ABSTRACT

EFFECT OF MUNG BEAN FLOUR AND CATFISH BONE FLOUR(*Pangasius hypophthalmus*) ADDITIONION ON THE CHEMICAL, PHYSICAL, AND SENSORY CHARACTERISTICS OF CORN FLAKES

By

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Corn flakes are a convenient food and fall into the category of ready-to-eat foods made from corn flour as a source of carbohydrates; however, they still have relatively low protein and calcium content. The addition of mung bean flour and catfish bone meal is known to help increase the protein and calcium content in food products. This study aims to determine the effect of adding mung bean flour and catfish bone meal on the characteristics of corn flakes, as well as to produce corn flakes with the best characteristics that meet the quality requirements for cereal milk as specified in SNI No. 01-4270-1996. The study was designed using a Completely Randomized Block Design (CRBD). The treatments for the addition of mung bean flour and catfish bone meal in this study were T0 (100%:0%), T1 (90%:10%), T2 (80%:20%), T3 (70%:30%), T4 (60%:40%), and T5 (50%:50%) . The data obtained were analyzed for homogeneity using Bartlett's test and for differences using Tukey's test, followed by ANOVA and BNJ tests at the 5% significance level. The results of the study showed that the best corn flakes were obtained in treatment T3 (70% mung bean flour: 30% catfish bone flour), which had a moisture content of 2.94%, ash content of 3,78%, hardness of 429.06 gf, warm water absorption of 63.30%, cold water absorption of 43.80%, a color score of (3.70), a texture score of (4.00), a taste score of (4.30), an aroma score of (4.10), and an overall acceptance score of (4.16) color score (3.70), texture score (3.80), taste (4.30), aroma (4.10), and overall acceptance (4.16), and contains 16.125% protein and 453.9 mg/100g of calcium.

Keywords: mung bean flour, catfish bone meal, corn flakes

ABSTRAK

PENGARUH PENAMBAHAN TEPUNG KACANG HIJAU DAN TEPUNG TULANG IKAN PATIN (*Pangasius hypophthalmus*) TERHADAP KARAKTERISTIK KIMIA, FISIK DAN SENSORI *CORN FLAKES*

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Corn flakes merupakan jenis makanan praktis dan termasuk dalam kategori makanan siap saji atau *ready to eat* yang dibuat dari tepung jagung sebagai sumber karbohidrat , namun masih memiliki kandungan protein dan kalsium yang relatih rendah. Penamabahan tepung kacang hijau dan tepung tulang ikan patin diketahui mampu membantu meningkatkan kandungan protein dan kalsium pada produk pangan. Penelitian ini bertujuan untuk mengetahui pengaruh penambahan tepung kacang hijau dan tepung tulang ikan patin terhadap karakteristik *corn flakes*, serta mampu menghasilkan *corn flakes* dengan karakteristik terbaik mendekati SNI No.01-4270-1996 syarat mutu susu sereal. Penelitian disusun dalam Rancangan Acak Kelompok Lengkap (RAKL). Perlakuan penambahan tepung kacang hijau dan tepung tulang ikan patin pada penelitian ini adalah T0 (100%:0%), T1 (90%:10%), T2 (80%:20%), T3 (70%:30%), T4 (60%:40%), dan T5 (50%:50%). Data yang diperoleh dianalisis kehomogenannya dengan uji *Bartlett* dan kemenambahan data dengan uji *Tukey*, dilanjutkan dengan uji ANOVA dan uji BNJ pada taraf 5%. Hasil penelitian menunjukkan bahwa *corn flakes* terbaik diperoleh pada perlakuan T3 (tepung kacang hijau 70%:tepung tulang ikan patin 30%) yang memiliki kadar air 2,94%, kadar abu 3,78%, *hardness* 429,06 gf, daya serap air hangat 63,30%, daya serap air dingin 43,80%, memiliki skor warna 3,70 (cerah), skor tekstur 4,00 (renyah), rasa 4,30 (suka), aroma 4,10 (suka), dan penerimaan keseluruhan 4,16 (suka) serta mengandung protein 16,125% dan kalsium 453,9mg/100g.

Kata kunci: tepung kacang hijau, tepung tulang ikan patin, *corn flakes*