

ABSTRACT

FORMULATION OF MULI BANANA FLOUR (*Musa acuminate*) AND WHEAT FLOUR ON CHEMICAL, PHYSICAL, AND SENSORY PROPERTIES OF DRY BROWNIES

By

MADE ARSA MERTAYASA

Banana flour is an alternative for preserving bananas because bananas was *perishable* fruits. One type of banana that could be processed into flour was Muli bananawhich has the advantage of other banana flour, namely its sweet taste. The purposeof the study was to determine the effect of the ratio of muli banana flour and wheatflour on the physical, chemical, and sensory properties of dry brownies and to obtain the ratio of muli banana flour and wheat flour to produce the best dry brownies. The study was arranged in a Completely Randomized Block Design (CRBD) with a single factor. The research treatment used 6 levels of comparison between banana flour and wheat flour (w/w), namely A1 (0:100); A2 (10:90); A3 (20:80); A4 (30:70); A5 (40:60), A6 (50:50). The data obtained were analyzed for similarity of variance with the *Bartlett* test and additional data was tested with the *Tuckey* test, then the data were analyzed for variance to determine the effect between treatments. If there is a significant effect, the data is analyzed further with the Least Significant Difference Test (LSD) at the 5% level. The results showed that the ratio of banana flour and wheat flour had a significant effect on the texture, taste, aroma, color, overall acceptance, swellability, and moisture content of dry brownies. The best treatment was A6 (50% banana flour: 50% wheat flour) which had a slightly soft texture (3.81), a typical banana taste (4.00), a slightly banana-like aroma (3.51), a rather likes color (3.20) and the overall acceptance likes (4.08). Dry brownies with the best treatment produced 2.35% swelling power, 4.02% moisture content, 1.32% ash content, 34.61% fat content, 6.28% protein content, and 53.77% carbohydrate content.

Keywords :Dry brownies, muli banana flour, wheat flour

ABSTRAK

FORMULASI TEPUNG PISANG MULI (*Musa acuminate*) DAN TEPUNG TERIGU TERHADAP SIFAT KIMIA, FISIK, DAN SENSORI BROWNIES KERING

Oleh

MADE ARSA MERTAYASA

Tepung pisang merupakan suatu alternatif pengawetan pisang karena pisang termasuk buah – buahan yang mudah rusak (*perishable*). Salah satu jenis pisang yang dapat diolah menjadi tepung adalah pisang muli yang memiliki keunggulan dari tepung pisang yang lainnya yaitu rasanya yang manis. Tujuan penelitian adalah untuk mengetahui pengaruh perbandingan tepung pisang muli dan tepung terigu terhadap sifat fisik, kimia, dan sensori brownies kering serta mendapatkan perbandingan tepung pisang muli dan tepung terigu yang menghasilkan brownies kering terbaik. Penelitian disusun dalam Rancangan Acak Kelompok Lengkap (RAKL) dengan faktor tunggal. Perlakuan penelitian menggunakan 6 taraf perbandingan tepung pisang dan tepung terigu (b/b) yaitu A1 (0:100); A2 (10:90); A3 (20:80); A4 (30:70); A5 (40:60), A6 (50:50). Data yang diperoleh dianalisis kesamaan ragam dengan uji *Barlett* dan kemenambahan data dengan uji *Tuckey*, selanjutnya data dianalisis sidik ragam untuk mengetahui pengaruh antar perlakuan. Apabila terdapat pengaruh yang nyata, data dianalisis lebih lanjut dengan Uji Beda Nyata Terkecil (BNT) pada taraf 5%. Hasil penelitian menunjukkan bahwa perbandingan tepung pisang dan tepung terigu berpengaruh nyata terhadap tekstur, rasa, aroma, warna, penerimaan keseluruhan, daya kembang, dan kadar air brownies kering. Perlakuan terbaik adalah A6 (50% tepung pisang : 50% tepung terigu) yang memiliki tekstur agak lembut (3,81), rasa khas pisang (4,00), aroma agak khas pisang (3,51), warna agak suka (4,20) dan penerimaan keseluruhan yang disukai panelis (4,08). Brownies kering dengan perlakuan terbaik menghasilkan daya kembang 2,35%, kadar air 4,02%, kadar abu 1,32%, kadar lemak 34,61%, kadar protein 6,28%, dan kadar karbohidrat 53,77%.

Kata kunci :Brownies kering, tepung pisang muli, tepung terigu