A BLENDING OF SAPOTA AND LIME JUICE USING DIFFERENT METHODS OF EXTRACTION

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ABSTRACT

Sapota (Achras sapota L.), commonly known as chiku, is mainly cultivated in India for its fruit value. An experiment was carried out in post-harvest technology and analytical laboratory at the university department of Dr Panjabrao Deshmukh Krishi Vidyapeeth, Akola (Maharashtra, India) to evaluate and standardize juice extraction methods of sapota for the preparation of readyto-serve (RTS) beverage of sapota and lime at ambient storage and also to assess economic feasibility for the preparation of RTS beverage of sapota and lime. The experiment comprised of 2 levels of juice extraction methods and six levels of recipes viz.10 % juice +15%TSS +0.3% acidity, 15 % juice+15 % TSS +0.3% acidity, 20 % juice+15 % TSS +0.3% acidity, 10 % blended juice of sapota & lime (3:1)+15% TSS +0.3 % acidity, 15 % blended juice of sapota and lime(3:1)+15% TSS+0.3% acidity, 20% blended juice of sapota and lime(3:1)+15%TSS+0.3% acidity. Among the different treatments combinations tried in this investigation, the RTS beverage of 15% blended sapota juice with lime (3:1) having 15% TSS with 0.3% acidity extracted by the hot method of juice extraction retained significantly highest score for colour and taste up to 90 days of storage while the highest score for flavour was registered in RTS prepared from the juice extracted by the cold method. The sensory parameter showed decreasing trend throughout the storage period. Chemical sugars showed an increasing storage period, while the ascorbic acid and non-reducing sugar content showed decreasing trend with the advancement of storage. The RTS combining 15% juice blended with lime (3:1) +15%TSS + 0.3% acidity stored for 90 days can be considered a standard recipe that exhibited maximum consumer acceptability and was found economical.

Keywords: Achras sapota L., Sapota, juice extraction, post-harvest technology, RTS beverage