

SIFAT FISIK, KIMIA DAN TINGKAT KESUKAAN ES KRIM DENGAN PENAMBAHAN PASTA UWI UNGU (*Dioscorea alata L.*)

INTISARI

Uwi ungu (*Dioscorea alata L.*) dapat digunakan sebagai pangan fungsional, karena banyak mengandung sumber antioksidan alami. Oleh karena digunakan sebagai bahan alternatif sebagai bahan pembuatan es krim. Penelitian ini bertujuan untuk menghasilkan es krim yang disubstitusi dengan pasta uwi ungu yang paling disukai panelis.

Penelitian dilakukan dengan membuat es krim dengan penambahan pasta uwi ungu 20%, 30% dan karagenan : pati sagu 0,0:0,5%, 0,5:0,0%, 0,1:0,5% dan 0,5:0,1% (bb). Data yang diperoleh dilakukan uji statistik dengan Rancangan Acak Lengkap dengan dua faktorial. Analisis yang diuji yaitu tingkat kesukaan, uji fisik (daya leleh dan *overrun*) dan analisa kimia (aktivitas antioksidan, kadar protein, kadar lemak dan gula total). Data dianalisis secara statistik menggunakan *Univariate Analysis of Variance* dan *Anova*, jika ada beda nyata antar perlakuan dilanjutkan dengan uji DMRT (*Duncan's Multiple Range Test*).

Hasil penelitian es krim yang paling disukai adalah es krim penambahan pasta uwi ungu 30% dan karagenan : pati sagu 0,5%:0,1% dengan daya leleh 15,23 menit/g, *overrun* 9,71%, aktivitas antioksidan 51,65% RSA, kadar protein 5,9% (bb), kadar lemak 0,31% (bb) dan gula total 1,9% (bb).

Kata kunci: Es krim, pasta uwi ungu, karagenan, aktivitas antioksidan

**PHYSICAL, CHEMICAL PROPERTIES AND LEVEL OF ICE
CREAM FONDNESS WITH THE ADDITION OF PURPLE YAM PASTE
(*Dioscorea alata* L.)**

ABSTRACT

Purple yam (*Dioscorea alata* L.) can be used as a functional food, because it contains many sources of natural antioxidants. Therefore, it is used as an alternative material for making ice cream. This study aims to produce ice cream substituted with purple yam paste which is the most preferred by the panelists.

The study was conducted by making ice cream with the addition of purple yam paste 20%, 30% and carrageenan: sago starch 0.0: 0.5%, 0.5: 0.0%, 0.1: 0.5% and 0, 5:0.1% (bb). The data obtained were statistically tested using a completely randomized design with two factorials. The analysis tested is the level of preference, physical test (melting power and *overrun*) and chemical analysis (antioxidant activity, protein content, fat content and total sugar). The data were analyzed statistically using *Univariate Analysis of Variance* and *ANOVA*, if there was a significant difference between treatments, it was continued with the DMRT test (*Duncan's Multiple Range Test*).

The result of the research that the most preferred ice cream is ice cream with the addition of 30% purple yam paste and carrageenan: sago starch 0.5%:0.1% with a melting power of 15.23 minutes/g, 9.71% overrun, antioxidant activity 51, 65% RSA, protein content 5.9% (bb), fat content 0.31% (bb) and total sugar 1.9% (bb).

Keywords : Ice cream. purple yam paste, carrageenan, antioxidant activity