Multivariate Analysis in Finger Millet (*Eleusine coracana* (L.) Gaertn.)

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ABSTRACT

The experimental material comprised 55 diverse genotypes of finger millet (*Eleusine coracana* (L.) Gaertn) were evaluated to asses genetic diversity using multivariate methods including principal component analysis (PCA) and cluster analysis. Principal component analysis identified four principal components with eigen values more than one which contributed 74.06 per cent of cumulative variance with days to 50% flowering, finger length and inflorescence width being the most important characters in the first principal component. The total genotypes were grouped into eight clusters. The number of accessions per cluster varied from 14 accessions in cluster IV to two accessions in cluster VI where cluster V is unitary with single genotype. The objective of the present study was to determine the extent of diversity present in the material.

Key words: *Cluster analysis ,Finger millet, Multivariate analysis, Principal component analysis.*