Studies on physical and bio-chemical analysis of value added products developed from tamarind pulp

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SUMMARY:

Tamarind is an evergreen crop grown in arid and semi-arid regions of India. It is also called as “Indian Date” from the date like appearance of dried pulp. The fruit is good source of calcium, phosphorus, iron and vitamins and also contains small amounts of vitamin A and C. Processing increases shelf-life of fruit and apart from increasing value. It also increases income to growers and processors. An attempt was made to use tamarind pulp for preparation of value added products from tamarind pulp like tamarind jam in the ratio of 1:2 (pulp: sugar), tamarind sauce in the ratio of 1:0.8:0.4 (Pulp: Sugar: Water) and tamarind squash in the ratio of 1: 0.06: 3.3: 1.6 (Pulp: Mint juice: Sugar: Water). In the present study, ripe tamarind fruit was analysed for various physical properties of tamarind fruit like length, width, thickness, geometric mean diameter, surface index and surface area were found to be 62.51 mm, 16.54 mm, 10.15 mm, 21.93 mm, 0.35 and 1510.11 mm², respectively. Value added products were analysed for bio-chemical characteristics like titratable acidity, pH, reducing sugar, fat, moisture, total soluble solids, carbohydrates, crude protein, crude fibre, ash content, etc. Changes in the bio-chemical constituents of the value added products were studied. Tamarind possesses great potentials for making jam, sauce, squash and other products and is safe for human consumption. Further development of these value added products from tamarind pulp to an industrial status was recommended.

KEY WORDS: Tamarind, Value added products, Physical characteristics, Bio-chemical characteristics, Moisture content, Ash content