

Correlation Coefficient Analysis for Yield Enhancing Traits and Lodging Parameters in Rice (*Oryza sativa* L.) Genotypes

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ABSTRACT

Thirty two elite rice lines (*Oryza sativa* L.) were evaluated during *Kharif* 2017-18 to study the nature and extent of correlation among yield enhancing and lodging related traits like plant height, tiller angle, ear bearing tillers per plant, flag leaf width, flag leaf length, days to 50 % flowering, number of grains per panicle, spikelet fertility, 1000 grain weight, panicle length, grain yield per plant, staygreenness of flag leaf, harvest index, culm diameter, culm thickness, basal internodal length, per cent of lodging, culm strength, bending strength. Character association studies revealed that the character grain yield per plant showed significant positive association with plant height, tiller angle, 1000-grain weight, harvest index, basal internodal length at both phenotypic and genotypic levels. Percent of lodging expressed positive significant genotypic association with plant height and basal internodal length. This indicated that simultaneous selection of all these characters was important for yield enhancement and lodging tolerance.

Keywords: *correlation, Grain yield, yield components, lodging,*