

PENGARUH RASIO TEPUNG BIJI NANGKA DAN TEPUNG DAUN KELOR TERHADAP NILAI GIZI *COOKIES*

*[The Effect of The Ratio of Jackfruit Seed Flour and Moringa Leaf Flour on
Nutritional Value of Cookies]*

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ABSTRACT

This study aims to determine the effect of the ratio of jackfruit seed flour and moringa leaf flour on the nutritional values, chemical, physical, and organoleptic properties. This study used an experimental method with a single factor Completely Randomized Design (CRD) consisting of 6 levels of the ratio of the use of jackfruit seed flour: moringa leaf flour, namely P1=100% : 0%, P2=90% : 10%, P3=85% : 15%, P4=80% : 20%, P5=75% : 25% and P6=70% : 30% with 3 repetitions. The parameters observed included chemical properties (moisture content, ash content and protein content), physical properties (broken power and color (L value)) and organoleptic properties (color, taste, aroma and texture). Observational data were analyzed by analysis of variance (Analysis of Variance) with a significance level of 5%. If there was significant difference, further tests were carried out by Polynomial Orthogonal (MOP) for chemical and physical parameters and Duncan's test for organoleptic. The results showed that the effect of the ratio of jackfruit seed flour and moringa leaf flour had a significantly different effect on all chemical, physical and organoleptic parameters. The higher the addition of moringa leaf flour cause decrease in moisture content and increase in ash content, protein content, then the fracture strength was higher and the color was lower or darker, the color is greener, the aroma was more unpleasant, the texture was denser and the taste was more bitter. Treatment with a ratio of 90% jackfruit seed flour: 10% moringa leaf flour was the best treatment with a moisture content of 3.80%; ash content 1.44%; protein content of 10.71%, broken power of 16.67, color (L value) 43.15 and organoleptic properties of slightly unpleasant aroma, slightly bitter taste, green color, and less crunchy texture and still acceptable to the panelists.

Keywords: *Cookies, Jackfruit Seed Flour, Moringa Leaf Flour, Nutritional Value, Organoleptic*

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh rasio tepung biji nangka dan tepung daun kelor terhadap nilai gizi *cookies* yang ditinjau dari aspek kimia, fisik dan organoleptik yang dihasilkan. Penelitian ini menggunakan metode eksperimental dengan Rancangan Acak Lengkap (RAL) satu faktor yang terdiri dari 6 taraf rasio penggunaan tepung biji nangka : tepung daun kelor yaitu P1=100% : 0%, P2=90% : 10%, P3=85% : 15%, P4=80% : 20%, P5=75% : 25% dan P6=70% : 30% dengan 3 kali pengulangan. Parameter yang diamati meliputi parameter kimia yaitu (kadar air, kadar abu dan kadar protein), parameter fisik yaitu (daya patah dan warna (nilai L)) serta organoleptik (warna, rasa, aroma dan tekstur). Data hasil pengamatan dianalisis dengan analisis keragaman (*Analysis of Variance*) dengan taraf nyata 5%. Apabila terdapat perbedaan nyata dilakukan uji lanjut dengan *Polynomial Orthogonal* (MOP) untuk parameter kimia dan fisik serta uji Duncan untuk organoleptik. Hasil penelitian menunjukkan bahwa pengaruh rasio tepung biji nangka dan tepung daun kelor memberikan pengaruh yang berbeda nyata terhadap semua parameter kimia, fisik dan organoleptik. Semakin tinggi penambahan tepung daun kelor menyebabkan penurunan kadar air dan mengalami kenaikan kadar abu, kadar protein, kemudian daya patah semakin tinggi dan warna semakin rendah atau semakin gelap, warna semakin hijau, aroma semakin beraroma langu, tekstur semakin padat dan rasa semakin pahit. Perlakuan dengan rasio 90% tepung biji nangka : 10% tepung daun kelor merupakan perlakuan terbaik dengan kadar air 3,80%; kadar abu 1,44%; kadar protein 10,71%, daya patah 16,67, warna (nilai L) 43,15 serta sifat organoleptik aroma agak beraroma langu, rasa agak berasa pahit, warna hijau, dan tekstur semakin tidak renyah serta masih dapat diterima oleh panelis.

Kata Kunci : *Cookies, Nilai Gizi, Organoleptik, Tepung Biji Nangka, Tepung Daun Kelor*