

# **The Influence Of Substitution Bamboo Shoot Flour (*Dendrocalamus asper*) With Green Beans Flour (*Vigna radiata*, (L.) R. Wilczek) The Characteristics Of Cookies**

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## **ABSTRACT**

This research was aimed to understand the characteristic of cookies produced from substitution bamboo shoot flour with green beans. The research was using by Completely Randomized Design consists of 5 treatments and 3 repetitions, that is mixing wheat flour with bamboo shoot flour and green beans flour such as : A ( 50 % : 50 %: 0 % ), B ( 50 %: 40 %: 10% ), C ( 50 %: 30 %: 20 %), D ( 50 %: 20 %:30 ) and E ( 50 %: 10 %: 40%). The research was observed raw materials such as water level, ash level, protein level, fatty level, carbohydrates level, coarse fiber, and yield level. The observations on the cookies such as water level, protein level, carbohydrates level, fatty level, ash level, coarse fiber, carbohydrates level, coarse fiber, potassium level, the number of total plates , hardness and sensory test.

The results of research showed that substitution bamboo shoot flour with green beans was significantly to water level, fatty level, protein level, carbohydrates level and potassium but not significantly on ash level and coarse fiber level. The result of sensory test showed the treatment of C where the mixing wheat flour with bamboo shoot flour and green beans (50 %: 30 %: 20 %) was a product that most favored by the span the score to colour 4,03 , the smell 3.97, taste 4,13 and texture 4.13. The best formulation of cookies favored by the panels was treatment C where the mixing wheat flour with bamboo shoot flour and green beans (50 %: 30 %: 20 %) with a rate of the analysis of the chemical content is on the water level (3,03%), ash level (2,02%), fatty level (23,99%), protein level (13,83%), carbohydrates (57,12%), coarse fiber (1,84%) , potassium level (0,16%) and the analysis of the physical was hardness ( $202,15 \text{ N/cm}^2$ ) and the number total plates ( $4,6 \times 10^3 \text{ cfu/g}$ ).

**Keywords :** bamboo shoot flour, cookies, green beans flour, mixing, wheat flour.

# **Pengaruh Substitusi Tepung Rebung Bambu (*Dendrocalamus asper*) dan Kacang Hijau (*Vigna radiata*, (L.) R. Wilczek) terhadap Karakteristik Cookies**

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## **ABSTRAK**

Penelitian ini bertujuan untuk mengetahui karakteristik *cookies* dari substitusi tepung rebung bambu tepung kacang hijau. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan tiga kali ulangan, yaitu pencampuran tepung terigu, tepung rebung bambu dan tepung kacang hijau: A ( 50 % : 50 %: 0 % ), B ( 50 %: 40 %: 10% ), C ( 50 %: 30 %: 20 %), D ( 50 %: 20 %:30 ) and E ( 50 %: 10 %: 40%). Pengamatan pada bahan baku adalah kadar air, kadar abu, kadar protein, kadar lemak, kadar karbohidrat, kadar serat kasar dan rendemen. Pengamatan pada cookies adalah kadar air, kadar, kadar protein, kadar karbohidrat, kadar lemak, kadar abu, kadar serat kasar, kadar kalium, angka lempeng total, uji kekerasan dan uji organoleptik.

Hasil penelitian ini menunjukkan bahwa substitusi tepung rebung bambu dan tepung kacang hijau berpengaruh nyata terhadap kadar air, kadar lemak, kadar protein, kadar karbohidrat dan kadar kalium, tetapi tidak berpengaruh nyata terhadap kadar abu dan kadar serat kasar. Hasil uji organoleptik menunjukkan perlakuan C, pencampuran tepung terigu dengan tepung rebung bambu dan tepung kacang hijau (50 %: 30 %: 20 %) adalah produk terbaik dengan nilai rata-rata warna 4,03; aroma 3,97; rasa 4,13 dan tekstur 4,13. Formulasi dari cookies perlakuan C, pencampuran tepung terigu dengan tepung rebung bambu dan tepung kacang hijau (50 %: 30 %: 20 %) dengan nilai rata-rata kadar air (3,03%), kadar abu (2,02%), kadar lemak (23,99%), kadar protein (13,835), kadar karbohidrat (57,12%), kadar serat kasar (1,84%), kadar kalium (0,16%), uji kekerasan (202,15 N/cm<sup>2</sup>) dan angka lempeng total (4,6 x 10<sup>3</sup> cfu/g).

Kata kunci : cookies, pencampuran, tepung kacang hijau, tepung rebung, bambu tepung terigu.