Physical characteristics and organoleptic mango chiffon cake based on formulation variations

Dibimbing oleh: Dr. Ir. Silvia Oktavia Nur Yudiastuti, S.TP., M. TP

Yesi Indah Dwi Kusuma Hariyanti

Food Engineering Technology Study Program
Departement og Agriculture Technology

ABSTRACT

Chiffon cake is one type of cake that has a thick paste with a mildly rough texture and is not flexible. When cut, the cake tended to develop and to have large, porous pores similar to the foam structure. The purpose of this study is to know the effect of the substitution of mango fruit flour on the physical characteristics and organoleptic chiffon cake. This study used the Complete Random Design (RAL) of 9 treatments and three replicates. The treatment is a0 (100% wheat flour), a1 (90% wheat flour, 10% mango flour), (80% wheat flour, 20% mango flour), a3 (70% wheat flour, 30% mango flour), a4 (60% wheat flour, 50% mango flour), a6 (40% of wheat flour, 70% of mango flour), a8 (20% of wheat flour, 80% of mango flour). Data analysis used the Microsoft excel 2016 program ANOVA (analysis of variance) method, the continud with data processing used IBM SPSS statistic 27 with Duncan's multilple range test. The results of this study suggest the substitution of mango flour has a tangible effect on the physical characteristics and organoleptic chiffon cake. The preferred treatment of a5 (50% of wheat flour, 50% of mango flour) contains water content of 27.08%, rude fiber 6.64%, antioxidal activity 90.32%, vit c 4.86%, and betakaroten 644.784 PPM.

Keyword: Mango Flour, Chiffon cake, Organoleptic and Physical Characteristics