Correlation and Path Coefficient Analyses in Rice

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ABSTRACT

Thirty five genotypes of rice, were studied to understand the association among the growth, yield and grain quality characters in rice in pursuit of developing highly potential rice genotypes with good grain quality. The path coefficient analysis was also carried out to understand direct and indirect effects of the rest of the traits on yield to develop efficient selection indices. The results of phenotypic and genotypic correlation analysis revealed that days to 50% flowering, panicle length (cm), number of filled grains panicle^{-1}, test weight (g), harvest index (%) and kernel breadth (mm) were significantly and positively correlated with grain yield (kg plot^{-1}). Path analysis indicated that days to 50% flowering, panicle length (cm), test weight (g) and kernel length (mm) had positive direct effect on yield signifying the importance of these traits in improvement of grain yield (kg plot^{-1}).

Key words : Correlation, Path analysis,Rice.