

ABSTRACT

THE EFFECT OF WHEAT FLOUR AND BREADFRUIT FLOUR FORMULATION ON WATER CONTENT, ASH CONTENT AND SENSORY PROPERTIES OF CRISPY BROWNIES

By

MUTIARA SHABRINA

The purpose of this study was to determine the effect of wheat flour and breadfruit flour formulations on the water content, ash content and sensory properties of crispy brownies that meet SNI 2973:2018. The treatment of wheat flour and breadfruit flour formulations consisted of 6 treatment levels, namely P0 (100%: 0), P1 (80%: 20%), P2 (60%: 40%), P3 (40%: 60%), P4 (20%:80%) and P5 (0%:100%). The equality of data variations was tested using Bartlett's test and the additivity of data was tested using Tukey's test. The data was analyzed by variance to determine the effect of the treatment. The data was then analyzed further to determine the differences between treatments using the Honestly Significant Difference (HSD) test at the 5% level. The results showed that the formulation of wheat flour and breadfruit flour in making crispy brownies had effect on the moisture content, ash content, texture score, aroma and aftertaste of crispy brownies. The best formulation of wheat flour and breadfruit flour for making crispy brownies is P5 treatment (0% wheat flour : 100% breadfruit flour) with a water content of 3.54%, ash content of 1.74%, protein content of 5%, aroma score 4.30 (typical of breadfruit), texture score 4.40 (crisp) and aftertaste score 4.53 (bitter). Crispy brownies with the best formulation support the diversification of breadfruit-based food processing with gluten-free products so the products are safe for those with gluten allergies.

Key words: biscuits, breadfruit flour, brownies, wheat flour

ABSTRAK

PENGARUH FORMULASI TEPUNG TERIGU DAN TEPUNG SUKUN TERHADAP KADAR AIR, KADAR ABU DAN SENSORI *BROWNIES CRISPY*

Oleh

MUTIARA SHABRINA

Penelitian ini bertujuan mengetahui pengaruh formulasi tepung terigu dan tepung sukun terhadap kadar air, kadar abu dan sensori *brownies crispy* yang memenuhi SNI 2973:2018. Perlakuan formulasi tepung terigu dan tepung sukun terdiri dari 6 taraf perlakuan yaitu P0 (100%:0), P1 (80%:20%), P2 (60%:40%), P3(40%:60%), P4 (20%:80%) dan P5 (0%:100%). Kesamaan ragam data diuji dengan uji Bartlett dan kemenambahan data diuji dengan uji Tukey. Data di analisis sidik ragam untuk mengetahui pengaruh perlakuan. Data kemudian dianalisis lebih lanjut untuk mengetahui perbedaan antar perlakuan dengan uji Beda Nyata Jujur (BNJ) pada taraf 5%. Hasil penelitian menunjukkan bahwa formulasi tepung terigu dan tepung sukun dalam pembuatan *brownies crispy* berpengaruh terhadap kadar air, kadar abu, skor tekstur, aroma dan aftertaste *brownies crispy*. Formulasi tepung terigu dan tepung sukun terbaik pada pembuatan *brownies crispy* adalah perlakuan P5 (tepung terigu 0% : tepung sukun 100%) dengan kadar air sebesar 3,54%, kadar abu sebesar 1,74%, kadar protein sebesar 5%, skor aroma 4,30 (khas sukun), skor tekstur 4,40 (renyah) dan skor aftertaste 4,53 (pahit). *Brownies crispy* perlakuan terbaik mendukung diversifikasi olahan pangan berbasis sukun dengan produk bebas gluten sehingga aman untuk yang memiliki alergi gluten.

Kata kunci: biskuit, *brownies*, tepung sukun, tepung terigu