Correlation and Path Analysis for Yield and its Component Traits in Rice (*Oryza Sativa* L.) Under Water Stress Condition

B Vijaya Lakshmi, Y Suryanarayana, P V RamaKumar, Y AshokaRani and V Srinivas Rao
Department of Genetics and Plant Breeding, Agricultural College, Bapatla- 522101, Andhra Pradesh

ABSTRACT

Simple correlation coefficients are used to find out the degree and direction of relationship between two or more variables are worked out for yield components and physiological characters in 24 F1 hybrids under water stress condition. The highly significant positive correlation were observed between grain yield per plant and panicle length, number of panicles per plant, filled grains per panicle, harvest index and relative water content under water stress. Results of path analysis revealed spikelet fertility (%), filled grains per panicle and relative water content were the major contributors of grain yield by way of their positive and high direct effect. Hence, there is much scope for selecting high yielding genotypes with water stress tolerance, if selection pressure is exerted on above traits.

Key words : Correlation, Path analysis, Rice.