

**EFFECT OF HEAT TREATMENT ON KEEPING
QUALITY OF PALMYRAH SWEET TODDY**

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ABSTRACT

The palmyrah palm (*Borassus flabellifer*) is believed to be a native of tropical Asia and Africa. The most important product of palmyrah palm is the sap or juice. It should be extracted from the inflorescences by the process known as "tapping. As the sap is highly perishable due to the natural yeast micro flora, the harvested sap should be immediately processed. Therefore the effect of thermal treatment on sweet toddy was carried out in order to increase the keeping quality of palmyrah sweet toddy. The main objective was to identify the optimum temperature and time for preservation of sweet toddy and detected the suitable shelf life for bottled sweet toddy via determined the physical, chemical, microbiological and sensory quality of preserved sweet sap. Three experiments with different thermal treatment were conducted to preserve the sweet toddy. Experiment I with thermal treatments of 60, 70 80 and 90 °C and experiment II with preservatives such as citric acid and sodium metabisulphite were rejected through the microbiology and sensory evaluation. In the experiment III the bottled sweet sap was heated at 95, 100, 105, 110 and 115 °C for different time intervals (15 min, 30 min) and stored at room temperature. There were no difference in chemical, physical and microbial evaluation of selected treatments at 60 days of storage. Although based on sensory evaluation, treatment I at 105 °C for 15 min was selected as the best treatment therefore it could be stored for 60 days without changing its natural characteristics.

Key words: Palmyrah, Palmyrah sap, Temperature, Time, Preservation and Sweet toddy