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"Morphometric Characterization of some Tall Indica Rice Varieties of West Bengal"

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Abstract—Thirty five genotypes of tall indica rice were evaluated, during kharif 2014, in Randomized Block Design with two replications at Instructional Farm, Bidhan Chandra Krishi Viswavidyalaya, Jaguli, Nadia, West Bengal to study morphological characters as well as genetic variability and to identify superior genotypes. Twenty seven morphological and twenty biometrical traits were studied. Among the morphological traits, considerable variability was recorded for coleoptile colour, leaf pubescence of blade surface, culm attitude, flag leaf attitude of blade, density of pubescence of lemma, anthocyanin colouration of keel, panicle attitude of branches, leaf senescence, decorticate grain colour. The traits like intensity of green colour in leaf, colour of stigma, panicle curvature of main axis, panicle exsertion, decorticate grain aroma showed moderate variability. Maximum variation was observed in number of grains per panicle followed by number of panicles per plant. Lunishree selection, Bankisali, Andewsali and Lunishree were superior in grain yield per plant. The highest estimates of phenotypic and genotypic variances were obtained for grain yield per plant, number of grains per panicle, panicle weight and floret number per panicle. High heritability was observed for most of the characters studied viz. days to 50% flowering, floret number per panicle, number of filled grain per panicle, 1000 grain weight, grain length, grain L/B ratio and Kernel length.