PENGARUH SUBSTITUSI TEPUNG OKARA TERHADAP AKTIVITAS *Saccharomyces cerevisiae* PADA ROTI TAWAR

THE EFFECT OF SUBSTITUTION OF OKARA FLOUR ON THE AKTIVITY OF THE Saccharomyces cerevisiae ON WHITE BREAD

Delvi Eka Rahayu[1)], Sri Widyastuti[2)], dan Mutia Devi Ariyana[3)]
[1)]Mahasiswa Fakultas Teknologi Pangan dan Agroindustri Universitas Mataram
[2)]Staf Pengajar Fakultas Teknologi Pangan dan Agroindustri Universitas Mataram
*email: delvirahayu77@gmail.com

ABSTRACT

Low-gluten white bread is substitution with the okara flour (dregs tofu). The purpose of this research was to determine the effect of okara flour substitution and fermentation time on the activity of Saccharomyces cerevisiae on white bread. This study used a Completely Randomized Design (CRD) with two factors of okara flour of 0, 5, and 10%w/w and fermentation time 30, 45, and 60 minutes. Observed data were analyzed using analysis of variance at 5% significance level using Co-Stat software and with the Tukey's-HSD at 5% level. The parameters observed include moisture content, crude fiber, crude protein, total ash, crude fat, carbohydrate content, aroma, tase, crust color, crumb color, crust characteristics, crumb characteristics, and bread pores. The best treatment was obtained at 5% okara flour substitution and 60 minutes of fermentation time produce white bread with moisture content of 30,40% (in accordance with the requirements of SNI 01-3840-1995), crude fiber 2,27%, crude protein 10,86%, total ash 1,70%, crude fat 3,18%, crude carbohydrat 51,59%, development volume 280,42 cm3, as well as the organoleptik quality are accepted by the panelist.

***Keywords**: Okara, Saccharomyces cerevisiae, white bread*

ABSTRAK

Roti tawar rendah gluten dibuat dengan substitusi tepung okara (ampas tahu). Penelitian ini bertujuan untuk mengetahui pengaruh substitusi tepung okara dan lama fermentasi terhadap aktivitas *Saccharomyces cerevsiae* pada roti tawar. Rancangan yang digunakan pada penelitian ini adalah Rancangan Acak Lengkap (RAL) dua faktor yaitu tepung okara 0, 5, dan 10%b/b dan fermentasi 30, 45, dan 60 menit. Data hasil pengamatan dianalisis menggunakan analisis keragaman (*Analysis of Variance*) dengan taraf nyata 5% menggunakan Co-Stat dan dengan Uji Lanjut Beda Nyata Jujur (BNJ) pada taraf 5%. Parameter yang diamati meliputi kadar air, kadar serat, kadar protein, kadar abu, kadar lemak, kadar karbohidrat, volume pengembangan, aroma, rasa, warna *crust*, warna *crumb*, karakteristik *crust*, karakteristik *crumb*, dan pori-pori roti. Perlakuan terbaik diperoleh pada substitusi tepung okara 5% dan lama fermentasi 60 menit menghasilkan roti tawar dengan kadar air 30,40% (sesuai dengan syarat SNI 01-3840-1995), kadar serat 2,27%, kadar protein 10,86%, kadar abu 1,70%, kadar lemak 3,18%, kadar karbohidrat 51,59%, volume pengembangan 280,42 cm^3, serta mutu organoleptik yang diterima oleh panelis.

Kata kunci: *Okara, Saccharomyces cerevisiae, roti tawar*