

Correlation and Path analysis in Popular Rice (*Oryza sativa* L.) Varieties of India

G Shobha Rani, K Radhika, V Ravindra Babu, V Padma and G Usharani

Department of Genetics and Plant Breeding, College of Agriculture, Rajendranagar, Hyderabad,

ABSTRACT

Correlation and path analysis studies for eleven yield attributing characters were conducted using eighty seven varieties of rice. The association studies revealed that the genotypic correlations in general were higher than the corresponding phenotypic correlations. Single plant yield exhibited highly significant positive association with plant height, panicle length, number of grains per panicle, number of filled grains per plant, number of chaffy grains per plant, total number of grains per plant, spikelet fertility and 100-grain weight and significant negative association with days to 50% flowering. Path coefficient analysis revealed that plant height, number of productive tillers per plant, number of grains per panicle, number of filled grains per plant and 100 grain weight were five important attributes in formulating selection criterion for effective improvement of grain yield in rice varieties.

Key words : Correlation, Path analysis, Rice and Yieldp