

Formulasi dan Karakteristik *Cookies* dengan Penambahan Tepung Pisang (*Musa paradisiaca*) dan Tepung Daun Katuk (*Sauropus androgynous*) sebagai Pangan Fungsional

SKRIPSI

OLEH :

Widya Ningsih

1111123026



Pembimbing :

- 1. Dr. Ir. Rina Yenrina, MS**
- 2. Prof. Dr. Ir. Kesuma Sayuti, MS**

**FAKULTAS TEKNOLOGI PERTANIAN
UNIVERSITAS ANDALAS**

PADANG

2016

Formulasi dan Karakteristik *Cookies* dengan Penambahan Tepung Pisang (*Musa paradisiaca*) dan Tepung Daun Katuk (*Sauropus androgynous*) sebagai Pangan Fungsional

Widya Ningsih, Rina Yenrina dan Kesuma Sayuti

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan tepung pisang dan tepung daun katuk pada *cookies*. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan tiga kali ulangan, yaitu pencampuran tepung terigu, tepung pisang dan tepung daun katuk: A (55% : 40% : 5%), B (55% : 35% : 10%), C (55% : 30% : 15%), D (55% : 25% : 20%) dan E (55% : 20% : 25%). Pengamatan pada bahan baku adalah kadar air, kadar serat kasar dan kadar Fe. Pengamatan pada *cookies* adalah kadar air, kadar abu, kadar protein, kadar lemak, kadar karbohidrat, kadar Fe, kadar serat kasar, aktivitas antioksidan, kadar asam lemak bebas, uji kekerasan dan uji organoleptik. Hasil penelitian ini menunjukkan bahwa penambahan tepung pisang dan tepung daun katuk berpengaruh nyata terhadap kadar air, kadar abu, kadar lemak, kadar protein, aktivitas antioksidan, kadar Fe dan kekerasan, tetapi tidak berpengaruh nyata terhadap kadar karbohidrat, kadar asam lemak bebas dan kadar serat kasar. Hasil uji organoleptik menunjukkan perlakuan B, pencampuran tepung terigu dengan tepung pisang dan tepung daun katuk (55% : 35% : 10%) adalah produk terbaik dengan nilai rata-rata warna 4,07, aroma 3,76, rasa 4,17 dan tekstur 4,03. Formulasi dari *cookies* perlakuan B, pencampuran tepung terigu dengan tepung pisang dan tepung daun katuk (55% : 35% : 10%) dengan nilai rata-rata kadar air (3,72%), kadar abu (1,47%), kadar protein (6,07%), kadar lemak (18,76%), kadar karbohidrat (69,98%), kadar Fe (0,04%), kadar serat kasar (1,96%), aktivitas antioksidan (13,07%), kadar asam lemak bebas (0,26%) dan uji kekerasan (7,57 N/cm²).

Kata kunci : *cookies*, penambahan, pencampuran, tepung pisang, tepung daun katuk, tepung terigu.

***Formulation And Characteristics Of Cookies With Additions
Banana Flour (*Musa paradisiaca*) And Katuk Leaves Flour
(*Sauropus androgynous*) As Functional Food***

Widya Ningsih, Rina Yenrina, Kesuma Sayuti

ABSTRACT

This research was aimed to understand the influence of additions banana flour and katuk leaves flour on cookies. This research use Completely Randomized Design (RAL) consists of 5 treatments and 3 repetitions, such as mixing wheat flour, banana flour and katuk leaves flour such as : A (55% : 40% : 5%), B (55% : 35% : 10%), C (55% : 30% : 15%), D (55% : 25% : 20%) and E (55 % : 20% : 25%). The observes on raw materials are water level, coarse fiber and Fe level. The observes on cookies are water level, ash level, protein level, fatty level, carbohydrates level, Fe level, coarse fiber, antioxidant activity, free fatty acids level, hardness and sensory test. The results of research showed that added banana flour and katuk leaves flour was significantly to water level, ash level, fatty level, protein level, antioxidant activity, Fe level, and hardness but not significantly on carbohydrates level, free fatty acids level and coarse fiber level. The result of sensory test showed the treatment of B with mixing wheat flour, banana flour and katuk leaves (55% : 35% : 10%) is the best product with the score to colour 4,07 , the smell 3,76, taste 4,17 and texture 4,03. The formulation of treatment B, that mixing wheat flour, banana flour and katuk leaves flour (55% : 35% : 10%) with rate of the water level (3,72%), ash level (1,47%), protein level (6,07%), fatty level (18,76%), carbohydrates level (69,98%), Fe level (0,04%), coarse fiber (1,96%), antioxidant activity (13,07%), free fatty acids level (0,26%) and hardness (7,57 N/cm²).

Keywords : addition, banana flour, cookies, katuk leaves flour, mixing, wheat flour.

