

Alteration of Pitaya Pulp into a Value Added Product to Reduce the Post Harvest Losses

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Abstract: Pitaya (*Hylocereus undatus*) is well known in the Asian region. It is delicious and having higher nutritional value. Study was conducted to develop ice-cream incorporated with pitaya pulp and further studies were undergone to determine the most acceptable formula for value added ice-cream and evaluate the shelf life. The samples were prepared into three different portion of pitaya pulp. Mashed pitaya pulp, the proportion of 12%, 15%, 18% (w/w) was added to the pasteurized ice-cream mix separately. Finally ice-cream was stored under freezing condition. This ice-cream was evaluated with 20 semi trained panelists with seven points' hedonic scales to find out the standard formula. Sensory, chemical and microbial analyses were conducted for 12 weeks to evaluate the shelf life. Chemical, physical components of the ice-cream were determined according to the methods recommended by AOAC (1995). Formula with 12% pulp was selected according to the panelist preference. Fat content of ice cream was $45.37 \pm 0.99\%$ (dry basis), protein was $7.73 \pm 0.34\%$. There was a slight increase in titratable acidity in the ice cream with time whilst pH, TSS decreased. There were no significant changes of pH during the storage. Microbial number also was reduced with time. The results revealed the possibility of manufacturing of value added ice cream with pitaya pulp showing satisfactory consumer acceptability.

Key words: Anti Oxidant, Pitaya, Value Addition