

BRRI Regional Station Satkhira
Binerpota, Satkhira-9400, Khulna

Proposed Research Program 2025-26

Sl. No.	Experiment Title	Objectives	Expected output
1	Improving rice yield and mitigating greenhouse gas emissions in rice cultivation using Nano Urea and Zeolite.	To increase rice yield with mitigating greenhouse gas.	Rice yield will be increased and greenhouse gas will be mitigated.
2	Investigation of nutrient uptake pattern in long and short duration BRRI rice varieties in the moderate soil salinity conditions.	<ul style="list-style-type: none"> • To find out the uptake pattern of essential nutrient elements. • To find out correlations between nutrient uptake and yield of long- and short-duration rice varieties. • To identify elemental ratios of different nutrients and minerals. 	This research will contribute for enhancing rice production in the challenging saline environment.
3	Effects of Long-term Missing Nutrients on Rice Yield.	To identify yield limiting nutrients.	Yield limiting nutrients will be identified.
4	Effect of Zinc on growth and Zinc nutrition of Zinc-enriched rice cultivar in unfavorable ecosystems of Bangladesh.	To study the effect of Zn fertilization on Zn accumulation and uptake by Zn-enriched rice varieties in saline soil.	Zn fertilization will improve Zn uptake.
5	Preliminary Yield Trial of high temperature induced spikelet fertility QTL introgression lines.	To assess the yield of <i>qHTSF4.1</i> on the background of BRRI dhan28, BRRI dhan29, BRRI dhan48 and BRRI dhan62 under natural field condition.	Yield of <i>qHTSF4.1</i> will be assessed.
6	Hybridization for developing region specific rice variety.	Introgression of high-yielding, salt-tolerant traits into elite genetic background for developing rice varieties for Satkhira region.	Development of rice varieties that is suitable for Satkhira region.
7	Characterization of local germplasm at field condition.	To find out the phenotypic traits under natural field condition.	Phenotypic traits of local germplasm will be identified.

8	Stability analysis of BRRRI varieties.	To identify the most suitable and adaptable BRRRI rice varieties for specific area.	One or more Varieties will be found stable in local conditions.
9	Regional Yield Trial (RYT).	Evaluation of agronomic performance, specific and general adaptability under on station condition One or more advanced breeding lines will be found higher yielder than checks.	One or more advanced breeding lines will be found higher yielder than checks.
10	Advanced Yield Trial (AYT).	Evaluation of agronomic performance, specific and general adaptability under on station condition	One or more advanced breeding lines will be found higher yielder than checks.
11	Advanced Line Adaptive Research Trial (ALART).	To evaluate the yield potential and adaptability of the advanced rice genotypes at farmers' field in different agro-ecological zones	One or more advanced breeding lines will be found higher yielder than checks.