

## Formulation of Palmyrah Watalappam from Palmyrah Fruit Pulp and Palmyrah Jaggery

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Palmyrah (*Borassus flabellifer*) fruit pulp has bioactive compounds with more health benefits, but due to its bitterness it has less consumer preference. The sap of Palmyrah palm is very rich in simple sugar and used to manufacture jaggery which is used as substitutes for sugar and sweetness. This study was designed as a value addition to Palmyrah Fruit Pulp (PFP) and traditionally prepared Palmyrah Jaggery (PJ) through formulation of Palmyrah Watalappam (PW). The ingredients PFP, PJ, eggs, coconut milk and spices (garlic powder, tamarind, salt, nutmeg, ginger, pepper) are used as ingredient. Two trials were carried out, one was to select the suitable PFP and coconut milk ratio and another trial was to select the suitable PJ ratio for PW. In the first trial three treatments were done by changing PFP and coconut milk ratio as, T1; 1:1, T2; 3:1 and T3; 1:3 respectively. Treatment T2; 3:1 ratio was selected among them for second trial. The PW mixed with 37% (m/m) PFP, 12% (m/m) coconut milk, 50% (m/m) PJ, two eggs and <1% (m/m) of spices was found to be best formulation. Triplicates of formulated PW were analyzed for moisture content, water activity, calories, ash, acidity, fat, salt, sugar and pH of using AOAC 2000 procedures. PW was stored in a transparent polypropylene cup No 5 at refrigerator condition of 4°C for one month for shelf life study and moisture content, ash content, acidity and microbial growth were monitored in seven days intervals up to one month. Results revealed that PW consist of moisture content 51.99±0.52%, water activity 0.79±0.001%, calories (energy) 0.86±0.001 kcal, ash 1.96±0.31%, acidity 0.21±0.01%, fat 0.39±0.45%, salt 0.08±0.001%, sugar 37.58±0.36% and pH value of 7.65 at the significant difference (p>0.05). PW was more stable in transparent polypropylene and there was no any significant different in moisture, ash content, acidity, yeast & mold and *E. coli* & coliform growth throughout the study period. PW developed with the incorporation of PFP and PJ has good texture flavor, aroma and shelf life of one month. It can be further developed as a successful value added desert product of PFP and PJ to the market by analyzing its antioxidant properties.

**Keywords:** Coconut Milk, Palmyrah fruit pulp, Palmyrah jaggery, Shelf life