PRODUCTION OF SEAWEED ICE CREAM AND EVALUATION OF PHYSICO-CHEMICAL & SENSORY QUALITY

A.D.ASHANI ERANDIKA WIPULASENA

FACULTY OF TECHNOLOGY
EASTERN UNIVERCITY
SRI LANKA

2021

ABSTRACT

Seaweed incorporated ice cream can be considered as a nutrient ice cream and health food, seaweed and processed products are rich source of natural carrageenan, view to improving utilization efficiency of the seaweed thereby adding value to the seaweed and encouraging its cultivation and sustainable management in the Sri Lanka. The seaweed for the study were collected from Ceylon seaweed pvt ltd (Colombo 04). The ice cream was prepared using variable proportions of pulp, where it fortified the ice cream. Therefore, the aim of this present study was undertaken to develop different concentration of the seaweed ice cream were analyzed for physicochemical & sensory evaluation properties.

Chemical analysis vs. - pH, total soluble solids, ash content, fat content, titrable acidity and Sensory Analysis, were conducted for each treatment of the ice cream. The treatments are as follows T_0 - Ice cream formulation with without seaweed, T_1 - Ice cream formulation with 5g of seaweed concentration, T_2 - Ice cream formulation with 10g of seaweed concentration, T_3 - Ice cream formulation with 15g of seaweed concentration for 1l of milk. The pH, total soluble solid, sugar content, fat content, ash content, were significantly difference among the treatments. The results of this study revealed that, the pH was significantly increased with the increasing with added seaweed. The sugar content was significantly decreased with the increasing with added seaweed.

Sensory evaluation was conducted using a sensory panel consisting of 30 panelists. The color, taste, aroma and overall acceptability were evaluated using a Nine– point hedonic scale. In the sensory analysis. T_3 has the highest color because of it contain high amount

of seaweed, there for it has light green colour. Most of panelist liked to that light color, but T_2 has the highest aroma, taste and overall acceptability.

TABLE OF CONTENT

LIST OF TABLE

Table No. **Page No.**

LIST OF FIGURES