

Character Association and Path Analysis of Promising Rice Genotypes under Different Planting Methods

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ABSTRACT

The present study was undertaken with 26 promising genotypes to determine the degree of association between yield, yield components and quality characters and their direct and indirect effects on grain yield in different planting methods. Analysis of variance revealed highly significant mean squares due to genotypes for all traits studied, indicating the existence of sufficient variation among the genotypes. Results on character associations and path analysis revealed correlation co-efficients and path co-efficients of similar direction and magnitude respectively, in all the planting methods studied for most of the characters. Positive and significant association of ear bearing tillers per plant, grains per panicle and 1000 seed weight was observed with grain yield per plant under all the methods studied. 1000-seed weight had also exhibited high positive direct effect with grain yield per plant under all the planting methods and hence is identified as an effective selection criterion for grain yield improvement in transplanting, SRI and wet direct seeding methods of planting.

Key words: *Correlation, Path analysis, Quality traits, Rice, Yield, yield components, .*