

ABSTRAK

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Program Studi : Farmasi
Judul : Kadar Vitamin C Dan Alkohol Pada Fermentasi Kombucha
Buah Sirsak (*Annona muricata* L)

Kombucha merupakan produk minuman fermentasi yang mengandung berbagai vitamin (B1, B2, B3, B6, B12, B9 dan Vit C), mineral, enzim dan asam organik yang difermentasi oleh sekelompok bakteri dan khamir seperti kombinasi bakteri *Acetobacter xylinum* dan yeast (*Saccharomyces ludwigii*, *Saccharomyces bisporus*, *Zygosaccharomyces* sp dan *Torolupsis* sp). Kombucha umumnya dibuat dari larutan teh akan tetapi pada penelitian ini kombucha dibuat menggunakan sari buah sirsak. Penelitian ini bertujuan untuk mengetahui jumlah kadar vitamin C dan Kadar Alkohol yang terkandung dalam fermentasi kombucha buah sirsak dengan waktu fermentasi yang berbeda yakni; hari ke-0, hari ke-6 dan hari ke-12. Kadar Vitamin C kombucha buah sirsak di analisa menggunakan instrumen High Performance Liquid Chromatography (HPLC) sedangkan kadar Alkohol di analisa menggunakan Gas Chromatography (GC). Hasil penelitian pada fermentasi hari ke-0 diperoleh kadar 0 mg/mL, fermentasi hari ke-6 diperoleh kadar 0,52 mg/mL, dan pada hari ke-12 diperoleh kadar 0 mg/mL. Sedangkan kadar Alkohol pada fermentasi hari ke-0 diperoleh kadar 0,2%, pada hari ke-6 diperoleh kadar 4,51% sedangkan pada fermentasi hari ke-12 diperoleh kadar Alkohol 2,99%.

Kata kunci: *Annona muricata* L, Gas Chromatography, High Performance Liquid Chromatography, Kombucha.

ABSTRACT

Name : Maria Romian Putri Sinaga
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Title : Levels of Vitamin C and Alcohol in Fermented Kombucha
Soursop Fruit (*Annona muricata* L)

Kombucha is a fermented beverage product containing various vitamins (B1, B2, B3, B6, B12, B9 and Vit C), minerals, enzymes and organic acids that are fermented by a group of bacteria and yeasts such as the combination of *Acetobacter xylinum* and yeast (*Saccharomyces ludwigii*, *Saccharomyces bisporus*, *Zygosaccharomyces* sp and *Torolupsis* sp). Kombucha is generally made from a tea solution, but in this study kombucha was made using soursop juice. This study aims to determine the amount of vitamin C and alcohol content contained in soursop fruit kombucha fermentation with different fermentation times, namely; day 0, day 6 and day 12. The levels of Vitamin C in soursop fruit kombucha were analyzed using the High Performance Liquid Chromatography (HPLC) instrument while the alcohol content was analyzed using Gas Chromatography (GC). The results of the experiment on day 0 fermentation obtained levels of 0 mg/mL, on day 6 fermentation obtained levels of 0.52 mg/mL, and on day 12 obtained levels of 0 mg/mL. While the alcohol content on the 0th day of fermentation was 0.2%, on the 6th day it was 4.51%, while on the 12th day of fermentation, the alcohol content was 2.99%.

Keywords: *Annona muricata* L, Gas Chromatography, High Performance Liquid Chromatography, Kombucha