Title Identification of volatile compounds in mangaba (*Hancornia speciosa* Gomes) fruit - a preliminary study

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Abstract

The ripe mangaba (*Hancornia speciosa* Gomes) fruit were harvested from an experimental Station situated in the city of João Pessoa, Brazil. Volatile compounds from the fruit pulp were extracted by using Likens and Nickerson's apparatus. Several extraction parameters such as weight of the pulp, dilution with water, solvent volume and extraction period were standardized to obtain highly characteristic fruit aroma extracts. The extracts were concentrated and analyzed for the identification of volatile compounds using a system of high resolution gas chromatograph coupled with mass spectrometer. Better separation was achieved in a polar capillary column. Compounds were positively identified when the mass spectrum and retention index data of the identified compound matched with that of the authentic standard run under identical analytical conditions. One hundred and ninety four compounds were separated out of which 38 compounds were positively identified and 23 were tentatively identified. The principal volatile compounds present in the pulp of ripe mangaba fruit were 3-hexanol (12.75%), isopropyl acetate (11.30%), 3-pentanol (9.93%), 3-methyl 3-buten-1-ol (4.98%), ethyl acetate (4.44%), δ-limonene (4.63%), ethanol (3.97%), dihydro actinidiolide (3.69%), (*E*)-2-pentenal (3.27%), amyl isobutyrate (2.62%), 2-phenylacetaldehyde (2.20%), β-cubebene (1.89%) and linalyl hexanoate (1.25%).