

Stability Analysis of Rice Varieties and their Hybrids for Yield and Yield Attributes

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ABSTRACT

In a field experiment, 21 F₁ hybrids along with their seven parents were evaluated for their stability with respect to grain yield, days to 50 percent flowering, productive tillers per plant, filled grains per panicle, and 100 grain weight in three successive seasons (both wet and dry seasons of 1999 and 2000). The genotype x environment interaction was significant indicating genotype interacted considerably with environments existed. Significant pooled deviations for yield and its components indicated that the variation in performance of genotypes is entirely unpredictable. The stable performance in yield observed in certain crosses was due to involvement of parents with higher stability in yield and component characters. The stable parents are Lunisree, Tellahamsa and Erramallelu and the stable cross combinations are Tellahamsa/Lunisree, Lunisree/Erramallelu and Shiva/ Tellahamsa.

Key words : Rice hybrids, Rice varieties, Stability.