Correlation and Path Analysis of Yield and Quality Attributes in Rice

P Siva Parvathi, V Satyanarayana Rao, Lal Ahamed M and P Anil Kumar Department of Genetics and Plant Breeding, Agricultural College, Bapatla 522 101, A P

ABSTRACT

Eighty four genotypes of rice were evaluated for twenty two yield and quality attributes to assess correlation among themselves. The correlation analysis indicated that grain yield was significantly associated with plant height, total number of tillers per plant, ear bearing tillers per plant, panicle length, days to 50% flowering, filled grains per panicle and grain length. Path coefficient analysis revealed that total number of tillers per plant, ear bearing tillers per plant, filled grains per panicle, grain width, test weight, kernal length and head rice recovery percentage had positive direct effect on grain yield. Hence, selection on these traits suggested to bring simultaneous improvement of yield and quality.

Key words: Correlation, Path Analysis, Quality, Rice, Yield