

ABSTRAK

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PENGARUH WAKTU FERMENTASI DAN PENAMBAHAN PUREE NANAS TERHADAP MUTU YOGHURT SANTAN KELAPA

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(xiv+68 halaman, 20 gambar, 9 tabel, 18 lampiran)

Santan kelapa dapat dijadikan alternatif untuk menggantikan susu sapi dalam pembuatan yoghurt, sehingga semua individu dapat tetap mendapatkan manfaat probiotik dalam yoghurt. Penambahan puree nanas dapat meningkatkan kualitas mutu dari yoghurt santan kelapa. Tujuan dari penelitian ini adalah mengetahui pengaruh waktu fermentasi serta penambahan puree nanas terhadap kualitas yoghurt santan kelapa. Analisis yang dilakukan terhadap yoghurt santan kelapa, meliputi total bakteri asam laktat (BAL), angka lempeng total (ALT), nilai pH, keasaman, daya ikat air, viskositas, dan kadar lemak dari yoghurt santan kelapa. Yoghurt santan kelapa dibuat dengan dengan faktor perlakuan waktu fermentasi (20, 24, 28, 32 jam). Yoghurt santan kelapa yang terpilih adalah yoghurt dengan waktu fermentasi 24 jam memiliki total BAL sebesar $9,0 \times 10^6$ CFU/g, nilai pH sebesar $4,445 \pm 0,012$, keasaman $0,461 \pm 0,082\%$, daya ikat air $72,82 \pm 0,034\%$, dan viskositas $2547 \pm 64,48$ cP. Waktu fermentasi 24 jam diaplikasikan dalam pembuatan yoghurt santan kelapa dengan penambahan puree nanas (0%, 4%, 8%, dan 12%). Yoghurt santan kelapa dengan 12% puree nanas memberikan hasil terpilih dengan daya ikat air tertinggi, yaitu sebesar $79,25 \pm 0,14\%$. Kenaikan konsentrasi puree nanas menurunkan nilai pH sementara tidak memberikan pengaruh signifikan terhadap total BAL dan keasaman. Viskositas yoghurt santan kelapa yang ditambahkan puree nanas mengalami kenaikan signifikan seiring dengan kenaikan konsentrasi puree nanas. Penambahan puree nanas mampu meningkatkan kualitas dari yoghurt santan kelapa. Komposisi asam lemak tertinggi dalam yoghurt santan kelapa dengan penambahan 12% puree nanas adalah asam laurat, yaitu sebesar 64,32%.

Kata Kunci : nanas, santan, yoghurt nabati, waktu fermentasi, konsentrasi puree

Referensi : 100 (2003-2020)

ABSTRACT

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INFLUENCE OF FERMENTATION TIME AND ADDITION OF PINEAPPLE PUREE ON QUALITY OF COCONUT MILK YOGHURT

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Coconut milk can be used as an alternative to substitute dairy milk in yoghurt making, so that all individuals may enjoy the benefits of probiotics in yoghurt. Additions of pineapple puree will enhance the quality of coconut milk yoghurt. The objective of the research was to study the influence of fermentation time and addition of pineapple puree on quality of coconut milk yoghurt. The analysis performed on coconut milk yoghurt was total lactic acid bacteria, total plate count (TPC), pH value, water holding capacity, viscosity, and fat content. Coconut milk yoghurt was made using fermentation time factor (20, 24, 28, and 32 hours). The selected coconut milk yoghurt was the one with 24 hours fermentation time, with total lactic acid bacteria $9,0 \times 10^6$ CFU/g, pH $4,445 \pm 0,012$, acidity $0,461 \pm 0,082\%$, water holding capacity $72,82 \pm 0,034\%$, and viscosity $2547 \pm 64,48$ cP. The 24 hours fermentation time was applied in making coconut milk yoghurt with addition of pineapple puree (0%, 4%, 8%, dan 12%). Coconut milk yoghurt with addition of 12% pineapple puree gave the selected results with the highest water holding capacity, which was $79,25 \pm 0,14\%$. Increase level of pineapple puree in coconut milk yoghurt showed significantly lower the pH value, but did not show significant effect on total lactic acid bacteria and acidity. Viscosity significantly increased with increasing pineapple puree amount. Addition of pineapple puree can improve the quality of coconut milk yoghurt. 64,32% of the total fatty acid in coconut milk yoghurt with addition of 12% pineapple puree recognized as lauric acid.

Keywords : Pineapple, coconut milk, plant-based yoghurt, fermentation time, puree concentration

References : 100 (2003-2020)