PENGARUH SUHU PENYIMPANAN DAN PENAMBAHAN EKSTRAK KUNYIT PUTIH TERHADAP BILANGAN *THIOBARBITURIC ACID, CREAMING INDEX*, DAN VISKOSITAS SANTAN PASTEURISASI SELAMA PENYIMPANAN

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ABSTRAK

Latar Belakang: Santan pasteurisasi merupakan produk santan dengan proses pemanasan suhu 75°C selama ±31,2 menit. Santan rentan mengalami kerusakan fisik (stabilitas emulsi dan viskositas) maupun ketengikan. Adanya penambahan ekstrak kunyit putih dan penerapan suhu penyimpanan yang tepat diharapkan dapat memperbaiki mutu produk.
Tujuan: Menganalisis pengaruh suhu penyimpanan dan penambahan ekstrak kunyit putih terhadap bilangan *thiobarbituric acid* (TBA), *creaming index*, dan viskositas santan pasteurisasi selama penyimpanan.
Metode: Penelitian menggunakan Rancangan Acak Lengkap dua faktorial dengan 3 pengulangan secara triplo yaitu penambahan ekstrak kunyit putih (kontrol dan perlakuan kunyit) dan suhu penyimpanan (suhu ruang dan suhu dingin). Uji dilakukan pengamatan pada hari ke-0, ke-1, ke-4, dan ke-7 untuk TBA, *creaming index*, dan viskositas. Data diuji dengan *Kruskal-Wallis*.
Hasil: Hasil analisis menunjukkan perlakuan kunyit dapat menekan laju bilangan TBA pada suhu dingin. Bilangan TBA kontrol hari ke-7 1,60±0,69 mg MDA/kg sedangkan perlakuan kunyit hari ke-7 1,27±0,13 mg MDA/kg. Stabilitas emulsi semua perlakuan stabil pada suhu dingin dengan *creaming index* 0%, namun pada suhu ruang terjadi penurunan. Nilai viskositas pada hari ke-0 perlakuan kunyit lebih besar (2680,33 ±702,53 cP) dibandingkan kontrol (1696,78 ± 133,59 cP).
Kesimpulan: Terdapat perbedaan signifikan dari suhu penyimpanan dan penambahan ekstrak kunyit putih terhadap bilangan TBA, *creaming index*, dan viskositas santan pasteurisasi selama penyimpanan 7 hari.

Kata Kunci: Santan pasteurisasi, ekstrak kunyit putih, suhu penyimpanan, TBA, *creaming index*, viskositas

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EFFECT OF STORAGE TEMPERATURE AND ADDITION WHITE TURMERIC EXTRACT ON THIOBARBITURIC ACID NUMBER, CREAMING INDEX, AND VISCOSITY IN PASTEURIZED COCONUT MILK DURING STORAGE

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ABSTRACT

Background: Pasteurized coconut milk is a coconut milk product with heating process (75°C for ±31.2 minutes). Coconut milk is susceptible to physical damage (emulsion stability and viscosity) and rancidity. The addition of white turmeric extract and proper application of storage temperature is expected to improve product quality.
Objective: To analyzed the effect of storage temperature and addition white turmeric extract on thiobarbituric acid (TBA) number, creaming index, and viscosity in pasteurized coconut milk during storage.
Methods: This study was a completely randomized design of two factor with 3 replications, namely the addition of white turmeric extract [control (0%) and turmeric treatment (0,6%)] and storage temperature (room temperature and cold temperature). The test was observed at 0, 1, 4, and 7 days for TBA, creaming index, and viscosity. Data was analyzed using Kruskal-Wallis.
Results: The results of the analysis shows that turmeric treatment could reduce the rate of TBA number at cold temperatures. The TBA number on the 7th day of treatment was 1,60±0,69 mg MDA/kg, while the 7th day of turmeric treatment was 1,27±0,13 mg MDA/kg. The emulsion stability of all treatments was stable at cold temperatures with a creaming index of 0%, but at room temperature there was decrease. The viscosity value on the 0th day of turmeric treatment was higher (2680,33 ±702,53 cP) than control (1696,78 ± 133,59 cP).
Conclusion: There is a significant difference between the storage temperature and the addition of white turmeric extract on the TBA number, creaming index, and viscosity of pasteurized coconut milk during 7 days of storage.

Keywords: Pasteurized coconut milk, white turmeric extract, storage temperature, TBA, creaming index, viscosity

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