

ABSTRACT

THE FORMULATION OF CORN TEMPEH FLOUR AND WHEAT FLOUR TOWARD CHEMICAL, PHYSICAL AND SENSORY CHARACTERISTICS OF BAKED BROWNIES

By

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The objective of this research was to obtain different chemical, physical and sensory characteristics of baked brownies from various formulations of corn tempeh flour and wheat flour, and to obtain the formulation of corn tempeh flour and wheat flour which produces brownies with the best chemical, physical and sensory properties. The research was arranged in a Complete Randomized Block Design with six treatments and four replications. The treatments used were A1 (100%: 0%), A2 (90%: 10%), A3 (80%: 20%), A4 (70%: 30%), A5 (60%: 40%) and A6 (50%:50%). The data were analyzed using ANOVA and further tested using Honestly Significance Difference (HSD) at levels 5%. The results showed that the best treatment was on A6 (50% corn tempeh flour : 50% wheat flour) with moisture of 17,14%, ash content of 1,96%, protein content of 8,54%, fat content of 13,60%, carbohydrate content of 58,77%, development degree of 77,83%, the resulted color blackish brown with RGB (*Red, Green, Blue*) index value with

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0,293 of red, 0,240 of green and 0,467 of blue, an aroma score was slightly typical of corn (2,61), a taste score was slightly taste typical of corn (3,02), a texture score was slightly tender (3,21) and an acceptance of overall score was like (3,63).

Keywords: brownies baked, corn tempeh flour, wheat

ABSTRAK

FORMULASI TEPUNG TEMPE JAGUNG (*Zea Mays L.*) DAN TEPUNG TERIGU TERHADAP SIFAT KIMIA, FISIK DAN SENSORI BROWNIES PANGGANG

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Tujuan penelitian ini adalah mendapatkan karakteristik kimia, fisik dan sensori brownies panggang yang berbeda dari berbagai formulasi tepung tempe jagung dan tepung terigu, serta mendapatkan formulasi tepung tempe jagung dan tepung terigu yang menghasilkan brownies panggang dengan sifat kimia, fisik dan sensori terbaik. Penelitian ini disusun dalam Rancangan Acak Kelompok Lengkap dengan enam perlakuan dan empat ulangan. Perlakuan yang digunakan yaitu A1 (100%:0%), A2 (90%:10%), A3 (80%:20%), A4 (70%:30%), A5 (60%:40%) dan A6 (50%:50%). Data dianalisis ragam dan diuji lanjut dengan uji Beda Nyata Jujur (BNJ) pada taraf 5%. Hasil penelitian menunjukkan bahwa perlakuan terbaik yaitu pada perlakuan A6 (50% tepung tempe jagung : 50% tepung terigu) dengan kadar air sebesar 17,14%, kadar abu sebesar 1,96%, kadar protein sebesar 8,54%, kadar lemak sebesar 13,60%, kadar karbohidrat sebesar 58,77%, derajat pengembangan sebesar 77,83%, dengan warna coklat kehitaman yang memiliki

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nilai indeks RGB (*Red, Green, Blue*) *red* 0,293, *green* 0,240 dan *blue* 0,467, aroma sedikit khas jagung (2,61), rasa sedikit terasa khas jagung (3,02), tekstur agak lembut (3,21) dan penerimaan keseluruhan suka (3,63).

Kata kunci: brownies panggang, tepung tempe jagung, terigu