

INTISARI

Infused water lemon dibuat melalui tahap sortasi, pencucian, pengupasan, pemotongan, penimbangan dan perendaman. Kandungan antioksidan dan vitamin C pada *Infused water* lemon cukup tinggi dan harga yang relatif murah sehingga potensial digunakan sebagai minuman sehat dalam penganekaragaman pangan berbasis sumber daya lokal dengan inovasi rasa yang dapat diterima. Tujuan penelitian ini adalah untuk memperoleh hasil *infused water* lemon yang terbaik berdasarkan lama perendaman jahe merah yang memiliki sifat kimia (antioksidan polifenol, pH, dan vitamin C) tertinggi dan disukai panelis.

Penelitian ini menggunakan rancangan acak lengkap dengan perlakuan variasi lama perendaman jahe selama 6, 9 dan 12 jam. Jahe yang digunakan adalah jahe merah dengan ketebalan irisan yang seragam sebesar 0,5 cm. Irisan jahe dan lemon ditimbang sebanyak 100 g kemudian dimasukkan ke dalam wadah dan ditambahkan air hingga 1 L lalu dilakukan perendaman dengan variasi waktu di dalam *refrigerator*. Analisa yang dilakukan adalah analisa kimia *infused water* setelah perendaman. Data yang diperoleh dilakukan analisa varian (ANOVA) dengan tingkat kepercayaan 95%. Apabila beda nyata masing-masing perlakuan dilanjutkan dengan uji lanjut menggunakan uji *Duncan Multiple Range Test* (DMRT) untuk mengetahui hubungan pada setiap perlakuan.

Hasil penelitian menunjukkan bahwa pengaruh variasi lama perendaman jahe merah berpengaruh nyata pada kadar antioksidan dan kadar vitamin C didukung dengan kadar pH yang rendah pada *Infused water* lemon. *Infused water* lemon yang terbaik memiliki kadar antioksidan sebesar 243,9 µg/ml dan kadar vitamin C sebesar 22,69 mg/g. Hasil terbaik dari kadar antioksidan dan vitamin C didukung oleh pH *infused water* yang rendah sebesar 3,10 H⁺. Ketiga hasil tersebut didapatkan dari *infused water* lemon dengan perendaman jahe merah selama 12 jam. Berdasarkan hasil uji kesukaan penambahan jahe merah berpengaruh nyata pada kesukaan panelis terhadap rasa *infused water* lemon, namun tidak berpengaruh nyata pada kesukaan panelis terhadap aroma, warna, keasamam, kekeruhan dan keseluruhan *infused water* lemon yang dihasilkan. Panelis menyukai *infused water* lemon dengan lama perendaman jahe merah selama 9 jam dari segi rasa. Pada aroma, warna, keasamam, kekeruhan dan keseluruhan kesukaan panelis kalah dominan sehingga kesukaan panelis tidak berbeda nyata disetiap perlakuan.

Kata kunci : *Infused Water* lemon, Jahe Merah, Ketebalan Irisan dan Lama Perendaman

The Effect Of Variations In The Duration Immersion Of Red Ginger On Chemical Properties And Preference Level of Infused Water Lemon

Abstract

Lemon infused water is made through the stages of sorting, washing, stripping, cutting, weighing and soaking. The content of antioxidants and vitamin C in Infused water lemon is quite high and the price is relatively cheap so that it is potentially used as a healthy drink in food diversification based on local resources with acceptable flavor innovations. The purpose of this study was to obtain the best infused water lemon results based on the long soaking of red ginger which has the highest chemical properties (antioxidant polyphenols, pH, and vitamin C) and is preferred by panelists.

This study uses a completely randomized design with treatment long variation of ginger soaking for 6, 9 and 12 hours. The ginger used is red ginger with a uniform thickness of 0.5 cm. The sliced ginger and lemon are weighed as much as 100 g then put into a container and added up to 1 L of water and then soaking with time variations in the refrigerator. The analysis is a chemical analysis of infused water after immersion. Data obtained were analyzed for variance (ANOVA) with a confidence level of 95%. If the real difference in each treatment continued with further tests using the Duncan Multiple Range Test (DMRT) to determine the relationship at each treatment.

The results showed that the effect of variations in the duration of red ginger immersion significantly affected antioxidant levels and vitamin C levels supported by low pH levels in infused lemon water. The best infused lemon water has anticosidan levels of 243.9 µg/ml and vitamin C levels of 22.69 mg / g. The best results from antioxidant and vitamin C levels are supported by a low infused water pH of 3.10 H +. All three results were obtained from infused lemon water with red ginger soaking for 12 hours. Based on the test results, the addition of red ginger has a significant effect on the preference of panelists for the taste of infused water lemon, but it has no significant effect on the preference of the panelists for the aroma, color, acidity, turbidity and overall infused water lemon produced. Panelists like infused lemon water with a long soaking of red ginger for 9 hours in terms of taste. In the aroma, color, acidity, turbidity and overall preference of the panelists were less dominant so that the panelists' preferences were not significantly different in each treatment.

Keywords: Infused Lemon Water, Red Ginger, Sliced Thickness and Soaking Time

