

Rathmalana, Sri Lanka | 12<sup>th</sup>. December 2024**CONSUMER ACCEPTABILITY OF CEYLON DATE PALM FRUIT  
INCORPORATED ALCOHOLIC BEVERAGE****I.P.D.P.D. Samanthilaka, W.A.C.H. Wijayathilaka and  
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**Abstract.** The fruit of the Ceylon Date palm (*Phoenix pusilla*), a member of the Arecaceae family, is extensively grown in southern India and Sri Lanka. This tropical fruit has a lot of promise for value-added goods because of its unique flavor profile, bioactive components, and rich nutraceuticals qualities. A study was conducted using an online survey to assess consumer acceptance of new products derived from the Ceylon Date palm. The survey included 100 participants, randomly selected and stratified by age, gender, and education level. The majority of participants (94.1%) were found to be between the ages of 20 and 24. The results showed a strong preference for an alcoholic beverage among the proposed products. Thus, two alcoholic beverage formulations (F1 and F2) based on Ceylon Date palm were developed. The beverage samples were subjected to physicochemical analysis and sensory evaluations. Using a 5-point hedonic scale, 30 semi-trained panelists assessed the samples as part of the sensory acceptability test. The F1 and F2 formulations scored identically for texture and odor, but the F2 formulation, which contained 60% Ceylon Date palm fruit, received the highest ratings for appearance, color, and taste, with a hedonic score of  $4.500 \pm 0.1$  for the overall acceptability. The selected F2 sample (100 ml) revealed a pH of  $5.5 \pm 0.02$ , a Brix value of  $20\% \pm 0.05$ , and an alcohol level of  $8\% \pm 0.05$ , based on physicochemical analysis. In conclusion, the unique flavor and health advantages of the Ceylon Date palm-based alcoholic beverage make it a promising product for both local and international markets.

**Keywords:** Ceylon Date palm, Alcoholic beverage, Consumer acceptability