

PENGARUH JENIS KEMASAN TERHADAP TOTAL KHAMIR DAN DAYA SIMPAN GULA AREN CAIR

[The Effect of The Type of Packaging on The Total Yeast and The Storage Capacity of Liquid Palm Sugar]

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ABSTRACT

This study aims to determine the effect of the type of packaging on the total yeast and the storage capacity of liquid palm sugar. The method used is an experimental method in a laboratory with a randomized block design (RAK) consisting of two factors, namely the type of packaging (glass and plastic bottles) and storage time (0, 15, and 30 days). Parameters observed included total yeast test, pH, total dissolved solids, viscosity and water content of liquid palm sugar. Observational data were analyzed with analysis of variance (Analysis of Variance) at 5% significance level using Co-stat software. Significantly different data were further tested with the Honest Significant Difference (BNJ) test. The results showed that the interaction between the type of packaging and storage time gave significantly different results to the physicochemical parameters (pH, total dissolved solids, water content and viscosity) of liquid palm sugar on days 0, 15 and 30. Total liquid palm sugar yeast packaged in glass and plastic bottles on day 0 of storage showed a relatively low growth ($<1.0 \times 10^2$ CFU/ml), while on the 15 and 30 days of storage, the total liquid palm sugar yeast increased slightly total yeast with glass bottle type treatment is lower than plastic packaging type treatment. Treatment of the type of glass bottle packaging with a storage period of 30 days is able to maintain the quality of liquid palm sugar based on microbiological and physicochemical parameters.

Key words: *Liquid palm sugar, storage time, type of packaging.*

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh jenis kemasan terhadap total khamir dan daya simpan gula aren cair. Metode yang digunakan adalah metode eksperimental di laboratorium dengan rancangan acak kelompok (RAK) terdiri dari dua faktor yaitu jenis kemasan (botol kaca dan plastik) dan lama penyimpanan (0, 15, dan 30 hari). Parameter yang diamati meliputi uji total khamir, pH, total padatan terlarut, viskositas dan kadar air gula aren cair. Data hasil pengamatan di analisis dengan analisis keragaman (*Analysis of Varians*) pada taraf nyata 5% dengan menggunakan software Co-stat. Data yang berbeda nyata diuji lanjut dengan uji Beda Nyata Jujur (BNJ). Hasil penelitian menunjukkan bahwa interaksi antara perlakuan jenis kemasan dan lama penyimpanan memberikan hasil yang berbeda nyata terhadap parameter fisikokimia (pH, total padatan terlarut, kadar air dan viskositas) gula aren cair pada hari ke-0, 15 dan 30. Total khamir gula aren cair yang dikemas dengan botol kaca dan plastik pada penyimpanan hari ke-0 menunjukkan pertumbuhan yang relatif rendah ($<1,0 \times 10^2$ CFU/ml), sementara pada penyimpanan hari ke-15 dan 30, total khamir gula aren cair sedikit mengalami peningkatan, total khamir dengan perlakuan jenis kemasan botol kaca lebih rendah dibandingkan dengan perlakuan jenis kemasan plastik. Perlakuan jenis kemasan botol kaca dengan lama penyimpanan 30 hari mampu mempertahankan kualitas gula aren cair berdasarkan parameter mikrobiologi dan fisikokimia.

Kata kunci: Gula Cair Aren, Lama Penyimpanan, Jenis Kemasan.