

ABSTRACT

Fajrin Safta Kusumah. B1510523. Protein Contain, Calories and Hedonic Profile and Texture of Snack bar Wingbean Flour and Sesame Seed Snack bar with with tapioca Binder. Supervised by Aminullah and Intan Kusumaningrum.

The use of winged bean flour and sesame seeds in snack bar products is to utilize high-protein winged bean flour as an effort to diversify food products and increase added value in winged bean seeds. The purpose of this study was to study the effect of mixing winged bean flour and sesame seeds with tapioca binder and their interaction on the caloric value and protein of snack bars, to obtain a snack bar formula that was selected based on the standard and determine its hedonic character, to obtain the most preferred snack bar formula, texture profile and snack bar proximate levels. This study used a two-factor completely randomized design (CRD) with three treatment levels, namely a mixture of winged bean flour: sesame seeds at the levels (90%:10%), (80%:20%) and (70%:30%) and the addition of binder (tapioca) at the level of 15%, 20% and 25% with two repetitions. The data analysis used was ANOVA with Duncan's Advanced Test ($\alpha=0,05$) while the hedonic data were analyzed using the Kruskal wallis non-parametric test and the Mann Whitney test. Snack bars were analyzed for protein and calorific value and then selected products with high protein content and lowest calorific value for hedonic tests, in this case the selected products were A1B1, A2B1, A3B1 treatments. Based on the hedonic test, A3B1 was found as the selected product which was then analyzed for dietary fiber and hardness test. The selected snack bar products contain water content of 16.97%, ash content of 1.18%, fat content of 11.37%, dietary fiber content of 18.28%, carbohydrates by different 50.52%, protein content of 19.97%, total calories 115.28 Kcal/30 g and hardness value 2051.83 gF.

Keywords: Wingbean flour, sesame seeds, snack bars, calories, protein.

ABSTRAK

Fajrin Safta Kusumah. B1510523. Kandungan Protein, Kalori Beserta Profil Hedonik dan Tekstur Dari *Snack bar* Tepung Biji Kecapir dan Biji Wijen dengan *Binder* Tapioka. Dibawah bimbingan Aminullah dan Intan Kusumaningrum.

Penggunaan tepung biji kecapir dan biji wijen pada produk *snack bar* adalah untuk memanfaatkan tepung biji kecapir tinggi protein sebagai upaya penganekaragaman produk pangan serta meningkatkan nilai tambah pada biji kecapir. Tujuan dari penelitian ini untuk mempelajari pengaruh pencampuran tepung biji kecapir dan biji wijen dengan *binder* tapioka serta interaksinya terhadap nilai kalori dan protein *snack bar*, mendapatkan formula *snack bar* terpilih berdasarkan standar dan mengetahui karakter hedoniknya, mendapatkan formula *snack bar* yang paling disukai, profil tekstur dan kadar proksimat *snack bar*. Penelitian ini menggunakan rancangan acak lengkap (RAL) dua faktor dengan tiga taraf perlakuan yaitu campuran tepung biji kecapir : biji wijen pada taraf (90%:10%), (80%:20%) dan (70%:30%) serta penambahan *binder* (tapioka) pada taraf 15%, 20% dan 25% dengan pengulangan sebanyak dua kali. Analisis data yang digunakan adalah ANOVA dengan Uji Lanjut Duncan ($\alpha=0,05$) sedangkan data hedonik dianalisis menggunakan uji non-parametrik *Kruskal wallis* dan uji lanjut *Mann Whitney*. *Snack bar* dilakukan analisis protein dan nilai kalori kemudian dipilih produk dengan kadar protein yang tinggi dan nilai kalori terendah untuk uji hedonik, dalam hal ini didapatkan produk terpilih yaitu perlakuan A1B1, A2B1, A3B1. Berdasarkan uji hedonik didapatkan A3B1 sebagai produk terpilih yang kemudian dilakukan analisis serat pangan dan uji kekerasan. Produk *snack bar* terpilih mengandung kadar air 16,97%, kadar abu 1,18%, kadar lemak 11,37%, kadar serat pangan 18,28%, karbohidrat by different 50,52%, kadar protein 19,97%, total kalori 115,28 Kkal/30 g dan nilai kekerasan 2051,83 gF.

Kata Kunci: tepung biji kecapir, biji wijen, *snack bar*, protein, kalori, dan hedonik.