

Research Program 2020-2021
VARIETAL DEVELOPMENT PROGRAM

PROGRAM AREA: PLANT BREEDING DIVISION

Proposed Research Program 2020-21

SN	Program Area/Project	Major Objective	Annual Budget (Thousand Tk.)
1	Development of Upland Rice (Broadcast Aus)	Development of varieties in combination of multiple traits such as quick seedling emergence and vigorous growth, short growth duration (90-95 days), tolerance to lodging, drought and pre-harvest sprouting as well as good eating quality.	2000
1A	Development of Jhum Rice	Development of 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	1000
1B	Development of Glutinous Rice	To evaluate and characterize the collected Binni accessions having <10% amylose content in grains for development of glutinous rice acceptable to ethnic community of Chottogram hill tracts for preparation of special dish.	1000
2	Development of Transplanted Aus (T. Aus) Rice	Introgression of earliness, pre-harvest sprouting tolerance and tolerance to high temperature into high yielding varieties for developing rice varieties with slender grain, short growth duration and resistance to major diseases.	1500
3	Improvement of rice for shallow flooded & Deep Water environment	Generation of genotypes in combination with moderate elongation, high yield and submergence tolerance for shallow flooded subecosystem (flood water depth 0.5-1.0 m).	1500
4	Development of Rainfed	Introgression of genes from	3000

	Lowland Rice (RLR) (T. Aman)	diverged genetic background for the improvement of standard T. Aman varieties.	
5	Development of Salt Tolerant Rice for T. Aman and Boro Season	Introgression of salinity tolerant traits/ gene (s) in high yielding varieties suitable for RLR and irrigated Boro ecosystem.	6000
6	Development of Premium Quality Rice (PQR) for T. Aman and Boro Season	Introgression of genes for small & long slender grain with aroma, photosensitivity and Antioxidant property into high yielding genetic background for the development of national and international grade aromatic rice.	5000
7	Development for Micronutrient Enriched Rice (ZER) for T. Aman & Boro	Development of new genotypes with high iron and zinc content along with resistance to major insect pests and diseases, and acceptable grain quality.	5000
8	Development of Insect Resistant Rice (IRR) for T. Aman & Boro Season	Introgression of genes of BPH and gall midge into high yielding rice genetic background.	5000
9	Development of Disease Resistant Rice (BB, Blast & RTV) for T. Aman and Boro season	Introgression of high yield, lodging tolerance and disease resistance trait for BB, Blast & RTV.	5000
10	Development of Submergence and Water Stagnation Tolerance Rice	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 and grain quality etc.	5000
11	Development of Drought Tolerant Rice for T. Aman Season	Introgression of drought tolerance traits gene into high yielding rice genetic background.	4000
12	Development for Golden rice for T. Aman & Boro	Development of new genotypes with high Beta Carotene (Vitamin-A) content and acceptable grain quality.	5000
13	Development of favorable Boro Rice	Development of new genotypes based on the farmers and consumers preference with better plant type and major insect and disease resistance.	5000
14	Development of Cold	Introgression of cold tolerance gene	5000

	Tolerance Boro Rice	into high yielding rice genetic background.	
15	Development of Heat Tolerant Rice	Introgression genes for high temperature tolerance into high yielding varieties for developing rice varieties with short growth duration.	1500
16	International Network For Genetic Evaluation of Rice (INGER)	Promising genotypes selection after evaluation to be used as parent materials and to be included in yield trials.	500
17	Development of water saving rice	Development of water saving rice varieties under transplanted AWD condition of irrigated ecosystem which will produce significantly similar grain yield but will save 25 to 30% water.	1500
Total Budget (Thousand Tk.) : 63500			