

ABSTRACT

Zazti Kinasih. B.1810985. Chemical and Sensory Characteristics of Bagelen Dried-Bread Substituted by Chickpea Flour (*Cicer arietinum*). Thesis. Under the supervision of Noli Novidahlia and Muhammad Fakhri Kurniawan.

Wheat flour is highly used as a main material for processing bread, one of the developments is bagelen bread. The intent of this study is to innovate bagelen dried-bread product with the proportion of chickpea flour, increasing protein content based on SNI and fibre content. This research was using a one-factor Complete Randomized Design (RAL) method and 2 repeats, by wheat flour: chickpea flour treatment rates each are 100%:0%, 90%:10%, 80%:20%, 70%:30%. Furthermore, ANOVA variance and Duncan test were carried out with a 95% confidence interval. The results of the data analysis stated that the substitution of chickpea flour had a significant effect on protein level, fibre level, sensory and hedonic quality, but it has no noticeable effect on the moisture level of the product. The selected product is bagelen dried-bread with the proportion of 80% wheat flour and 20% chickpea flour with water content of 6,09%, protein 9,93%, crude fibre 29,5%, ash 1.49%, fat 29.97%, carbohydrate 52.50% and total calorie value of 519,53 kcal. Based on the results of sensory quality tests, bagelen dried-bread was obtained with more brownish-yellow color, more of bagelen smell, more of chickpea smell, more of baked smell, more of not smelled *langu*, tasted more of sweet like bagelen, more of chickpea taste, more crispy texture. By hedonic tests, panelists tend to like the colour, odour, taste, crispiness, and overalls of the product.

Keywords: bagelen, chickpea, dried-bread, crude fibre, protein

ABSTRAK

Zazti Kinasih. B.1810985. Karakteristik Kimia dan Sensori Roti Kering Bagelen Substitusi Tepung Kacang Arab (*Cicer arietinum*). Skripsi. Dibawah bimbingan Noli Novidahlia dan Muhammad Fakhri Kurniawan.

Tepung terigu banyak digunakan sebagai bahan baku pengolahan roti, salah satu pengembangannya adalah roti bagelen. Tujuan penelitian ini yaitu untuk membuat inovasi produk roti kering bagelen dengan perbandingan tepung kacang arab, meningkatkan kadar protein berdasarkan SNI dan kadar serat. Metode penelitian yang digunakan yaitu Rancangan Acak Lengkap (RAL) satu faktor dan 2 kali ulangan, dengan taraf perlakuan tepung terigu: tepung kacang arab masing-masing 100%:0%, 90%:10%, 80%:20%, 70%:30%. Selanjutnya dilakukan analisis sidik ragam (ANOVA) dan uji lanjut Duncan dengan selang kepercayaan 95%. Hasil analisis data menyatakan bahwa substitusi tepung kacang arab memiliki pengaruh nyata terhadap kadar protein, kadar serat, mutu sensori dan hedonik, tetapi tidak memiliki pengaruh nyata terhadap kadar air produk. Produk terpilih yaitu roti kering bagelen dengan perbandingan tepung terigu 80% dan tepung kacang arab 20% dengan kadar air sebesar 6,09%, kadar protein 9,93%, kadar serat kasar 29,5% kadar abu 1,49%, kadar lemak 29,97%, kadar karbohidrat 52,50% dan total nilai kalori 519,53 kkal. Berdasarkan hasil uji mutu sensori, diperoleh roti kering bagelen dengan warna kearah kuning kecoklatan, kearah tercium aroma kacang arab, kearah tercium aroma *baked*, kearah tidak tercium aroma langu, kearah terasa manis khas bagelen, kearah terasa kacang arab, tekstur kearah renyah. Secara hedonik, panelis cenderung kearah menyukai warna, aroma, rasa, kerenyahan, dan *overall* produk.

Kata kunci: bagelen, kacang arab, protein, roti kering, serat kasar