

# **Character association and Path analysis of Grain Yield and Yield Components in Maize (*Zea mays* L.)**

**A Rajitha, D Ratna Babu, Lal Ahamed M and V Srinivasa Rao**

Department of Genetics and Plant Breeding, Agricultural College, Bapatla- 522101, Andhra Pradesh

## **ABSTRACT**

An investigation was carried out to assess the character association and path analysis for nine characters viz., days to 50% tasseling, days to 50% silking, days to maturity, plant height, cob length, kernel rows per cob, 100-seed weight, grain protein content and grain yield per plant in 24 genotypes (fifteen hybrids, their eight parents along with a check). Association studies revealed that, four out of nine characters exhibited highly significant positive correlation with grain yield per plant. However, the traits cob length, 100-seed weight, kernel rows per cob, plant height and days to 50% tasseling were found to possess significant association in desirable direction with grain yield per plant at both genotypic and phenotypic levels. Path analysis studies revealed that cob length, 100-seed weight and kernel rows per cob true relationship by establishing significant positive association and direct effect on grain yield per plant.

**Key words :** Character association, Maize, Path analysis, Yield.