

# **PENGARUH SUBSTITUSI TEPUNG KUNIR PUTIH (*Curcuma mangga* Val.) DAN LAMA PEMANGGANGAN TERHADAP SIFAT FISIK, KIMIA DAN TINGKAT KESUKAAN *COOKIES* PATI GARUT**

## **INTISARI**

Kebiasaan masyarakat untuk mengkonsumsi produk olahan roti dan kue yang semakin meningkat, tentunya meningkatkan kebutuhan akan tepung terigu. Hal yang dapat dilakukan untuk dapat membantu pemerintah dalam mengurangi pajak import yaitu dengan cara memanfaatkan produk pangan lokal yaitu pati garut. Penelitian ini bertujuan untuk mengetahui pengaruh substitusi tepung kunir putih dan lama pemanggangan terhadap sifat fisik, kimia dan tingkat kesukaan *cookies* pati garut.

Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dua faktor dengan dua kali ulangan. Faktor pertama merupakan variasi substitusi tepung kunir putih sebesar 5, 10 dan 15%. Faktor kedua merupakan lama pemanggangan selama 15, 20 dan 25 menit. Data yang diperoleh dilakukan analisa statistik dengan tingkat kepercayaan 95% dan apabila terdapat perbedaan nyata antara perlakuan dilanjut dengan *Duncan Multiple Range Test* (DMRT). *Cookies* yang dihasilkan diuji fisik (tekstur, warna dan volume pengembangan), kimia (kadar air, abu, protein, lemak, karbohidrat *by difference*, aktivitas antioksidan dan fenol total) dan uji tingkat kesukaan.

Hasil penelitian menunjukkan bahwa *cookies* dengan substitusi tepung kunir putih sebesar 10% dan lama pemanggangan 15 menit merupakan *cookies* terpilih. *Cookies* terpilih menunjukkan nilai warna L, a dan b secara berturut-turut 84,78, 4,46 dan 28,01, tekstur 810,75 gF, dan volume pengembangan 46,90%. Hasil analisa kimia *cookies* terpilih menunjukkan kadar air 8,6% b/b, abu 2,04%, protein 5,88%, lemak 32,37%, karbohidrat *by difference* 50,64%, aktivitas antioksidan 54,38%RSA dan kadar fenol total 2,62 mg EAG/g.

**Kata kunci :** Tepung kunir putih, antioksidan, lama pemanggangan, *cookies*

# **EFFECT OF WHITE SAFFRON (*Curcuma mangga* VAL.) SUBSTITUTION AND BAKING TIME ON PHYSICAL, CHEMICAL PROPERTIES AND PREFERENCE LEVEL OF ARROWROOT COOKIES**

## **ABSTRACT**

The habits of the people to consume processed bread and cake products are increasing, of course, increasing the need for flour. What can be done to help the government in reducing import taxes is by utilizing local food products, namely arrowroot starch. This study aims to determine the effect of white turmeric flour substitution and roasting time on the physical, chemical properties and the level of preference of arrowroot starch cookies.

This research uses a completely randomized design (CRD) of two factors with two replications. The first factor is the variation of white turmeric flour substitution of 5, 10 and 15%. The second factor is roasting time for 15, 20 and 25 minutes. The data obtained were analyzed statistically with a confidence level of 95% and if there were significant differences between the treatments followed by Duncan Multiple Range Test (DMRT). The resulting cookies are tested physically (texture, color and volume of development), chemistry (water content, ash, protein, fat, carbohydrate by difference, antioxidant activity and total phenol) and the degree of preference test.

Cookies produced are analyzed by color, texture, and level of liking. The results of the study showed that cookies with white turmeric flour substitution of 10% and 15 minutes of baking time were selected cookies. Selected cookies show the color values of L, a and b respectively 84.78, 4.46 and 28.01, texture 810.75 gF, and the development volume 46.90%. The chosen chemical cookie analysis test results showed 8.6% water content, 2.04% ash, 5.88% protein, 32.37% fat, carbohydrate by difference 50.64%, antioxidant activity 54.38% RSA and total phenol 2.62 mg EAG / g.

**Keywords:** White saffron, antioxidant activity, roasting time, cookies.