

Effect of seaweed powder on the quality of the Pineapple-Chili sauce

ABSTRACT

This study was conducted to produce pineapple-chili sauce mixed with seaweed (*Kappaphycus alvarezii*) based on the best formulation, to determine nutritional composition of the control and the best formulation and to determine the effect on quality of this product. A total of 3 formulations had been developed using different composition of seaweed powder at 2.0%, 2.5%, 3.0% and were undergo sensory evaluation and physicochemical analysis to choose the best formulation. The selected and control samples were then analysed for proximate values. The increasing in seaweed powder composition influenced significantly ($p < 0.05$) the aroma, viscosity, aftertaste and overall acceptability of the sauces. In the physicochemical analysis, increasing in seaweed powder percentage was significantly ($p < 0.05$) influenced positively in the viscosity, syneresis and water activity while it did not affect ($p > 0.05$) the total soluble solids, total acidity and pH. The results of proximate analysis shown the composition of the best formulation was 72.54% moisture content, 23.44 % carbohydrate, 2.70% ash, 0.81% crude fibre, 0.37% crude protein and 0.14 % rude fat showed significantly higher ($p < 0.05$) in ash, crude protein, and crude fibre compared to control.