

Pengaruh Variasi Suhu dan Waktu Penyimpanan Terhadap Kadar Alkohol Pada Nira Aren (*Arenga pinnata*)

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ABSTRAK

Nira aren merupakan hasil fermentasi mikroorganisme yang dapat mengubah glukosa menjadi alkohol. Alkohol berperan sebagai sumber kalori bagi manusia. namun, jika dikonsumsi secara terus menerus dapat mengakibatkan bahaya keracunan (toksisitas) dan berefek buruk terhadap kesehatan. Tujuan penelitian ini adalah untuk mengetahui pengaruh variasi temperatur dan waktu penyimpanan terhadap kadar alkohol pada nira aren. Objek penelitian ini adalah nira aren yang diberi perlakuan variasi suhu 4, 28 dan 50 °C dengan lama penyimpanan 3, 6 dan 9 hari. Hasil penelitian didapatkan kadar alkohol yang signifikan pada suhu 28 dengan lama penyimpanan 3, 6 dan 9 hari dimana hasilnya berturut-turut yaitu 70,16 %v/v; 71,52 % v/v; dan 73,06 %v/v. Uji statistik Anova menunjukkan p value $0,001 < 0,05$ sehingga dapat disimpulkan bahwa ada pengaruh variasi suhu dan waktu penyimpanan terhadap kadar alkohol pada nira aren.

Kata kunci : Nira Aren, Alkohol

The Influence of Temperature and Storage Time Variations on Alcohol Levels on Aromatic Nira (*Arenga pinnata*)

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ABSTRACT

Palm juice is the result of fermentation of microorganisms that can convert glucose into alcohol. Alcohol acts as a source of calories for humans. however, if consumed continuously can cause danger of poisoning (toxicity) and have a bad effect on health. The purpose of this study was to determine the effect of temperature variation and storage time on alcohol content in palm sap. This research was conducted at the Chemical Laboratory of the Faculty of Science and Technology of the Alauddin State Islamic University in Makassar which was held in May-April 2018. The object of this research was palm sap which was treated with temperature variations of 4, 28 and 50 °C with a storage time of 3, 6 and 9 days . The results obtained were significant alcohol content at a temperature of 28 with a storage time of 3, 6 and 9 days where the results were respectively 70.16% v / v; 71.52% v / v; and 73.06% v / v. Annova statistic test shows p value $0.001 < 0.05$ so it can be concluded that there is influence of temperature variation and storage time on alcohol content in palm sap.

Keywords: Palm juice, alcohol