

## READY TO SERVE (RTS) BEVERAGE FROM DRAGON FRUIT (*Hylocereus undatus*)

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Dragon fruit (*Hylocereus undatus*) is a climbing vine belongs to the cactus species. In Sri Lanka there are no prominent value added products of dragon fruit and thus there is a need of developing more value added products using dragon fruit. As Ready to Serve (RTS) drink is one of the basic types of fruit beverages and can be produced by simple low cost technology, this study attempted to develop a RTS drink using dragon fruit. Preliminary investigations were carried out based on the Sri Lanka standards (SLS 729:1985) specified for RTS fruit drinks to develop a suitable recipe. Four recipes were prepared containing 8%, 10%, 12%, and 14% pulp with 11% sugar and 0.01% sodium metabisulphite. Sensory evaluation was conducted using 25 untrained panelists to determine the best pulp concentration to develop the RTS. Then the recipe was further developed with the addition of four levels of citric acid (0.6%, 0.7%, 0.8%, and 0.9%) and 1% of carboxy methyl cellulose (CMC) and a sensory evaluation was carried out to determine the best level of citric acid to be added to develop the RTS. The selected product was packaged in a sealed glass bottle and stored under two storage conditions, ambient (27 °C, 70% RH) and refrigeration (5 °C, 75% RH) for 3 months period and Total Soluble Solids (TSS), pH, acidity, color and microbial counts were determined at two weeks intervals.

Recipe with 12% fruit pulp and 0.8% citric acid was selected as the best recipe for the development of RTS dragon fruit drink. Storage data revealed that the product was compatible with the Sri Lanka standards (SLS 729:1984). However, there was a slight increase in acidity and decrease in pH in samples stored at ambient condition. Thus, it can be concluded that dragon fruit could be used to produce RTS drink and it can be kept for three months period under ambient and refrigerated conditions without quality deterioration.

**Key words:** Dragon fruit, Pulp, RTS, Shelf life