

**STUDY THE EFFECT OF APPLICATION OF
DIFFERENT SAP COLLECTION VESSELS ON
NUTRITION & QUALITY PARAMETERS OF
PALMYRAH SAP AND ITS VALUE-ADDED
PRODUCTS**

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By
(T.PIRASHANTH)

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Faculty of Animal Science and Export Agriculture
Uva Wellassa University of Sri Lanka**

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ABSTRACT

Palmyrah (*Borassus flabellifer. L*) is an important and versatile plant that belongs to the family of Aceraceae (Palmae). Palmyrah sap is an important output that is used for sweet toddy production or fermented toddy production. The sap is collected from male or female spadix or inflorescence of the palmyrah palm using clay pots and plastic bottles. It is light yellow, transparent liquid, and sweet. The pH of the sap is nearly (6.8 to 7). The Sap contains sugar as sucrose, glucose, and fructose, protein-free amino acids minerals (K, Ca, p, Mg, Fe, and Cr), and some vitamins (Vit C, Vit B₁, Vit B₅). The research mainly focusing on the sap collection vessels affect the quality parameters of sap so there are two types of vessels Earthen clay pot and Plastic bottle (Polyethylene terephthalate). Testing parameters are sap Brix, pH, Reducing sugar, Total sugar, Titrable acidity, Microbial tastings. Clay pot sap shows high pH value and Brix value also reducing sugar and total sugar value high because reducing the fermentation using high purity of lime. The clay pot sap is more suitable than plastic bottle sap. Clay pot shows a higher Brix value compared with the plastic bottle. Further, they showed a higher reducing value than a plastic bottle. Also, can identify higher pH value in the clay pot, Clay pot showed a higher value for pH compared with plastic bottle sap, Clay pot showed a higher reducing sugar value than plastic bottle sap, The earth pot sap shows a higher Brix worth and high pH likewise lessening sugar and complete sugar high in that strategy. Among the tried strategies all out sense of taste count and yeast and shape, count is higher into the plastic compartment as a result of the maturation and synthetic responses.

Key Words: Palmyrah, sweet toddy, sap, vessels. Earthen clay pot, Plastic bottle, pH, Fermentation.