KARAKTERISASI SEREAL *FLAKES* TEPUNG JAGUNG DAN LABU KUNING DENGAN PENAMBAHAN TEPUNG KEDELAI
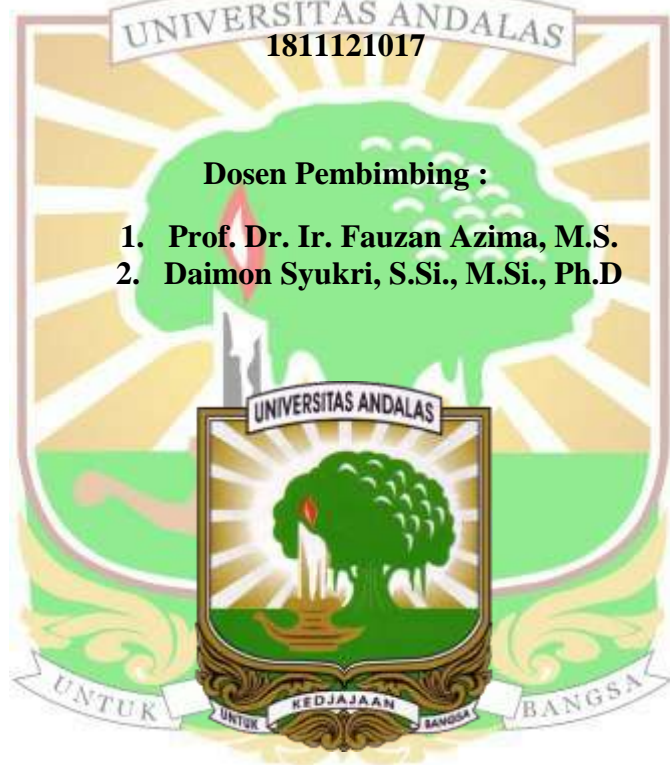
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FAKULTAS TEKNOLOGI PERTANIAN

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Skripsi

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2022

Karakterisasi Sereal *Flakes* Tepung Jagung dan Labu Kuning dengan Penambahan Tepung Kedelai

Lucia Saraswati[1], Fauzan Azima[2], Daimon Syukri[3]

ABSTRAK

Tujuan dari penelitian ini untuk mengetahui karakteristik kimia, fisika, dan organoleptik sereal *flakes* dari kombinasi jagung (*Zea mays*) dan labu kuning (*Cucurbita moshcata*) dengan berbagai konsentrasi penambahan tepung kedelai (*Glicine max*) serta menentukan perlakuan terbaik sereal *flakes* yang dihasilkan berdasarkan tingkat kesukaan panelis dan karakteristik fisika dan kimianya. Metode penelitian yang digunakan adalah metode eksperimental dengan analisis data secara deskriptif. Penelitian ini menggunakan 5 perlakuan dan 3 ulangan yaitu : A = (penambahan tepung kedelai 0 gram), B = (penambahan tepung kedelai 15 gram), C = (penambahan tepung kedelai 30 gram), D = (penambahan tepung kedelai 45 gram), dan E = (penambahan tepung kedelai 60 gram). Pengamatan yang dilakukan yaitu analisis kimia berupa kadar air, kadar abu, kadar protein, kadar lemak, kadar karbohidrat, kadar serat kasar dan total asam amino pada perlakuan C, serta uji fisika berupa uji daya serap air, uji warna, dan uji organoleptik berupa uji warna, aroma, rasa, dan tekstur. Hasil penelitian menunjukkan bahwa penambahan tepung kedelai dalam penelitian sereal *flakes* tepung jagung dan labu kuning memiliki perbedaan terhadap kadar air, kadar abu, kadar protein, kadar lemak, kadar karbohidrat, kadar serat kasar, daya serap air, tingkat kecerahan (warna), dan tingkat kesukaan panelis terhadap warna, aroma, rasa, dan tekstur sereal *flakes* yang dihasilkan. Perlakuan terbaik sereal *flakes* yang dihasilkan yaitu perlakuan C (penambahan tepung kedelai 30 gram) berdasarkan tingkat kesukaan panelis dengan karakteristik mutu yaitu : kadar air (6,43% ± 0,41), kadar abu (1,76% ± 0,19), kadar protein (9,78% ± 0,29), kadar lemak (11,25% ± 0,69), kadar karbohidrat (70,89% ± 0,57), kadar serat kasar (2,81% ± 0,29), daya serap air 368,31% ± 2,49), °Hue (78,57 ± 0,01) dan nilai organoleptik (warna 4,35; aroma 3,65; rasa 4,10; tekstur 3,70) dengan nilai total asam amino 9,72%.

Kata Kunci – **Asam amino, daya serap air, jagung, kedelai, labu kuning, sereal flakes.**

Characterization of Flakes Made in Corn Flour and Pumkin with Addition of Soybean flour

Lucia Saraswati[1], Fauzan Azima[2], Daimon Syukri[3]

ABSTRACT

The purpose of this study was to determine the chemical, physical, and organoleptic characteristics of cereal flakes from a combination of corn (Zea mays) and pumpkin (Cucurbita moshcata) with various concentrations of addition of soy flour (Glicine max) and determine the best treatment for flakes cereal produced based on the level of preference. panelists and their physical and chemical characteristics. The research method used is an experimental method with descriptive data analysis. This study used 5 treatments and 3 replications, namely: A = (addition of 0 grams of soybean flour), B = (addition of 15 grams of soybean flour), C = (addition of 30 grams of soybean flour), D = (addition of 45 grams of soybean flour), and E = (addition of 60 grams of soybean flour). Observations made were chemical analysis in the form of water content, ash content, protein content, fat content, carbohydrate content, crude fiber content and total amino acids in treatment C, as well as physical tests in the form of water absorption tests, color tests, and organoleptic tests in the form of color, aroma, taste and texture. The results showed that the addition of soybean flour in the study of corn and pumpkin flour flakes cereals had differences in water content, ash content, protein content, fat content, carbohydrate content, crude fiber content, water absorption, brightness (color), and level of panelists' preference for the color, aroma, taste, and texture of the resulting flakes. The best treatment of flakes cereal produced was treatment C (addition of 30 grams of soybean flour) based on the panelists' preference level with quality characteristics, namely: water content (6.43% ± 0.41), ash content (1.76% ± 0.19) , protein content (9.78% ± 0.29), fat content (11.25% ± 0.69), carbohydrate content (70.89% ± 0.57), crude fiber content (2.81% ± 0 .29), water absorption 368.31% ± 2.49), °Hue (78.57 ± 0.01) and organoleptic values (color 4.35; aroma 3.65; taste 4.10; texture 3, 70) with a total value of 9.72% amino acids.

Keywords – Amino acids, corn, flakes, pumkin, soybeans, water absorption.