Development of Pond Apple (*Annona glabra*) Ready-To-Serve Drink and Evaluation of Its Quality Parameters to Popularize the Utilization of Underutilized Fruits

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Pond apple (*Annona glabra*) is a tropical fruit species in the family Annonaceae and called "*Wel Atha*" in Sinhalese. The fruit is edible and the flesh is attractive yellow in colour, highly fragrant, unique and appealing in aroma, but it has not come to general popular consumption unlike Soursop and other fruit in same family due to the myth in community as it is a toxic fruit. Therefore, this is a one of very much underutilized fruit in Sri Lanka. However, all the plant parts are commonly used in Ayurveda medicine due to their superior febrifuge, antidote, emetic, fungi static, antibiotic and anticarcinogenic activities. Therefore, the proposed study was aimed to investigate the utilization of pond apple fruits to develop Ready-To-Serve (RTS) drink and to evaluate its sensory, physicochemical and microbiological properties in order to emphasize and popularize the edibility of this underutilized fruit. The pond apple RTS drink was prepared using fresh ripen pond apple fruit pulp, water, refined sugar (sweetener), citric acid (acidulant), pectin (stabilizer) and sodium metabisulfite (preservative) and bottled using glass bottles and caps. The best consumer preferred formula was selected using an untrained panel consisted of 30 panelists. A drink with 10% fruit pulp, 15% sugar, 74.6% water, 0.2% citric acid, 0.1% pectin and 0.1% sodium metabisulfite at 15 ^{o}Brix was found as best formula by sensory evaluation for RTS drink production. The pH, titratable acidity and ^{o}Brix or total soluble solids (% TSS) were 3.50±0.01, 0.37±0.01% and 15.2±0.2%, respectively with achieving the final product specifications of RTS fruit drink. The total sugar content was 18.04±0.5% according to phenol-sulfuric acid method and ascorbic acid (Vitamin C) content was 10±0.36 mg 100 ml^{-1} according to DCPIP method. Eventually, it can be concluded that the pond apple RTS drink can be effectively used to popularize the consumption of pond apple fruit in the community.

Keywords: *Annona glabra*, Pond apple, Ready to serve, RTS drink, Underutilized fruits