

ABSTRACT

THE EFFECT OF THE RATIO OF YELLOW SWEET POTATO FLOUR, PUMPKIN FLOUR AND PUMPKIN SEED FLOUR ON THE CHEMICAL AND SENSORY CHARACTERISTICS OF SNACK BARS

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Snack bars could be made using local ingredients such as yellow sweet potato flour, pumpkin flour, and pumpkin seed flour. This research aimed to determine the effect of the ratio of yellow sweet potato flour, pumpkin flour, and pumpkin seed flour on the chemical and sensory characteristics of snack bars, and to obtain the best ratio of yellow sweet potato flour, pumpkin flour, and pumpkin seed flour based on their chemical and sensory characteristics. This research was designed using a Completely Randomized Block Design (RAKL) with a single factor and 3 replications. The ratios of yellow sweet potato flour, pumpkin flour, and pumpkin seed flour were tested at 6 levels: F1 (100%:0%:0%), F2 (80%:10%:10%), F3 (60%:20%:20%), F4 (40%:30%:30%), F5 (20%:40%:40%), and F6 (0%:50%:50%). The obtained data were analyzed for homogeneity using the Bartlett test, and data additivity was tested with the Tukey test. Subsequently, a variance analysis (ANARA) was performed to determine the effect of the treatments. If there was a significant effect, the data were further analyzed using the Honestly Significant Difference (BNJ) test at a 5% level. The results of the study showed that the ratio of yellow sweet potato flour, pumpkin flour, and pumpkin seed flour had a significant effect on the moisture and ash of snack bars, and had a very significant effect on the protein, texture, taste, color, aroma, and overall acceptance of snack bars. The best ratio of yellow sweet potato flour, pumpkin flour, and pumpkin seed flour according to SNI 01-4216-1996 was treatment F5 (20%:40%:40%) with the following criteria moisture 12.32%, ash 5.04%, protein 28.59%, fat 6.35%, carbohydrate 48.7%, calories 378.31 kcal/100 g, inhibition of free radical scavenging 73.27%, texture score 4.86 (very much liked), taste score 4.20 (liked), color score 1.96 (disliked), aroma score 4.78 (very much liked), and overall acceptance 4.32 (liked).

key words : snack bars, sweet potato flour, pumpkin flour, and pumpkin seed flour

ABSTRAK

PENGARUH PERBANDINGAN TEPUNG UBI JALAR KUNING, TEPUNG LABU KUNING DAN TEPUNG BIJI LABU KUNING TERHADAP KARAKTERISTIK KIMIA DAN SENSORI *SNACK BARS*

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Snack bars dapat dibuat menggunakan bahan lokal seperti tepung ubi jalar kuning, tepung labu kuning dan tepung biji labu kuning. Penelitian ini bertujuan untuk mengetahui pengaruh perbandingan tepung ubi jalar kuning, tepung labu kuning, dan tepung biji labu kuning terhadap karakteristik kimia dan sensori *snack bars*, serta mendapatkan perbandingan berdasarkan karakteristik kimia dan sensori terbaik. Penelitian disusun dalam Rancangan Acak Kelompok Lengkap (RAKL) dengan faktor tunggal dan 3 ulangan. Perbandingan tepung ubi jalar kuning, tepung labu kuning dan tepung biji labu kuning dilakukan dengan 6 taraf yaitu F1 (100%:0%:0%), F2 (80%:10%:10%), F3 (60%:20%:20%), F4 (40%:30%:30%), F5 (20%:40%:40%), dan F6 (0%:50%:50%). Data yang diperoleh dianalisis kehomogenannya dengan uji Bartlett dan kemenambahan data diuji dengan uji Tuckey, selanjutnya dianalisis ragam (ANARA) untuk mengetahui pengaruh perlakuan. Apabila terdapat pengaruh nyata, data dianalisis lebih lanjut dengan Uji Beda Nyata Jujur (BNJ) pada taraf 5%. Hasil penelitian menunjukkan bahwa perbandingan tepung ubi jalar kuning, tepung labu kuning, dan tepung biji labu kuning berpengaruh nyata terhadap kadar air dan kadar abu *snack bars*, serta berpengaruh sangat nyata terhadap kadar protein, tekstur, rasa, warna, aroma, dan penerimaan keseluruhan *snack bars*. Perbandingan tepung ubi jalar kuning, tepung labu kuning dan tepung biji labu kuning terbaik sesuai SNI 01-4216-1996 adalah perlakuan F5 (20%:40%:40%) dengan kriteria kadar air 12,32%, kadar abu 5,04%, kadar protein 28,59%, kadar lemak 6,35%, karbohidrat 48,7%, kalori 378,31 kkal/100 g, inhibisi penghambatan radikal bebas 73,27%, tekstur 4,86 (sangat suka), rasa 4,20 (suka), warna 1,96 (tidak suka), aroma 4,78 (sangat suka) dan penerimaan keseluruhan 4,32 (suka).

Kata kunci : *snack bars*, tepung ubi jalar kuning, tepung labu, tepung biji labu