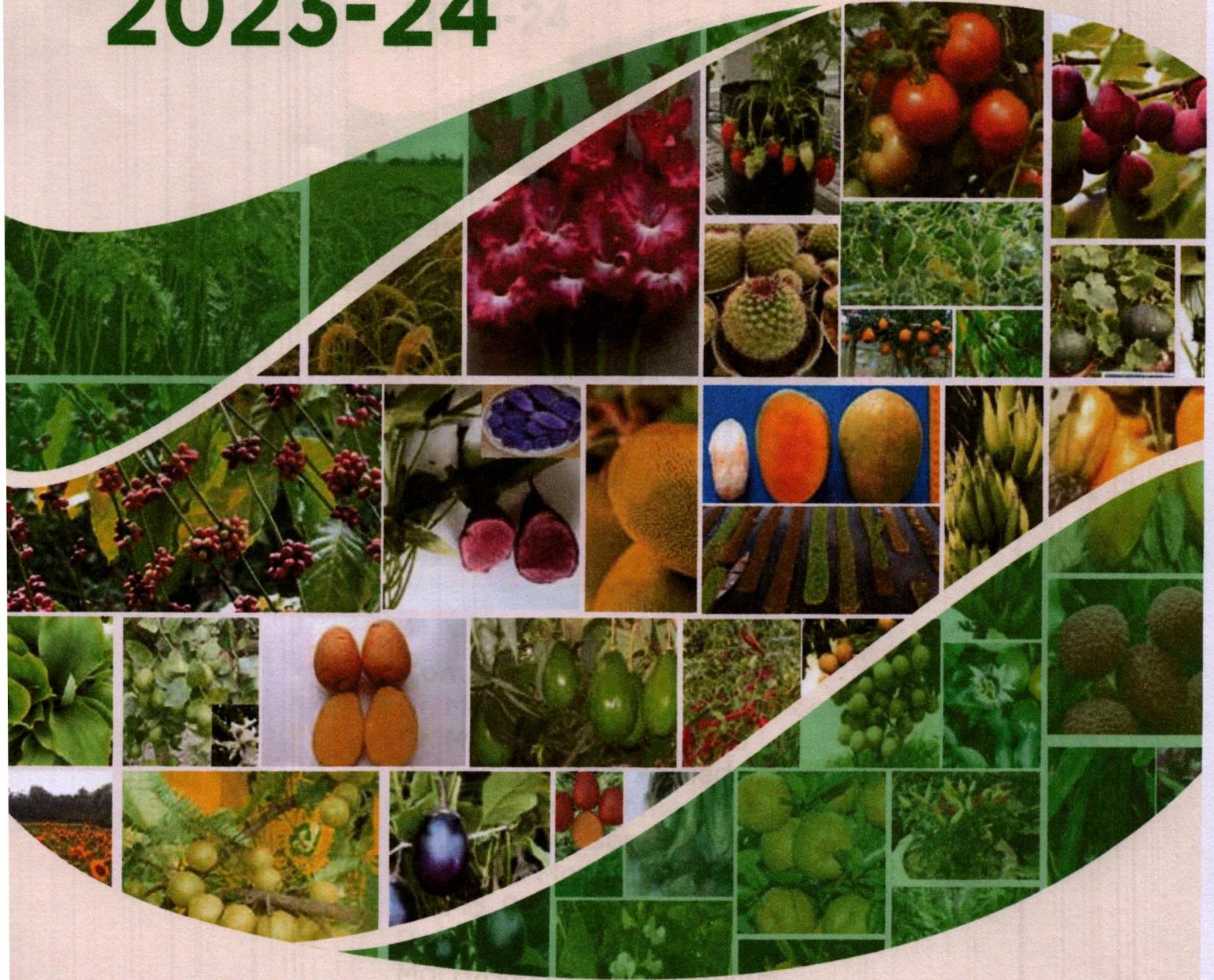


BARI Annual Report 2023-24

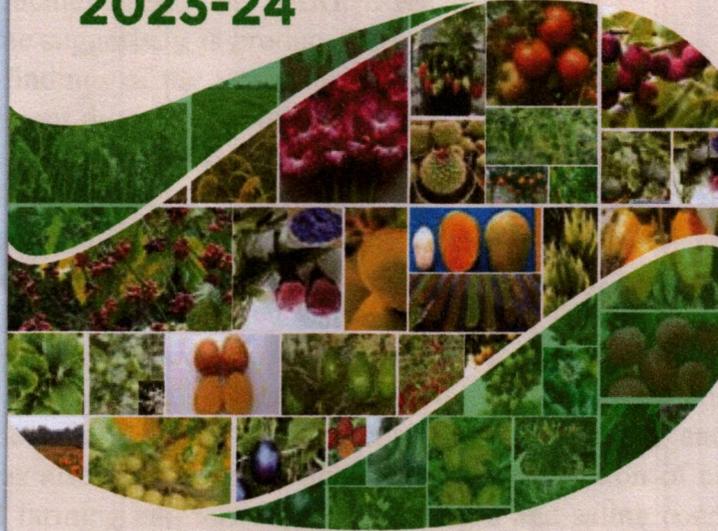


Bangladesh Agricultural Research Institute

মোহাম্মদ রাসেল
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বৈজ্ঞানিক কর্মকর্তা (পরিসংখ্যান)
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BARI Annual Report 2023-24



Bangladesh Agricultural Research Institute

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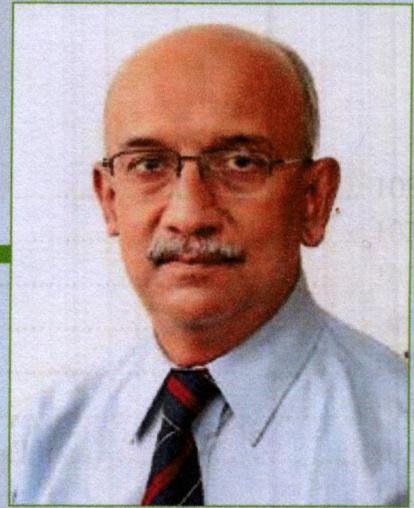
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Foreword



This annual report is a comprehensive overview of the activities and achievements of BARI from the year 2023-24. As the name suggests, it is produced on yearly basis and includes major findings of the experiments conducted by the scientists of different disciplines working in various Crop Research Centers and Research Divisions of BARI during the preceding year. The major research areas include variety development of different crops, such as tubers (potato, sweet potato, aroids, etc.), oilseeds (mustard, rapeseed, groundnut, sunflower, etc.), horticultural crops (fruits, vegetables and ornamentals), spices (onion, garlic, chili, turmeric, ginger etc.) and cereals (barley, oat, millets, etc.). The areas of research also include improvement of cropping systems, crop, soil, water and irrigation management, plant nutrition, disease and insect management, plant biotechnological research, postharvest processing, production economics, development of low-cost farm machinery, and farm management. Besides, attention has also been given to adaptation and mitigation of climate change related issues, char and hill farming and farming under drought and saline conditions. Our scientists have also engaged in developing technologies which are appropriate as well as sustainable with a view to narrowing the gap between current food demand and its production in the country.

Although this report tried to summarize all the research activities of the previous year, it is really difficult to accommodate complete findings of all the studies in a single volume. So, like previous years, only the major findings of the studies have been incorporated in abstract forms allowing the readers to get an overview of the studies in brief. Detailed information of any particular study may be obtained from the respective Centers' or Divisions' reports.

I express my heartfelt thanks and appreciate the efforts of scientists, editors, and associates who have worked hard to bring this report out on time. I hope this report will be useful to scientists, teachers, students, policymakers and other stakeholders who are engaged in agricultural research and development for food and nutrition security of the country.

Dr. Md. Abdullah Yousuf Akhond
Director General, BARI

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০০/২০/২৪

নূর মোহাম্মদ (BARI0653)
উর্দুভাষা বৈজ্ঞানিক কর্মকর্তা
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মোহাম্মদ বাশেখ
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CONTENTS

Foreword

Board of Management

Tuber Crops 01

Pulse Crops

Blackgram	32
Lentil	33
Grasspea	38
Chickpea	41
Fieldpea	44
Cowpea	46
Mungbean	46
Pigeon pea	49

Oilseed Crops

Rapeseed - Mustard	55
Sesame	67
Groundnut	69
Soybean	76
Sunflower	79
Linseed	84
Niger	85
Safflower	85

Spice Crops

Onion	96
Garlic	96
Chilli	96
Ginger	96
Turmeric	98
Coriander	98
Cumin	99
Black cumin	100
Ajown	101
Dill	101
Black pepper	102
Bay leaf	102

মোহাম্মদ রাসেল
বৈজ্ঞানিক কর্মকর্তা (পরিমার্গবান)
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বিএআরআই, গাজীপুর-১৭০১

Vanilla	103
Cardamom	103
Betel leaf	103
Golmorich	103
Cinnamon	104
Fengreek	104
Plum (Alu-bukhara)	105
Mint	106

Vegetable Crops

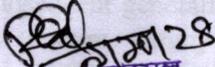
Eggplant	121
Tomato	121
Sweet pepper	122
Bottle gourd	123
Water melon	124
Muskmelon	126
Sponge gourd	126
Pumpkin	126
Ridge gourd	128
Squash	128
Snake gourd	129
Cucumber	129
Teasle gourd	130
Pointed gourd	130
Country bean	131
Yard long bean/ velvet bean/ french bean ...	134
Mushroom	135
Stem amaranth	135
Okra	136
Cauliflower	137
Organic	138

Fruit Crops

Jackfruit	155
Mango	167
Banana	173
Litchi	174

০০/২০/২৪

Guava	175	FMF Engineering	239
Shahi Papaya	176	Agricultural Economics	250
Ber	176	Plant Genetic Resources	256
Coconut	178	On-Farm Studies	263
Mandarin	179	Plant Pathology	210
Sweet orange	179	Plant Physiology	333
Pummelo	180	Seed Technology	338
Bael	183	Vertebrate Pest	343
Wood apple	184	Postharvest Technology	245
Golden apple	184	Biotechnology	358
Burmese grape	184	Soil Management	362
Custard apple	185	Entomology	374
Indian dillenia	186	Hill Agriculture	379
Cowa	186	Agricultural Statistics and ICT	382
Water chestnu	189	Training & Communication Wing	388
Dragon fruit	190	Planning & Evaluation Wing	391
Avocado	194	Budget	397
Flower Crops	175	Information Report	
Cereal Crops		(As per Information	
Barley	205	Commission Requirements)	400
Millets	209		
Buckwheat	211		
Agronomy	212		
Irrigation and Water Management	232		


 নূর মোহাম্মদ ২৪
 মোহাম্মদ রাসেল
 বৈজ্ঞানিক কর্মকর্তা (পরিসংখ্যান)
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 ০২/২০/২৪

নূর মোহাম্মদ (BARI0653)
 উর্ধ্বতন বৈজ্ঞানিক কর্মকর্তা
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 বিএআরআই, গাজীপুর-১৭০১

TUBER CROPS

01

Tuber crops viz. potato, sweet potato, aroids, yam and cassava are essential food crops. Tuber Crops Research Centre (TCRC), BARI deals with these crops. The main research thrust of TCRC is on variety development considering high yield, short duration, biotic-abiotic stress tolerant, good keeping and processing quality. Breeding, biotechnology, disease & pest management, soil & nutrient management, organic culture, postharvest processing are the major concern groups to improve tuber crops. Achievements during 2023-2024 on varietal improvement, biotechnology approaches, disease management, insect management, production technology, soil, water and nutrient management, postharvest technology, organic culture and technology transfer have been given below:

Varietal Improvement

Potato

Hybridization for high yielding (early bulking and early maturity, etc.) Potato variety development

S. Naznin, M.A. Kawochar, T. Jahan, A.T.M.T. Islam, M. Rahman, M.S. Hosasin, M. M. Islam, and M.M. Rahman

Hybridization was done at Debiganj and Gazipur using 64 and 52 advanced lines/varieties, respectively under 16 hours extended photoperiod to create variability, and to select superior genotypes in the subsequent generations. For early bulking and early mature variety development targeted parents were BARI Alu-86, BARI Alu-79, BARI Alu-85 (Seven four seven), BARI Alu-75 (Montecarlo) and BARI Alu-52 (Labadia) etc. For improving natural storage capacity targeted parents were BARI Alu-48, BARI Alu-100 (Ottawa) and

BARI Alu-67 (Gorgina) etc. Different high yielding varieties were used for high yielding variety development. We found several successful crosses by using those varieties as male and female parent and collected seeds from crosses for developing early bulking, early mature, longer natural storage capacity and high yielding varieties at both the locations. Those seeds will be sown next year for F1 seedling production for subsequent variety development process.

Production of potato seedling tubers from F1 seed (F1C0)

M. Rahman, M. A. Halim, A.T.M. T. Islam, M. A. Kawochar, S. Naznin, T. Jahan, A.K. Das and M.M. Rahman

Hybrid true seeds which were produced in 2022-23 at Gazipur and Debiganj were sown at Breeder Seed Production Centre, BSPC, Debiganj, Panchagarh during this season 2023-24. After harvesting of all plantlets, 76 single plants and 128 single tubers of 263 crosses were selected for high yielding table potato. In total 123kg seedling tubers were stored for next year.

Field evaluation of F1 potato seedling tubers (F1C1)

M. Rahman, A.T.M. T. Islam, M. A. Kawochar, S. Naznin, T. Jahan, M.A. Halim, A.K. Das and M.M. Rahman

Last year's collected seedling tubers were planted individually in the field. During the selection process all potato clones are examined critically. Each material (F1C0) was planted separately. In single plant generations (F1C1) 143 potato clones weighing 105 kg were selected and stored at BSPC, Debiganj for further evaluation.

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সি.এম.আর.আই. গাজীপুর-১৭০১

২
০১/২/২৪
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বি.এম.আই, গাজীপুর-১৭০১

Information on Right to Information: RTI of BARI

Designated Officer	
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Mobile	: 01315187804
Email	: secretary@moa.gov.bd
Website	: www.moa.gov.bd
Office	: Building # 04, Ministry of Agriculture, Bangladesh Secretariat, Dhaka

Table. Citizen's access to information in 2023-24

SN	Name of the Authority	No. of application received as of the format of Right to Information Act, 2009	No. of application which has solved through providing information	No. of decisions for not providing requested information and the reason for that decision	No. of appeals against the decision of the officer in charge	No. settlement appeals	No. of disciplinary action taken by the authorities against the officer in charge	Amount received as the value of information as per rule 8 of Right (Regulation of Information) to Information Act, 2009	Details of different activities taken by the authorities
1	2	3	4	5	6	7	8	9	10
1	Bangladesh Agricultural Research Institute, Gazipur	05	05	-	-	-	-	-	-

** BARI has provided answers to all 735 questions received through the website and mobile apps.

মোহাম্মদ সালেহ
বৈজ্ঞানিক কর্মকর্তা (পরিসংখ্যান)
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বিএআরআই, গাজীপুর-১৭০১

BARI Annual Report 2023-24

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