SIFAT FISIK DAN KIMIA SERTA TINGKAT KESUKAAN BISKUIT YANG DISUBTITUSI BERBAGAI TEPUNG FRAKSI HASIL PENGGILINGAN GABAH PRATANAK

INDAH ASTUTI
16031036

INTISARI

Jumlah penderita diabetes (diabetesi) di Indonesia cukup tinggi. Salah satu strategi untuk mengelola gula darah diabetesi ialah mengkonsumsi makanan yang memiliki IG rendah, misalnya beras pratanak. Fraksi hasil penggilingan beras pratanak yaitu beras utuh, menir dan bekatul akan dimanfaatkan untuk bahan baku pembuatan biskuit sebagai makanan selingan diabetesi. Tujuan penelitian ini ialah mengetahui pengaruh persentase subtitusi tepung terigu dengan tepung beras, tepung menir, dan tepung bekatul terhadap sifat fisik ,kimia dan tingkat kesukaan biskuit.

Penelitian ini menggunakan rancangan acak lengkap dengan 2 faktor perlakuan yaitu fraksi hasil penggilingan gabah pratanak(tepung beras, menir dan bekatul) dan proporsi penambahan tepung (0%, 10%, 20%, 30%, 40%, 50%). Analisis yang dilakukan meliputi sifat fisik (tekstur, warna), sifat kimia (kadar air, amilosa, pati, gula, protein, dan lemak) dan uji sensoris. Hasil yang diperoleh dilakukan analisa varian (ANOVA) pada tingkat kepercayaan 95%. Apabila terdapat beda nyata dilanjut dengan uji *Duncan Multiple Range Test*.

Hasil penelitian menunjukkan tepung fraksi hasil penggilingan gabah pratanak (beras, menir dan bekatul) dan proporsi berpengaruh nyata terhadap sifat fisik dan kimia biskuit. Biskuit yang disukai panelis dengan substitusi tepung beras 40 % memiliki kadar air, pati, amilosa, gula total, lemak, protein, tekstur dan *lighness* berturut- turut 3,8%, 52%, 14,2%, 21,4%, 21,5%, 8,34%, 303 N, dan 62). Biskuit yang disukai panelis dengan substitusi tepung menir 30 % memiliki kadar air, pati, amilosa, gula total, lemak, protein, tekstur dan *lighness* berturut- turut 3,6%, 51,65% , 14,10% 27,1%, 16,6%, 8,24%, 247 N, dan 62. Biskuit yang disukai panelis dengan substitusi bekatul 20% memiliki kadar air, pati, amilosa, gula total, lemak, protein, tekstur dan *lighness* berturut- turut 4,9%, 54,92% , 14,50%, 21,3%, 16,5%, 9,0%, 555 N, dan 57.

Kata kunci : Biskuit, beras pratanak, bekatul, makanan selingan

PHYSICAL AND CHEMICAL PROPERTIES, AND PREFERENCE LEVEL OF SUBSTITUTED BISCUITS WITH FRACTION FLOUR VARIOUS OF PARBOILED PADDY MILLING

INDAH ASTUTI
16031036

ABSTRACT

The number of people with diabetes in Indonesia is quite high and increasing every year. One strategy for managing diabetic blood sugar is to consume foods that have a low GI, such as parboiled rice. The fraction of the results of parboiled rice milling, namely whole rice, broken rice, and rice bran, will be used as raw material for making biscuits as diabetic snacks.

This study uses a completely randomized design with two treatment factors. The first factor is the fraction results of parboiled rice grains (rice flour, broken rice, and rice bran) The second factor is the proportion of flour addition (0%, 10%, 20%, 30%, 40%, 50%). The analysis included physical characteristics (texture, color), chemical properties (water content, amylose, starch, sugar, protein, and fat), and sensory tests. The results obtained were analyzed for variance (ANOVA) at a 95% confidence level. If there is a real difference, continued with the Duncan Multiple Range Test.

The results showed that the fraction flour produced by parboiled rice grains (rice, broken rice, and bran) and the proportion had a significant effect on the physical and chemical properties of biscuits. The biscuits preferred by panelists with 40% rice flour substitution had moisture, starch, amylose, total sugar, fat, protein, texture and lightness, respectively 3.8%, 52%, 14.2%, 21.4%, 21, 5%, 8.34%, 303 N, and 62). The biscuits preferred by panelists with 30% broken rice flour substitution had moisture, starch, amylose, total sugar, fat, protein, texture, and lightness respectively 3.6%, 51.65%, 14.10% 27.1%, 16.6%, 8.24%, 247 N, and 62. The biscuits favored by the panelists with 20% bran substitutes have water content, starch, amylose, total sugar, fat, protein, texture, and texture, respectively 4.9%, 54.92%, 14.50%, 21.3%, 16.5%, 9.0%, 555 N, and 57.

Keywords : Biscuits, parboiled rice, rice bran, snacks