ASSESSMENT OF MANGABA (*Hancornia speciosa*) GENOTYPE TO DETERMINE THE BEST CHARACTERISTICS FOR DIFFERENTIATION OF ACCESSIONS AND PUTATIVE PROGENITORS[1]

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Physical and chemical characteristics were evaluated in ten accessions of mangaba (EXT1, IPJ3, IPJ4, IPJ5, NF1, NF6, NF8, PAR11, RIT7, and TOU48) in an jardim clonal oriundo do Banco Ativo de Germoplasma da EMEPA, João Pessoa, Paraiba State, Brazil. It was evaluated eighteen characteristic: weight, length, diameter, firmness, number of seed, percentage of (pulp + skin), percentage of seeds, soluble solids (SS), pH, titratable acidity (TA), SS/TA, vitamin C, chlorophyll, soluble sugars, reducing sugars and phenolics. This assay aimed to determine best characteristics for differentiation among accessions and putative progenitors for breeding program. No differences among accessions were observed for two characteristics: Length and Chlorophyll. All multivariate analysis, canonical variable analyses, Tocher cluster and Single Linkage method (based on Mahalanobis distance), formed four groups of genotypes: (1) EXT1, IPJ3, IPJ5, NF6, NF8, RIT7 and PAR11; (2) IPJ4; (3) TOU48 and (4) NF1. This multi-characteristics analysis also indicated firmness, number of seeds, pH and polymeric phenolics as being the characteristics with highest relevance to discriminate accession behavior. Additionally, the index selection indicated the genotypes EXT1, IPJ3 and RIT7, with superior performance in this assay, which may be used as progenitors in breeding program in order to improve firmness, SS, soluble sugars and reducing sugars.

Keywords: Tropical fruit, multivariate analysis, divergence, quality


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