ABSTRACT

Bilin *(Averrhoa bilimbi)* is a small tree, growing in mid and low country of Sri Lanka. It yields small, acidic fruits, which are used as seasonings to eat with curries, or cooked as a curry or for medicinal purposes. The tree yields fruits seasonally, and during harvesting season, a considerable amount of harvest is been wasted. There are no bilin-based products in Sri Lankan market. Therefore, this study was carried out to prepare a value added product from bilin fruits, and to determine the best ingredients levels for bilin sauce. With the objective of minimizing the wastage of fruits during the harvesting season.

Sauce samples were prepared using various ingredient combinations with respect to stipulated experiment design. Three most influential variables with two levels of thickeners, spice content and sugar content added to bilin pulp were used to develop eight samples. The most preferable levels of thickeners, spice content, and sugar level were selected by sensory evaluation using hedonic scale and analysed under non-parametric method. Then two samples were prepared by using only bilin pulp and bilin pulp with pumpkin as a filler with selected ingredient levels. Most preferable sample was selected by paired comparison test.

The selected sample contained bilin pulp, 10% pumpkin, 2% corn flour, 30%sugar and low spice content. It's chemical analysis indicated a Brix° 38 and pH of 3.45, total solids 38.25 %, total soluble solids35.87 %, total sugars 23.96 %, and titrable acidity 4.2%.

Microbial count and chemical tests including pH, Brix values were done periodically to establish microbial safety and evaluate shelf life. Shelf life evaluation was not completed. Further studies should be done to complete shelf life evaluation and should conduct a market survey to evaluate consumer acceptance and demand.