

Comparison of Ready to Drink Artificially Flavoured Teas (*Camellia sinensis*) of Two Commercial Brands

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Tea is the oldest, mostly consumed nonalcoholic plant-based beverage in the world. Ready-to-Drink (RTD) tea is one of the popular value-added products among consumers worldwide. RTD tea is processed by brewing the made tea, and dissolving tea concentrate or powder with other ingredients such as flavours, colourants, acidity regulators, sugar, or sweeteners. Due to the increasing consumer demand, RTD teas are available with different flavours and colours. Thus, evaluation of physicochemical, microbiological, and sensory attributes plays a significant role. This study was conducted to evaluate and compare the physicochemical parameters, microbiological quality, and sensory attributes of two brands (A and B) of artificially flavoured commercially available RTD tea in Sri Lanka. The pH, total soluble solids (TSS), titratable acidity, colour, total plate count (TPC), yeast and mold count and sensory attributes were determined in apple, lemon, peach, and strawberry flavoured RTD products. According to the results, the pH and TSS were significantly different ($P < 0.05$) in two brands in all flavours. The pH and Brix value varied between 1.61-3.65 and 6.8-8.2 respectively. Acidity varied between 0.26-0.45 % and showed a significant difference ($P < 0.05$) between the two brands for apple, lemon, and strawberry flavours. There was no significant difference ($P > 0.05$) in hue values (0.50-1.37) between the two brands. The TPC was 0 cfu/mL for all the samples while yeast and mold count was 0 cfu/mL for both brands except for the lemon flavour in brand B. Considering the overall sensory evaluation, the apple flavour of both A and B brands had a better sensory profile compared to other flavours. In conclusion, all flavoured teas of both A and B brands had microbial safety and acceptable sensory attributes as a RTD tea beverage.

Keywords: Black tea, Brewing, Flavoured tea, Quality, Ready to drink

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