

INTISARI

Temulawak (*Curcuma xanthorrhiza* Roxb.) merupakan tanaman obat yang telah lama dan banyak dimanfaatkan sebagai bahan ramuan obat tradisional. Kadar air rimpang temulawak saat panen adalah 80-90%. Kadar air yang tinggi ketika panen, menyebabkan kualitas temulawak menurun sehingga harga jual temulawak menjadi rendah. Penelitian ini bertujuan untuk mengetahui pengaruh perbedaan jumlah air dan konsentrasi gula terhadap warna dan sifat kimia serbuk temulawak.

Pada penelitian ini dilakukan pembuatan serbuk temulawak dimulai dengan menimbang rimpang temulawak segar, selanjutnya diparut dan parutannya ditambahkan air dengan perbedaan jumlah (100 ml dan 150 ml) kemudian dilakukan penyaringan untuk memisahkan ampas dan filtrat. Kemudian melakukan penambahan gula dengan konsentrasi berbeda yaitu (100 g, 150 g dan 200 g).

Analisis yang dilakukan adalah uji warna, kadar air, kadar flavonoid, kadar tanin dan aktivitas antioksidan. Data yang diperoleh dihitung secara statistik dengan Rancangan Acak Kelompok Lengkap dan dilakukan dengan analisa varian (ANOVA) dengan tingkat kepercayaan 95%. Apabila beda nyata masing-masing perlakuan dilanjutkan dengan uji *Duncan Multiple Range Test* (DMRT). Hasil penelitian menunjukkan bahwa jumlah air dan penambahan gula pasir berpengaruh signifikan pada warna, kadar air, kadar flavonoid, kadar tannin dan aktivitas antioksidan. Serbuk temulawak dengan jumlah air 100 ml dan gula pasir 100 g memiliki warna 1,7 red, 8,8 yellow, kadar air 3,01% wb, kadar flavonoid sebesar 1,73 mg GAE/g bk, tanin 10,99 mg/100g dan aktivitas antioksidan yaitu 83,30% RSA.

Kata kunci : Serbuk Temulawak, Aktivitas Antioksidan, Flavonoid, Tanin

THE EFFECT OF EXTRACTION AND SUGAR ADDITION METHODS ON THE COLOR AND CHEMICAL PROPERTIES OF TEMULAWAK (*Curcuma xanthorrhiza* Roxb.)

ABSTRACT

Temulawak (*Curcuma xanthorrhiza* Roxb.) is a medicinal plant that has been used for a long time and is widely used as ingredients of traditional medicine. The water content of the ginger rhizome at harvest is 80-90%. High water content during harvest, causes the quality of ginger to decrease so that the selling price of ginger becomes low. This study aims to determine the effect of differences in the amount of water and sugar concentration on the color and chemical properties of temulawak powder.

In this study, the production of temulawak powder was started by weighing the fresh ginger rhizome, then shredded and grated water was added with different amounts (100 ml and 150 ml) and then filtered to separate the pulp and filtrate. Then do the giving of sugar with different concentrations namely (100 g, 150 g and 200 g).

The analysis carried out was a test of color, water content, levels of flavonoids, tannin levels and antioxidant activity. The data obtained were calculated statistically by the Complete Randomized Block Design and carried out by analysis of variance (ANOVA) with a confidence level of 95%. If the real difference in each treatment continued with Duncan Multiple Range Test (DMRT). The results showed that the amount of water and the addition of sugar have a significant effect on color, water content, flavonoid levels, tannin levels and antioxidant activity. Temulawak powder with 100 ml water amount and 100 g sugar has 1.7 red color, 8.8 yellow color, 3.01% wb water content, flavonoid content of 1.73 mg GAE/g bk, tannin 10.99 mg / 100g and antioxidant activity is 83.30% RSA.

Keywords: Temulawak Powder, Antioxidant Activity, Flavonoids, Tanin