

**DEVELOPMENT OF PALMYRAH (*Borrasus flabellifer* L)
FRUIT PULP INCORPORATED ICE CREAM**

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Abstract

Incorporation of fruits into the ice cream is one of the choices to increase the nutrition value of the product, flavorings and palatability. The study was focused to formulate a nutritionally rich ice cream by incorporating Palmyrah fruit pulp. Four levels of Palmyrah pulp (9%, 12%, 15% and 18%) were tested for the formulation by 30 semi trained sensory panelists using 5-point hedonic scale. Results of the sensory evaluations revealed that 15% Palmyrah fruit pulp as the best incorporation level. Proximate composition and other nutrients of the selected sample were analyzed. Microbiological quality was evaluated using Total aerobic plate count, yeast and mold count, Coliforms and *Salmonella* counts of the selected product. Accordingly selected Palmyrah fruit pulp ice cream contained 66.01% moisture, 9.89% fat, 1% ash content, 0.77 % dietary fiber, 21.36% total sugar, 4.3% reducing sugar, 17.38 % Non-reducing sugar, 101.50 mg per 100g Vitamin C, 49.75 mg/100g Calcium, 36.74 mg/100g Sodium and 183.67 mg/100g Potassium. The product was complied with Sri Lanka Standards and was safe for consumption up to 10 weeks at -4 °C without any artificial preservative. In conclusion, ice cream with acceptable consumer preference can be developed by using Palmyrah fruit pulp. Future studies are needed to analysis of antioxidant activity of developed ice cream and increase the storage period.

Keywords: Palmyrah fruit pulp, Ice cream, Nutritional analysis, Microbial analysis