

Genetic Analysis of Iron, Phosphorus, Potassium and Zinc Concentration in Peanut

Authors : Ajay B. C., Meena H. N., Dagla M. C., Narendra Kumar, Makwana A. D., Bera S. K., Kalariya K. A., Singh A. L.

Abstract : The high-energy value, protein content and minerals makes peanut a rich source of nutrition at comparatively low cost. Basic information on genetics and inheritance of these mineral elements is very scarce. Hence, in the present study inheritance (using additive-dominance model) and association of mineral elements was studied in two peanut crosses. Dominance variance (H) played an important role in the inheritance of P, K, Fe and Zn in peanut pods. Average degree of dominance for most of the traits was greater than unity indicating over dominance for these traits. Significant associations were also observed among mineral elements both in F₂ and F₃ generations but pod yield had no associations with mineral elements (with few exceptions). Di-allele/bi-parental mating could be followed to identify high yielding and mineral dense segregates.

Keywords : correlation, dominance variance, mineral elements, peanut

Conference Title : ICSRD 2020 : International Conference on Scientific Research and Development

Conference Location : Chicago, United States

Conference Dates : December 12-13, 2020