

## Enhancement of Palmyrah Fruit Leather (*Panattu*) Mouth Feel by Developing *Panattu* Choco Bar

R. Pavithra<sup>1</sup>, T. Suganja<sup>2\*</sup>, K. Kemashalini<sup>1</sup> and S. Srivijeindran<sup>2</sup>

<sup>1</sup>Department of Biosystems Technology, University of Jaffna, Sri Lanka

<sup>2</sup>Palmyrah Research Institute, Kaithadi, Jaffna, Sri Lanka

\*tnsuganya@gmail.com

Palmyrah fruit leather (*Panattu*) is a product obtained by drying the Palmyrah fruit pulp. It has a soft, rubbery texture and a sweet taste with organoleptically acceptable characteristics. Even though, it contains high medicinal and anti-hypoglycemic properties, consumer acceptability is low due to its bitter taste. Mouth feel of the fruit pulp can be enhanced by reducing the bitterness. Therefore, the aim of this study is to increase the mouth feel of the Palmyrah fruit leather by adding different food flavor compounds and develop *Panattu* Choco Bar. Preserved Palmyrah pulp was used to prepare fruit leather with the addition of three different flavorings such as salt, sugar and citric acid in different ratios. Fruit leather treated with salt 0.4% (w/v) and citric acid 0.2% (w/v) was selected as best based on sensory evaluation results. Citric acid treated fruit leather showed low bitterness, good chewiness and mouth feel. The overall acceptability of these fruit leathers were significantly different ( $p < 0.05$ ) from others. Choco bar was developed with the addition of chocolate, condensed milk and desiccated coconut to selected salt (0.4%), citric acid (0.2%) treated and control Palmyrah fruit leather. Best Choco Bar was selected using sensory evaluation. The overall acceptability of citric acid treated choco bar was significantly different ( $p < 0.05$ ) from others. Chosen Choco Bar was analyzed for sugar, salt, fat and energy content and results were 45.54%, 1.6%, 21.75% and 526.93 kcal respectively. *Panattu* Choco Bar was stored at room temperature for three weeks and TPC, yeast and mold growth, acidity and moisture content were tested at seven days interval. The microbial counts were in the limit according to the SLS standard (SLS: 516 Part 1: 1991) but acidity and the moisture content of the product were increased with storage at room temperature. The newly developed Choco bar has enhanced the mouth feel of *panattu*, thus it would be a value added product of traditionally available Palmyrah leather.

**Keywords:** *Panattu*, Choco bar, Mouth feel, Palmyrah, Bitterness