Development of Beverage Powder from Vacuum Dehydrated Lavulu (*Pouteria campechiana (*Kunth) Baehni) and Lime (*Citrus aurantiifolia (*Christm.) Swingle) fruits

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This research explores the utilization of Canistel, locally known as "Lavulu" (*Pouteria campechiana (*Kunth) Baehni), an underutilized fruit crop in Sri Lanka. Lavulu is a cheap source of macro and micronutrients. While Lavulu is traditionally hindered by its high moisture content and short shelf-life, the study's primary aim is to enhance its utilization among consumers. To achieve this, the research focuses on developing a beverage powder derived from Lavulu fruit through vacuum dehydration, creating a value-added product from this underutilized fruit. Four distinct drink mix powders were formulated, combining vacuum dehydrated Lavulu with vacuum dehydrated Lime (*Citrus aurantiifolia (*Christm.) Swingle) fruit powder in varying ratios: T1: 100% Lavulu powder, T2: 75% Lavulu with 25% Lime fruit powder, T3: 50% Lavulu with 50% Lime fruit powder, and T4: 25% Lavulu with 75% Lime fruit powder. Sensory evaluation identified the 100% vacuum dehydrated Lavulu powder mixture as the most acceptable, featuring a °Brix value of 9.43% and a titratable acidity of 0.416%. Proximate analysis of this selected powder mixture revealed 2.7 g of moisture, 94.2 g of carbohydrates, 0.8 g of protein, 0.6 g of fat, 0.2 g of crude fiber, and 1.5 g of ash content per 100 g of dried powder, providing 385 kcal of energy. By introducing Lavulu fruit into the beverage industry, this study demonstrates a novel value-added product for consumers offering a promising solution for the enhanced utilization of Lavulu fruit in Sri Lanka.

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