

PENGARUH PENAMBAHAN GULA AREN (*Arenga Pinnata*) TERHADAP MUTU YOGHURT KACANG KOMAK (*Lablab purpureus* (L.) Sweet)

(THE EFFECT OF ADDING PALM SUGAR (*Arenga pinnata*) ON THE QUALITY OF YOGHURT KOMAK BEAN (*Lablab purpureus* (L.) Sweet)

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ABSTRACT

*Yoghurt is a fermented milk product that utilizes the activity of lactic acid bacteria. This study aims to determine the effect of the concentration of the addition of palm sugar (*Arenga pinnata*) on the quality of yoghurt from the Komak bean (*Lablab purpureus* (L.) Sweet). The method used in this study was an experimental method with a single factor Completely Randomized Design (CRD), namely the addition of palm sugar as much as 0%; 2.5%; 5%; 7.5%; 10%; 12.5%. Parameters observed were microbiological quality (total Lactic acid bacteria (LAB) and viability Lactic acid bacteria (LAB)), chemical quality (total lactic acid and pH), physical quality (color) and organoleptic quality (aroma, taste, color, viscosity). Observational data were analyzed by analysis of variance (Analysis of Variance) with a significant level of 5% using Co-Stat software. If there are significantly different results, a follow-up test is carried out with the Honest Significant Difference (BNJ) follow-up test. The results showed that the addition of palm sugar concentration had significantly different effects on total Lactic acid bacteria (LAB), viability Lactic acid bacteria (LAB), total lactic acid, pH, color, and organoleptic quality of aroma (hedonic), taste (hedonic and scoring), color (scoring) and viscosity (hedonic and scoring). Komak bean yoghurt with the addition of 12.5% palm sugar was the best treatment based on a total value (BAL) of 9.93 log CFU/mL, viability (BAL) of 0.03 log CFU/mL, total lactic acid value of 1.38%, value of pH 4.07, color (°Hue) value 81.51 and organoleptic quality acceptable to panelists.*

Keywords: *Yoghurt, komak bean, palm sugar, fermentation*

ABSTRAK

Yoghurt adalah produk olahan fermentasi susu yang memanfaatkan aktivitas bakteri asam laktat. Penelitian ini bertujuan untuk mengetahui pengaruh konsentrasi penambahan gula aren (*Arenga pinnata*) terhadap mutu yoghurt kacang komak (*Lablab purpureus* (L.) Sweet). Metode yang digunakan dalam penelitian ini adalah metode eksperimental dengan Rancangan Acak Lengkap (RAL) faktor tunggal yaitu penambahan gula aren sebanyak 0%; 2,5%; 5%; 7,5%; 10%; 12,5%. Parameter yang diamati yaitu mutu mikrobiologi (Total BAL dan Viabilitas BAL), mutu kimia (Total asam laktat dan pH), mutu fisik (warna) dan mutu organoleptik (aroma, rasa, warna, kekentalan). Data hasil pengamatan dianalisis dengan analisis keragaman (*Analysis of Variance*) dengan taraf nyata 5% dengan menggunakan software *Co-Stat*. Apabila terdapat hasil yang berbeda nyata dilakukan uji lanjut dengan uji lanjut Beda Nyata Jujur (BNJ). Hasil penelitian menunjukkan bahwa penambahan konsentrasi gula aren memberikan pengaruh yang berbeda nyata terhadap total (BAL), viabilitas (BAL), total asam laktat, pH, warna, serta mutu organoleptik aroma (hedonik), rasa (hedonik dan skoring), warna (skoring) dan kekentalan (hedonik dan skoring). Yoghurt kacang komak dengan penambahan gula aren 12,5% merupakan perlakuan terbaik berdasarkan nilai total (BAL) 9,93 log CFU/mL, viabilitas (BAL) 0,03 log CFU/mL, nilai total asam laktat 1,38%, nilai pH 4,07, nilai (°Hue) warna 81,51 serta mutu organoleptik yang masih dapat diterima panelis.

Kata kunci: Yoghurt, kacang komak, gula aren, fermentasi