

**DEVELOPMENT AND QUALITY EVALUATION OF VALUE  
ADDED DATES (*Phoenix dactylifera*) JAM**



By

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## ABSTRACT

Jam is a semi-solid product used as a spread ingredient in bakery product. In Dates Jam is made from date flesh (pulp) of ripe dates. The Date palm (*Phoenix dactylifera*) belonging to the family Arecaceae is one of the oldest cultivated fruit tree in the world. Dates are highly nutritious and rich in natural sugar, dietary fiber, vitamins and minerals. Jam based on date's meat in an innovative product aimed to make Dates product diversification. The objective was to formulate Dates jam with enhanced nutritional and sensory properties while maintaining food safety and shelf stability. This research study was carried out to investigate the production of Dates based jam, which are more nutritious and instead of jam containing artificial colors and sweeteners widely available in Sri Lanka.

The result of this study confirms the great potentialities of Dates jam production, the treatment are as follows  $T_0$  – control, its only containing natural sugar of dates,  $T_1$ - white sugar based jam its contain 40% of white sugar,  $T_2$  – Jaggery based jam its contain 40% of Jaggery,  $T_3$  – Glucose syrup based jam its contain 40% of glucose syrup. Physiochemical analysis vs – pH, moisture content (MC), Total soluble solid (TSS) and Titrable Acidity (TA) and sensory analysis vs – Texture, color, spreadability, taste, appearance, and overall acceptability were conducted for each treatment of the jam. Physiochemical analysis was conducted by using standards AOAC methods. Sensory evaluation was conducted using a sensory panel consisting 30 semi trained panelists, the texture, color, spreadability, taste, appearance and overall acceptability were evaluating using a seven – point hedonic scale, in the sensory analysis  $T_3$  (Glucose syrup with dates paste) had high texture, color, spreadability, taste and overall acceptability and appearance,  $T_2$  has high appearance similar to  $T_1$ . Therefore, Jam prepared from the Dates pulp is the best jam sample within three treatments and there is no any harmful effect to the consumers. Therefore, it can be concluded that jam prepared by Dates flesh (pulp) is having good potential for the commercial production.

**Key words:** Dates jam, Jaggery, Nutritious, Sweeteners, Sensory evaluation

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