

ABSTRACT

Marmalade is food product from fruit juice and mixing sugar, acid, pectin, fruit peel slice. The purpose of research is determine the characteristic or marmalade diversified products made from dragon fruit and using of red fruit dragon. Experimental design used was a randomized block design (RAK) with two factors, that is concentration of sucrose and pectin 9 treatment combination with 3 repetitions. The research consisted of preliminary research and main research. The preliminary research aim to determine content of vitamin C, total sugar content, pH and antioxidant activity in raw material red dragon fruit juice. Response main research include chemical responses that content of vitamin C, and physics response to viscosity, total soluble solid, and sensory response that consists color, taste, odor, and texture. Selected sample is taste the antioxidant activity and total sugar content. Research shows that variations in the concentration of sucrose make a significant effect on vitamin C, viscosity, total soluble solid, color, flavor, odor and texture of red dragon fruit marmalade. The Variation of pectin concentration make a significant effect on vitamin C, viscosity, color, and texture of red dragon fruit marmalade. While the interaction between the concentration sucrose and concentration pectin make a significant effect on vitamin C, viscosity, color, odor, texture red dragon fruit marmalade. Selected sample of red dragon fruit marmalade with the addition of concentration sucrose 30% and the concentration pectin 1,5% showed a decrease of antioxidant activity become 93×10^3 ppm and rising levels of total sugar content to 51,02% with average concentration of vitamin C 41,20 mg/ml from 100 materials, total soluble solid 11,73° Brix and viscosity 82,67 dPa.s.

Keywords : Marmalade, red dragon fruit, sucrose, pectin