

Genetic divergence in autumn rice germplasm of North East India

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ABSTRACT : The nature and magnitude of genetic divergence was estimated in 208-photoperiod insensitive autumn rice germplasms of North East India and few improved varieties under irrigated condition. Differences among the genotypes were significant for all the seven characters. The wide range of D^2 values indicated presence of enormous diversity in the material studied. Based on genetic distances, the genotypes were grouped into eleven clusters and the pattern of distribution of genotypes was found to be independent of geographic isolation. Differences among the genotypes were significant for all the characters studied. The relative contribution of different characters revealed that 100-grain weight and yield per plant contributed the highest to the total divergence. The findings indicated that intercrossing of genotypes from cluster I, V, VI, VII, IX and X showing good mean performance may help to select early maturing, dwarf and high yielding recombinants for identifying varieties for autumn season.

Key Words: Autumn rice, cluster mean, genetic divergence and recombinants.