Effect of Purple Sweet Potato Flour Substitution on the Physical and Organoleptic Characteristics of Non-flaky Crackers

Dibimbing Oleh: Dr. Silvia Oktivia Nur Yudiastuti, S.TP., M.TP

Wiwin Purnama

Food Engineering Technology Study Program
Departement of Agricultural Technology

ABSTRACT

Non-flaky crackers are snacks like biscuits but go trough a fermentation process and had the characteristics not multi-layered. The purpose of this study is to determine the Effect of Purple Sweet Potato Flour Substitution on the Physical and Organoleptic Characteristics of Non-flaky Crackers. This study used the Complete Random Design (RAL) method which consisted of six treatments and three replicates. The treatments are C0 (100% wheat flour), C1 (10% purple sweet potato, 90% wheat flour), C2 (30% purple sweet potato, 70% wheat flour), C3 (50% purple sweet potato, 50% wheat flour), C4 (70% purple sweet potato, 30% wheat flour), C5 (90% purple sweet potato, 10% wheat flour). Data analysis used the Microsoft excel 2010 program ANOVA (Analysis of Variance) method, the continued with data processing used IBM SPSS Statistics 25 with Duncan's Multiple Range Test. The result this study showed that purple sweet potato flour substitution had a real effect on the organoleptic and physical characteristics of non-flaky crackers. The selected treatments is C4 (70% purple sweet potato flour, 30% wheat flour) wich contains a water content of 5%, ash content of 1,8%, carbohydrate 71,96%, fiber 4,63%, protein 5,2%, free fatty acid 0,01%, and antioxidan 38,5%.

Keyword: Purple Sweet Potato Flour, Non-flaky Crackers, Organoleptic and Physical Characteristics