DEVELOPMENT OF GREEN TEA INCORPORATED SOURSOP (*Annona muricata.* L) JAM

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ABSTRACT

Soursop is a tropical fruit very prized for their pleasant, aromatic and distinctive flavor. In this work, the fresh fruits pulp had high nutritional values, since they contain significant levels of carbohydrates. The results for the chemical composition analysis of Soursop jam was obtained by Orsi, *et al.* (2012) with research done on "Use of Sugar Apple, Atemoya and Soursop for Technological development of jams – chemical and Sensorial composition" respectively, moisture (21.52 g.100 g^{-1}), carbohydrates (77.83 g.100 g^{-1}), pH (3.41), polyphenol (496.08 mg GAE 1000 g^{-1})and soluble solids (68.60 °Brix). With the aim of value adding the green tea in to incorporate with processing the pulp of ripe fruit to add value to this fruit, jams have been developed. The jams were subjected to Quantitative Descriptive Analysis. A total of 30 untrained panelists evaluated the attributes flavor, consistency, appearance, color and overall acceptability of the jams on a 5-point hedonic scale. Based on sensory evaluation, new product presented a good overall acceptability and 2.5 g (10%) green tea incorporated jam was the most preferred by the panelists. The new product was good source of polyphenol content than the Soursop jam. The results of the chemical composition analysis of "green tea incorporated Soursop (*Annona muricata.* L) jam was respectively, during six week storage period of moisture (between 20.83 g.100 g^{-1} - 22.35 g.100 g^{-1}), carbohydrate (77.8 g.100 g^{-1}), during six week storage period of pH range (between 3.40 – 3.26), polyphenol (733.33 mg GAE 1000 g^{-1}) and soluble solids (64 °Brix). Results of the Shelf life study of the new product analyses for six week storage period via yeast and mold count (0-14 g^{-1}) and aerobic plate count (6-26 g^{-1}) under control of SLSI standard.