

# GENETIC DIVERSITY, DOMESTICATION AND CONSERVATION IMPLICATIONS OF FRUIT MORPHOMETRIC DATA ANALYSES FOR *DACRYODES EDULIS* IN SOUTHERN NIGERIA

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**Abstract :** *Dacryodes edulis* – African Pear is of socio-economic importance in the Southern region of Nigeria where it is a major auxiliary revenue source for farmers. Cluster and Principal Component analyses of the fruit data showed three distinct groupings; small-sized fruit, large-sized fruit and an intermediary group of mixed fruit types. These reflect the cadre of genetic diversity inherent in the taxon, and constitute a possible veritable tool for its improvement. Notwithstanding the diversity, the prevailing spread pattern of the taxon across the region threatens to erode a section of the species genetic richness; the small-sized fruit types - var. *parvicarpa*, as well as undermine the genetic integrity of large-sized fruit var. *edulis* population. The trend is driven by a vendor/farmer preference for the large-sized fruit type across the region, and except there is deliberate *In situ* and *Ex-situ* conservation efforts, these intraspecific diversities of the species may be lost altogether.

**Keywords :** African pear, Farmer/vendor, Genetic erosion, Intra-specific diversity, Spread pattern.

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