Genetic variability and character association in turmeric (*Curcuma longa* L.)

V.P. Pandey, D.P. Mishra and M.K. Pandey

Received September 22, 2011 and Accepted December 21, 2011

ABSTRACT: The experiment was conducted on genetic evaluation of thirty three diverse genotypes of turmeric for eleven yield and quality traits. The phenotypic and genotypic coefficient of variation were higher for oleoresin per cent, weight of secondary rhizomes per plant and weight of primary rhizomes per plant. High heritability coupled with high genetic advance were recorded for oleoresin per cent weight of secondary rhizome per plant, rhizome yield and dry matter per cent. The phenotypic and genotypic correlation coefficient for rhizome yield showed highly significant positive correlation with width of primary rhizome length of secondary rhizome and width of secondary rhizome. The path coefficient analysis showed very high direct positive effect on rhizome yield via oleoresin per cent, length of secondary rhizome and dry matter per cent indicating that the selection made on the basis of those traits will help for increasing rhizome yield of turmeric.

Key Words: Curcuma longa L., variability, correlation, path.