

Formulation, Preparation and Preservation of Palmyrah Fruit (*Borassus Flabellifer L.*) Jelly

**M. Jeyarajasingam¹, W.A.J.P. Wijesinghe¹, S.M.I.P.G. Bandara¹, A.M. Nilushiny²,
S. Sirivijendred**

*¹Department of Export Agriculture, Uva Wellassa University, Badulla, Sri Lanka
²Palmyrah Research Institute, Jaffna, Sri Lanka*

Palmyrah fruit has high nutritive value but it has received less attention from palmyrah industry. It could be utilized to prepare jelly from fruit pulp. The study was carried out at Palmyrah Research Institute to develop a fruit jelly from the Palmyrah fruit pulp. Several preliminary experiments were carried out to find out the optimum amount of each ingredient which could be added in Palmyrah Fruit Jelly (PFJ) production. In each experiment one ingredient was changed in different amounts keeping the others constant in weigh basis. Then, all ingredients were interpreted in percentage. A sensory evaluation was performed and results were analysed using Minitab 17.0 software. Freidman's test and Turkey's pairwise comparison were used to find the optimum level of each ingredient for PFJ. Nutritional composition of developed PFJ and Preserved Palmyrah Fruit Pulp (PPFP) were determined. Yeast and mould count of PFJ packed in three different packing materials such as transparent polypropylene cup, high impact polystyrene white cup and low density polythene cup were determined in 15 days interval to find out shelf life of PFJ under normal atmospheric condition. According to sensory evaluation results 40g of PPFP, 50g of sugar, 0.5g of citric acid and 0.5g of seaweed extract were selected as most acceptable formula to develop the PFJ. Developed PFJ contained 29.40% moisture, 1.67% protein, 6.48% reducing sugar, 56.05% total sugar and 0.89% ash contents, 0.65% titratable acidity, 3.50 pH, 65.51% TSS, Ca (25.6 mg/100g), P (5.06 mW100g) , Fe (20.67 mg/100g) and vitamin C (0.86 mg/100g). Used PPFP for jelly preparation contained 0.41% protein, 0.89% ash, and 5.92% reducing sugar, 8.72% total sugar, 0.34% titratable acidity, Ca (30.67 mg/100g), P (11.11 mg/100g), Fe (13.85 mg/100g) and vitamin C (1.47 mg/100g). The acidity, pH and TSS were in recommended range and microbial colony was not observed up to two months. One cup of jelly in polypropylene cup can be sold for Rs. 30.00 while one cup of jelly in HIPS and LDPE at Rs. 25.00

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