Genetic Variability, Heritability and Genetic Advance as per cent of Mean for Pod Yield and its Components in Spanish Bunch Groundnut (Arachis hypogaea L.) in Rabi 2012-13

G Bhargavi, V Satyanarayana Rao, D Ratna Babu and K L Narasimha Rao Department of Genetics and Plant Breeding, Agricultural College, Bapatla- 522101, Andhra Pradesh

ABSTRACT

An investigation was carried out in 20 Spanish bunch groundnut genotypes to assess the variability, heritability and genetic advance as per cent of mean for nineteen characters viz., days to 50% flowering, SPAD chlorophyll meter reading at 40, 50,60,70 DAS and at maturity, days to maturity, number of mature pods per plant, biological yield per plant (g), pod yield per plant (g), biological yield per hectare (q), pod yield per hectare (q), harvest index, 100 kernel weight (g), shelling percentage, kernel yield per plant (g), kernel yield per hectare (q), oil content (%) and oil yield per hectare (q). The results revealed that high PCV and GCV were observed for harvest index and biological yield per plant (g) respectively. High heritability accompanied with high genetic advance as per cent of mean was recorded for SCMR at 60 DAS, SCMR at maturity, number of mature pods per plant, biological yield per plant (g), pod yield per plant (g), biological yield per hectare (q), pod yield per hectare (q), harvest index, kernel yield per plant (g), kernel yield per hectare (q), pod yield per hectare (q), harvest index, kernel yield per plant (g), kernel yield per hectare (q), pod yield per hectare (q), harvest index, kernel yield per plant (g), kernel yield per hectare (q) nod yield per hectare (q) indicating the preponderance of additive gene action which may be exploited through simple selection procedures.

Key words : Genetic advance, Groundnut, Heritability, Variability.