RESEARCH PAPER International Journal of Agricultural Sciences, January to June, 2010, Vol. 6 Issue 1 : 305-310

Character association and path coefficient analysis in F₂ generation of groundnut (*Arachis hypogaea* L.)

R.D. RAUT, L.K. DHADUK^{1*}, AND J.H. VACHHANI¹

Department of Agricultural Botany, Junagadh Agricultural University, JUNAGADH (GUJARAT), INDIA

ABSTRACT

The correlation coefficients among eleven yield and yield contributing traits with their path effects towards pod yield were investigated in F_2 generation for six crosses of groundnut during *Kharif*-2007. The correlation coefficients of pod yield per plant were found positive and highly significant with kernel yield per plant, number of mature pods per plant and shelling out-turn. Kernel yield per plant had the highest positive direct effect on pod yield per plant followed by mature pods per plant. While, shelling out-turn showed high negative direct effect towards pod yield per plant but it expressed high indirect effect via kernel yield per plant. Thus, on the basis of correlations and direct and indirect effects, kernel yield per plant, number of mature pods per plant and shelling out-turn were proved to be the outstanding characters influencing pod yield in groundnut and need to be given importance in selection to achieve higher pod yield.

Key words : Character association, Path coefficient analysis, Groundnut

* Author for correspondence. ¹ Main Oilseeds Research Station, Junagadh Agricultural University, JUNAGADH (GUJARAT) INDIA