

*Taxonomic Significance of the Leaf Geometric and Micrometric Attributes in the Discrimination of Some Cultivars of Mangifera indica L. (Anacardiaceae)*

**Abstract**

The genus *Mangifera* L. belongs to the family Anacardiaceae, order Sapindales with 69 known species. *Mangifera indica* is an essential major tropical crop in the globe economy. This study aims to portray the significance of the usage of geometric and micrometric leaf traits to characterize Mango cultivars. Thirty-three morphological and anatomical leaf traits of 41 Mango accessions belong to six cultivars were investigated. The data were analyzed using statistical packages under R environment. Results showed that geometric and micrometric leaf traits such as the leaf length, width, petiole length, leaf blade shape, the shape of upper and lower epidermal cells, the outline of the vascular cylinder, and the number of phloem resin canal were of significance value in the characterization of Mango cultivars. Taxonomic diagnostic key based on some of those traits was constructed. ANOVAs, MANOVA, correlation, and Principal Component Analysis (PCA) retrieved the significance of applying those leaf traits as cultivar identifiers. The present investigation estimate that the attributes of the Mango leaf could be useful and straightforward cultivar identifiers that could be followed by Mango breeders to save time, efforts and money in terms of being unhindered by long juvenile stage of the tree.