdi, Pabna and Gazipur
511.	Incidence of chickpea pod borer, *Helicoverpa armigera* Hubner on the promising varieties of chickpea	• To find out the abundance and infestation status of pod borer and its effect on grain yield of chickpea.	Ishurdi, Pabna Barind Jashore and Faridpur Ishurdi Pabna and Gazipur
512.	Population fluctuation of grasspea aphid, *Aphis craccivora* Koch in relation to sowing time and its effect on grain yield	• To know population fluctuation trend and to find out suitable time(s) of sowing to avoid aphid infestation.	Ishurdi, Pabna
Socio-Economics			

Sl. No.	Research Title	Objective (s)	Location
513.	Socio-economic study of lentil cultivation in some selected areas of Bangladesh	• To know the farm-level adoption of improved lentil varieties and to explore the factors of adoption of improved lentil varieties at the farm level. • To measure the profitability and comparative advantage of lentil production and • To explore the socio-economic constraints to lentil production and to make policy recommendations for higher adoption of the improved lentil varieties.	Faridpur Magura Kushtia Jhenaidah Manikgonj and Sirajganj
514.	Profitability and varietal adoption of fieldpea in some selected areas of Bangladesh	• To know the varietal adoption of fieldpea at farm level • To estimate the financial and economic profitability of fieldpea and • To determine the constraints to fieldpea cultivation and policy guidelines.	Ishurdi, Pabna Jashore and Gopalganj
515.	Financial profitability and constraints to the production, processing & marketing of mungbean seed in some selected areas of Bangladesh	• To determine socio-economic information of the mungbean farmers • To find out financial profitability in the mungbean seed production • To estimate effect of inputs on the yield of mungbean seed production and • To identify the constraints to the mungbean seed production, processing and marketing as well as to suggest some policy recommendation.	Jhalokathi and Barisal
OILSEEDS RESEARCH CENTRE			
516.	Collection of rapeseed-mustard germplasm	• To enrich and widen the genetic base of the gene pool of oilseed crops.	Different AEZ of Bangladesh
517.	Evaluation of rapeseed-mustard germplasm	• To explore the genetic diversity of *Brassica rapa*, *B. juncea* and *B. napus* germplasm and • To identify the accessions having useful traits.	Gaipur
518.	Development of short duration	• To develop short duration inbred	Gazipur

Sl. No.	Research Title	Objective (s)	Location
	inbred lines in *Brassica rapa* L. Advancing S5 to S6 generation	lines having desirable agronomic traits.	
519.	Hybridization in *B rapa* L.	• To incorporate earliness in *B. rapa* existing genotypes.	Jamalpur
520.	Evaluation of segregating generation of *Brassica rapa* (F5 and F6 generation)	• To advance generation and • To select short duration plants/families having desirable traits	Gazipur
521.	Growing of F5 generation derived from 16 genotypes of *B. rapa* L.	• To create genetic variability and • To accumulate favourable genes from 16 parents into a single parent.	Gazipur
522.	Observation Trial of *Brassica rapa* L. (Set-I, Set-II, Set-III & Set- IV)	• To select short duration genotypes with better agronomic traits.	Gazipur andJamalpur
523.	Preliminary Yield Trial of *Brassica rapa* L.(Set-I, Set-II & Set-III)	• To select short duration genotypes with better agronomic traits. Location : Gazipur, Ishurdi, Jashore Rahmathpur, Hathazari, Jamalpur, Ishurdi, Gazipur, Jamalpur and Jashore	
524.	Regional Yield Trial of *Brassica rapa* L. (set-I & set-II)	• To select short duration high yielding lines with better agronomic traits and wider adaptability and • To develop short duration variety to fit in between • T. aman and Boro rice. Location: Gazipur, Ishurdi, Jamalpur, Jessore, Rahmatpur and Hathazari	
525.	Hybridization in *B. napus* L.	• To incorporate earliness in *B. napus* existing genotypes.	Jamalpur
526.	Evaluation of segregating generation (F1 –F6) of B.*napus L.*	• To advance generation and to select desirable plants.	Jamalpur
527.	Observation Yield trial of *B. napus* L.	• To select high yield potential lines with early maturity those can be grown in between T. Aman and Boro rice.	Jamalpur
528.	Preliminary Yield trial of *B. napus* 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
529.	Regional Yield trial of *B. napus* L.	• To select high yield potential lines with early maturity those can be grown in between T. Aman and Boro rice.	Jamalpur Gazipur Ishurdi Hathazari Rahmatpur and

Sl. No.	Research Title	Objective (s)	Location
			Jashore
530.	Evaluation of segregating generation of *Brassica juncea* L. (F4, F6 generation -Set-I & Set-II)	• To select plant families having desirable traits.	Gazipur
531.	Observation Trial of *Brassica juncea* L.	• To select genotypes with high yield potential and better agronomic traits and • To develop high yielding variety of *B. juncea.*	Gazipur
532.	Preliminary Yield Trial of *Brassica juncea* L.	• To select genotypes with high yield potential and better agronomic traits and • To develop high yielding variety of *B. juncea.*	Gazipur Ishurdi Jessore and Rahmatpur
533.	Regional Yield Trial of *Brassica juncea* L.	• To select lines with high yield potential, better agronomic traits and wider adaptability and • To develop high yielding variety of *B. juncea.*	Gazipur Ishurdi Jamalpur Jashore Rahmatpur and Hathazari
534.	Observation trial of entries developed from back cross generation of interspecific crosses among *B. carinata*, *B. rapa* and *B. napus*	• Utilization of genetic variability of inter specific cross and • To find out genotypes suitable for cultivation in Bangladesh.	Gazipur
535.	Maintenance of CMS, restorer and maintainer lines of *Brassica napus* L.	• To maintain the male sterile and maintainer lines and • To use in future breeding programme.	Gazipur
536.	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 and • To develop and evaluate test cross hybrids.	Gazipur
537.	Performance of the hybrids developed through selected restore	• To select commercial hybrid.	Gazipur and Jamalpur
538.	Maintenance of double low genotypes of *Brassica napus* L.	• To maintain the double low genotypes.	Gazipur

Sl. No.	Research Title	Objective (s)	Location
539.	Development of double low short duration genotypes through interspecific hybridization I. Evaluation of F5 generation	• To develop double low short duration genotypes through crossing between *Brassica rapa* and *Brassica napus.*	Gazipur
540.	Regional yield trial of double low genotypes of *Brassica napus* L.	• To observe the performance of double low genotypes in Bangladesh condition and • To determine the amount of erucic acid and glucosinolate of the genotypes.	Gazipur Ishurdi and Jashore
541.	Marker Assistance Selection (MAS) of double-low rapeseed	• To identify double-low rapeseed among the germplas. • Selection of superior germplasm based on MAS.	Gazipur (Molecular Breeding Lab,ORC)
542.	Identification of restorer line through Marker Assisted Selection (MAS)	• To identify restorer line. • To select superior restorer lines for hybrid development.	Gazipur (Molecular Breeding Lab,ORC)
543.	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 and • To create genetic variability.	Gazipur (Green house of Plant Breeding Division)
544.	Development of hexaploidy *Brassica* spp	• Incorporation of sufficient genetic diversity to form a basis for breeding and improvement of this potential crop species and • Improvement of agronomic traits to the level of "elite" breeding material in the diploid and allotetraploid crop species.	Gazipur (Green house of Plant Breeding Division)
545.	Development of nested association mapping (NAM) populations	• To create genetic variability. • To phenotyping of NAM lines under short duration and multiple stresses (salinity, drought, Low phosphorus and heat stresses).	Gazipur (Green house of Plant Breeding Division)
546.	Introgression of heat tolerance gene in rapeseed-mustard from wild relatives	• Introgression of heat tolerance gene • Broadening of genetic diversity.	Gazipur (Green house of Plant Breeding Division)
547.	Identification of Climate Smart Rapeseed-Mustard	• To select abiotic stress tolerance line (s) and	Gazipur (Green

Sl. No.	Research Title	Objective (s)	Location
		• To explore climate smart Rapeseed-mustard.	house of Plant Breeding Division
548.	Development of Mobile Apps for Brassica spp. Field Book	• To develop a mobile application for electronic data collection book that runs on consumer grade Adroid mobile phone.	Gazipur
549.	Adaptive trial of advanced lines of *Brassica rapa* L.	• To evaluate the performance of advanced lines of Brassica rapa in the farmers field and • To develop high yielding short duration variety of Brassica rapa.	Ishurdi,Pabna Cumilla Netrakona and Tangail
550.	Adaptive trial of advanced lines of *B napus* 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
551.	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 and • To select the best one (s).	Khulna (Dacope and Koyra), Satkhira and Gazipur
552.	Collection of sesame germplasm	• To enrich and widen the genetic base of the gene pool of sesame. Location :Khulna, Satkhira, Kushtia, Faridpur, Jamalpur, Hathazari Gazipur, Jessore and Ishurdi.	
553.	Maintenance of germplasm of sesame	• To maintain the collected germplasm.	Gazipur Jessore and Ishurdi
554.	Hybridization in sesame	• To create genetic variation and • To find out desirable genotypes.	Gazipur
555.	Evaluation of segregating generation of sesame (F_3, F_5 and F_6)	• To advance generation and • To select desirable genotypes.	Gazipur
556.	Observation trial of sesame	• To select lines with desired characters.	Gazipur
557.	Preliminary yield trial of sesame	• To observe the performance of lines and • To select lines with desired characters over locations.	Gazipur Ishurdi Maulovivazar and Jessore
558.	Regional yield trial of sesame (Set-I and Set-II)	• To select lines with desired agronomic characters and wider adaptability.	Gazipur Ishurdi Jessore and Maulibazar,

Sl. No.	Research Title	Objective (s)	Location
			Akbarpur
559.	Seed increase of advanced lines of sesame	• To meet up the seed requirement for RYT of the next year and • To meet up the seed requirement adaptive trial of the next year.	Gazipur, Ishurdiand Jeshore
560.	Screening of sesame genotypes under water logged condition	• To select water logged tolerant genotypes and • To develop stress tolerant sesame variety.	Gazipur
561.	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 and • To develop high yielding variety of sesame.	Faridpur Khusti Khulna and Sylhet
Variety Development (Crop: Groundnut)			
562.	Collection of groundnut germplasm	• To enrich the gene pool of groundnut.	Gazipur
563.	Maintenance and evaluation of groundnut germplasm (2 exp.)	• To maintain and evaluate the existing germplasm.	Gazipur and Jamalpur
564.	Hybridization in groundnut (2 exp.)	• To create genetic variability and to develop short duration and bold seeded groundnut variety.	Gazipur and Jamalpur
565.	Confirmation of F_1 generation	• To confirm the F_1 generation.	Gazipur
566.	Evaluation of segregating generations of groundnut (Growing F_2, F_3, F_4, F_5, F_6)	• To advance generation and to select short duration plants having desirable traits.	Gazipur and Jamalpur
567.	Observation trial of groundnut (Set-I, Set-II, Set-III and Set-IV)	• To select high yielding, bold seeded, high oleic acid content and early maturing lines.	Gazipur and Jamalpur
568.	Preliminary yield trial of groundnut (Set-I, Set-II and Set-III) (3 exp.)	• To select high oleic acid content, bold seeded and early maturing lines.	Jamalpur and Burirhat
569.	Regional yield trial of Groundnut (Set-I, Set-II and Set-III) (3 exp.)	• To select high yielding and early maturing lines.	Gazipur Jamalpur Burirhat and Hathazari
570.	Seed Increase of Advanced lines of Groundnut and BARI released groundnut varieties	• To produce seeds of groundnut lines and different groundnut varieties.	Gazipur
571.	Adaptive Trial of Groundnut (Set-I and Set-II)	• To know the performance of advanced lines and their adaptation in farmers' field. Location:	

Sl. No.	Research Title	Objective (s)	Location
		Manikgonj,Noakhali,Tangail,Rangpur,Nowbhangarchar, Jamalpur and Char Belgachha and Islampur	
572.	Maintenance and evaluation of soybean germplasm	• To maintain and evaluate the germplasm of soybean.	Gazipur
573.	Development of recombinant inbred lines (RIL) of Soybean	• To develop RIL population and • To create genetic variability.	Gazipur
574.	Observation trial of soybean	• To select high yielding genotypes.	
575.	Preliminary yield trial of soybean	• To select high yielding genotypes.	Gazipur Noakhali and Chandpur
576.	Maintenance and evaluation of sunflower germplasm	• To maintain and evaluate the germplasm of sunflower and • Selection of different accessions for future breeding program.	Gazipur
577.	Development of dwarf inbred lines in sunflower: Family selection from S_7 generation	• To select dwarf, early and high yield potential family from S_7 generation.	Gazipur
578.	Identification of parental lines for development of hybrid sunflower variety	• To identify parental lines (CMS, restorer and maintainer) of sunflower.	Gazipur
579.	Development of synthetic and composite sunflower variety	• To develop synthetic variety of sunflower and • To develop composite variety of sunflower.	Gazipur
580.	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.	Gazipur
581.	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.	Gazipur
582.	Molecular characterization of sunflower dwarf mutants (i) by the expression analysis of Gibberalic Acid (GA) pathwayregulating genes	• To analyze sunflower dwarf mutants for the expression of GA regulating genes	Gazipur Field and Molecular Biology Laboratorty (ORC)
583.	Molecular characterization of sunflower mutants	• To know the expression of *FAD* and *SAD* gene sequences in	Gazipur Field and

Sl. No.	Research Title	Objective (s)	Location
	(i) by the expression of *FAD* and *SAD* gene sequences	sunflower mutants compared to non-treated plants.	Molecular Biology Laboratorty (ORC)
584.	Screening of diverse genotypes of Oilseed crops using SSR primers. (i) Genetic diversity analysis of *Brassica rapa* genotypes using SSR primers	• To study the genetic diversity among *Brassica rapa* gerplasm and variety at molecular level.	Gazipur Field and Molecular Biology Laboratorty (ORC
585.	Seed increase of dwarf advance lines of sunflower	• To increase seed of dwarf advance lines of sunflower and • To use seed in adaptive trial.	Gazipur
586.	Maintenance of linseed germplasms	• To maintain the collected germplasm for future breeding programme.	Gazipur
587.	Preliminary Yield Trial of Linseed	• To select genotypes with high yield potential and better agronomic traits for different locations of Bangladesh and • To develop high yielding variety of Linseed.	Gazipur Pabna Jamalpur and Rangpur
588.	Maintenance of niger germplasm	• To maintain the collected germplasm for future breeding programme.	Gazipur
589.	Observation trial of Niger	• To select genotypes with high yield potential and better agronomic traits. • To develop high yielding variety of Niger.	Gazipur
590.	Maintenance of safflower germplasm	• To maintain the collected germplasm for future breeding programme.	Gazipur
591.	Performance of selected linseed genotypes under salinity condition in pot culture	• To select salt tolerant linseed genotypes under salinity condition.	Gazipur
592.	Intercropping bunching onion (patapeaz) with groundnut at different row arrangement	• To find out the suitable row arrangement of leafy onion with groundnut for higher productivity and profitability.	Gazipur
593.	Effect of seed priming on the yield and seed quality of groundnut (*Arachishypogaea* l.)	• To find out the suitable seed priming method for better crop establishment and shortening the	Gazipur

Sl. No.	Research Title	Objective (s)	Location
		crop growth period of groundnut at field condition.	
594.	Effect of spacing on growth and yield of perilla	• To find out the suitable spacing of perilla and • To find out the growth, yield, and yield component of perilla.	Gazipur
595.	Effect of planting time on yield and seed quality of perilla	• To determine optimum planting time for maximizing yield of perilla.	Gazipur
596.	Study on physicochemical properties and fatty acid composition of perilla and chia	• To determine the oil content, saponification value, iodine value and fatty acid composition of perilla and chia.	Gazipur (Central Laboratory)
597.	Effect of spacing on growth and yield of BARISoybean-7	• To determine optimum spacing for maximizing the yield of soybean genotype as well as economic return.	Gazipur
598.	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	• To increase cropping intensity and productivity through crop intensification in rice based cropping system and • To increase farmer's income, access to food and nutrition, employment opportunity and livelihood improvement.	Jamalpur and Tangail
599.	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
600.	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 and • To increase the yield and farmers' income from soybean cultivation in southern region of Bangladesh.	Rahmatpur, Barishal
601.	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.	Moulavibazar and Sunamganj
602.	Performance of soybean varieties in southern region of Bangladesh	• To identify the appropriate variety of soybean for southern region.	Chandpur, Cumilla and Noakhali

Sl. No.	Research Title	Objective (s)	Location
603.	Performance of sunflower varieties in southern region of Bangladesh	• To identify the suitable variety of sunflower for southern region.	Barisal, Patuakhali and Shatkhira
604.	Performance of groundnut and sesame varieties at charland areas	• To see the performance of groundnut and sesame varieties for charland areas.	Faridpur and Khustia
605.	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 and • To identify critical growth stages for irrigation of canola type mustard variety.	Gazipur
606.	Effect of transplanting time on yield and seed quality of sunflower variety	• To determine optimum transplanting time for maximizing yield of sunflower variety.	Gazipur
607.	Growth and maturity pattern of different mustard genotypes	• To determine growth rate and maturity pattern of three different genotypes of mustard.	Gazipur
608.	Intercropping of firingi with groundnut	• To identify suitable row arrangement of firingi with groundnut for higher productivity and profit.	Gazipur
609.	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.	Gazipur
610.	Determination of fertilizer doses for Canola type mustard variety	• To determine optimum fertilizer dose for maximizing yield of canola type mustard variety.	Gazipur
611.	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
612.	Performance of sunflower genotype in hilly areas of Bangladesh.	• To identify the suitable variety of sunflower in hilly region.	Raikhali
613.	Development of cropping pattern for increasing cropping intensity and productivity	• To increase cropping intensity and productivity through crop intensification in rice based cropping system and • To increase farmer's income,	Gazipur

Sl. No.	Research Title	Objective (s)	Location
		access to food and nutrition, employment opportunity and livelihood improvement.	
614.	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.	Kishoregonj Sunamganj and Moulovibazar
615.	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 and • To know the performance of mechanized mustard production.	Satkhira
616.	On-farm adaptive trial of mustard genotypes in Barind tract areas	• To select suitable genotype of mustard for Barind areas.	Joypurhat and Rajshahi
617.	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 and • To know the present status of disease management practice of the farmers	All over the country
618.	Screening of rapeseed-mustard varieties/lines against *Alternaria* leaf blight disease	• To find out the resistant source(s) against *Alternaria* leaf blight disease of mustard and • The selected resistant lines will be advanced as variety or utilize in the breeding programme.	Gazipur
619.	Evaluation of different group of commercial fungicides against Alterneriablight disease of mustard	• To find out the most effective fungicides in controlling Alterneriablight disease of mustard and • To increase seed yield of mustard.	Gazipur
620.	Screening of groundnut varieties/lines against Tikka, rust and other soil born diseases	• To find out the resistant source(s) against Tikka(leaf spot), rust and other soil borndiseases ofgroundnut for breeding programme.	Gazipur
621.	Evaluation of different group of	• To find out effective fungicides	Gazipur

Sl. No.	Research Title	Objective (s)	Location
	commercial fungicides against Tikka (leaf spot) and rust disease of groundnut (*Arachis hypogaea*)	in controlling Tikka (leaf spot) and rust disease of groundnut and • To increase seed yield of groundnut.	
622.	Evaluation of botanicals, fungicides, bio-agents and soil amendments against collar rot (*Sclerotium rolfsii*) of sunflower *in-vivo* as component of IPM	• To identify the most effective components against collar rot of sunflower caused by *Sclerotium rolfsii* under field condition.	Gazipur
Insect pest management			
623.	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 and record the incidence and damage severity of these pests.	Gazipur
624.	Development of a management approach against flea beetle attacking mustard	• To record the incidence of flea beetle in mustard and • To estimate damage severity of the pest in mustard varieties	Gazipur and Jashore
625.	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	Gazipur
626.	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.	Gazipur
627.	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 and • To record the incidence and damage severity of these pests.	Gazipur
Technology Transfer Programme			
628.	Training programmes for farmers, SA, SSA, SAAO, Officers and Scientists	• Quick dissemination of modern varieties of oilseed crops • Block demonstration of the latest oilseed technologies and • Improvement of skill of the farmers and extension personnel	Gazipur Pabna (OFRD) Netrokona Dinajpur (ARS)
629.	Field Day Number of field days: 23 (80 person/ batch)	Quick dissemination of modern varieties of oilseed crops	Gazipur Pabna (OFRD) Netrokona Dinajpur (ARS)

Sl. No.	Research Title	Objective (s)	Location
630.	Pilot Production Number of locations: 30	• Quick dissemination of modern varieties of oilseed crops Location: Gazipur, Manikgonj, Kishorgonj, Faridpur, Tangail, Sylhet, Hobigonj, Panchagar, Thakurgaon, Kurigram, Sherpur, Netrakona, Jamalpur, Pabna, Sirajgonj, Rangpur, Gaibandha, Bhola, Patuakhali, Khulna, Kumilla, Noakhali, Chandpur, Bandarban, Satkhira, Borguna, Mymensingh, Bogura, Kushtia and Rajshahi	
631.	Breeders seed and TLS production of rapeseed- mustard	• To produce breeders seeds and TLS of modern varieties/advanced lines of Oilcrops. • To supply seed to BADC, researchdivisions and other researchorganizations, NGOs, farmers etc. Location: Gazipur, Ishurdi, Jamalpur, Jashore, Hathazari, Rahamatpur, Bogura, Burirhut, Debigonj, Kumilla and Dinajpur	
632.	Breeder and TLS production of groundnut	• Dissemination of modern varieties Location: Gazipur, Jamalpur, Burirhat and Debigonj	
633.	Breeder seed and TLS production of sesame, sunflower and soybean	• Dissemination of modern varieties Location : Gazipur, Ishurdi, Jamalpur, Jashore, Hathazari, Burirhat, Rahmatpur, Debigonj, Laxmipur, Raikhali and Rajbari	
634.	Breeder seed and TLS production of minor oilseeds	• Dissemination of modern varieties • Location: Gazipur, Burirhat and Rangpur	
SPICES RESEARCH CENTRE			
635.	Collection, conservation and evaluation of onion germplasm	• To identify new onion lines for different agro-ecological zones and • To conserve the land races for future research purposes.	Bogura (SRC)
636.	Evaluation and selection of poly-crossed onion population	• To study the variability of poly-crossed third generation onion populations and • To select the better genotypes in respect of bulb and seed production from the population.	Gazipur (RSRC)
637.	Improvement of poly crossed onion population through mass selection	• To maintain and utilize the local germplasm for the development of elite line (s).	Gazipur
638.	Development of diverse onion germplasm through hybridization	• To develop a diverse source population of onion with a view to increase the yield and keeping quality.	Bogura

Sl. No.	Research Title	Objective (s)	Location
639.	Advance yield trial of winter onion (*Allium cepa* L.)	• To identify the superior open pollinated onion line/s prone to be higher yield and quality.	Faridpur (SRSC)
640.	Searching of male sterile and maintainer lines of onion	• To search male sterile and maintainer lines for future hybrid breeding program.	Bogura
641.	Generation advancement of onion for the development of inbred lines	• To maintain and utilize the germplasm for the development of elite inbred lines locally.	Gazipur (RSRC)
642.	Advancing S_1 seed to S_1 bulb generation of onion	• To maintain and utilize the germplasm for the development of elite inbred lines locally.	Gazipur
643.	A performance study on the growth, yield and quality of negi onion (*Allium fistulosum*) genotypes	• To see the performance on growth, yield and quality of two Negi onion genotypes in Bangladesh conditions.	Faridpur
644.	Regional yield trial of winter onion	• To select promising onion lines over the locations for testing regional adaptability.	Bogura
645.	Regional yield trial of winter onion against thrips	• To select promising onion lines over the locations for testing regional adaptability.	Bogura (SRC) Magura and Cumilla (RSRC)
646.	Purification of BARI released onion varieties	• To bring back the original genetic purity, identity and other good qualities of BARI Piaz-1 and BARI Piaz-4.	Bogura
647.	Evaluation of garlic germplasm	• To select the germplasm having higher yield potential.	Bogura
648.	Advance yield trial of garlic line	• To select the promising garlic germplasm for releasing a variety.	Bogura
649.	Regional yield trial of promising garlic line	• To identify superior germplasm for releasing garlic variety.	Bogura Magura Faridpur and Lalmonirhat (SRSC)
650.	Regional yield trial of garlic (*Allium sativum*)	• To evaluate the stability of yield and tolerant to diseases of garlic lines to develop new variety	Bogura Gazipur Magura Faridpur and Lalmonirhat
651.	Evaluation of winter chilli lines	• To identify suitable winter chilli	Bogura

Sl. No.	Research Title	Objective (s)	Location
		line (s) and to develop good breeding line(s) for improvement of chilli.	
652.	Evaluation of local germplasm of chilli in cumilla region	• To study the performance of different chilli lines for developing variety having higher yield.	Cumilla (RSRC)
653.	Characterization and evaluation of ornamental chilli germplasm	• To identify chilli germplasm suitable for kitchen and rooftop garden as ornamental and table purpose.	Bogura
654.	Collection, evaluation of perennial chilli germplasm	• To characterize and evaluate the morphological performance of different perennial chilli germplasm locally to be released as a variety.	Gazipur
655.	Searching of CMS and maintainer lines of chilli	• To make CMS and maintainer line from indigenous sources.	Bogura
656.	Study of heterosis in chilli	• To exploit heterosis by crossing chilli lines in a 5 × 5 half-diallel fashion.	Bogura
657.	Production of single cross chilli hybrids through diallel mating design	• To produce F1s hybrid seeds.	Gazipur
658.	Development of chilli hybrids for higher yield, more edible dry powder, higher color and oleoresin content with improved nutritional quality	• To identify new chilli genotype(s) to adapt in different agro-ecological zones and • To conserve the land races for future research purposes.	Bogura
659.	Advance yield trial of chilli	• To further evaluate and to identify new chilli genotype(s) to adapt in different agro-ecological zones.	Bogura
660.	Regional yield trial of chilli (Set-I)	• To further evaluate and to identify new chilli genotype(s) to adapt in different agro-ecological zones.	Bogura Faridpur and Lalmonirhat
661.	Regional yield trial of winter chilli (Set-II)	• To observing the regional adaptability of the selected chilli lines at different chilli growing areas and • To select promising winter chilli lines for releasing variety.	Bogura and Cumilla
662.	Regional yield trial of chilli	• To evaluate the performance of	Gazipur

Sl. No.	Research Title	Objective (s)	Location
	(Set-III)	Chilli genotypes with higher yield and stability.	Magura Cumilla and Lalmonirhat
663.	Evaluation of ginger germplasm	• To evaluate the yield and yield components of twenty ginger germplasm collected from different parts of Bangladesh.	Bogura
664.	Evaluation of exotic ginger germplasm	• To study the performance of different ginger germplasm and to select the promising one.	Gazipur
665.	Regional yield trial of promising ginger line	• To identify superior germplasm for releasing a variety.	Bogura and Lalmonirhat
666.	Evaluation of turmeric germplasm	• To identify superior germplasm.	Bogura
667.	Characterization and evaluation of turmeric lines	• To evaluate collected turmeric germplasm for higher rhizome yield with better quality.	Khagrachari (HARS)
668.	Advanced yield trial of turmeric	• To study the performances of promising lines over different locations for regional adaptability.	Bogura
669.	Evaluation of coriander germplasm	• To evaluate twenty-five available coriander genotypes in terms of yield and yield attributes.	Bogura
670.	Evaluation of black cumin germplasm	• To identify the best germplasm with higher yield and other desirable characters.	Bogura
671.	Evaluation of fenugreek germplasm	• To evaluate the germplasm collected from different sources in terms of their seed size and yield potential and • To identify the best one(s).	Bogura
672.	Evaluation of cumin germplasm	• To find out some promising line(s) for variety release.	Bogura
673.	Evaluation of cinnamon genotypes	• To identify the best genotypes of cinnamon.	Jaintapur
674.	Evaluation of bay leaf germplasm	• To select a superior bay leaf germplasm as variety.	Jaintapur
675.	Collection, conservation, and characterization of small and large cardamom germplasm	• To observe yield potentiality of cardamon in Sylhet region.	Jaintapur
676.	Collection and evaluation of	• To enrich gene pool and to	Jaintapur

Sl. No.	Research Title	Objective (s)	Location
	indigenous spices crop under sylhet region	evaluate their performance and further thirst of releasing new variety for commercial use in farmer's level.	
677.	Advance yield trial of fenugreek	• To evaluate six advanced fenugreek germplasm and to identify the superior one(s) for regional yield trail.	Bogura
678.	Advance yield trail of isabgul (*Plantago ovata*)	• To evaluate the performance of different Isabgul (*Plantago ovata*) germplasm. • To select the promising one(s) for releasing a variety.	Magura
679.	Advanced yield trial of mint	• To select promising mint lines in respect of yield and quality.	Bogura
680.	Advance yield trial of chaba (*Piper chaba*)	• To evaluate the performance of different Chaba germplasm and • To select the promising one(s) for releasing as a variety.	Magura
681.	Regional yield trial of coriander genotype(s) for leaf production	• To select the promising line/lines over locations for testing regional adaptability.	Bogura
682.	Regional yield trial of black cumin	• To evaluate the performance of advanced black cumin germplasm at the different agro-ecological zones and • To select the promising one(s) for releasing a variety.	Bogura Gazipur and Magura
683.	Regional yield trial of ajown (*Allium sativum*)	• To select promising lines which has high yield and quality.	Gazipur Faridpur and Lalmonirhat
684.	Regional yield trial of cumin	• To evaluate the performance of advance cumin lines at different agro ecological zone and • To select the promising one for releasing a variety.	Bogura Gazipur Magura Faridpur and Lalmonirhat
685.	Screening of waterlogging stress tolerance chilli germplasm	• To find out suitable waterlogging tolerant chilli genotypes/cultivars for cultivation in rainy season.	Gazipur
686.	Effects of planting date and bulb size on the growth, quality and yield of bulb onion	• To find out the suitable bulb size and plating time on the growth and yield of cut onion cultivation under existing agro-	Lalmonirhat (SRSC)

Sl. No.	Research Title	Objective (s)	Location
		climatic condition of Bangladesh.	
687.	Effects of set size and plant population density on the yield attributes, yield and quality of onion (*Allium cepa* L.)	• To search optimum plant population densities (plant spacing) for obtaining higher yield and quality of onion through set planting method (bulb to bulb) and • To find out suitable set size/s for getting higher yield and quality of onion through set planting method.	Faridpur
688.	Effect of weed management practices on the growth, yield, quality and economic of onion (*Allium cepa* L.)	• To study the efficacy of weed management practices on controlling weeds and growth, yield and quality of onion and • To find out the suitable integrated weed management practice on the basis of economics of onion.	Faridpur
689.	Development of a power tiller operated garlic planter	• To modify the seed metering mechanism of existing BARI seeder suitable for garlic planting. • To test the performance of seeder for planting of garlic clove and • To evaluate technical and financial performance of a prototype developed for a garlic clove planter.	Bogura
690.	Intercropping of spices with chilli in cumilla region	• To find out the most suitable crop combination of onion, garlic and coriander with chilli for increasing total productivity, economic return and maximize land utilization through intercropping system.	Cumilla
691.	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.	Jaintapur (CRS)
692.	Effect of different growing media for ginger seedling production under pro-tray	• To identify suitable growing media for producing ginger seedlings under pro-tray	Bogura

Sl. No.	Research Title	Objective (s)	Location
	technique	technique and • To ensure sustainable ginger production.	
693.	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.	Bogura
694.	Yield performance of turmeric in mango orchard	• To the yield performance of turmeric in mango orchard as intercrop.	Cumilla
695.	Effect of seed rate on growth and yield of ajowan	• To find out the optimum seed rate for growth and yield of Ajowan.	Faridpur
696.	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.	Jaintapur
697.	Effect of different potting media on the success and survivability of black pepper cutting in nursery	• To find out proper media for better growth and success of black pepper cuttings in nursery.	Jaintapur
698.	Effect of different living and non-living standards on the establishment, growth and yield of black pepper cv. BARI Golmorich-1	• To find out suitable standards on the establishment, growth and yield of black pepper cv. BARI Golmorich-1.	Jaintapur
699.	Effect of different standard on growth and yield of black pepper (*P. nigrum*)	• To examine effect of pole types on the early growth of black pepper.	Khagrachari
700.	Observation trial of selected spices, fruits and vegtables for roof top gardening	• To studying the performance of some selected spices, fruits and vegetable crops for roof top gardening. • To ensure year round supply of fresh spices, fruits and vegetables, effective utilization of space. • To increases the monetary value of land/apartment and • To facilitate clean environment.	Bogura
701.	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.	Bogura

Sl. No.	Research Title	Objective (s)	Location
702.	Effect of irrigation and nitrogen on yield and keeping quality of onion	• To evaluate the irrigation and nitrogen fertilizer for quality onion production and better shelf life.	Gazipur and Lalmonirhat
703.	Effect of irrigation and nutrient management on seed yield of onion	• To determine the effect of irrigation and nutrient management on the quality and seed yield.	Gazipur
704.	Optimization of NPKS fertilizers for yield maximization of onion (*Allium cepa* L.)	• To evaluate the response of onion to the NPKS fertilizer in Gazipur.	Gazipur
705.	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.	Bogura
706.	Effect of different organic fertilizers on yield and quality of chilli	• To know the effect of different organic fertilizers on yield and quality of chilli.	Bogura
707.	Effect of different sources of nitrogen on the growth and yield of chilli	• To evaluate the effect of different sources of nitrogen on growth and yield of chilli (BARI Morich-1).	Gazipur
708.	Effect of nitrogen on blossom drop in chilli lines	• To find out optimum doses of nitrogen to reduce blossom drop and • To find a lesser blossom drop chilli line.	Gazipur
709.	Effect of napthylene acitic acid on blossom drop in chilli	• To standardize the optimum concentration and time of application of NAA as foliar spray in reducing blossom drop.	Gazipur
710.	Effect of organic fertilizer for safe naga chili production	• To check the significance and importance of organic manures for Naga chili cultivation.	Jaintapur
711.	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.	Jaintapur
712.	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.	Bogura
713.	Effectof N, P, K and S for yield on growth and yield of fennel	• For knowing the optimum row spacing with the N, P, K and S	Gazipur

Sl. No.	Research Title	Objective (s)	Location
		fertilization for achieving the higher growth and yield of fennel.	
714.	Effect of nutrient management on growth and leaf yield of bay leaf	• To develop a suitable nutrient management package for yield maximizing of bay leaf.	Gazipur
715.	Effect of different chemical and biological agent for controlling fusarium basal rot of summer onion	• To know the appropriate management practices for controlling fusarium basal rot of summer onion.	Magura
716.	Management of choanephora blight of chilli	• To find out the effective control measures against Choanephora blight or wet rot disease of chilli.	Bogura
717.	Control of foot and root rot disease of chilli	• To find out the effective control measures against foot and root rot disease of chilli.	Bogura
718.	Fungicidal management of leaf spot disease of ginger	• To find out the effective fungicides to control leaf spot of ginger.	Bogura
719.	Fungicidal management of rust disease of fenugreek	• To find out the control measures of rust of Fenugreek.	Bogura
720.	Management of Alternaria leaf and umbel blight of dill	• To find out the effective fungicides in controlling Alternaria leaf and umbel blight of Dill.	Bogura
721.	Storability study of different exotic and native onion (*Allium cepa* L.) genotypes/varieties	• For testing storability of 25 genotypes.	Faridpur
722.	Studies on the processing and preservation of garlic paste	• To prepare garlic paste from fresh garlic • To study the effects of different types of preservatives (in different concentration and combination of potassium metabisulphite and sodium benzoate) on the keeping quality of the garlic pastes and • To study the effects of storage conditions (ambient and refrigerated temperature) on the keeping quality of the garlic pastes.	Bogura

Sl. No.	Research Title	Objective (s)	Location
723.	Studies on quality of developed ginger-garlic mix paste during storage	• To prepare ginger-garlic mix paste from fresh ginger and garlic • To study storage stability and determine organoleptic acceptability of developed products and • To minimize the post- harvest losses and optimize process parameter to obtain high quality process products from ginger and garlic	Bogura
724.	Development of shelf stable value added pickles from plum (*Prunus domestica*)	• To develop different types pickles from plum. • To analyze chemical and proximate composition of developed products. • To assess the storage stability and the acceptability of the processed products.	Bogura
725.	Development of shelf stable value added candy from plum (*Prunus domestica*)	• To develop different candies from plum. • To analyze chemical and proximate composition of selected developed products and • To assess the storage stability and the acceptability of the processed products.	Bogura
726.	Development of shelf stable value added bar from plum (*Prunus domestica*)	• To develop different bars 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.	Bogura
727.	Studies on post-harvest losses of onion and factors affecting for such losses in selected areas in Bangladesh	• To quantify the post-harvest losses of Rajshahi, Pabna and Rajbari districts at various stages of supply chain viz. farm, wholesale market and retail market levels.	Bogura
728.	Assessment of onion production trend in onion growing area of	• To promote and adopt the quickest and accurate approach	Bogura

Sl. No.	Research Title	Objective (s)	Location
	Bangladesh through remote sensing technique	of mapping and estimating onion growing area using GIS, satellite remote sensing techniques within the existing cropland mask for as one means to assist the development and management of sustainable agricultural production of Bangladesh.	
729.	Performance of BARI Dhania-2, BARI Kalozira-1 and BARI Piaz-1 at char land	• To motivate farmers for cultivation of minor spice crops by performance trial.	Lalmonirhat
730.	Effect of varieties and sowing methods on yield of black cumin under charland condition	• To find out suitable black cumin variety and sowing methods under charland condition.	Lalmonirhat
PLANT GENETIC RESOURCE CENTRE			
731.	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
732.	Characterization of Sorghum Germplasm	• To explore the genetic diversity of sorghum germplasm and • To identify the accessions having useful traits.	Gazipur
733.	Characterization of Chickpea Germplasm	• To characterize the germplasms and to regenerate seeds for conservation and • To identify the promising germplasm.	Jashore
734.	Characterization of Pea Germplasm	• To study the genetic diversity in pea germplasm and • To identify accession having useful traits	Rangpur (RARS)
735.	Characterization of Coriander Germplasm	• To study the genetic diversity in coriander germplasm and • To identify salient features of studied germplasm	Gazipur
736.	Characterization of Pumpkin Germplasm	• To identify the genetic variability of desirable yield contributing characters in pumpkin germplasm.	Gazipur
737.	Characterization of Hyacinth bean Germplasm	• To study the genetic diversity in hyacinth bean germplasm and	Gazipur

Sl. No.	Research Title	Objective (s)	Location
		• To identify salient features of studied germplasm	
738.	Characterization of Amaranth Germplasm	• To study the genetic variation in amaranth accessions and • To identify salient features that distinguishes germplasm from one another	Gazipur
739.	Characterization of Grass pea Germplasm	• To characterize grass pea germplasm for future use and • To estimate genetic diversity in grass pea germplasm under field condition for various qualitative and quantitative traits	Gazipur
740.	Characterization of Grass pea Germplasm	• To characterize grass pea germplasm for future use and • To estimate genetic diversity in grass pea germplasm under field condition for various qualitative and quantitative traits	Jamalpur
741.	Characterization of Grass pea Germplasm	• To characterize grass pea germplasm for future use and • To estimate genetic diversity in grass pea germplasm under field condition for various qualitative and quantitative traits	Ishurdi, Pabna
742.	Characterization of Lentil Germplasm	• To study the genetic diversity in lentil germplasm and • To identify accession having useful traits	Ishurdi, Pabna
743.	Characterization of Onion Germplasm	• To study the genetic diversity in onion germplasm and • To identify salient features of studied germplasm.	Gazipur
744.	Characterization of Mung bean Germplasm	• To identify the genetic variability of desirable yield contributing characters in mung bean germplasm.	Gazipur
745.	Characterization of Sesame Germplasm	• To estimate genetic differences among sesame germplasm and • To identify salient features of studied germplasm.	Gazipur
746.	Characterization of Cucumber Germplasm	• To study the genetic diversity in cucumber germplasm and • To identify salient features of	Gazipur

Sl. No.	Research Title	Objective (s)	Location
		studied germplasm.	
747.	Characterization of Brinjal Germplasm	• To study the genetic diversity in brinjal germplasm and • To identify salient features of studied germplasm	Gazipur
748.	Characterization of Tomato Germplasm	• To characterize the indigenous tomato germplasm. • To assess morphological variability among the studied germplasm and • To provide genetic information for crop improvement program.	Gazipur
749.	Characterization of Chilli Germplasm	• To study the genetic diversity in chilli germplasm and • To identify salient features of studied germplasm.	Gazipur
750.	Conservation of Germplasm in Active and Base Collection	• To register newly collected germplasm with passport information and • To assign accession number and • To conserve germplasm in active and base collection.	Gazipur (PGRC)
751.	Monitoring of Germplasm in Active and Base Collection	• To test the viability of conserved germplasm and • To identify the germplasm for regeneration and multiplication	Gazipur
752.	Distribution of Germplasm	• To explore the germplasm for crop improvement. • To facilitate in conducting research for academic degree and • To restore diversity loss in on-farms and natural habitat	Gazipur
753.	Conservation of Germplasm in Field Gene Bank	• To maintain germplasm at the field gene bank.	Gazipur
754.	Regeneration of Pumpkin, Hyacinth Bean, Bottle Gourd, Cucumber and Bitter Gourd Germplasm	• To multiply the seeds of newly collected germplas and • To multiply the seeds for characterization and distribution.	Gazipur
755.	Regeneration of Safflower Germplasm	• To maximize seed quantity. • To maintain genetic integrity of the germplas and • To conserved germplasm for future study.	Gazipur

Sl. No.	Research Title	Objective (s)	Location
756.	Regeneration of Sunflower Germplasm	• To regenerate the original sample and conserved accession and • To identify salient features that distinguish germplasm from one another.	Gazipur
757.	Database Development and Data Entry for Germplam Documentation	• To properly conserve, manage and use biodiversity of plant species.	Gazipur
PLANT BREEDING DIVISION			
758.	Collection and maintenance of exotic barley germplasm	• To maintain and enrich genetic pool of barley germplasm.	Gazipur
759.	Hybridization of barley	• To incorporate earliness and saline tolerant gene in high yielding hull-less barley.	Gazipur
760.	Growing of F_1 of barley (2 Sets)	• Advancing of different generation to develop desired variety	Gazipur
761.	Growing of F_2 generation of barley	• To advance the generation. • To select individual plant on the basis of desirable characters.	Gazipur
762.	Growing of F_3 generation of barley	• To advance the generation. • To select individual plant on the basis of desirable characters.	Gazipur
763.	Growing of F_4 generations of barley	• To advance the generation. • To select individual plant on the basis of desirable characters.	Gazipur
764.	Growing of F_5 generations of barley	• To advance the generation. • To select desirable family on the basis of desirable characters.	Gazipur
765.	Growing of F_6 generations of barley	• To select desirable lines.	Gazipur
766.	Growing of F_1, F_2 and F_3 generations of barley under saline condition	• To selected saline tolerant plants in F_2 and F_3 generation.	Gazipur
767.	Observation trial of promising barley lines	• To test the performance of the selected genotypes and • To identify short duration and high yielding barley lines.	Gazipur
768.	Preliminary yield trial of hull-less barley	• To select better performing high yielding hull-less barley lines.	Gazipur Jashore and Burirhat
769.	Regional yield trial of hull-less	• To assess the stability of some	Gazipur

Sl. No.	Research Title	Objective (s)	Location
	barley	hull-less barley lines and verify the influence of different environments at different locations of Bangladesh and • To select better performing hull-less barley line(s).	Rangpur Jashore Satkhira and Debigonj
770.	Isolation and artificial inoculation of *Drechslera sp*. for screening of barley lines	• To identify new sources of Drechslera resistant barley line(s)	Gazipur and Burirhat
771.	Induced mutagenesis in foxtail millet to develop variability	• To create variability in the existing germplasm	Gazipur
772.	Regional yield trial of foxtail millet	• To test the performance for early maturity and high yielding foxtail millet genotype over locations.	Gazipur Debigonj Burirhat Jashore and Jamalpur
773.	Observation trial of selected proso millet lines	• To select high yielding and lodging tolerant proso millet lines.	Gazipur
774.	Preliminary yield trial of proso millet lines	• To test the performance of the selected proso millet lines over the tested regions. • To develop high yielding and short statured proso millet variety	Gazipur Rangpur and Jashore
775.	Regional yield trial of proso millet	• To develop high yielding and lodging tolerantproso millet variety	Gazipur Jamalpur Burirhat and Jashore
776.	Preliminary yield trial of finger millet	• To develop short statured and early maturing finger millet variety	Gazipur and Rangpur
777.	Population development of pearl millet	• To develop source population for the development of pearl millet variety.	Gazipur
778.	Development of base population in sorghum	• To develop source population for the production of short and medium height genotypes.	Gazipur
779.	Screening of Sorghum lines under waterlogging stress condition	• To select the waterlogging tolerant sorghum genotypes	Gazipur
780.	Evaluation and selection of mutants for desirable traits in M_1 generation of oat	• To evaluate M_1 generation. • To select desirable variable mutants.	Gazipur

Sl. No.	Research Title	Objective (s)	Location
781.	Induced mutagenesis in buckwheat to develop variability	• To develop variable mutant.	Gazipur
782.	Regional yield trial of buckwheat	• To select better performing buckwheat line.	Gazipur
783.	Molecular characterization of newly developed barley lines with released varieties	• Assessment of genetic variation in barley genotypes.	Gazipur
784.	Alternation of adaptive mechanism of quinoa using malic acid under drought	• To understand the drought tolerance mechanism in quinoa and • To examine the possible role of exogenous malic acid in drought tolerance.	Gazipur
785.	Modulation of drought tolerance of finger millet by Trehalose and Methyl Jasmonate	• To insight the drought tolerance mechanism of finger millet.	Gazipur
786.	Adaptive mechanism of response of oat to salinity	• To better understand stress tolerance mechanism in Oat under salinity.	Gazipur
787.	Nutritional analysis of BARI released minor cereals	• Analysis of nutrient contents in barley, millets, sorghum, oat, buckwheat and quinoa grains.	Gazipur BIRTAN and Narayanganjr
788.	Starch quality analysis of barley lines and varieties	• Analysis of amylopectin and amylose contents in barley grains.	Gazipur
789.	Breeder seed production of barley	• To maintain and increase seed of the released variety and • To supply seeds producing agency like BADC, DAE or NGOs and farmers.	Gazipur Ishurdi Debigonj and Burirhat
790.	Breeder seed production of foxtail millet, proso millet, sorghum and oat varieties	• To maintain and seed increase of the released variety to supply to BADC, DAE or NGOS and farmers.	Gazipur Ishwardi Burirhat Debigomj and Jamalpur
791.	Maintenance and seed increase of barley lines	• To maintain and seed increase of advanced lines.	Gazipur
792.	Maintenance and seed increase of foxtail millet germplasm	• To maintain and seed increase of foxtail millet germplasm.	Gazipur
793.	Maintenance of proso millet germplasm	• To maintain of proso millet germplasm for future breeding programme.	Gazipur
794.	Maintenance of pearl millet	• To maintenance of pearl millet	Gazipur

Sl. No.	Research Title	Objective (s)	Location
	germplasm	germplasm for future breeding programme.	
795.	Maintenance and seed increase of oat lines	• To maintain of oat lines for future breeding program.	Gazipur
796.	Maintenance and seed increases of buckwheat lines	• To increase seed of buckwheat lines.	Gazipur
797.	Seed increase of quinoa germplasm	• To maintain and enrich genetic resources of quinoa germplasm.	Gazipur
798.	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 and • To disseminate and popularize BARI barley varieties to the farmers.	Satkhira Khulna Noakhali (Saline areas) and Rajshahi (Barind)
799.	Adaptive trials with BARI barley and oat varieties in Char areas	• To observe theperformance of BARI barley varieties in dry and char areas and • To popularize and disseminate BARI barley varieties to the farmers of dry areas.	Bogura Tangail Rangpur Faridpur Manikganj and Gaibandha
800.	Up-scalling of BARI foxtail 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 (Char land) an Rajshahi (Barind))
801.	Field days on the performance of BARI released barley and millet varieties	• To popularize BARI Barley and Foxtail millet varieties among thefarmers and private agencies.	Satkhira Khulna Noakhali Bogura Rangpur and Rajshahi
802.	Training program	• SA/SSA training on barley, millets and sorghum production and • Farmers Training on barley and millets production	Satkhira Noakhali Gaibandha and Rangpur
AGRONOMY DIVISION			
803.	Nitrogen use efficiency in maize through different application method	• To increase efficiency of N in maize cultivation. • To observe the growth and yield of maize and	Gazipur

Sl. No.	Research Title	Objective (s)	Location
		• Uptake of N and protein content.	
804.	Light interception chlorophyll content and productivity of baby corn as influenced by planting geometry and fertilizer management	• To evaluate the influence of crop geometry and fertilizer levels on light interception, chlorophyll, content and yield of baby corn.	Gazipur
805.	Estimation of optimum plant population of maize through functional model	• To adjust the optimum plant population of maize through functional modeling in relation to phenological development and growth	Gazipur
806.	Effect of sampling technique on yield assessment of lentil	• To find out yield variation from different sampling methods and • To find out relaionship between assessed yield and whole plot yield.	Gazipur
807.	Performance of BARI released mustard varieties at Moulvibazar	• To know the performance of mustard varieties in the areas of Moulvibazar area.	Moulvibazar
808.	Effect of sowing date on sunflower at Moulvibazar	• To find out the optimum seeding date for obtaining maximum yield of Sunflower.	Moulvibazar
809.	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
810.	Effect of different concentration and application time of gibberalic acid on growth and yield of potato	• To find out appropriate concentration and appropriate time of GA_3 application in potato tuber production. • To increase seed tuber number per plant and accelerate seed production scheme.	Dinajpur
811.	Effect of variety and transplanting date on year round chilli production	• To find out suitable chilli variety for year round production.	Jamalpur
812.	Effect of planting date and variety on taro	• To find out the suitable sowing time and variety for taro production and • To get better market price and nutrition.	Jamalpur
813.	Performance of garlic varieties at Dinajpur region	• To find out suitable garlic variety for Dinajpur	Dinajpur
814.	Growth and yield of sorghum as influenced by spacing and	• To find out suitable spacing and optimum fertilizer dose for	Gazipur

Sl. No.	Research Title	Objective (s)	Location
	nutrient management	higher grain yield of sorghum.	
815.	Grain and fodder yield of sorghum as affected by cutting time	• To increase total productivity and economic return and • Yield of forage sorghum will be increased.	Gazipur and Jamalpur
816.	Effect of nutrient management and harvesting time on ratooning of sorghum as fodder crop	• To find out optimum fertilizer dose for ratooningof sorghum.	Gazipur
817.	Effect of sowing time and plant population on growth and yield of chia (*salvia hispanica)*	• To find out suitable sowing time and row spacing on yield of chia seeds.	Gazipur
818.	Effect of sowing date and planting method on growth and yield of squash	• To evaluate the optimum sowing time and planting method of squash.	Dinajpur
819.	Effect of plant population and integrated nutrient management on yield of dwarf yard long bean(*Vigna unguiculata*)	• To find out optimum spacing as well as fertilizer dose for maximum yield of dwarf yard long bean	Gazipur
820.	Determination of harvesting efficiency of mung bean	• To find out the harvesting efficiency of mungbean.	Gazipur and Ishwardi
821.	Effect 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) and • To improve the quality of shitalpati (cooling mat).	Barishal
822.	Effect of different chemical treatments of murta cane on the quality of shital pati in Bangladesh	• To develop suitable chemical treatment/process of murta cane for improving the quality of shital pati in Bangladesh.	Barishal
823.	Effect of integrated weed management on sorghum cultivation	• To find out suitable weed management practices in sorghum and to observe the effect of herbicide on soil microbes.	Gazipur
824.	Effect of weeding and nutrient management practice on yield of sweet gourd	• To increase the production and quality of sweetgourd.	Gazipur
825.	Optimization of dose and time of application of pendimethalin on weed control of onion	• To find out the appropriate dose, and time of spray of herbicide for weed control of onion.	Gazipur
826.	Effect of integrated weed management on tomato cultivation	• To find out suitable weed control method in tomato.	Gazipur

Sl. No.	Research Title	Objective (s)	Location
827.	Integrated weed management of okra	• To find out the suitable weed management practice.	Gazipur and Jashore
828.	Carbon sequestration through residue management and crop productivity in Potato-Maize-T.*aman* cropping pattern in long term basis	• To find out carbon sequestration rate • To maintain soil health in long term basis and • To observe productivity trend in long term basis.	Gazipur
829.	Maize-legume strip cropping for resource conservation	• To evaluate the effect of strip cropping on maintain sustainable productivity and conserve soil health, and soil moisture	Gazipur
830.	Performance of intercropping dwarf yard long bean with maize under different planting system	• To find out suitable planting system of hybrid maize and DYLB intercropping.	Gazipur
831.	Intercropping onion and garlic with brinjal under different planting system	• To find out suitable intercrop combination of onion and garlic with brinjal.	Gazipur
832.	Performance of legume vegetables intercropping with chilli	• To find out suitable crop combination for higher productivity and economic return.	Gazipur
833.	Yield process and crop competition of leafy vegetables intercropping system with chilli	• To find out suitable crop combination for higher productivity and economic return.	Gazipur
834.	Performance of intercropping bushbean with sorghum	• To find out suitable planting systems of sorghum and bush bean (short duration crop) intercropping.	Gazipur
835.	Compatibility of minor cereals intercropping with groundnut	• To find out the compatibility of minor cereals intercropping with groundnut.	Gazipur
836.	Performance of relay bitter gourd in chilli + red amaranth intercropping at medium high land under AEZ-9 without trellis	• To find out suitable combination of red amaranth and bitter gourd as intercropping and relay cropping with chilli at medium high land.	Jamalpur (RARS)
837.	Performance of relay bitter gourd in chilli + onion intercropping at medium high land under AEZ -9 without trellis	• To find out suitable combination of onion and bitter gourd as intercropping and relay cropping with chilli.	Jamalpur (RARS)
838.	Performance of relay snake	• To find out the suitable	Jamalpur

Sl. No.	Research Title	Objective (s)	Location
	gourd in brinjal + onion intercropping at medium high land under AEZ -9 without trellis	combination of onion and snake gourd as intercropping and relay cropping with brinjal.	(RARS)
839.	Nutrient management for mustard as relay crop with T. *aman* rice under Ganges Tidal Floodplain	• To develop nutrient management package for mustard as relay crop with T. *aman* rice.	Barishal (RARS)
840.	Intercropping of cauliflower with sweet gourd at different plant population	• To find out the suitable cauliflower population for intercropping with sweet gourd.	Dinajpur (ARS)
841.	Productivity and profitability analysis of intercropping hybrid maize with potato at different planting system	• To get maximum benefit from intercropping by optimizing plant population of maize and potato.	Dinajpur
842.	Intercropping of spices with chilli in Cumilla region	• To find out the most suitable crop combination of onion, garlic and coriander with chilli.	Cumilla (RARS)
843.	Intercropping of vegetables and spices with chilli in Chattogram	• To evaluate the performance of the intercropping system of vegetables and spices with chilli.	Hathazari, Chattogram
844.	Improvement of cropping intensity through relay yard long bean with maize + bush bean (*khaissa*) intercropping	• To increase the total productivity through relay intercropping of yard long bean with maize.	Burirhat, Rangpur
845.	Long term effect of four crop based cropping pattern on crop productivity and soil health	• To increase cropping intensity and productivity through crop intensification and diversification in rice based cropping system and to find out its effect on soil nutrient balance	Gazipur
846.	Development of vegetable based cropping pattern for increasing cropping intensity and ensuring nutrition	• To develop, standardize and popularize nutrition enriched vegetable based cropping patterns.	Jashore
847.	Development of fertilizer package for five crop based cropping pattern in rice based cropping system	• To find out judicious fertilizer recommendation for T. *Aman*-Mustard – Spinach-Mungbean- • T. *Aus* - cropping pattern.	Jashore
848.	Development of alternate cropping pattern for increasing cropping intensity and productivity in Rangpur region	• To find out the productivity and profitability of said cropping pattern.	Burirhat, Rangpur
849.	Estimation of temperature co-	• To observe the growth behavior	Gazipur

Sl. No.	Research Title	Objective (s)	Location
	efficient of wheat for adjusting proper sowing time	and yield of wheat as influenced by prevailing air temperature as well as other weather elements based on sowing time	
850.	Potentiality of BARI released tomato varieties under late planting condition in Dinajpur	• To study response of different variety of tomato during late season under the agro-climatic conditions of this region	Rajbari, Dinajpur
851.	Effect of micronutrient on cowpea in southern region of Bangladesh	• To examine the effects of micronutrient on cowpea.	Rahmatpur, Barishal
852.	Effects of different rates of growth regulator (gibberellic acid) on cowpea in southern region of Bangladesh	• To determine the effects of growth regulator on cowpea for increasing the yield of the crop.	Rahmatpur, Barishal
853.	Performance of different pulse crops under mango orchard in southern region of Bangladesh	• To study the effect of intercropping on main crop mango and to select the most appropriate intercropping system	Rahmatpur, Barishal
854.	Effect of seedling age on yield of transplanted sunflower under zero tillage condition in southern region of Bangladesh	• To find out the optimum age of sunflower seedling for getting higher yield under zero tillage condition in the southern region of Bangladesh.	Rahmatpur, Barishal
855.	Performance 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.	Rahmatpur, Barishal
856.	Effect of tillage and fertilizer dose on sunflower growth and yield in southern region of Bangladesh	• To investigate the effects of different tillage methods on growth and yield and yield components sunflower.	Rahmatpur, Barishal
857.	Water stress effect on growth and yield of yard long bean	• To examine the effect of water stress on growth and yield of yard long bean	Gazipur
858.	Integrated vegetables and fish cultivation through plastic drum based floating system in flooded ecosystem of Bangladesh	• To increase the total productivity and net return through vegetable cum fish farming under floating agriculture system.	Rahmatpur, Barishal
859.	Development of floating bed cum trellis (tidal model) for creeper vegetables cultivation under tidal flooded ecosystem of	• To develop floating bed cum trellis (tidal) in flooded ecosystem.	Rahmatpur, Barishal

Sl. No.	Research Title	Objective (s)	Location
	Bangladesh		
860.	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
861.	Sorjan based integrated farming systems research for increasing agricultural productivity unde 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
862.	Adaptation of BARI released crop varieties in charland	• To adapt crop varieties at charland for higher productivity.	Lakxmi-kunda, Ishurdi
863.	Earthing up and sowing time effect on sweet potato in char land ecosystem	• To find out the suitable sowing time and management practice of sweet potato for increasing productivity and economic return in charland.	Jamalpur
864.	Performance of intercropping leafy vegetables with sweet potato in char area of Rangpur	• To evaluate the performance of the intercropping system and to find out a suitable leafy vegetables crop for using as intercrop with sweet potato.	Gangachara, Rangpur
865.	Performance of sweet potato varieties at char land in Rangpur	• To find out better sweet potato varieties in char land area.	Gangachara, Rangpur
866.	Performance of potato varieties a chalanbeel area	• To adapt BARI released high yielding potato varieties in Chalanbeel area	Chalanbeel, Sirajgonj
867.	Evaluation of recent developed maize based intercropping technologies at hilly areas of Khagrachari	• To evaluate the potentiality of those intercrop technologies.	Khagrachori
868.	Varietal performance of sesame in hilly and semi hilly areas of Moulvibazar	• To find out the suitable variety of Sesame for hilly areas.	Moulvibazar
SOIL SCIENCE DIVISION			
869.	Assessment of leaching loss of nutrients and determination of crop coefficient values of sweet pepper through lysimetric studies	• To find out the crop coefficient values (Kc) and evapotranspiration (Et) using lysimeter and • To quantify leaching loss of nutrients.	Gazipur (Lysimeter block)
870.	Requirement of nitrogen for Mustard-Maize-T. Aman	• To determine the optimum rate of nitrogen fertilizer for the	Gazipur and Jashore

Sl. No.	Research Title	Objective (s)	Location
	cropping systems based on Conservation Agriculture practices	intensive Mustard-Maize-T. Aman cropping system under CA practice. • To evaluate the effects of crop residue and nitrogen on soil physico-chemical properties and component crop productivity and • To assess the system productivity in the aforesaid cropping system.	
871.	Effect of organic and synthetic mulches on soil temperature, nutrient availability and yield of squash	• To determine the effects of different mulches on soil temperature and • To observe the changes in soil moisture and trend of nutrient availability as governed by organic and synthetic mulches.	Gazipur
872.	Synchronization of different aged compost to crop demand, nutrient release and their contribution to the production of spinach	• 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 and • To observe the changes in soil physical, chemical and biological properties.	Gazipur
873.	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 and • To study the soil health under crop establishment and organic dominant IPNS in the cropping system.	Gazipur
874.	Effect of crop establishment practices, residue management and starter N dose on N mineralization and soil health performance of vegetable based cropping system	• To find out the performance of crops in vegetable based cropping system • To study on N mineralization under starter dose of N and • To find out the best combination of crop establishment practice,	Gazipur

Sl. No.	Research Title	Objective (s)	Location
		residue and starter N dose for vegetable-based cropping system and soil health.	
875.	Performance of anaerobically decomposed organic manure under different crop establishment practices	• Preparation of anaerobic decomposed organic manure. • Incubation study on decomposition rate and nutrient release pattern from anaerobically decomposed organic manure and • Study on performance of the best combinations of organic manure and cropestablishment practice at field level.	Gazipur
876.	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
877.	Decomposition rates of different organic residues under tillage practices and release of nutrients under varied agro-climatic conditions	• To estimate the mass loss and release of C and N under crop establishment practices and different agro-climatic conditions and • To find out the mineralization rate of nutrients from different organic residues.	Gazipur Rajshahi Faridpur Sylhet Pabna Satkhira and Chattragram
878.	Effect of seed priming and sowing method on soil salinity amelioration and yield of sunflower in south-western Bangladesh	• To assess the germination percentage and yield attributes of sunflower under different seed priming and planting depth and • To study the interactive effect of seed priming and planting depth on soil properties and yield of sunflower.	Satkhira
879.	Effect of conservation tillage and urea super granule on soil	• To develop a protocol for USG application under CA practices.	Gazipur

Sl. No.	Research Title	Objective (s)	Location
	physico-chemical properties and productivity of Gardenpea-Panikachu-T.aman	• To study on the soil physical properties improvement under the crop establishment and USG application practices and • To investigate the performance of crops in the triple crops cropping system under the crop establishment and USG application practices.	
880.	Effect of tillage methods and biochar on the cropping system productivity and establishment of carbon and nitrogen footprints	• To observe the effects of tillage and biochar application on soil physical, chemical and biological properties and crop yields in the triple-crop cropping system. • To find out the optimum combination of tillage system and potential • C source for C stabilization in soil and • To assess C and N footprint under different tillage and C source	Gazipur
881.	Effect of conservation tillage and phosphorus on the productivity Gardenpea-Maize-T.aman rice cropping pattern and soil properties	• To find out the effect of tillage and phosphorus on the productivity of the pattern and • To observe the effect of tillage and phosphorus on soil health.	Gazipur
882.	Effect of conservation tillage and split application of potassium on the productivity of Maize-Mungbean-T.aman and physico-chemical properties of soil	• To find out the effect of tillage and timing of potassium application on soil physic-chemical properties and • To increase the productivity of the pattern	Gazipur
883.	Effect of legume-vegetative cover crop in reducing soil loss and improving crop productivity in hilly region	• To find out the effect of legume-vegetative cover crop on soil conservation. • To increase the productivity of hill slope by using LCC and VCC and • To minimize rate of soil loss through utilization of LCC and VCC.	Ramgarh
884.	Nutrient management for sustaining soil fertility and yield	• To find out judicious fertilizer recommendation for Wheat-	Ishurdi and Jashore

Sl. No.	Research Title	Objective (s)	Location
	of Wheat-Mungbean-T.Aman cropping pattern	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.	
885.	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
886.	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.	Gazipur
887.	Estimation of fertilizer requirement for four crop based cropping pattern (Mustard-Mungbean-Jute-T.Aman)	• To develop a fertilizer recommendation for four crop based cropping pattern and • To maximize the yield of four crop based cropping pattern through nutrient management.	Jamalpur and Jashore
888.	Nutrient management of panikachu on water hyacinth floating bed	• To develop nutrient management package for panikachu on floating bed and • To increase the yield of panikachu under floating agriculture	Rahamatpur, Barishal
889.	Nutrient management of turmeric on water hyacinth floating bed	• To develop nutrient management package for turmeric grown on water hyacinth made floating bed and • To increase the yield of turmeric	Rahamatpur, Barishal

Sl. No.	Research Title	Objective (s)	Location
		under floating agriculture	
890.	Comparative study of different application methods of potassium on panikachu	• To compare the effect of basal and top dress application of K on quality of panikachu and • To increase the yield of panikachu through K management	Jamalpur
891.	Effect of poultry litter biochar in ameliorating acid soil	• To investigate the effectiveness of poultry litter biochar on the amelioration of acidic soil.	Gazipur / Narsingdi and Khagrachari
892.	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 and • To quantify the change of soil health	Gazipur
893.	Development of fertilizer recommendation for Aloe Vera	• To find out optimum fertilizer doses for the production *Aloe Vera*	Gazipur
894.	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 and • To increase yield, popularize rooftop garden in the urban area and ensure family nutrition.	Gazipur
895.	Fertilizer management of some vegetables, fruits and flowers for a rooftop garden	• To develop fertilizer recommendation for vegetables, fruits and flowers grown on the rooftop garden.	Gazipur
896.	Influence of different ratio of soil and organic materials on the growth and yield of vegetable for rooftop garden	• To develop fertilizer recommendation for vegetables, fruits and flowers grown on the rooftop garden.	Gazipur
897.	Development of fertilizer	• To find out a suitable and	Gazipur

Sl. No.	Research Title	Objective (s)	Location
	recommendation for cauliflower maize intercropping system	economic fertilizer dose for maximizing the yield from the intercropping system.	
898.	Production of compost from household waste	• To optimize the process parameter to produce compost from kitchen waste and • To analyze the quality of compost produced from kitchen waste.	Gazipur
899.	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 and • To analyze cost and return of maize produced from different form of urea.	Gazipur
900.	Effect of different rate of nitrogen and phytohormone on the yield of sunflower in coastal area	• To identify the best combination of nitrogen and phytohormones on the yield of sunflower in coastal area • To find out optimum dose of phytohormones to ameliorate soil salinity for sunflower production in saline areas and • To observe the lodging avoidance capacity of sunflower under different combination of nitrogen and phytohormones.	Satkhira
901.	Nutrient management for lemon	• To find out optimum and economic fertilizer dose for yield maximization of lemon and • To know the response of lemon to added nutrients.	Jamalpur
902.	Nutrient management of sesame in Barishal region	• To develop nutrient management package for sesame in Barishal region and • To increase the yield of sesame through fertilizer management.	Rahmatpur, Barishal
903.	Effect of different nitrogen sources on nitrogen use efficiency and yield of tomato in Cumilla Region	• To find out the best nitrogen source for tomato yield in Cumilla Region and • To find out the nitrogen use	Cumilla

Sl. No.	Research Title	Objective (s)	Location
		efficiency of different sources on nitrogen.	
904.	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 and • To increase soil fertility and sustain crop productivity.	Gazipur and Jamalpur
905.	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 and • To increase crop yield.	Jamalpur
906.	Effect of vermiwash on yield and quality of brinjal	• To investigate the role of vermiwash on yield and quality of brinjal and • To find out suitable foliar dose of vermiwash for maximizing the yield of brinjal.	Jamalpur
907.	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 and • To evaluate benefit cost ratio of compost and trichocompost for profitable production of garlic.	Jamalpur
908.	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 and • To evaluate benefit cost ratio of trichocompost and Arbuscular mycorrhizae for profitable production of garlic.	Jamalpur
909.	Effect of integrated nutrient management on the yield and	• To assess the effect of organic and inorganic fertilizer on the	Gazipur and Jamalpur

Sl. No.	Research Title	Objective (s)	Location
	nutrient uptake of foxtail millet	yield of foxtail millet and • To increase soil fertility and sustain crop productivity.	
910.	Development of permanent block for identifying nutrient deficiency symptoms of crops round the year	• Development of a demonstration site at RARS, Jamalpur for the farmers, extension personnel and researchers round the year • Facilitate the knowledge about plant nutrient deficiency symptom • Create visual materials for lecture and discussion • Identify the complexity of symptoms caused by nutrient deficiencies along with pest attack.	Jamalpur
911.	Effect of biochar on soil properties after 5-years of in-situ aging under field conditions	• Investigate the changing nature of biochar and its effect on soil propertie • Identify the soil health improvement after amendment and • Accelerate the sustainable carbon sequestration in to soil.	Jamalpur
912.	Effect of biochar on yield and quality of potato	• To produce spotless and quality tuber • To control the scab disease of potato and • To sequestrate carbon in soil for a long time.	Gazipur
913.	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 CO_2 gas emission from soil thus mitigating GHG emission and • To find out suitable form, application method and optimum dose of urea for cauliflower yield.	Gazipur

Sl. No.	Research Title	Objective (s)	Location
914.	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 and • To increase yield of Mustard-Mungbean-T.aman	Gazipur and Jamalpur
915.	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.	Jamalpur
916.	Effect of vermicompost on groundnut yield and soil fertility in charland	• To find out the effect of vermicompost on groundnut yield and • To find out nutrient uptake and to increase soil fertility of char land by vermicompost application.	Nouvanger char, Jamalpur
917.	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.	Gazipur
918.	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 and • To analyze cost and return of panikachu produced from different form of urea.	Gazipur
919.	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 and • To develop a low-cost biochar-based fertilizer dose.	Gazipur
920.	Nutrient management for watermelon	• To find out suitable fertilizers dose on the yield and quality of watermelon.	Lebukhali , Ptuakhali and Gazipur
921.	Nutrient management of onion to reduce storage rots	• To assess the balanced nutrition to reduce onion storage rots.	Rajshahi (FRC) and Lalmonirhat (RSC)
922.	Development of fertilizer	• To find out a suitable and	Gazipur

Sl. No.	Research Title	Objective (s)	Location
	recommendation for chilli onion intercropping system	economic fertilizer dose for maximizing the yield of chilli onion intercropping system	
923.	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 and • To increase crop yield.	Gazipur
924.	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.	Industrial polluted and non polluted areas
925.	Effect of seed priming on yield and nutrient uptake of cauliflower	• To investigate the role of seed priming on yield and quality of cauliflower and • To find out the interactive effect of seed priming on nutrient uptake	Gazipur
926.	Response of zinc and boron on yield and nutrient content of coriander	• To identify a suitable combination of zinc and boron fertilization for coriander production. • To evaluate the requirement of Zinc and Boron fertilizer for coriander and • To estimate zinc and boron content and uptake both leaves and seeds of coriander.	Gazipur.
927.	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 and • To find out the boron use efficiency of mungbean.	Rangpur (OFRD)
928.	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	Gazipur

Sl. No.	Research Title	Objective (s)	Location
		• To compare the effects of the method of micronutrient application foliar vs. soil fertilization on plant yield of strawberry.	
929.	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.	Heavy metal polluted soil and industrial effluents polluted areas, Gazipur
930.	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 and • To mitigate arsenic contamination and to improve crop quality	Gazipur
931.	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 from selected different locations
932.	Estimation of greenhouse gas emission and carbon sequestration from crop fields	• To obtain quantitative estimates of greenhouse gases (CO_2, CH_4 and N_2O) and the carbon sequestration for dominant cropping patterns and • To determine the impact of management practices for	Gazipur

Sl. No.	Research Title	Objective (s)	Location
		carbon sequestration under different cropping patterns.	
933.	Estimation of CO_2 and N_2O emission from organic manures and amenders in maize field	• To evaluate the CO_2 and N_2O emission from terrace soils due to application of biochar, cowdung, poultry manure and vermicompost • To observe the maize yield and nutrient uptake and • To enhances soil physicochemical properties.	Gazipur
934.	Effect of boron fertilization on lentil in Barishal region	• To find out the response of BARI Masur-8 to boron fertilizer and • To determine the optimum dose of boron for maximizing the yield of BARI Masur-8	Rahmatpur, Barisal
935.	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 $ZnSO_4$ and ZnO nanoparticles	Gazipur
936.	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	Gazipur
937.	Foliar application of boron on reproductive growth of sunflower	• To determine the effect of foliar spray of boron on yield contributing characters of sunflower and • To find out the optimum rate of boron for maximizing the yield and quality of sunflower.	Gazipur
938.	Foliar application of manganese on yield and nutrient uptake of groundnut	• To investigate the effect of manganese on yield and quality of groundnut and • To find out the optimum dose of manganese to maximizing the yield of groundnut.	Gazipur.
939.	Effect of foliar application of	• To determine the efficiency of	Cumilla

Sl. No.	Research Title	Objective (s)	Location
	zinc in sweet orange	Zn sources in providing the plants with sufficient micronutrients and • To compare new doses of sweet orange orchards with traditionally used sources.	
940.	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.	Ishurdi, Pabna
941.	Study on collection, isolation and screening of indigenous *Rhizobium* strains, arbuscular mycorrhizal fungi, *Azotobacter,* phosphate solubilizing bacteria and *Azospirillium* strain(s) for different crops from different AEZs of Bangladesh	• To select the best indigenous *Rhizobium* strain(s), arbuscular mycorrhizal fungi, *Azotobacter,* phosphate solubilizing bacteria and *Azospirillium* strain(s) from different AEZs of Bangladesh and • To prepare biofertilizer for different legume and other crops. • Location : Rahmatpur, Jessore, Gazipur, Hathazari, Rajshahi, Dinajpur, Rangpur, Ishurdi, Khagrachari Raikhali, Patuakhali, Sathkhira, Noakhali, Cox's Bazar and Sylhet	
942.	Assessment of Arbuscular mycorrhizal association in diffirent plants and crops	• To study the percent root colonization and AM fungal spore population in the rhizosphere soil and • To produce suitable AM inoculum for future use in different plants and crops	Khagrachori Jamalpur Gopalgonj and Rangpur
943.	Effect of *Azotobacter* on the growth and yield of onion	• To study the role of *Azotobacter* on the growth and yield of onion and • To find out the nutrient uptake as influenced by *Azotobacter*	Gazipur
944.	Bio control of foot and root rot disease of groundnut by dual inoculation with *Rhizobium* and arbuscular mycorrhiza	• To observe the effect of pre-inoculation of AM and *Rhizobium leguminosarum* on the disease resistance of pulse and oilseed crops infected by pathogen and • To produce healthy and vigorous seedlings of different pulse and oilseed crops	Gazipur

Sl. No.	Research Title	Objective (s)	Location
945.	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 and • To reduce to use of P-fertilizer for vegetables, spices and legume crops.	Gazipur
946.	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	Gazipur and Jamalpur
947.	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 and • To know the effect of climate change on the rhizobial population and other soil microorganisms	Different AEZs of Bangladesh.
948.	Effect of cropping pattern and seasonal variation on soil micRabial biomass carbon and nitrogen in different AEZs soil of Bangladesh	• To determine soil micRabial biomass carbon and nitrogen in different cropping pattern. • To find out the seasonal variation of micRabial biomass carbon and nitrogen and • To monitor the soil fertility status	Gazipur
949.	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 and • Genomic DNA isolation, PCR amplifications and sequencing to know family, genus and species of effective rhizobial strains. Location: Rahmatpur, Jessore, Gazipur, Hathazari,	

Sl. No.	Research Title	Objective (s)	Location
		Rajshahi, Dinajpur, Rangpur, Ishurdi, Khagrachari, Raikhali, Patuakhali, Sathkhira, Noakhali, Cox's Bazar, Sylhet and different AEZs.	
950.	Response of lentil varieties to elite strains of *Rhizobium*	• To study the response of *Rhizobium* inoculation with different varieties of lentil • To study the effect of *Rhizobium* inoculation and varieties at different locations and • To popularize the use of *Rhizobium* inoculant instead of applying urea-N for lentil production	Gazipur Ishurdi Jamalpur and Jashore
951.	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 farmers level. Location : Mungbean: Kustia, Faridpur, Patuakhali, Bhola, Satkhira, Sylhet, Cox's Bazar Lentil: Meherpur, Faridpur, Jessore, Sylhet, Jamalpur Chickpea: Kustia, Faridpur, Rajshahi, Pabna, Sylhet Groundnut: Rangpur, Jamalpur, Kishoregonj, Cox's Bazar. Soybean: Noakhali, Lakhmipur, Bhola and Rangpur	
952.	Effect of Arbuscular mycorrhizal inoculation on groundnut at different salinity levels	• To evaluate the role of AMF and the percentage of AM colonization on growth and nutrient uptake of groundnut under salinity stress condition • To observe the effect of AM under salinity stress condition and • In order to further understand salt tolerance mechanisms in inoculated plants.	Gazipur
953.	Effect of bio-fertilizer and chemical fertilizers on nodulation pattern, nodule initiation date and yield of pulse crop varieties	• To know the micRabial population status, nodulation pattern and nodule initiation date of chickpea varieties and • To increase the yield of chickpea by using bio-fertilizer with low input cost	Gazipu Jamalpur and Ishurdi, Pabna.

Sl. No.	Research Title	Objective (s)	Location
954.	Effect of sterilization of peat on survival of micRabial population at two storage condition	• To know the survival of *Rhizobium* in inoculant using different autoclave process and storage condition	Gazipur and Savar, Dhaka (BAEC)
955.	Effect of Arbuscular mycorrhizal fungi, biochar and vermicompost on soybean in saline soil	• To evaluate the effect of indigenous Arbuscular Mycorrhizal Fungi (AMF), biochar and vermicompost on nodulation, colonization and yield character of soybean in 8 dS m^{-1}saline soil.	Gazipur
956.	Isolation of salt tolerant *Rhizobium* 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 and • To measure nodulation test of collected strains in respective crops Location: Noakhali, Lakhmipur, Cox's Bazar, Chittagong, Satkhira, Bhola, Borguna, Patuakhali, Satkhira and different coastal AEZs of Bangladesh.	
957.	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 and • To measure N fixation capacity and growth performance of soybean and groundnut at different salinity level	Gazipur
958.	Salt tolerant bacterial performance on soybean and groundnut in saline stress coastal region of Bangladesh	• To check the infection ability of *Rhizobium* on soybean and groundnut roots in native saline stress condition and • To measure N fixation capacity, growth and yield performance of soybean and groundnut	Noakhali Cox's Bazar Patuakhali and Benerpota, Satkhira
959.	Effects of biofertilizer, biochar and chemical fertilizers on yield and qualitative properties of groundnut	• To study the effects of bio-fertilizer and biochar on yield and qualitative properties of Groundnut and • To reduce the chemical fertilizer in groundnut cultivation.	Gazipur

Sl. No.	Research Title	Objective (s)	Location
960.	Isolation of phosphate solubilizing bacteria (PSB) 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 and • To monitor the soil fertility status	Gazipur
PLANT PATHOLOGY DIVISION			
961.	Screening of guava seedlings against wilt disease caused by *Nalanthamala psidii*	• To evaluate guava seedlings against *Nalanthamala psidii,* wilt disease causing pathogen	Gazipur
962.	*In-vitro* screening of endophytic microorganism against wilt disease causing pathogen *Nalanthamala psidii* of guava	• To find out endophytic biocontrol agent against *Nalanthamala psidii*	Gazipur
963.	Characterization of the *Fusarium oxysporum* f.sp. *nevium* and *Didymella bryoniae* of watermelon	• To characterize of *Fusarium oxysporum* f.sp. *nevium*and *Didymella bryoniae* at morphological and molecular level and observe the diversity among the isolates.	Gazipur
964.	Identification and characterization of *Alternaria* spp. collected from different solanaceaous and cruciferous crops	• To study the variability of *Alternaria*spp. isolated from different solanaceous and cruciferous crops.	Gazipur
965.	Effect of *Trichoderma harzianum* on survival of sclerotia of *Sclerotinia sclerotiorum* in soil	• To find out antagonistic effect of *Trichoderma harzianum* on sclerotia of *S. sclerotiorum*	Gazipur
966.	*In vitro* evaluation of antifungal activity of cinnamon powder against *Aspergillus* sp.	• To find out effectiveness of cinnamon powder as an antifungal element	Gazipur
967.	Isolation, identification and molecular characterization of causal organisms of chilli anthracnose	• To identify the pathogens responsible for chilli anthracnose • To preserve the isolated pathogens and • To know the current status of associate pathogens of chilli anthracnose in Bangladesh.	Gazipur
968.	Identification of associate pathogens of imported vegetable	• To identify different pathogens associated with imported	Gazipur

Sl. No.	Research Title	Objective (s)	Location
	seeds in Bangladesh	vegetable seeds.	
969.	Efficacy of natural bioactive compounds in controlling post-harvest pathogen (*Colletotrichum gloesporioides*) of mango	• To understand the effectiveness of natural bioactive compounds on post-harvest pathogen • (*C. gloeosporioides*) of mango.	Gazipur
970.	Efficacy of natural bioactive compounds on post-harvest disease (*Botryodiplodia theobromae*) of guava	• To understand the effectiveness of natural bioactive compounds against post-harvest pathogen (*B. theobromae*) of guava.	Gazipur
971.	Isolation, evaluation and characterization of native biocontrol agents from char areas in Rangpur Division	• To evaluate efficacy of newly isolated native biocontrol agents to control different soil borne fungi	Burirhat, Rangpur
972.	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, Pabna
973.	Screening of onion varieties and lines against purple blotch disease	• To find out the resistant varieties/lines against purple blotch disease.	Gazipur
974.	Screening of pumpkin lines/varieties against powdery mildew disease	• To find out the resistant lines/varieties against the disease	Ishurdi, Pabna
975.	Screening of lentil lines/varieties against stemphylium blight disease	• To find out the resistant lines/varieties against Stemphylium blight of lentil.	Ishurdi, Pabna
976.	Screening of mustard varieties/lines against white mold disease caused by *Sclerotinia sclerotiorum*	• To select resistant sources against the white mold disease.	Burirhat, Rangpur
977.	Efficacy of different new fungicides in controlling Sigatoka disease of banana	• To find out the effective fungicides in controlling sigatoka disease of banana.	Bogura
978.	Evaluation of new fungicides for controlling purple blotch disease of onion	• To find out the effective fungicides against purple blotch disease of onion.	Gazipur
979.	Evaluation of new fungicides against Early blight of Tomato	• To find out the appropriate chemical fungicide to control the disease.	Gazipur
980.	Evaluation of new fungicides in controlling Anthracnose of Chilli	• To find out an effective chemicals in controlling Anthracnose of Chilli.	Gazipur

Sl. No.	Research Title	Objective (s)	Location
981.	Evaluation of new fungicides against Late blight of Potato	• To find out the appropriate chemical fungicide to control the disease.	Jamalpur Debijang Rangpur and Bogura
982.	Screening of different group of commercial fungicides against anthracnose of chilli	• To find out an effective group of commercial fungicide for management of chilli anthracnose.	Bogura
983.	Evaluation of new fungicides in controlling powdery mildew of pumpkin	• To find out the effective fungicide(s) in controlling powdery mildew of pumpkin.	Gazipur
984.	Management of purple blotch disease of onion seed crop through fungicide	• To study the efficacy of nine different fungicides for controlling purple blotch disease of onion seed crop.	Gazipur
985.	Evaluation of fungicides against anthracnose disease of mango	• To find out effective fungicide against anthracnose disease of mango.	Burirhat, Rangpur Ishurdi, Pabna and Chapai-nawabgonj
986.	Efficacy of fungicides against white rot of sunflower	• To evaluate the efficacy of different fungicides for controlling white rot of sunflower.	Burirhat, Rangpur
987.	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
988.	Validation of management technology for different foliar diseases (purple blotch, stemphylium leaf blight, downy mildew and botrytis leaf blight) of onion	• To validate of management technology in controlling foliar diseases of onion and • To increase bulb yield.	Burirhat, Rangpur
989.	Management of leaf spot and leaf blight of aloe vera	• To find out the effective management practice against leaf spot and leaf blight of aloe vera.	Ishurdi, Pabna
990.	Chemical and biological management of anthracnose (fruit rot) disease of strawberry	• To find out the effective management practice against anthracnose (fruit rot) disease of Strawberry.	Ishurdi, Pabna
991.	Validation of score and rovral against alternaria leaf spot and flower blight of marigold	• To confirm the effectiveness of fungicides against Alternaria leaf spot and flower blight	Ishurdi, Pabna

Sl. No.	Research Title	Objective (s)	Location
		disease of marigold.	
992.	Effect of sowing date on the incidence of sclerotinia stem rot of sunflower	• To find out the suitable planting date to manage the disease.	Ishurdi
993.	Management of powdery mildew of cucurbitaceous vegetables on floating bed cum trellis	• To find out an effective control measure against powdery mildew of pumpkin.	Rahmatpur
994.	Effect of fungicides and bio-agents against purple blotch disease of onion	• To find out the effective control meager against purple blotch of onion	Jashore
995.	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
996.	Evaluation of microbial products for controlling Fusarium Wilt of Chickpea	• To observe the efficacy of microbial products in controlling fusarium Wilt of Chickpea.	Gazipur
997.	Isolation of *Bacillus* spp. and screening against major soil borne fungal pathogens	• To identify beneficial *Bacillus* spp. and • To develop a bio pesticide against soil borne fungal pathogens.	Gazipur
998.	Development of bio-rational management package for panama and sigatoka diseases of banana	• To develop integrated management package(s) against panama and sigatoka diseases of banana.	Kushtia and Narshingdi
999.	Screening of new bio-fungicides against soil borne pathogens	• To identify effective new bio-fungicides against soil borne pathogens.	Gazipur
1000.	Screening of new bio-fungicides against foliar diseases	• To observe the efficacy of new bio-fungicides against foliar diseases and • To identify effective new bio-fungicides against foliar diseases.	Gazipur
1001.	Screening of compost and biochar against soil borne pathogens	• To evaluate different composts and biochar for management of soil borne pathogens.	Gazipur
1002.	Development of bio-rational based management package of disease complex of betel vine	• To develop an effective management package(s) against diseases of betel vine.	Bogura and Kushtia
1003.	Development of bio-rational based management package of	• To develop an effective management package(s) against	Rajshahi

Sl. No.	Research Title	Objective (s)	Location
	wilting disease of guava	wilt disease of guava.	
1004.	Development of bio-rational management package of white mold disease caused by *S. sclerotiorum*	• To develop bio-rational based management package(s) against white mold disease.	Gazipur
1005.	Management of soil-borne diseases of bottle gourd and banana using tobacco dust waste	• To evaluate the efficacy of tobacco dust waste against soil-borne diseases of Bottle gourd and Banana.	Burirha, Rangpurt
1006.	Management of soil-borne diseases of tomato and brinjal seedling production using tobacco dust waste	• To evaluate the efficacy of tobacco dust against damping off Tomato and Brinjal seedling production.	Burirhat, Rangpur
1007.	Performance of different organic matter on management of scab and scurf disease of potato	• To observe the effect of different organic matter on disease incidence yield and quality of potato and • To observe the effect of organic matter on soil health.	Burirhat, Rangpur Debiganj, Panchagarh and Lebukhali, Patuakhali
1008.	Development of cost-effective integrated fertilizer management practice utilizing agricultural waste tobacco dust in potato	• To develop cost-effective integrated fertilizer management practice utilizing agricultural waste tobacco dust and • To manage soil borne disease.	Burirhat, Rangpur
1009.	Biological Management of white mold disease of bush bean caused by *sclerotinia sclerotiorum*	• To develop effective management package(s) against white mold disease of bush bean.	Ishurdi, Pabna
1010.	Development of Trichoderma based management practice against foot and root rot of lentil	• To find out effective biological management against foot and root rot of lentil.	Jashore
1011.	Integrated Disease Management against wilt and stem blight disease of watermelon	• To develop IDM packages for sustainable management of wilt and stem blight of watermelon.	Noakhali Patuakhali and Gazipur
1012.	Integrated management of white mold disease of red salvia and marigold	• To reduce disease incidence and increase crop yield.	Gazipur
1013.	Management of foot rot and wilting disease of chilli	• To develop wilt and foot rot disease management technology of Chilli.	Gazipur
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

Sl. No.	Research Title	Objective (s)	Location
1015.	Management of Anthracnose in Yard Long Bean through fungicides and Bioagents of Floating bed cultivation at Barishal region	• To find out effective control measures in controlling Anthracnose disease of Yard Long Bean.	Rahmatpur, Barishal
1016.	Yield loss assessment in late blight resistant potato variety/germplasm under natural inoculum pressure	• To evaluate the resistant ability of varieties / germplasm. • To assess the yield loss due to disease and • To select optimum time of planting for avoiding late blight disease.	Burirhat, Rangpur and Debiganj, Panchagarh
1017.	Studies on seed transmission *of Xanthomonas campestris* pv. campestris in cabbage in Bangladesh	• To know the level of seed infection to initiate and cause severe black rot of cabbage in Bangladesh.	Gazipur (PPD)
1018.	Detection of *Xanthomonas* spp. associated on tomato seeds	• To detect *Xanthomonas campestris* pv. *vesicatoria* in market available seeds.	Gazipur (PPD)
1019.	Evaluation of 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.	Gazipur (PPD)
1020.	Management of soil-borne *Ralstonia solanacearum* of potato by using soil amendment of natural bioactive compounds	• To investigate the efficacy of natural bioactive compounds against soil-borne *R. solanacearum.*	Gazipur (PLP Division)
1021.	Collection and Isolation of endophytic bacteria to suppress bacterial wilt pathogens	• To identify endophytic bacteria as biological control agents to manage the bacterial wilt disease.	Gazipur and On-farm
1022.	Genetic diversity citrus greening pathogens isolated from different citrus hosts	• To identify causal organisms of greening disease of citrus and • To determine the genetic diversity of pathogens based on hosts. Location : Gazipur, Jamalpur, Mymensingh, Sylhet, Moulavibazar, Khagrachari, Chittagong, Barishal, Jashore, Satkhira and Rangpur	
1023.	Efficacy of some chemicals in controlling black rot disease of cruciferous vegetables	• To find out the effective chemicals to control the seed-borne disease of crucifers caused by *Xanthomonas campestris* pv. *campestris*	Joydebur, Gazipur
1024.	Collection, isolation and	• To identify the different isolates	Gazipur and

Sl. No.	Research Title	Objective (s)	Location
	identification of *Xanthomonas campestris* pv. *campestris* from Cabbage and Cauliflower	of pathogenic bacteria *Xanthomonas campestris* pv. *campestris* from cabbage and cauliflower to preserve them as type culture.	On-Farm
1025.	Management of bacterial wilt disease of ginger through physical seed sorting	• To observe the effect of seed health on bacterial wilt disease of ginger and • To suggest suitable seed for minimization of loss.	Gazipur
1026.	Prevalence of *Ralstonia solanacearum* in cold storage and field potato	• To know the status of *Ralstonia solanacearum* on tuber	Gazipur
1027.	The efficacy of formulated products of *Bacillus* species for controlling greening disease of sweat orange)	• To control the greening disease (*Candidatus Liberibacter* spp.) of BARI Malta 1	Hathazari (RARS)
1028.	Efficacy of new *Bacillus* species for controlling panama disease of banana	• To control the Fusarim wilt (Panama) disease from the very susceptible banana variety of BARI Kola-1	Hathazari
1029.	Study of Propiconazole degraded *Bacillus velezensis* BARI/HAT/ GL6 for suppressing *Lasidiodiplodia theobromae* in mango	• To find out degraded the proportion of triazole Propiconazole from the mango considering the human health and • To control the stem end rot.	Hathazari and Pathology Lab.
1030.	Detection of viruses infecting Yard longbean in Bangladesh	• To identify major viruses of Yardlong bean in Bangladesh.	Gazipur
1031.	Screening of Cucumber germplasm against Cucumber mosaic virus (CMV)	• To find out resistant/tolerant cucumber germplasm(s) against CMV.	Gazipur
1032.	Evaluation of selected okra lines resistant to Okra yellow vein mosaic virus (OKYVMV)	• To find out OKYVCMV resistant/ tolerant okra variety/line.	Gazipur
1033.	Bio-rational based management of *Cucumber mosaic virus* (CMV) of Cucumber	• To develop management technology against CMV.	Gazipur
1034.	Screening of okra lines/varieties against okra yellow vein mosaic virus	• To find out the resistant lines/varieties against the disease.	Ishurdi, Pabna (RARS)
1035.	Screening of Papaya germplasm against *Papaya ringspot virus* (PRSV)	• To find out resistant/tolerant papaya germplasm(s) against PRSV.	Gazipur

Sl. No.	Research Title	Objective (s)	Location
1036.	Development of bio-rational management package against root knot nematode and bacterial wilt of tomato and eggplant	• To develop effective, cheap and eco-friendly package for root knot and bacterial wilt diseases of tomato.	Gazipur (PPD)
1037.	Effect of glyphosate and ammonium sulfate $(Nh_4)_2So_4$ for controlling orobanche of mustard	• To find out the effective management treatment against Orobanche of mustard.	Ishurdi, Pabna
1038.	Survey on diseases of summer tomato in Bangladesh	• To identify different diseases and causal organisms of tomato and • To assess the disease status (disease incidence and severity).	Sathkhira Thakurgaon Cumilla and Bogura
1039.	Survey, isolation and identification of major diseases of Flowers (Gerbera, Tuberose and Gladiolus)	• To find out the existence of golden/cyst nematode in Bangladesh	Gazipur
1040.	Survey of potato golden/cyst nematode in Bangladesh	• To identify new diseases as well as previously recorded diseases of the flowers and • To assess the disease status (severity and estimated losses) of flowers.	Flower growing areas
1041.	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 and • To identify those nematodes based on morphological characters.	Gazipur
1042.	Survey on bacterial wilt disease of Bt-brinjal in Bangladesh	• To find out the wilt disease infection scenario in Bt-brinjal	Gazipur
1043.	Survey of wilt and stem blight disease of the watermelon growing areas of Bangladesh	• To survey of wilt and stem blight disease of watermelon.	Gazipur
1044.	Survey on pre-harvest and post-harvest diseases of onion in Bangladesh	• To assess the pre-harvest and post-harvest diseases status of onion.	Gazipur
1045.	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 and • To identify the causal organism of major diseases of Cashew nut and Coffee in Bangladesh.	Gazipur

Sl. No.	Research Title	Objective (s)	Location
1046.	Survey on Malta diseases at Southern Region of Bangladesh	• To identity the diseases of Malta and • To determine the severity of the diseases.	Ramatpur, Barishal
1047.	Survey and identification of major diseases of vegetable and spice crops on floating bed cultivation in Barishal region	• To identity different diseases and its causal organisms. • To assess the disease status (disease incidence and severity).	Project area
1048.	Survey of aloe vera plant diseases	• To identify new diseases as well as existing diseases of Aloe vera plant.	Ishurdi, Pabna
1049.	Survey of major diseases of selected fruits and vegetables in Rangpur region	• To know the disease status of selected fruits and vegetables and to characterize the causal agents of diseases.	Rangpur
1050.	Survey and identification of major diseases of vegetable crops in saline region	• To identify the existing diseases of vegetable crops in saline area and • To assess the disease status to different vegetable crops in saline area	Joshore
Demonstration			
1051.	Validation on IPM package technology for the management of panama disease of banana	• To disseminate the IPM Package against panama disease of banana.	Bogura and Joshore
1052.	Validation of integrated management package against CMV of Chilli	• To confirm the effectiveness of management package against CMV.	Gazipur and Bogora (SRC)
1053.	Integrated Management of Rhizome Rot Disease of Ginger	• To inform the new technology to all relevant stakeholders and • To provide management package of the disease.	Gazipur
1054.	Integrated Management of foot & root rot and wilt disease of Chickpea	• To inform the new technology to all relevant stakeholders and • To provide management packages of the diseases.	Jashore and Rajshahi
1055.	Demonstration on ginger production through integrated management of Rhizome rot disease	• To demonstrate developed management packages for managing rhizome rot disease of ginger.	Burirhat, Rangpur
1056.	Promotion and dissemination of newly released late blight resistant potato variety at Rangpur	• To popularize late blight resistant potato varieties at farmers' level and	Gangachara, Rangpur Sadar, Pirgacha and Mithapukur,

Sl. No.	Research Title	Objective (s)	Location
		• To minimize production cost and environmental hazards.	Rangpur
1057.	Validation trial of EMOs (*Bacillus oryzicola* YC7007 and *Bacillus velezensis* BARI/HAT/GL6) package for controlling bacterial wilt in BARI Bt Begun 2	• To control the wilt of eggplant in very susceptible variety of BARI Bt Begun 2.	Hathazari and Pathology Lab
ENTOMOLOGY DIVISION			
1058.	Field evaluation of some new bio-pesticides against fall armyworm attacking maize	• To select suitable bio-pesticides against fall armyworm in maize.	Gazipur
1059.	Bio-control based IPM of fall armyworm, *Spodoptera frugiperda* attacking maize	• To develop a bio-control based management package against fall armyworm, *Spodoptera frugiperda* in maize.	Bogura
1060.	Integrated management of fall armyworm, *Spodoptera fruigiperda* attacking maize	• To develop suitable IPM package against fall armyworm, *Spodoptera frugiperda* in maize.	Bogura
1061.	Evaluation of some integrated management packages against flower thrips and pod borers of mung bean	• To find out effective integrated management package(s) against flower thrips and pod borers of mung bean and • To provide indication for integrated management approach towards cost effective mung bean cultivation.	Gazipur
1062.	Evaluation of several management packages against pod borer, *Helicoverpa armigera* infesting chickpea	• To find out an environment friendly management approach of chickpea pod borer.	Gazipur
1063.	Comparative evaluation of different IPM packages against major insect pests of brinjal	• To find out suitable IPM package against major insect pests of brinjal • production of toxic synthetic chemical pesticide free brinjal	Gazipur
1064.	Evaluation of new dimensional management options against brinjal shoot and fruit borer, *Leucinodes orbonalis* Guenee.	• To find out an environment friendly management option against brinjal shoot and fruit borer.	Gazipur
1065.	Evaluation of new dimensional management options against sucking pests of brinjal	• To find out a suitable management option against sucking pests of brinjal through new microbial pesticides.	Gazipur

Sl. No.	Research Title	Objective (s)	Location
1066.	Evaluation of new biorational pesticides against sucking pests of brinjal	• To find out a suitable management option against sucking pests of brinjal	Gazipur
1067.	Evaluation of sustainable management options against whitefly, whitefly-vectored begomoviruses and fruit worm in tomato	• To develop suitable IPM package(s) for the control of major insect pests of tomato and • To produce toxic chemical pesticides free tomato.	Gazipur
1068.	Development of bio-rational management approach against major insect pests attacking country bean	• To develop IPM package for the control of major insect pests of country bean and • To produce toxic pesticide free country bean.	Gazipur
1069.	Development of bio-rational management package against flea beetle, *Phyllotreta striolata* attacking cabbage	• To develop IPM package for managing flea beetle attacking cabbage.	Bogura
1070.	Evaluation of some bio-pesticides and a chemical insecticide against sucking insect pests of yard long bean	• To develop appropriate strategy for managing the sucking pests attacking yard long bean.	Gazipur
1071.	Management approach against pod borer, *Euchrysops cnejus* F. attacking yard long bean	• To develop appropriate strategy for managing the pod borer attacking yard long bean.	Gazipur
1072.	Assessment of the pest status of asian citrus psyllid (*Diaphorina citri*) and documentation of its natural enemy	• To document pest status of asian citrus psyllid and • To document parasitoid status of asian citrus psyllid.	Gazipur
1073.	Management of fruit borer, *Deudorix isocrates* attacking wood apple	• To develop a suitable management technique against fruit borer of wood apple.	Gazipur and Panchgarh
1074.	Population dynamics and biorational management of whitefly complex infesting guava	• To know the population fluctuation of whitefly as well as to develop a suitable management option against newly introduced invasive pest Rugose Spiraling Whitefly.	Gazipur
1075.	Sustainable management approach against thrips-mite and borer complex in chilli	• To find out the cost-effective management options against thrips-mite and borer complex in chilli and • To know the extent of damage of thrips-mite and borer complex in chilli.	Gazipur

Sl. No.	Research Title	Objective (s)	Location
1076.	Survey on the abundance of natural enemies of fall armyworm, *Spodoptera frugiperda* attacking maize crop in Bangladesh	• To collect and identify the native parasitoids and predators of fall armyworm and • To record parasitism rate of parasitoids found in the survey	Gazipur and Manikgonj
1077.	Efficacy of*Trichogramma pretiosum*and *Telenomus remus*for parasitizing the eggs of fall armyworm in laboratory	• To know the effectiveness of *Trichogramma pretiosum*and *Telenomus remus* as egg parasitoids of fall armyworm.	Gazipur
1078.	Mass rearing of two different egg parasitoids (*Trichogramma pretiosum* and *Telenomus remus*) under laboratory condition	• To develop mass rearing protocol of *Trichogramma pretiosum* and*Telenomus remus.*	Gazipur
1079.	Lab bioassays to test efficacy of biocontrol agent (*Trichogramma chilonis*) against *Spodoptera frugiperda* in Bangladesh	• To assess the potentiality of egg parasitoid, *Trichogramma chilonis* for biological control of fall armywom.	Gazipur
1080.	Efficacy of *Bracon hebetor* Say on *Spodoptera frugiperda* evaluated with *Galleria mellonella* and *Corcyra cephalonica* as alternate hosts	• To assess the potentiality of *Bracon hebetor* aslarval parasitoid of fall armyworm (FAW) larvae	Gazipur
1081.	Study on biology and a simple mass rearing method of fall armyworm	• To develop simple mass rearing protocol of fall armyworm.	Gazipur
1082.	Determination of pre harvest interval for lambda-cyhalothrin, deltamethrin andfenvalerate in major vegetables	• To ensure safe and judicious use of lambda-cyhalothrin, deltamethrin and fenvalerate in cauliflower, brinjal, broccoli and hyacinth bean.	Gazipur
1083.	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 chlorpyrifos + cypermethrin, deltamethrin and cypermethrin in hyacinth bean, cauliflower and lettuce.	Gazipur
1084.	Quantification of pesticide residue load in major vegetables collected from different regions of Bangladesh	• To detect and quantify the amount of left over residue of pesticide in different vegetable samples collected from local markets of different regions of Bangladesh.	Gazipur
1085.	Monitoring of multiple pesticide	• To develop and validate an	Gazipur

Sl. No.	Research Title	Objective (s)	Location
	residues in major fruits collected from different regions of Bangladesh	analytical method for the analysis of commonly used pesticides in mango, litchi, ber, hog plum, dragon fruit and guava using QuEChERS extraction and gas chromatography and • To monitor pesticide residues in mango, litchi, ber, hog plum, dragon fruit and guava collected from different regions of Bangladesh.	
1086.	Monitoring of multiple pesticide residues in betel leaf collected from different regions of Bangladesh	• To develop and validate an analytical method for the analysis of pesticide residues in betel lea and. • To monitor pesticide residues in betel leaf samples collected from different regions of Bangladesh.	Gazipur
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 and • 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 ensure safe and judicious use of acetamiprid in hyacinth bean and cauliflower.	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 andgas chromatography.	Gazipur
1090.	Health risk assessment of selected pesticides in betel leaf using gas chromatography	• To assess the health risk of the selected pesticides in betel leaf using QuEChERS extraction coupled with gas	Gazipur

Sl. No.	Research Title	Objective (s)	Location
		chromatography	
1091.	Determination of emamectin benzoate using High Performance Liquid Chromatography	• To develop and validate an analytical method for the analysis of emamectin benzoate using High Performance Liquid Chromatography (HPLC).	Gazipur
1092.	Decontamination of emamectin benzoate residue in chilli	• To validate the quantification method for the analysis of emamectin benzoate residues in chilli and • To quantify residue loss through washing with different household solution.	Gazipur
1093.	Detection and quantification of different pesticides residue in dry fish collected from different locations	• To validate the detection and quantification method of different pesticides in dry fish and • To detect and quantify the pesticide residue levels in farm gate & marketed dry fish	Gazipur
1094.	Development of analytical method for the determination of imidacloprid, thiacloprid & thiamethoxam using High Performance Liquid Chromatography	• To develop and validate a multi-residue analytical method for the analysis of imidacloprid, thiacloprid and thiamethoxam using High Performance Liquid Chromatography	Gazipur
1095.	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 and • To monitor pesticide residues in milk collected from different markets of Bangladesh.	Gazipur
1096.	Purity analysis of different brands of marketed pesticides	• To quantify the active ingredient present in different marketed brands of selected pesticides • To know the purity level of different formulated products of different pesticides	Gazipur
ON-FARM RESEARCH DIVISION			
1097.	Nutrient management for onion bulb production of BARI Piaz-4	• To determine suitable nutrient package for Onion and • To increase sustainable yield of Onion bulb production	Rajbari (MLT)

Sl. No.	Research Title	Objective (s)	Location
1098.	Integrated nutrient management of BARI Shahebikachu-1 in Southern region of Bangladesh	• To find out appropriate doses of fertilizers for BARI Shahebikachu-1 production	Gournadi, Barisal (MLT)
1099.	Effect of Boron fertilizers on relay lentil in southern region of Bangladesh	• Effect of Boron fertilizers on relay Lentil in southern region of Bangladesh	Gournadi, Barishal
1100.	Integrated nutrient management to mitigate soil salinity and maximize yield of Potato in coastal saline soil	• To assess the effects of organic fertilizer on Potato yields and • To increase soil fertility and sustain soil productivity	Kuakata, Patuakhali and Amtoli, Borguna (MLT)
1101.	Performance of Water hyacinth residue as an organic manure for cauliflower production at AEZ-14	• To find out alternate source of organic manure and • To popularize the use of residue of water hyacinth	Gopalganj Sadar and Tungipara Najirpur, Pirojpur
1102.	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.	FSRD
1103.	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 and MLT sites
1104.	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.	Moulvibazar and Shayestaganj (MLT)
1105.	Fertilizer management of zero tillage potato in saline areas	• To determine the appropriate nutrient management of zero tillage Potato in saline area.	Dacope, Khulna
1106.	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, Mymensingh
1107.	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, Mymensingh
1108.	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	Gouripur and Trishal, Mymensingh
1109.	Development of fertilizer recommendation for Maize-T.	• To find out a suitable and economic fertilizer dose for	Sherpur, Bogura

Sl. No.	Research Title	Objective (s)	Location
	Aus-T. Aman cropping pattern in Karatoa Bangali floodplain (AEZ-4)	sustainable crop productivity and soil fertility for Maize-T. Aus-T. Aman cropping pattern and • To increase the productivity and income of the farmers'	
1110.	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 and • To increase crop productivity and sustain soil health	Paba, Rajshahi (MLT)
1111.	Development of fertilizer recommendation for relaying Brinjal with Garlic-T. Aman rice cropping pattern	• To find out a cropping pattern based economically viable fertilizer dose for AEZ 11 and • To increase crop productivity and sustain soil health	Paba, Rajshahi (MLT)
1112.	Development of fertilizer package for Bitter gourd production in charland	• To find out suitable fertilizer package for Bitter gourd production in Charland and • To increase farmers income.	Char Begumganj, Kurigram
1113.	Effect of nutrient management on the yield of onion	• To see the effect of plant nutrient management approaches on growth and yield of Onion and • To increase Onion production and famers income.	Ganggarampur (FSRD) and Kashinathpur, Pabna (MLT)
1114.	Nutrient management on Rice-based cropping systems	• To study the effect of nutrient management and cropping system on the crop productivity and soil health under different Rice-based croppingsystems.	Pabna (ARS)
1115.	Effects of tillage and residue retention on crop yield and soil health in Lentil-T. Aus-T. Aman rice cropping pattern	• To evaluate the crop yield, productivity, and soil health under different crop establishment method (strip planting and no-tillage along with high residue retention) in rice-based cropping systems and • To evaluate and identify the most effective, productive, and profitable crop establishment method.	Pabna
1116.	Development of fertilizer recommendation for four crop-	• To develop an optimum fertilizer dose for higher productivity and	Gouripur, Mymensingh

Sl. No.	Research Title	Objective (s)	Location
	based Potato-Boro rice-Yard long bean-T. Aman rice cropping pattern	profitability at Mymensingh region and • To increase total productivity and farmers income	
1117.	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 (FSRD)
1118.	Nutrient management of Betel nut	• To find out optimum fertilizer dose for betel nut and • To increase production and farmers' income	Barisal, Sadar and Daulatkhan, Bhola
1119.	Effect of different fertilizer management packages on yield of Soybean in Chandpur	• To see the performance of different fertilizer packages on yield of Soybean.	Hanarchar, Sadar and Haimchar, Chandpur
1120.	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 and • To observe phosphorous uptake as affected by liming.	Narsingdi
1121.	Determination of suitable zinc fertilizer dose for Maize production in char areas of Gaibandha	• To find out the optimum dose of Zinc for Maize and • To increase the maize productivity in char areas.	Gaibandha
1122.	Development of fertilizer package for Chilli production in char areas of Gaibandha	• To determine the optimum fertilizer dose for Chilli production and • To increase farmers income.	Gaibandha
1123.	Effect of vermicompost and trichocompost on Tomato production	• To find out optimum dose of Vermicompost and Trichocompost for Tomato production and • To increase farmers income.	Rangpur
1124.	Effect of Zn on Lentil production in charland ecosystems	• To find out optimum dose of Vermicompost and Trichocompost for Tomato production and • To increase farmers income.	Ulipur, Kurigram
1125.	Effect of lime and fertilizer management on yield of Maize in acidic soil of Sylhet region	• To find the optimum lime and fertilizer dose for maximizing the yield of maize.	Sylhet
1126.	Effect of fertilizer doses on	• To find the optimum lime and	Sylhet

Sl. No.	Research Title	Objective (s)	Location
	Turmeric at Madhapur Tract	fertilizer dose for maximizing the yield of maize.	
1127.	Integrated nutrient management for Bitter gourd cultivation in calcareous soil	• To find out the optimum fertilizer dose for Turmeric and • To increase productivity and economic return of farmers	Tangail
1128.	Integrated Nutrient Management on Foxtail millet in Coastal region of Bangladesh	• To determine suitable nutrient package for Bitter gourd and • To increase sustainable yield of Bitter gourd	Sholakundu, Sadar, Faridpur (FSRD)
1129.	Effect of liming on Mukhikachu	• To assess the effects of organic and inorganic fertilizer on Foxtail millet yields and • To increase soil fertility and sustain soil productivity	Patuakhali
1130.	Development of fertilizer package for Garlic-Maize-T. Aman rice cropping pattern in the charland	• To develop cropping system-based fertilizer dose for charland and • To increase crop productivity and sustain soil health	Ulipur (MLT)
1131.	Development of fertilizer management package for Onion	• To find out the optimum fertilizers package for Onion cultivation and • To increase the yield and economic return	Sujanagar (MLT)
1132.	Effect of fertilizer doses with elevated levels of potassium on soil salinity and yield of Transplanted Maize	• To determine appropriate dose of fertilizer for transplanted Maize • To test the effectivity of higher dose of K in minimizing salinity damage to the crop and • To find out the yield performance in response to fertilizer application in coastal area.	Amtoli and Kuakata (MLT)
1133.	Effect of different fertilizer management on the performance of BARI Bt Brinjal	• To find out the optimum fertilizer dose for BARI Bt Brinjal	Shyampur, Rajshahi
1134.	Development of fertilizer package for Potato-Groundnut-T. Aman rice cropping pattern under stable charland condition	• To develop cropping system-based fertilizer dose for charland and • To increase crop productivity and sustain soil health	Lalmonirhat
1135.	Effect of planting system and	• To find out suitable planting	Shariatpur and

Sl. No.	Research Title	Objective (s)	Location
	fertilizer of Onion bulb production under zero tillage condition	system and fertilizer dose for increasing bulb yield of Onion	Madaripur (MLT)
1136.	Improvement of existing cropping pattern Soybean-Dibbling Aus-T. Aman rice of Bhola	• To improve the existing cropping pattern and • To increase production and economic return of farmers	Bhola
1137.	Development of alternate cropping pattern Soybean-T. Aus-T. Aman/ Garden pea against farmers existing Soybean-D. Aus–T. Aman rice pattern in coastal region	• To establish garden pea as alternate crop as relaying with T. Aman in Bhola and • To establish a new pattern	Dawlatkhan, Bhola (MLT)
1138.	Development of alternate cropping pattern Maize with Potato-Fallow-T. Aman rice against farmers existing Potato-Fallow–T. Aman rice pattern in coastal region	• To increase cropping intensity in coastal region • To increase farmers income and • To utilize fallow land during late Rabi season and increase cropping intensity	Kuakata, Patuakhali and Amtoli, Borguna (MLT)
1139.	Development of alternate cropping pattern T. Aman rice/ Garden pea- Mungbean – Fallow against farmers existing T. Aman-Mungbean- Fallow pattern in coastal region	• Gap time utilization between TAman and mungbean • To introduce new cropping pattern and increase cropping intensity and • To increase farmers income	Kuakata, Bauphal, Patuakhali and Amtoli, Borguna
1140.	Development of alternate cropping pattern Wheat-Jute-T. Amon against farmers existing Mustard-Jute-T. Aman pattern in Gopalganj region	• To introduce wheat cultivation as an alternate crop and • To establish a new pattern	Muksudpur, Gopalganj Sadar (MLT)
1141.	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 and • To increase economic return of farmers	Chokoria and Coxsbazer
1142.	Development of cropping pattern Potato-Red amaranth-Okra-T. Aman rice against farmers existing pattern Fallow-Okra-T. Aman rice in coastal area of Bangladesh	• To improve cropping intensity and • To increase economic return of farmers	Cox'sbazar
1143.	Development of alternate cropping pattern relaying of Sweet gourd with Bushbean-	• To develop alternate cropping pattern and increase cropping intensity as well as income of	Hakaluki haor Moulvibazar (MLT)

Sl. No.	Research Title	Objective (s)	Location
	Fallow against Fallow-Fallow-Bushbean cropping pattern in haor area	the farmers	
1144.	Development of improved cropping pattern Aroid relaying with Potato-T. Aman rice against Potato-Fallow-T. Aman rice	• To increase the cropping intensity and productivity through improved cropping pattern and • To increase the income of the farmers.	MLT site, Barura, Cumilla
1145.	Development of Tomato-Kenaf-Fallow cropping pattern against Fallow-Boro- Fallow cropping pattern in upper catena of haor area	• To develop two crop-based cropping patterns for haor areas and • To increase cropping intensity, productivity and economic return	Nikli, Kishoreganj and Kendua, Netrakona
1146.	Development of five crops-based cropping pattern against farmers three crops	• To develop an economically viable cropping pattern in charland and • To increase cropping intensity as well as maximize the farmers' income.	Mymensingh (Charland)
1147.	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 and • To increase cropping intensity as well as maximize farmers income	Netrakona
1148.	Development of four crops based cropping pattern Garden pea-Boro-T. Aus-T. Aman rice against Boro-T. Aman rice in Sherpur region	• To increase cropping intensity. • Popularize the pattern to the farmers • To retain soil fertility and • To increase yield and income of the farmers.	Sherpur
1149.	Variety replacement in the existing cropping pattern Wheat-Jute-T. Aman rice	• To improve the existing cropping pattern by including new crop varieties and • To increase crop yields and economic return of farmers.	Atia, Tangail (FSRD)
1150.	Variety replacement in the existing cropping pattern Wheat-Sesame-T. Aman rice	• To improve the existing cropping pattern by including new crop varieties and • To increase crop yields and economic return of farmers.	Atia, Tangail

Sl. No.	Research Title	Objective (s)	Location
1151.	Variety replacement in the existing cropping pattern Lentil-Jute-T. Aman rice	• To improve the existing cropping pattern by including new crop varieties and • To increase crop yields and economic return of farmers	Atia, Tangail
1152.	Development of Boro-T. Aman-Garlic cropping pattern against Boro-T. Aman-Fallow cropping pattern	• To improve the existing cropping pattern by including new crop varieties and • To increase crop yields and economic return of farmers.	Mirzapur, Tangail (MLT)
1153.	Development of T. Aman-Garden Pea- Boro cropping pattern against T. Aman-Fallow-Boro cropping pattern	• To increase productivity and cropping intensity and • Utilization of fallow land by introducing garden pea.	Modhupur, Tangail (FSRD)
1154.	Development of cropping pattern Potato-Lady's finger-T. Aman rice against Cabbage-Fallow-T. Aman rice cropping pattern	• To improve the existing cropping pattern and • To increase economic return of farmers.	Shibpur, Narsingdi
1155.	Development of Potato-Boro-T. Aus-T. Aman rice based four crops pattern against Potato-Boro-T. Aman rice in level Barind tract	• To develop an economically profitable cropping pattern over the existing Potato-Boro-T. Aman rice cropping pattern and • To increase production and economic return.	Joypurhat and Shibganj, Bogura
1156.	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 and • To increase the production of onion as spices crop as well as increase productivity and profitability for higher income.	Sonatola/Shibganj/ Sherpur (MLT) and Bogura
1157.	Development of alternate cropping pattern lentil–Boro (late) -T. Aman rice against Boro-Fallow-T. Aman rice in Karatoa Bangali Floodplain	• To study the agro-economic performances of the alternate cropping pattern over the existing pattern and • To increase the productivity and profitability	Shibganj and Sonatola (MLT) and Bogura
1158.	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 and • To increase productivity and profitability	Shyampur, Rajshahi

Sl. No.	Research Title	Objective (s)	Location
1159.	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 and • To increase productivity and profitability.	Shyampur, Rajshahi
1160.	Development of mechanization package for four crops-based cropping patterns	• To reduce the turnaround period in the whole cropping pattern and • To assess the crop productivity.	Ajoddhapur, Rangpur (FSRD)
1161.	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.	Rangpur
1162.	Development of healthy oilseed crops based cropping pattern	• To find out the profitable cropping pattern including relatively safe oilseed crops/ mustard var. BARI Sarisha-18 andsunflowr var. BARI Surjamukhi-3	Char Bongram, Chilmari
1163.	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 and • To increase the cropping intensity and productivity at famers level.	Dhaperhat, Sadullapur
1164.	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 and • To increase crop yield and farmers' income.	Dinajpur
1165.	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.	Habigonj (MLT)
1166.	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 and • To increase cropping intensity	Netrakona

Sl. No.	Research Title	Objective (s)	Location
		and maximize farmers income	
1167.	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 and • To increase cropping intensity and farmers income	Muktagacha, Mymensingh
1168.	Development of improved cropping pattern Garden pea - Boro-T. Aman rice against existing cropping pattern T. Aman-Fallow- Boro rice at Sherpur region	• To improve the existing cropping pattern by inclusion of Motorshuti • To increase soil health and cropping intensity and • To maximize farmers income	Sherpur
1169.	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 ntensity and productivity by inclusion of Mungbean • To increase crop yield and farmers' income	Raniganj, Sadar Dinajpur (MLT)
1170.	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 and • To increase crop yield and farmers' income	Pirganj, Thakurgaon (MLT)
1171.	Development of Maize-Jute-Fallow cropping pattern against existing Fallow-Boro- Fallow cropping pattern in upper catena of haor area	• To develop two crops-based cropping patterns for haor areas and • To increase cropping intensity, total productivity and economic return.	Nikli, Kishoreganj
1172.	Development of Blackgram-Boro-Fallow cropping pattern against existing Fallow-Boro-Fallow cropping pattern in upper catena of Haor area	• To develop two crop-based cropping patterns for haor areas and • To increase cropping intensity, productivity and economic return.	Nikli, Kishoreganj
1173.	Development of Foxtail Millet-Fallow-T. Aman rice cropping pattern against Fallow-Fallow T. Aman rice cropping pattern	• To introduce Foxtail Millet in coastal ecosystem. • To increase cropping intensity in coastal region and • To increase productivity and farmers income.	Amtali, Bogurna and Kuakata, Patuakhali (MLT)

Sl. No.	Research Title	Objective (s)	Location
1174.	Development of Watermelon-Fallow-T. Aman rice cropping pattern against Fallow-Fallow-T. Aman rice cropping pattern in the coastal area	• To validate and disseminate the technology watermelon relaying with T. Aman to the farmer's level and • To increase production and farmers income with utilize the fallow land.	Chakaria and Cox's Bazar
1175.	Improvement of cropping pattern with Bitter gourd-Fallow- T. Aman rice against farmers existing pattern Fallow-Fallow-T. Aman rice in coastal area of Bangladesh	• To improve cropping intensity and • To increase economic return of farmers.	Chakaria and Cox's Bazar
1176.	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 and • To increase cropping intensity and to popularize the pattern to the farmers.	Melandah, Jamalpur (MLT)
1177.	Development of cropping pattern Blackgram/Grass Pea-Jute-T. Aman rice against existing cropping pattern Grass pea-T. Aman in charland	• To develop a four crops-based cropping pattern for charland areas and • To increase cropping intensity, total productivity and economic return.	Chilmari, Kurigram.
1178.	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 and • To increase economic return of farmers.	Shibpur, Narsingdi.
1179.	Development of alternate cropping pattern late Tomato-T. Aus- T. Aman rice against Late Tomato–Fallow–T. Aman rice	• To increase cropping intensity by introducing T. Aus rice in a cropping pattern and • To increase total productivity and farmers' income.	Sadar, Dinajpur
1180.	Development of productive cropping pattern in Bhola	• To increase system productivity as well as farmers' income.	Bhola, Sadar
1181.	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 and • To increase total productivity and farmers' income	Patuakhali

Sl. No.	Research Title	Objective (s)	Location
1182.	Development of alternate cropping pattern Maize-T. Aus-T. Aman rice against Boro - Fallow–T. Aman rice	• To introduce Maize and T. Aus rice in the cropping pattern and • To increase cropping intensity and productivity.	Kaliganj, Jhenidah (MLT)
1183.	Development of alternate cropping pattern Field pea-Boro-T. Aus -T. Aman rice against Mustard-Boro-T. Aman rice	• To study the comparative performance of alternate cropping pattern compared to existing cropping patternand • To increase cropping intensity, productivity and farmers' income.	Jhikargacha, Jessore (MLT)
1184.	Development of vegetables-based cropping pattern in Narsingdi	• To increase the cropping intensity and farmers income through vegetable-based cropping pattern and • To popularize the vegetable-based cropping pattern.	Shibpur, Narsingdi
1185.	Improvement of existing Fallow-Boro rice cropping pattern through Mustard and Potato in Haor area of Kishoreganj	• To introduce potato or mustard in fallow-Boro-fallow cropping sequence in haor area and • To increase the crop production and economic return.	Nikli, Kishoreganj
1186.	Intercropping of different rabi vegetables with Sweet gourd in hill valleys of Bandarban	• To find out the suitable sweet gourd + rabi vegetables intercrop at farmer's field for increasing farm yield and income of the farmers.	Bandarban
1187.	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 Moulvibazar (MLT)
1188.	Intercropping of Mustard with Groundnut on yield and economics under acidic soils of northeast haor region	• To find out the suitable intercrop combination for increasing yield and economic return.	Moulvibazar and Sunamganj (MLT)
1189.	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.	Moulvibazar and Sunamganj
1190.	Performance of intercropping Coriander leaf with Tomato and Sweet gourd varieties under Mango-based agroforestry system	• To find out the suitability ofTomato and sweet gourd varieties in mango-based agroforestry systems. • To observe the performance of	Cumilla, B. Baria and Chandpur

Sl. No.	Research Title	Objective (s)	Location
		coriander leaf with winter vegetables in the mango-based agroforestry system and • To increase production and economic return.	
1191.	Performance of intercropping Coriander and Red amaranth with Turmeric varieties under Mango-based agroforestry system	• To observe the performance of intercropping red coriander leaf/ amaranth with turmeric in the mango-based agroforestry system. • To find out the suitable variety/ies of turmeric under mango-based agroforestry system and • To increase production and economic return.	Cumilla, B. Baria and Chandpur
1192.	Performance of intercropping Coriander and Red amaranth with summer vegetables under Mango-based agroforestry system	• To observe the performance of intercropping coriander/red amaranth with summer vegetables in the fruit tree-based agroforestry system and • To increase production and economic return.	Cumilla, B. Baria and Chandpur
1193.	Intercropping of Cauliflower with Bt brinjal	• To find out the performance of cabbage as intercrop with Bt. brinjal and • To increase total productivity and economic return.	Narail (MLT)
1194.	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
1195.	Intercropping legume crops with Maize at charland of Bhuapur	• To find out the suitable legume crop for higher productivity and economic return. • To increase the cropping intensity as well as total productivity and • To improve soil health.	Bhuapur, Tangail
1196.	Intercropping of vegetables, Spices and Red amaranth in Sugarcane	• To find out suitable profitable intercrop combinations with sugarcane and • To intensify use of land for growing vegetables and spices	Solakundu and Modhukhali, Faridpur (FSRD)

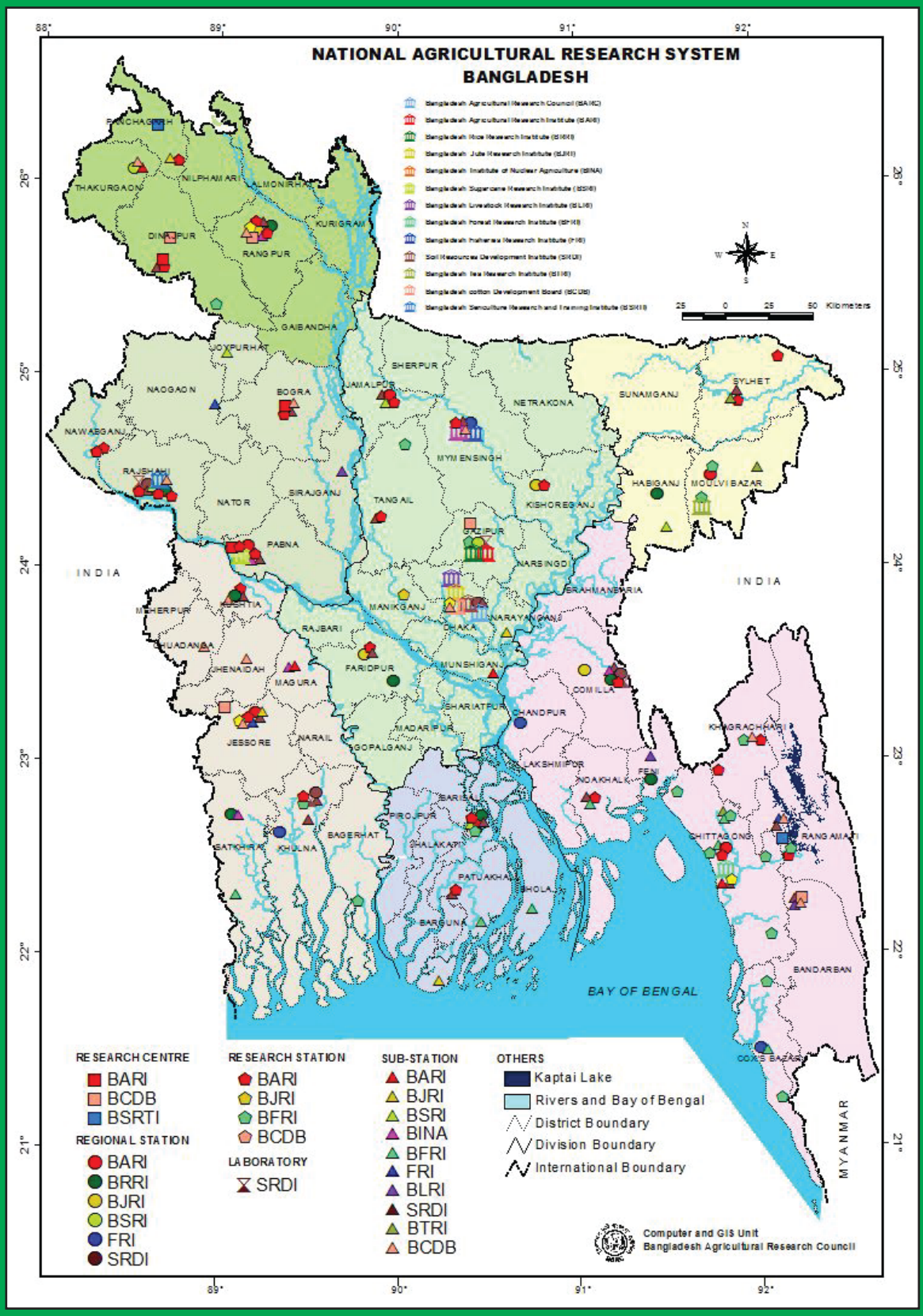
Sl. No.	Research Title	Objective (s)	Location
		crops.	
1197.	Intercropping of Soybean with Maize in Bhola	• To find out the appropriate intercrop combination for higher yield and • To early establishment of soybean with minimum fertilizer and also to escape from natural hazard.	Dawlatkhan and Bhola (MLT)
1198.	Intercropping of Sorghum with Cowpea at coastal Area of Noakhali	• Assess yield within intercropping compared to pure stand cropping and to • determine the optimum spatial arrangement for the mixture of sorghum with cowpea for highest yield.	Noakhali
1199.	Intercropping of Sweet gourd with Cabbage	• To evaluate the performance of sweet gourd as intercrop with cabbage and • To increase the income of farmers	Dhirashram, Gazipur (MLT)
1200.	Intercropping of Mungbean and Sesame in southern district of Bangladesh	• To find out suitable intercrop combination and • To increase total productivity	Patuakhali and Borguna
1201.	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.	Noakhali
1202.	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.	Noakhali
1203.	Intercropping of Mungbean within Sesame in Gopalganj	• To find out the appropriate intercrop combination for higher yield and • To minimize the yield loss of sesame due to damage caused by rain.	Tungipara and Gopalganj (MLT)
1204.	Intercropping of Foxtail millet with Groundnut in the charland	• To find out the suitable combination of foxtail millet and groundnut under intercropping system and	Ulipur and Chilmari (MLT)

Sl. No.	Research Title	Objective (s)	Location
		• To increase yield and economic return	
1205.	Intercropping of Cabbage with Brinjal	• To find out the optimum population of cabbage as intercrop with brinjal and • To increase total productivity and economic return.	Shibpur, Narsingdi
1206.	Intercropping of vegetables with Chilli in Southern region of Bangladesh	• To find out the suitable intercrop combination for higher productivity and economic return and • To increase cropping intensity in the coastal area	Patuakhali
1207.	Improvement of existing Turmeric+ Chilli+ Brinjal intercropping system through inclusion of Papaya and creeper vegetables	• To make the existing mixed cropping system more productive and • To increase farmers' income	Gongarampur, Pabna (FSRD)
1208.	Effect of mixing ratio on crop yield and advantage indices in Barley and Field pea at coastal areas of Noakhali	• To investigate the effects of different intercropping arrangements on barley and Field pea yield and • To find the land use advantage in the intercropping system	Noakhali
1209.	Effect of seed rate of Mustard and Cowpea mixed cropping in Bhola	• To verify the agro-economic performance of mixed cropping of mustard with cowpea and • To ensure the maximum utilization of land for higher yield and economic return.	Bhola, Sadar and Daulatkhan (MLT)
1210.	Mixed-cropping of Black cumin with Groundnut at the charland of Tangail	• To find out the most suitable intercropping combination and • To increase yield and economic return of farmers	Bhuapur, Tangail (MLT)
1211.	Performance of mixed cropping in char area of Gaibandha	• To observe the different ratio of chilli, brinjal, coriander and radish under mixed cropping and • To increase farmers income.	Chinirpotol char, Saghata, Gaibandha
1212.	Grass pea as relay crop with T. Aman rice in low lying areas of Narail	• To evaluate the performance of BARI khesari varieties and • To disseminate and popularize the varieties among the farmers.	Tularampur, Narail (MLT)
1213.	Relay cropping of Maize with	• To find out the suitable inter	Karimganj and

Sl. No.	Research Title	Objective (s)	Location
	Kenaf in Kishoreganj	cropping combination and • To increase productivity and economic return of the farmers.	Kishoreganj
1214.	Relaying Mustard with T. Aman under T. Aman-Fallow-Boro rice cropping pattern	• To increase the cropping intensity and system productive efficiency and • To develop a new cropping pattern	Faridpur
1215.	Relay cropping of Kenaf with Maize in haor areas of Kishoreganj	• To find out the suitable inter cropping combination and • To increase productivity and economic return of the farmers	Karimganj and Kishoreganj
1216.	Performance of relaying Cowpea with T. Aman for fallow land utilization in the coastal area	• To test the performance of cowpea for fallow land utilization and • To see economic return and farmers reaction.	Chakaria and Cox's Bazar
1217.	Relay Cucurbit vegetables with Tomato and Potato at Tangail Region	• To find out the suitable relay cropping system of cucurbit vegetables with tomato and • To increase the production and economic return of the farmers.	Atia, Deldhur(FSRD) and Modhupur, Tangail (MLT)
1218.	Performance of Mustard varieties as relay crop with B. Aman rice in Cumilla Region	• To see the performance of mustard varieties as relay crop with B. Aman.	Chandina, Muradnagar, Cumilla
1219.	Performance of Wheat varieties as relay crop with B. Aman rice in Cumilla Region	• To see the performance of garlic varieties as relay crop with B. Aman rice.	Muradnagar, Cumilla
1220.	Performance of Potato/Brinjal relay cropping under Potato/Brinjal-T. Aman rice cropping pattern at charland of Sherpur	• To increase cropping intensity and • To increase yield and income of the farmers	Sherpur, Bogura
1221.	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
1222.	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 and • To ensure higher productivity and economic return.	Bhola Sadar and Daulatkhan, Bhola

Sl. No.	Research Title	Objective (s)	Location
1223.	Performance of Grass pea varieties relaying with T. Aman rice in Bhola	• To evaluate the performance of BARI released grasspea varieties as relay crop with T. Aman rice and • To increase Grass pea yield and farmers' income.	Sadar, Daulatkhan and Charfashion, Bhola
1224.	Performance of Field pea varieties as relay crop with T. Aman rice	• To evaluate the performance of field pea varieties as relay crop with T. Aman rice. • To increase yield of field pea and farmers' income.	Jhikargacha , Jessore and Narail (MLT)
1225.	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 and • To increase farmers' income.	Tularampur, Narail (MLT)
1226.	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 and • To ensure higher yield and economic return from garden pea.	Daulatkhan and Charfashion (On-Farm)
1227.	Relay cropping of Panikachu with Potato in Tangail	• To find out the most suitable combination of Panikachu with potato and • To increase yields and economic return of farmers	Elenga, Tangail (FSRD)
1228.	Effect of sowing methods on Grass pea in southern region of Bangladesh	• To study the performance of BARI Kheshari-5 under different sowing methods in Barishal.	Gournadi, Barishal (MLT)
1229.	Effect of planting time for Onion bulb production of BARI Piaz-4	• To find out optimum planting time of BARI Piaz-4.	Faridpur and Rajbari
1230.	Identification of critical weed competition periods for Black cumin in Faridpur	• To find out the critical weed competition periods for black cumin.	Faridpur
1231.	Effect of sowing time and method on Soybean in Bhola	• To find out the suitable time for Soybean production and • To select suitable sowing methods for Soybean cultivation.	Dawlatkhan, Charfashion, Bhola
1232.	Effect of container size on yield	• To find out suitable container	Bandarban

Sl. No.	Research Title	Objective (s)	Location
	of different vegetables at Rooftop gardening in Bandarban district	size for different vegetables and evaluate their performances on rooftop gardening.	Sadar
1233.	Effect of spacing of Potato under zero tillage condition in saline soil of Bangladesh	• To find out optimum spacing of zero tillage Potato for higher yield.	Dacope, Khulna
1234.	Irrigation management of zero tillage Potato in saline areas	• To determine the irrigation requirement of zero tillage Potato in saline area.	Dacope, Khulna
1235.	Integrated management of Betel leaf disease and insect in safe way	• To control disease and insect in Kushtia	Kushtia Sadar
1236.	Effect of different planting methods on the yield and maturity duration of Sunflower in haor areas	• To find out the suitable planting system for sunflower to save it from natural disaster in the haor area and • To increase yield and farmers' income	Nikli (haor)
1237.	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
1238.	Analysis of agricultural drought, rainfall and crop yield relationships in Northern and Southern part of Bangladesh based on Landsat Time-Series	• To evaluate the relationships of agricultural drought with rainfall and crop yields of the northern and southern regions of Bangladesh. • To increase the crop productivity of northern and southern parts of Bangladesh.	Rajshahi Rangpur Khulna and Barishal
1239.	Genotype, Environment and Management interaction for yield improvement in Chickpea	• To evaluate the relationships of agricultural drought with rainfall and crop yields of the northern and southern regions of Bangladesh and • To increase the crop productivity of northern and southern parts of Bangladesh.	Rajshahi Pabna and Natore
1240.	Genotype, Environment and Management interaction for yield improvement in Mungbean	• To evaluate the interaction effect of genotype, environment and management on yield of Chickpea and • To develop a model for yield improvement of Chickpea based	Gazipur Pabna and Rajbari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