

RINGKASAN

Tepung kacang hijau dan tepung jagung dapat dijadikan alternatif dalam pembuatan *cookies* yang merupakan salah satu produk makanan yang cukup populer dan tidak memerlukan bahan yang volumenya dapat mengembang besar. Selain untuk mengurangi ketergantungan terhadap tepung terigu, tepung jagung yang tinggi serat dan tepung kacang hijau yang tinggi akan protein sangat baik bagi kesehatan tubuh. Pada pembuatan *cookies* memerlukan bahan pemanis, bahan pemanis yang digunakan adalah gula pasir dan gula kelapa kristal.

Penelitian ini bertujuan untuk: 1) Mengetahui pengaruh berbagai jenis formula terhadap sifat kimia *cookies* yang dihasilkan. 2) Mengetahui pengaruh berbagai jenis formula *cookies* terhadap tingkat kesukaan panelis berdasarkan uji organoleptik. Penelitian ini dilakukan secara eksperimental menggunakan Rancangan Acak Kelompok (RAK) dengan dua faktor yang dicoba yaitu jenis tepung dan jenis gula. Terdapat 6 perlakuan dan 3 ulangan sehingga didapat 18 unit percobaan. Faktor yang diteliti yaitu (T1G1) *cookies* jagung kacang hijau (67 : 33) gula pasir (100%), (T1G2) *cookies* jagung kacang hijau (67 : 33) gula kelapa kristal (100%), (T2G1) *cookies* jagung (100%) gula pasir (100%), (T2G2) *cookies* jagung (100%) gula kelapa kristal (100%), (T3G1) *cookies* terigu (100%) gula pasir (100%) dan (T3G2) *cookies* terigu (100%) gula kelapa kristal (100%). Data kimia dianalisis menggunakan ANOVA pada taraf kepercayaan 95% dan jika terdapat pengaruh nyata dilanjutkan dengan *Duncan Multiple Range Test* (DMRT) pada taraf kepercayaan 95%. Data sensori dianalisis menggunakan Uji Friedman pada taraf kepercayaan 95% dan jika terdapat pengaruh nyata dilanjutkan dengan uji banding ganda taraf kepercayaan 95%.

Hasil penelitian menunjukkan bahwa perbedaan formula bahan *cookies* pada setiap perlakuan berpengaruh nyata terhadap kadar air, kadar abu, kadar protein, kadar karbohidrat dan kadar zat besi, namun tidak berpengaruh nyata terhadap kadar lemak, kadar serat pangan dan kadar gula total. Pengujian sensori pada produk *cookies* menunjukkan bahwa perbedaan formula bahan *cookies* pada setiap perlakuan berpengaruh nyata terhadap parameter warna, aroma, tekstur, flavor dan *Overall*. *Cookies* yang memiliki kandungan gizi paling baik yaitu jenis *cookies* jagung dan kacang hijau pemanis gula pasir dengan kadar air 4,03%, kadar abu 1,83%, protein 18,62%, karbohidrat 48,17% dan zat besi 1,52%.

Kata kunci : tepung jagung, tepung kacang hijau, *cookies*, gula kelapa kristal, gula pasir, organoleptik

SUMMARY

Mung bean flour and cornflour can be used as alternatives in making cookies, which are one of the most popular food products and do not require ingredients that can expand in volume. In addition to reducing dependence on wheat flour, cornflour which is high in fiber and green bean flour which is high in protein are very good for health. In making cookies, sweeteners are needed, the sweeteners used are granulated sugar and crystalline coconut sugar.

This study aims to: 1) Determine the effect of various types of formulas on the chemical properties of the resulting cookies. 2) Knowing the effect of various types of cookie formulas on the panelists' preference level based on organoleptic tests. This research was conducted experimentally using a Randomized Block Design (RAK) with two factors being tested, namely the type of flour and the type of sugar. There were 6 treatments and 3 replications so 18 experimental units were obtained. The factors studied were (T1G1) mung bean corn cookies (67: 33) granulated sugar (100%), (T1G2) mung bean corn cookies (67: 33) crystal coconut sugar (100%), (T2G1) corn cookies (100%) granulated sugar (100%), (T2G2) corn cookies (100%) crystal coconut sugar (100%), (T3G1) wheat cookies (100%) granulated sugar (100%) and (T3G2) wheat cookies (100%) crystalline coconut sugar (100%). Chemical data were analyzed using ANOVA at the 95% confidence level and if there was a significant effect, it was continued with the Duncan Multiple Range Test (DMRT) at the 95% confidence level. Sensory data were analyzed using the Friedman test at a 95% confidence level and if there was a significant effect, it was followed by a double comparison test with a 95% confidence level.

The results showed that the different formulas for cookies in each treatment had a significant effect on water content, ash content, protein content, carbohydrate content, and iron content, but had no significant effect on fat content, dietary fiber content, and total sugar content. Sensory testing on cookie products showed that the differences in the cookie ingredient formula in each treatment had a significant effect on the color, aroma, texture, flavor, and overall parameters. cookies that have the best nutritional content are corn cookies and green beans sweetened with sugar with a water content of 4.03%, ash content of 1.83%, protein 18.62%, carbohydrates 48.17% and iron 1.52%.

Keywords: cornflour, mung bean flour, cookies, crystal coconut sugar, granulated sugar, organoleptic