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Development of lime (Citrus aurantifolia) based paste for middle level consumers

Lime (*Citrus aurantifolia*), is a popular commodity for several reasons- its medicinal and nutritional values, specific aromatic smell, etc. There is a high demand for raw lime and its products in both local and international markets. Lime is highly seasonal and perishable leading to a high extent of post harvest losses.

A protocol was established to develop a low cost lime paste satisfying consumers' requirements identified through a preliminary market survey. Lime juice extracted was treated with SO2 and was left to sediment. Clarified juice was then mixed with corn flour and carboxy methyl cellulose (CMC) in different ratios.

Visually acceptable texture of the paste was obtained by heating the juice at 850C for 3-5 minutes mixed with 5% corn flour resulting in a Brix value in the range of 16.5-17.0. It was found that the flavour characteristic in lime can be obtained in the paste by adding back 18% fresh lime juice into heat-treated paste. The paste samples treated with 400 ppm of sodium benzoate and kept in glass bottles and high-density polyethylene (HDPE) package had shelf lives for more than 5 and 4 weeks respectively. Samples incorporated with spices were rejected based on sensory evaluation. No statistical significant difference was observed between fresh lime juice and samples prepared. Proximate chemical analysis detected the final product to contain 79.7% moisture, 1.9% ash, 1.9 protein and 20.2% total solids. Acidity of the product was found to vary from 5.8% to 7.0%, which needs to be clarified in further studies.