Consumption Patterns and Awareness of Underutilised Fruits among Agricultural Undergraduates in Sri Lanka

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Underutilized fruits offer significant nutritional and economic value, but remain marginalised in mainstream food systems. As future advocates in the agricultural sector, agricultural undergraduates must develop a comprehensive awareness and understanding to effectively shape public perceptions. However, research on their awareness and consumption remains limited. This study evaluates the consumption patterns, awareness, and utilisation barriers of 12 selected underutilised fruits (Lovi, Ugurassa, Naran, Sapodilla, Himbutu, Madan, Beli, Nelli, Weralu, Donga, Kirala, and Laulu) among agricultural undergraduates in Sri Lanka. A structured, closed-ended online questionnaire was distributed among agricultural undergraduates from nine universities across the country. Using a convenience sampling approach, responses were obtained from 302 undergraduates. Descriptive and inferential statistical analyses were conducted using R software. Results showed 72.85% (n=220) of undergraduates were aware of underutilised fruits, and the frequency of consumption varied, with the majority consuming these fruits rarely or never, indicating a relatively infrequent consumption pattern. Most respondents consume these fruits raw (59.1%) or as juice (27.09%), primarily sourced from local markets (35.28%) and home gardens (32.70%). Statistical analysis revealed that income level significantly influenced consumption (p<0.05) of Naran and Beal, while purchasing habit, residential background, and education level showed no significant effects on consumption frequency. Awareness of their health benefits was high (86.4%) primarily through informal education, and the awareness did not significantly (p>0.05) vary with the study year of undergraduates. Additionally, 81.13% of students expressed willingness to promote underutilised fruits in their future careers. Despite high awareness, consumption of underutilised fruits among agricultural undergraduates remains low, largely influenced by socio-economic factors. This highlights the need for targeted curriculum enhancements and practical initiatives that promote engagement, entrepreneurship, and value chain development to support sustainable integration of underutilised fruits into food systems. This initiative facilitates the integration of these underutilised food sources into mainstream dietary practices.

Keywords: Agricultural undergraduates, Awareness, Consumption patterns, Underutilised fruits, Sri Lanka