

**PENGARUH PENAMBAHAN BUBUK *Azolla microphylla*
TERHADAP KARAKTERISTIK *COOKIES* DARI MOCAF
(*Modified Cassava Flour*)**

**VLIO LINA MONALISA
181121015**



Dosen Pembimbing :

- 1. Prof. Tuty Anggraini, S.TP. M.P. Ph.D**
- 2. Prof. Dr. Ir. Fauzan Azima, M.S**

**FAKULTAS TEKNOLOGI PERTANIAN
UNIVERSITAS ANDALAS
PADANG
2022**

**PENGARUH PENAMBAHAN BUBUK *Azolla microphylla*
TERHADAP KARAKTERISTIK *COOKIES* DARI MOCAF
(*Modified Cassava Flour*)**

**VLIO LINA MONALISA
1811121015**



**FAKULTAS TEKNOLOGI PERTANIAN
UNIVERSITAS ANDALAS
PADANG
2022**

Pengaruh Penambahan Bubuk *Azolla Microphylla* Terhadap Karakteristik *Cookies* Dari MOCAF (*Modified Cassava Flour*)

Vlio Lina Monalisa, Tuty Anggraini, Fauzan Azima

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan bubuk *Azolla microphylla* terhadap karakteristik *cookies* dari MOCAF (*Modified Cassava Flour*). Penelitian ini menggunakan Rancangan Acak Lengkap dengan 5 perlakuan yaitu penambahan bubuk *Azolla microphylla* 0%, 8%, 10%, 12%, dan 14% dengan 3 kali ulangan. Data yang diperoleh dianalisis secara statistika dengan ANOVA (*Analysis of Variance*) dan jika berbeda nyata dilanjutkan dengan uji DNMRT (*Duncan's News Multiple Range Test*) pada taraf nyata 5%. Hasil penelitian menunjukkan bahwa penambahan bubuk *Azolla microphylla* terhadap karakteristik *cookies* dari MOCAF berbeda nyata pada taraf $\alpha=5\%$ terhadap kadar air, kadar abu, kadar protein, kadar lemak, kadar karbohidrat, kadar serat kasar, aktivitas antioksidan, uji kekerasan, uji warna, uji organoleptik (warna, dan rasa). Tetapi tidak berbeda nyata terhadap uji organoleptik (aroma dan tekstur). Berdasarkan hasil uji organoleptik maka ditetapkan produk terbaik *cookies* dari MOCAF dengan penambahan bubuk *Azolla microphylla* adalah perlakuan D (penambahan BAM 12%) dengan karakteristik yaitu kekerasan (83,85 N/cm²), ^oHue (178,70), kadar air (3,42%), kadar abu (1,49)%, kadar lemak (23,19%), kadar protein (7,34%), kadar karbohidrat (64,14%), kadar serat kasar (6,87%), aktivitas antioksidan (46,89%), dan uji oranoleptik meliputi warna 3,75 (suka), aroma 3,15 (biasa), rasa 3,55 (suka), tekstur 3,35 (biasa).

Kata kunci : bubuk *Azolla microphylla*, *cookies*, karakteristik, mocaf

The Effect of Addition of Powder *Azolla Microphylla* on the Characteristics of Cookies from MOCAF (Modified Cassava Flour)

Vlio Lina Monalisa, Tuty Anggraini, Fauzan Azima

ABSTRACT

This research aimed to know the effects of *Azolla microphylla* powder addition the characteristics of cookies from MOCAF (Modified Cassava Flour). This study used a completely randomized design with 5 treatments, namely the addition of *Azolla microphylla* 0%, 8%, 10%, 12%, and 14% with 3 replications. The data obtained were analyzed statistically by ANOVA (Analysis of Variance) and if they were significantly different, it was continued with the DNMRT (Duncan's News Multiple Range Test) test at a significance level of 5%. The result of this research showed that different additions of *Azolla microphylla* to the characteristics cookies from MOCAF had a significantly effected at the level of $\alpha=5\%$ on water content, ash content, protein content, fat content, carbohydrate content, crude fiber content, antioxidant activity, hardness test, color test, organoleptic test (color, and taste). But not significantly different from the organoleptic test (aroma and texture). Based on the results of the organoleptic test, it was determined that the best cookies from MOCAF with the addition of *Azolla microphylla* powder was treatment D (addition of 12% BAM) with the characteristics of hardness (83.85 N/cm²), °Hue (178,70), water content (3,42%), ash content (1,49%), fat content (23,19%), protein content (7,34%), carbohydrate content (64,16%), crude fiber content (6,87%), antioxidant activity (46,89)%, and the oranoleptic test included color (3,75/like), aroma (3,15/ordinary), taste (3,55/like), texture (3,35/regular).

Keywords : *Azolla microphylla* powder, cookies, characteristics, mocaf