

Association and Path analysis between Yield and its Contributing traits in F₂ Generation of Aromatic Rice

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ABSTRACT

A field experiment was conducted during kharif, 2010 at Rice section, ARI, Rajendranagar, involving 7 F₂ populations to study the correlations, direct and indirect effects of yield components in aromatic rice. The correlation analysis indicated that grain yield was significantly associated with days to 50% flowering, plant height, panicle length, 1000-grain weight, kernel length and kernel breadth. Critical analysis of the results by path analysis revealed that the characters, kernel breadth followed by 1000-grain weight, panicle length and number of productive tillers are directly influencing the grain yield. A critical study on correlation and path analysis in each cross in F₂ generation revealed that selection on important yield components viz., number of productive tillers per plant, panicle length and 1000-grain weight and the quality trait, kernel length was suggested to bring out further improvement in aromatic rice.

Key words :Aromatic Rice, Correlation, F₂ Generation, Path analysis.