

**PENGARUH KONSENTRASI SUSU SKIM TERHADAP MUTU KIMIA, MIKROBIOLOGI DAN
ORGANOLEPTIK
YOGURT SARI KACANG MERAH
(*Phaseolus vulgaris* L.)**

[*The Effect from Skim Milk Concentration on Chemical, Microbiological and Organoleptic Qualities of Red Beans Juice Yoghurt (Phaseolus vulgaris L.)*]

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ABSTRACT

*This study aimed to determine the effect of skim milk concentration on the chemical, microbiological and organoleptic qualities of red beans juice yoghurt (*Phaseolus vulgaris* L.). The method used in this study was an experimental method with a single factor Completely Randomized Design (CRD) namely skim milk concentration of 0%, 3%, 6%, 9%, 12%, 15%. Observed parameters were chemical quality (total acid), microbiological quality (total lactic acid bacteria (LAB)), physical quality (viscosity), and organoleptic qualities (color, taste, aroma and texture). Observational data were analyzed by analysis of variance with a significance level of 5% using Co-Stat. If they were significantly different, further tests of orthogonal polynomials (chemical and physical parameters) were carried out. Honest Significant Difference Test (HSD) (organoleptic parameters), while the microbiological parameters were analyzed by Orthogonal Polynomial method. The results showed that the concentration of skim milk had a significantly different effect on total lactic acid bacteria, total acid, viscosity, color and organoleptic properties of red beans yoghurt. Red beans juice yoghurt concentration of 15% skimmed milk was the best treatment based on total lactic acid bacteria 9.33 log CFU/ml, total acid 1.55%, viscosity 4333 cP, and as well as organoleptic both hedonic which is the most preferred by the panelists and scoring with the criteria of color "yellow red", "slightly sour" aroma, "slightly sour" taste, and "slightly thick" viscosity that can be accepted by the panelists.*

Keywords : Red beans juice, Skim milk, Yoghurt.

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh konsentrasi susu skim terhadap mutu kimia, mikrobiologi dan organoleptik yogurt sari kacang merah (*Phaseolus vulgaris* L.). Metode yang digunakan dalam penelitian ini adalah metode eksperimental dengan Rancangan Acak Lengkap (RAL) faktor tunggal yaitu konsentrasi susu skim 0%, 3%, 6%, 9%, 12%, 15%. Parameter yang diamati yaitu mutu kimia (total asam), mutu mikrobiologi (total bakteri asam laktat (BAL)), mutu fisik (viskositas), dan mutu organoleptik (warna, rasa, aroma dan kekentalan). Data hasil pengamatan dianalisis dengan analisis keragaman taraf nyata 5% menggunakan Co-Stat. apabila berbeda nyata dilakukan uji lanjut polinomial ortogonal (parameter kimia). Uji Beda Nyata Jujur (BNJ) (parameter organoleptik), sedangkan untuk parameter mikrobiologi dianalisis secara deskriptif. Hasil penelitian menunjukkan konsentrasi susu skim memberikan pengaruh yang berbeda nyata terhadap total bakteri asam laktat, total asam, viskositas, warna dan organoleptik terhadap yogurt sari kacang merah. Yogurt sari kacang merah dengan konsentrasi susu skim 15% merupakan perlakuan terbaik berdasarkan total bakteri asam laktat 9,33 log CFU/ml, total asam 1,55%, viskositas 4333 cP, serta organoleptik baik hedonik yang paling disukai panelis maupun skoring dengan kriteria warna "kuning merah", aroma "agak asam", rasa "agak asam", dan kekentalan "agak kental" yang dapat diterima oleh panelis.

Kata Kunci : Sari kacang merah, Susu skim, Yogurt.