

Correlation Studies of F₅ Families in Rice (*Oryza sativa* L.)

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ABSTRACT

One hundred and fourteen F₅ families of rice belonging to six crosses along with seven parents were evaluated during *kharif*, 2015 at Andhra Pradesh Rice Research Institute and Regional Agricultural Research Station, Maruteru to study variability, heritability, genetic advance as per cent of mean and nature and direction of association among themselves and with grain yield. Data was recorded on ten characters which showed significant differences among themselves. High PCV and GCV were observed for grain yield per plant and test weight. High heritability coupled with high genetic advance as per cent of mean was observed for number of grains per panicle, grain yield per plant and test weight indicating the presence of additive gene action in governing the inheritance of these traits. Hence, direct phenotypic selection is useful with respect to these traits. The study of character association revealed that panicle length showed significant positive association with grain yield per plant indicating that direct selection can be practiced for this character.

Key words: *Correlation, Genetic advance, Heritability, Variability.*