

# DEVELOPMENT OF A SOY (Glycine max) MILK TONED SET YOGHURT

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## Abstract

In this study, an attempt was made to develop set yoghurt with the acceptable combination of milk and soy milk (Glycine max). Incorporation of suitable percentage of soy milk was determined by organoleptic evaluation. Various levels of soy milk viz. 5,10,15,20 and 25 percent were used for the preparation of yoghurt. The yogurt without addition of soy milk was used as control. Selected yoghurt sample (10% soy milk incorporated yoghurt) and control were analysed for chemical parameters, microbiological test and sensory parameters. The means for total solids %, fat, protein and fibre for the control samples were  $19.73 \pm 0.12$ ,  $4.00 \pm 0.06$ ,  $3.30 \pm 0.02$ ,  $0.00 \pm 0.00$  respectively whereas for the soy yoghurt samples the means were  $19.26 \pm 0.81$ ,  $3.84 \pm 0.08$ ,  $3.34 \pm 0.01$ ,  $0.14 \pm 0.01$  respectively. Results obtained showed that, considering non-fat solids contents and absence of coliforms, all the samples were in line with the SriLankan Standards. The products were packed in cartons and stored under refrigerated conditions at  $4 \pm 10^\circ\text{C}$  for a period of three weeks whereas pH, titratable acidity and syneresis were measured once in three days, during 3 weeks. The means of syneresis and pH increased whereas titratable acidity decreased throughout the storage period. Based on the results of above parameters and visual observation products were acceptable for a period of fifteen days under refrigerated conditions. Yoghurt sample prepared with incorporation of 10 % soy milk resulted in superior organoleptic as well as chemical characteristics compared to normal yoghurt. It could be manufactured for a sustainable market with a low cost of production.