

**PEMANFAATAN BUBUK DAUN KELOR (*Moringa oleifera* L.)  
TERHADAP KARAKTERISTIK *CRACKERS* CAMPURAN TEPUNG  
TERIGU DAN TEPUNG JAMUR TIRAM PUTIH (*Pleurotus ostreatus*)**

**FITRI RAHMADHANI**

**2011122017**



**Dosen Pembimbing :**

- 1. Prof. Tuty Anggraini, S.T.P, M.P, Ph.D.**
- 2. Dr. Ir. Hasbullah, M.S.**

**FAKULTAS TEKNOLOGI PERTANIAN**

**UNIVERSITAS ANDALAS**

**PADANG**

**2024**

**PEMANFAATAN BUBUK DAUN KELOR (*Moringa oleifera* L.)  
TERHADAP KARAKTERISTIK *CRACKERS* CAMPURAN TEPUNG  
TERIGU DAN TEPUNG JAMUR TIRAM PUTIH (*Pleurotus ostreatus*)**

**FITRI RAHMADHANI**

**2011122017**



**FAKULTAS TEKNOLOGI PERTANIAN**

**UNIVERSITAS ANDALAS**

**PADANG**

**2024**

**PEMANFAATAN BUBUK DAUN KELOR (*Moringa oleifera* L.)  
TERHADAP KARAKTERISTIK *CRACKERS* CAMPURAN TEPUNG  
TERIGU DAN TEPUNG JAMUR TIRAM PUTIH (*Pleurotus ostreatus*)**

Fitri Rahmadhani, Tuty Anggraini, Hasbullah

**ABSTRAK**

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan bubuk daun kelor terhadap karakteristik *crackers* campuran tepung terigu dan tepung jamur tiram putih dan untuk mengetahui perlakuan terbaik berdasarkan tingkat penerimaan secara organoleptik, karakteristik kimia, dan fisik *crackers* campuran tepung terigu dan tepung jamur tiram putih. Rancangan penelitian yang digunakan adalah Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan 3 kali ulangan. Data penelitian dianalisis secara statistik menggunakan *Analisis of Varians* (ANOVA) dan jika data menunjukkan perbedaan yang nyata dilanjutkan dengan analisis *Duncan's New Multiple Range Test* (DNMRT) pada taraf nyata 5%. Perlakuan pada penelitian ini adalah A (BDK 0%), B (BDK 1%), C (BDK 2%), D (BDK 3%), dan E (BDK 4%). Hasil penelitian menunjukkan bahwa penambahan bubuk daun kelor pada *crackers* berpengaruh nyata terhadap kadar air, kadar abu, kadar protein, kadar karbohidrat, kadar serat kasar, aktivitas antioksidan, total polifenol, kekerasan, uji organoleptik (warna, aroma, rasa, dan tekstur) dan berpengaruh tidak nyata pada taraf 5% terhadap kadar lemak, asam lemak bebas, dan nilai energi. Perlakuan terbaik berdasarkan penerimaan secara organoleptik, karakteristik kimia, dan fisik adalah perlakuan C (BDK 2%) dengan rata-rata kadar 4,78%, kadar abu 3,22%, kadar protein 8,75%, kadar lemak 19,22%, kadar karbohidrat 64,02%, kadar serat kasar 10,65%, asam lemak bebas 0,62%, aktivitas antioksidan 43,77%, total polifenol 172,60 mg GAE/g, nilai energi 421,48 kkal/100 g, kekerasan 74,70 N/cm<sup>2</sup>, dan uji organoleptik meliputi warna 3,88 (suka), aroma 3,72 (suka), rasa 3,44 (biasa), dan tekstur 3,96 (suka).

**Kata Kunci :** *crackers*, tepung jamur tiram putih, bubuk daun kelor, antioksidan

**UTILIZATION OF MORINGA LEAF POWDER (*Moringa oleifera* L.) ON  
THE CHARACTERISTICS OF CRACKERS MIXED WHEAT FLOUR  
AND WHITE OYSTER MUSHROOM FLOUR (*Pleurotus ostreatus*)**

Fitri Rahmadhani, Tuty Anggraini, Hasbullah

**ABSTRACT**

**This research aimed to determine the effect of adding moringa leaf powder on the characteristics of crackers mixed with wheat flour and white oyster mushroom flour and to find out the best treatment for adding moringa leaf powder based on the level of organoleptic acceptance, chemical, and physical characteristics of crackers mixed with wheat flour and white oyster mushroom flour. The research design used was a Completely Randomized Design (CRD) with 5 treatments and 3 replications. The research data was analyzed statistically using Analysis of Variance (ANOVA) and if the data showed significant differences, it was continued with Duncan's New Multiple Range Test (DNMRT) analysis at a significance level of 5%. The treatments in this study were A (BDK 0%), B (BDK 1%), C (BDK 2%), D (BDK 3%), and E (BDK 4%). This research showed that the addition of moringa leaf powder to crackers significantly affected on moisture content, ash content, protein content, carbohydrate content, crude fiber content, antioxidant activity, total polyphenols, hardness, organoleptic tests (color, aroma, taste, and texture) and there is no significant effect at the 5% level on fat content, free fatty acid, and energy value. The best treatment based on organoleptic acceptance, chemical, and physical characteristics is treatment C (BDK 2%) with average moisture content 4.78%, ash content 3.22%, protein content 8.75%, fat content 19.22%, carbohydrate content 64.02%, crude fiber content 10.65%, free fatty acids 0.62%, antioxidant activity 43.77%, total polyphenols 172.60 mg GAE/g, energy value 421.48 kcal/100 g, hardness 74.70 N/cm<sup>2</sup>, and organoleptic tests including color 3.88 (like), aroma 3.72 (like), taste 3.44 (netral), and texture 3.96 (like).**

**Keywords : crackers, white oyster mushroom flour, moringa leaf powder, antioxidant**