

PENGARUH LAMA FERMENTASI TERHADAP KADAR ASAM DAN KARAKTERISTIK FISIKA (Uji Organoleptik) PADA KOMBUCHA TEH RIMPANG ALANG-ALANG (*Imperata cylindrica*)

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Abstrak

Rimpang alang-alang memiliki kandungan berkhasiat yang dapat digunakan sebagai bahan minuman dan obat-obatan. Rimpang alang-alang dapat dijadikan sebagai bahan alternatif dalam pembuat minuman teh. Teh rimpang alang-alang (*Imperata cylindrica*) yang diolah dengan menggunakan metode *black tea* dapat memberikan manfaat baik untuk kesehatan tubuh. Untuk lebih meningkatkan manfaat teh hitam rimpang alang-alang maka dibuat menjadi kombucha teh rimpang alang-alang yang mengalami proses fermentasi oleh kultur kombucha atau disebut dengan SCOBY (*Symbiotic Culture Of Bacteria and Yeast*). Penelitian ini bertujuan untuk mengetahui pengaruh lama waktu fermentasi kombucha teh rimpang alang-alang terhadap kadar asam total, kadar gula dan kadar PH serta uji organoleptik.

Jenis penelitian ini adalah penelitian quasi eksperimen. Percobaan yang dilakukan dengan menggunakan 3 perlakuan berbeda dengan menggunakan kontrol penelitian. Perlakuan tersebut dilakukan bertahap mulai fermentasi 2 hari (P1), 4 hari (P2) dan 6 hari (P3). Hasil dari fermentasi diuji kadar asam total (TAT), Kadar Gula Terukur dan Kadar ph total serta uji organoleptik . Data hasil uji kadar asam total, Kadar gula dan pH dianalisis dengan uji statistik regresi dan korelasi. Sedangkan untuk analisa data organoleptik menggunakan uji statistik Chi-Square.

Perbedaan lama waktu fermentasi berdasarkan uji regresi dan korelasi memiliki hubungan yang kuat secara signifikan terhadap kadar asam total, kadar gula dan kadar pH total. Semakin lama waktu fermentasi dapat meningkatkan kadar asam tertitiasi pada kombucha rimpang alang-alang.

Kata kunci : kombucha, rimpang alang-alang (*Imperata cylindrica*), total asam, kadar gula, kadar pH, organoleptik

THE EFFECT OF LONG FERMENTATION ON ACID LEVEL AND PHYSICS CHARACTERISTICS (Organoleptic Test) ON KOMBUCHA TEH RIMPANG ALANG-ALANG (*Imperata cilindrica*)

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Abstract

Alang-alang rhizome has nutritious ingredients that can be used as a beverage and medicine. Imperata rhizome can be used as an alternative ingredient in making tea drinks. Alang-alang rhizome tea (Imperata cilindrica) which is processed using black tea method can provide good benefits for body health. To further enhance the benefits of alang-alang rhizome black tea, it is made into kombucha alang-alang rhizome tea which undergoes a fermentation process by kombucha culture or called SCOBY (Symbiotic Culture Of Bacteria and Yeast). This study aims to determine the effect of kombucha teh fermentation time of reeds on total acid levels, sugar content and PH levels and organoleptic tests .

This type of research is quasi-experimental study. Experiments were carried out using 3 different treatments using research control. The treatment was carried out gradually starting 2 days fermentation (P1), 4 days (P2) and 6 days (P3). The results of fermentation were tested for total acid content (TAT), measured sugar content and total pH levels and organoleptic tests. Data from total acid content, sugar content and pH were analyzed using regression and correlation statistical tests. As for the analysis of organoleptic data using Chi-Square statistical test.

The difference in fermentation time based on regression and correlation tests has a significant strong relationship to total acid levels, sugar content and total pH levels. The longer the fermentation time can increase titrated acid levels in the kombucha reeds.

Keywords : kombucha, alang-alang rhizome (*Imperata cilindrica*), total acid, sugar content, pH level, organoleptic