

DEVELOPMENT OF NORMAL, LOW SUGAR AND NON-SUGAR READY TO SERVE
(RTS)
FRUIT DRINK USING BAEL FRUIT (*Aegle marmelos*)

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Bael (*Aegle marmelos* (L) Correa) is one of the very important under utilized fruit having nutritional and medicinal values. There are very less processed products of bael fruit in the market of Sri Lanka. Therefore there is a need for development of new processed products using bael fruit. Ready To Serve (RTS) drink has been becoming popular among Sri Lankan and specially there is a high demand for low sugar food items due to health concerns of people. Therefore this study was conducted to develop normal, low sugar and non-sugar RTS drink using bael fruit. The best recipe for the Ready to Serve drink was developed using trial and error method based on sensory evaluation conducted by using 30 untrained panelists. The selected recipe containing 11% pulp was used to develop normal RTS drink with 120 g of sugar, low sugar RTS drink with 60 g of sugar and non-sugar RTS drink with 666 mg of Aspartame. pH, brix and acidity of developed product was measured and packed in glass bottles followed by batch type in bottle sterilization. The samples were stored under ambient temperature and brix, pH, acidity, sensory evaluation and total plate count were analyzed in one month interval for 3 months. Data of sensory evaluation was analyzed using Fiedman test with non parametric analysis during storage. Chemical parameters were analyzed using ANOVA ($\alpha=0.05$). pH, brix and acidity were not significantly changed ($\alpha=0.05$) with storage. Taste and overall acceptability of low sugar RTS were significantly lower ($\alpha=0.05$) than that of normal and non-sugar RTS. Flavor, color and odor were not significantly different among normal, low sugar and non-sugar RTS drink. Normal and non-sugar RTS drinks could be effectively developed using 11% bael pulp and stored for 3 months without any quality deterioration.

Key words: Bael fruit, Ready to Serve (RTS) drink, Normal RTS, Low sugar RTS, Non-sugar RTS, Sensory evaluation