

PENGARUH PENAMBAHAN BUBUK KUNIR PUTIH (*Curcuma mangga* Val.) DAN *BAKING POWDER* TERHADAP SIFAT FISIK, KIMIA DAN TINGKAT KESUKAAN *COOKIES* TALAS

INTISARI

Semakin modernnya zaman dan kemajuan teknologi di Indonesia membuat sebagian besar masyarakat mengonsumsi produk makanan yang mengandung bahan tambahan pangan kimia buatan dan apabila dikonsumsi dalam jangka panjang dapat menimbulkan efek samping bagi kesehatan. *Cookies* talas-kunir putih merupakan produk makanan ringan pangan fungsional substitusi talas dengan penambahan bubuk kunir putih dan *baking powder*. Kunir putih memiliki potensi besar sebagai sumber antioksidan alami menjadi alternatif bagi asupan antioksidan tubuh karena tidak menimbulkan bahaya tubuh dan bahannya mudah diperoleh. Umbi talas sumber daya pangan lokal namun masih jarang pemanfaatannya, memiliki nilai gizi yang tinggi, rendah gluten, kaya serat dan dapat diolah menjadi tepung talas. Tepung umbi talas dimanfaatkan lebih lanjut sebagai bahan kue kering *cookies* menghasilkan produk yang lebih awet karena daya mengikat airnya yang tinggi. *Baking powder* merupakan bahan tambahan pangan pembentuk gas CO₂ dapat meningkatkan tekstur dan cita rasa produk. Sehingga penambahan *baking powder* yang sesuai penting dalam pembuatan produk makanan karena dapat meningkatkan mutu fisik atau organoleptik *cookies* talas-kunir putih.

Penelitian ini dilakukan dengan Rancangan Acak Lengkap (RAL) pola faktorial dengan 2 batch ulangan perlakuan dan dua faktor perlakuan. Faktor yang digunakan adalah variasi penambahan bubuk kunir putih 5 %, 10 %, 15 % dan *baking powder* 1 %, 1,5 %, 2 %. Analisa yang dilakukan dalam penelitian ini adalah warna, tekstur, volume pengembangan, kadar air, kadar abu, protein, aktivitas antioksidan, fenol total dan uji kesukaan. Data yang diperoleh selanjutnya dianalisis menggunakan software SPSS *Univariate Analysis of Variance One Way ANOVA* pada tingkat kepercayaan 95 % untuk mengetahui pengaruh perlakuan. Apabila ada pengaruh nyata maka dilanjutkan Uji *Duncan Multiple Range Test* (DMRT).

Formulasi penambahan bubuk kunir putih dan *baking powder* memberi pengaruh nyata terhadap volume pengembangan, aktivitas antioksidan, fenol total, tingkat kesukaan aroma, rasa, keseluruhan namun tidak memberi pengaruh sifat fisik dan tingkat kesukaan warna, tekstur. Hasil analisa menunjukkan jika penambahan bubuk kunir putih dan *baking powder* meningkatkan aktivitas antioksidan, fenol total dan mempengaruhi sifat fisik, kimia dan kesukaan produk. *Cookies* talas-kunir putih terbaik berdasarkan uji kesukaan adalah perlakuan penambahan 5 % bubuk kunir putih dan 1,5 % *baking powder*. Hasil analisa menunjukkan *cookies* terpilih mempunyai nilai gizi memiliki nilai gizi kadar air 6 %, kadar abu 2,06 %, protein 8,49 %, aktivitas antioksidan 51,56 % RSA dan fenol total 15,30 mg GAE/g bk.

Kata kunci : *cookies* talas, bubuk kunir putih, *baking powder*

THE EFFECT OF WHITE SAFFRON (*Curcuma mangga* Val.) POWDER AND BAKING POWDER ADDITION ON THE PHYSICAL, CHEMICAL PROPERTIES AND PREFERENCE LEVEL OF TARO COOKIES

ABSTRACT

More modern times and technology advances in Indonesia have made most people consume food products that contain artificial chemical additives and food additives if consumed in the long can cause side effects for health. White saffron-taro cookies are a functional snack food product that substitutes taro with the addition of white saffron powder and baking powder. White saffron has great potential as a source of natural antioxidants to be an alternative for the body's antioxidant intake because it does not cause harm to the body and the ingredients are easy to obtain. Taro tubers are local food resources but are rarely used, have high nutritional value, are low in gluten, are rich in fiber and can be processed into taro flour. Taro flour is further used as an ingredient in cookies to produce a more durable product due to its high water binding power. Baking powder is a food additive that forms CO₂ gas which can improve the texture and taste of the product. So that the addition of appropriate baking powder is important in the manufacture of food products because it can improve the physical or organoleptic quality of white saffron-taro cookies.

This research was conducted with a completely randomized design (CRD) factorial pattern with 2 batches of treatment replications and two treatment factors. The factors used were variations in the addition of 5 %, 10 %, 15 % white saffron powder and 1 %, 1,5 %, 2 % baking powder. The analysis carried out in this study were color, texture, swelling volume, moisture content, ash content, protein, antioxidant activity, total phenol and preference test. The data obtained were then analysis using SPSS Univariate Analysis of Variance One Way ANOVA software at a 95 % confidence level to determine the effect of treatment. If there is a real effect, then continue the Duncan Multiple Range Test (DMRT).

The addition formulation of white saffron powder and baking powder had a significant effect on the volume of development, antioxidant activity, total phenol, level of preference for aroma, taste, overall but did not affect physical properties and level of preference for color, texture. The analysis results show that the addition of white saffron powder and baking powder increases antioxidant activity, phenol completely and affect the physical, chemical and preference of the product. The best white saffron-taro cookies based on the preference test is the addition of 5 % white saffron powder and 1,5% baking powder. The results of the analysis show that the selected cookies have nutritional value, have a nutritional value of 6 % water content, 2,06 % ash content, 8,49 % protein, 51,56 % RSA antioxidant activity and phenol completely 15,30 mg GAE/g bk

Keywords : taro cookies, white saffron powder, baking powder