Correlation and Path Analysis Studies in Rice (Oryza sativa L.) Hybrids

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ABSTRACT

The experiment was conducted to carryout correlation and path coefficient analysis in rice (*Oryza sativa* L.) hybrids for fifteen characters *viz.*, days to 50% flowering, days to maturity, plant height (cm), number of productive tillers per plant, panicle length (cm), number of total grains per panicle, grain yield per plant (g), hulling percentage, milling percentage, head rice recovery percentage, L/B ratio, water uptake, kernel elongation ratio, volume expansion ratio and amylose content. The results revealed that grain yield per plant was positively and significantly associated with plant height and number of total grains per panicle indicating importance of these traits as selection criteria in yield improvement programmes. Scrutiny in path analysis indicated that maximum direct effect on grain yield was exhibited by number of total grains per panicle. Hence, the trait should be taken in account of breeding programme to develop the maximum of threshold yield obtaining new rice hybrids.

Keywords: *Correlation, Grain yield, path coefficient analysis and rice Hybrids.*