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Development of technology to produce spice flavoured toffees as a commercial product

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Spices are major export agricultural commodity in Sri Lanka. The major uses are in food industries as a condiment and also as a seasoning agent to flavor a variety of food items. Value added spice products are more popular in food sector over the primary processed products since they are easy to handle, safe to use due to little contaminations and low cost of storage. The aim of the study is to develop technologies to make value added products (Confection–toffees) with spice flavours for the commercial market and promote them among the consumers. Cinnamon, clove and cardamom spice oil was obtained by water distillation method. These oil was used in different amounts to make flavoured toffees using trial and error methods with other ingredients used in the industry. A fixed recipe was developed and found that, to produce 1 kg bulk it was required 0.5 L of water, 750 g of sugar, 650 g of liquid glucose, 0.006 L of spice oil.

A sensory evaluation test was conducted to observe the consumer preferences for the three spice flavours with the developed recipe. A specific questionnaire was given to 200 members of the taste panel. The results were statistically analyzed. Overall preferences, as per the panel test were 98.29% for the cinnamon toffee, 97.14 % for clove toffee and 96.00 % for cardamom toffee. The preference values for color were 95.43 %, 94.86 % and 91.43 %, for sweetness 97.71%, 95.43% and 98.29 %, for aroma 98.86 %, 97.14 % and 98.29 %, for mouth feel softness 93.71 %, 89.71 % and 94.86 %, for adhesiveness 92.00 %, 90.29 % and 97.71 %, for cinnamon, clove and cardamom toffees respectively. Developed recipe can be introduced as a new value added product with spice flavour.

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