An Emerging Scenario of Indian Sesame Seed Research

Abstract: Twenty five Indian sesame accessions (23 Sesamum indicum L. and two S. mulayanum Nair. Family: Pedaliaceae) having potential economical importance, were primarily categorized by using seed macro- and micro-morphological characters along with mineral distributions on their testa. SEM studies revealed different patterns of architecture and ornamentation in the testa as well as hilar region of the seeds. Combining seed morphological and mineral assessment data with hierarchical cluster analysis dendrogram was obtained. These data collectively demonstrated huge phenotypic diversity among the accessions. These findings can be used as valuable phenotypic markers for the preliminary assessment of gene pool of the selected Indian sesame genotypes.

Keywords: Sesame, *Sesamum spp.*, Pedaliaceae, Macro- and Micro- Morphology, SEM, EDAX