PENGARUH PENAMBAHAN KULIT KOPI ARABIKA (*Coffea arabica*) TERHADAP KARAKTERISTIK KERUPUK UDANG *VANNAMEI*

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ABSTRAK

Penelitian ini bertujuan untuk mengetahui karakteristik fisik, kimia dan organoleptik kerupuk udang berbahan dasar kulit kopi arabika, tepung tapioka dan tepung terigu serta untuk mengetahui konsentrasi penambahan kulit kopi arabika yang terbaik berdasarkan uji organoleptik, fisik dan kimia pada produk kerupuk yang dihasilkan. Rancangan penelitian yang digunakan adalah Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan 3 ulangan. Perlakuan yang diberikan pada penelitian ini adalah A (tanpa penambahan kulit kopi arabika), B (penambahan kulit kopi arabika 3%), C (penambahan kulit kopi arabika 6%), D (penambahan kulit kopi arabika 9%), dan E (penambahan kulit kopi arabika 12%). Data hasil penelitian dianalisis secara statistik dengan menggunakan *Analysis of Variance* (ANOVA) dan dilanjutkan dengan analisis *Duncan's New Multiple Range Test* (DNMRT) pada taraf 5%. Hasil penelitian menunjukkan bahwa penambahan kulit kopi arabika berpengaruh nyata terhadap kadar air, kadar protein, kadar lemak, kadar serat kasar, aktivitas antioksidan, daya kembang, daya serap minyak, kekerasan, organoleptik warna dan organoleptik rasa. Namun tidak berpengaruh nyata terhadap nilai kadar abu, organoleptik aroma dan organoleptik tekstur. Perlakuan terbaik berdasarkan uji organoleptik, analisis fisik, kimia dan mikrobiologi kerupuk udang dengan penambahan kulit kopi arabika adalah perlakuan B (penambahan kulit kopi arabika 3%) dengan nilai rata-rata kadar air (7,38%), kadar abu (1,61%), kadar protein (14,04%), kadar lemak (12,46%), kadar serat kasar (3,76%) dan aktivitas antioksidan (19,49%), daya kembang (53,33%), daya serap minyak (16,76%), kekerasan (12,92 N/cm^2), angka lempeng total (4,13 x 10^3 CFU/g), serta nilai penerimaan organoleptik dengan rata-rata kesukaan panelis terhadap warna 4,12 (suka), aroma 4,16 (suka), rasa 4,28 (suka) dan tekstur 4,16 (suka).

Kata Kunci : kulit kopi arabika, kerupuk udang, tepung tapioka, tepung terigu

THE EFFECT OF ADDING ARABICA COFFEE SKIN (Coffea arabica) ON THE CHARACTERISTICS OF VANNAMEI SHRIMP CHIPS

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ABSTRACT

This research aims to determine the physical, chemical and organoleptic characteristics of shrimp chips made from arabica coffee skin, tapioca flour and wheat flour and to determine the concentration of the best addition of arabica coffee skin based on organoleptic, physical and chemical tests on the resulting cracker products. The research design used was a Completely Randomized Design (CRD) with 5 treatments and 3 replications. The treatments given in this study were A (without adding arabica coffee skins), B (3% addition of arabica coffee skins), C (6% addition of arabica coffee skins), D (9% addition of arabica coffee skins), and E (12% addition of arabica coffee skins). The research data was analyzed statistically using Analysis of Variance (ANOVA) and continued with Duncan's New Multiple Range Test (DNMRT) analysis at the 5% level. The research results showed that the addition of arabica coffee skin had a real influence on water content, protein content, fat content, crude fiber content, antioxidant activity, swelling power, oil absorption capacity, hardness, color organoleptic and taste organoleptic. However, it had no real effect on the values of ash content, aroma organoleptic and texture organoleptic. The best treatment based on organoleptic tests, physical, chemical and microbiological analysis of shrimp chips with the addition of arabica coffee skin is treatment B (3% addition of arabica coffee skins) with average values of water content (7.38%), ash content (1.61%), protein content (14.04%), fat content (12.46%), crude fiber content (3,76%) and antioxidant activity (19.49%), swelling power (53.33%), oil absorption (16,76%) and hardness (12.92 N/cm2), total plate number (4.13 x 10^3 CFU/g), and organoleptic acceptance values with the average panelist preference parameter for color 4.12 (like), aroma 4.16 (like), taste 4.28 (like) and texture 4.16 (like).

Keywords : arabika coffee skin, shrimp chips, tapioca flour, wheat flour