PENGARUH PENAMBAHAN RUMPUT LAUT COKLAT (*Sargassum binderi*) DAN KECAMBAH KACANG KEDELAI (*Glycine max,* L.) UNTUK MENINGKATKAN SERAT DAN PROTEIN *COOKIES*

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Pengaruh Penambahan Rumput Laut Coklat (*Sargassum* sp.) dan Kecambah Kacang Kedelai (*Glycine max,* L.) untuk Meningkatkan Serat dan Protein *Cookies*

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ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan rumput laut coklat (*Sargassum* sp.) dan kecambah kacang kedelai (*Glycine max,* L.) untuk meningkatkan serat dan protein *cookies* dan mendapatkan formulasi terbaik dari *cookies* berdasarkan tingkat penerimaan panelis. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan 3 ulangan. Data analisis statistik menggunakan ANOVA dan dilanjutkan dengan uji DNMRT (Duncan's New Multiple Range Test) pada taraf 5%. Perlakuan pada penelitian ini dengan penambahan rumput laut coklat (*Sargassum* sp.) dan kecambah kacang kedelai (*Glycine max,*L.) pada konsentrasi A (0% : 0%), B (4% : 96%), C (8% : 92%), D (12% : 88%) and E (16% : 84%). Pengamatan pada bahan baku seperti kadar air, kadar abu, protein dan serat kasar. Sedangkan, pengamatan pada produk *cookies* seperti kadar air, kadar abu, kadar lemak, kadar protein, kadar karbohidrat, kekerasan, serat kasar, nilai energi, angka lempeng total dan uji organoleptik. Hasil pada penelitian penambahan tepung rumput laut coklat (*Sargassum* sp.) dan tepung kecambah kacang kedelai (*Glycine max,*L.) memberikan pengaruh nyata pada kadar air, kadar abu, kadar lemak, kadar protein, kadar karbohidrat dan kekerasan. Angka lempeng total berkisar antara $5.0x10^3$ cfu/g - $9.9x10^3$ cfu/g. Pada uji organoleptik (warna, aroma, rasa dan teksture) pada perlakuan B rata-rata tingkat penerimaan panelis warna 3,75 , aroma 4,15 , rasa 4,20 dan teksture 4,40. Pada fisikokimia seperti kadar air (3,75%), kadar abu (2,35%), kadar lemak (19,35%), kadar protein (14,32%), kadar karbohidrat (60,31%), kekerasan (69,18%), serat kasar (2,17%), dan angka lempeng total (($6.1 x10^3$ cfu/g).)

Kata kunci : rumput laut coklat (*Sargassum* sp.), kecambah kacang kedelai (*Glycine max,* L.), *cookies*

The Effect of Addition of Brown Seaweed (*Sargassum binderi*) and Soybean Sprouts (*Glycine max*, L.) to Increase Fiber and Protein of Cookies

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ABSTRAK

This study aims to determained the effect of addition of brown seaweed (*Sargassum binderi*) and soybean sprouts (*Glycine max*, L.) to increase fiber and protein of cookies and get the best formula from cookies based on panelists acceptance level. This research used Completely Randomized Design (CDR) with 5 treatment and 3 replication. Data analyzed statistically by using ANOVA and continue with Duncan's New Multiple Range Test (DNMRT) at 5% significant level. The treatment in this research addition of brown seaweed (*Sargassum binderi*) and soybean sprouts (*Glycine max*, L.) with concentration A (0% : 0%), B (4% : 96%), C (8% : 92%), D (12% : 88%) and E (16% : 84%). The research was observed raw materials such as water content, ash content, protein content and crude fiber content. The observation on the cookies such as water content, ash content, fatty content, protein content, carbohydrate content, hardness, crude fiber content, energy value, total plate count and sensory analysis. The result showed that addition of brown seaweed (*Sargassum binderi*) flour and soybean sprouts (*Glycine max*, L.) flour give effect significantly of water content, ash content, fatty content, protein content, carbohydrate content, hardness, crude fiber content, energy value. The result of total plate count around $5.0x10^3$ cfu/g - $9.9x10^3$ cfu/g. The result of sensory analysis (color, flavor, taste and texture) showed cookies treatment B had highest level of panelists acceptance with average 3.75 of color, 4.15 of flavor, 4.20 of taste and 4.40 of texture and water content (3.75%), ash content (2.35%), fatty content (19.35%), protein content (14.32%), carbohydrate content (60.31%), hardness (69.18%), crude fiber content (2.17%), energy value (491.79 kkal/g) and total plate count (6.1 $x10^3$ cfu/g).

Keywords : brown seaweed* (*Sargassum binderi*), *soybean sprouts (Glycine max, L.), cookies