

Abstract:

Despite the great potential of mangaba as a fruit tree and even for gum production, it is not cultivated in commercial orchards. Collection of fruits from wild plants is at present the only means of exploitation. The unique flavor and aroma of mangaba make it one of the most popular among the native fruits in the Northeast region of Brazil as a raw material for fruit industries. With the objective of evaluating its potential for juice processing, mangaba fruits were harvested ripe, at the adequate stage for human consumption, and analyzed for physical, chemical and biochemical characteristics. Great variation in weight was found among fruits (3.05 to 51.23g), which may be attributed to the high natural variability of the species in the wild state. Nevertheless, pulp yield was high, approximately 87%. The contents of starch (0.52%) and total pectin (0.54%) suggest that the use of processing aids such as enzymes could even increase yield. The analysis of pectin fractions showed that the highly methylated pectins are predominant in the alcohol insoluble solids, which may explain the higher native activity of pectinmethylesterase (498.39 EU) as compared to poligalacturonase (17.33 EU). The high soluble solids content (16.72 oBrix), and soluble sugars (12.98%), together with high acidity (1.77%) impart a very interesting sweet-sour flavor. Mangaba fruits are a rich source of vitamin C (139,64 mg/100g) as ascorbic acid. Phenolic contents can be considered high, particularly the 50% methanol-soluble fraction, with which the astringency characteristic is usually associated.