

PENGARUH PERBANDINGAN SARI JAGUNG PULUT DAN SUSU SKIM TERHADAP KOMPONEN MUTU *YOGHURT* JAGUNG PULUT (*Zea mays ceratina*)

*[The Effect of Waxy Corn and Skim Milk Ratio on The Quality of Waxy Corn Yoghurt (*Zea mays ceratina*)]*

Yuliatin Hasfiani¹⁾, Sri Widyastuti²⁾*, Baiq Rien Handayani²⁾,

¹⁾ Mahasiswa Fakultas Teknologi Pangan dan Agroindustri, Universitas Mataram

²⁾ Staff Pengajar Fakultas Teknologi Pangan dan Agroindustri, Universitas Mataram

*email: sriwidyastuti@unram.ac.id

ABSTRACT

Yoghurt made from waxy corn is a type of food diversification that have a health effect. Waxy corn has good nutritional content, but its processed products are still limited. The aim of this study was to determine the effect of ratio between the extract of waxy corn and skim milk on the quality of yoghurt. This study used Completely Randomized Design (CRD) with a single factor i.e. ratio of corn extract and skim milk which consisted of 85% : 0%, 80% : 5%, 75% : 10%, 70% : 15%, 65% : 20%, and 60% : 25% with 3 replications to obtain 18 experimental units. The parameters tested were total number of lactic acid bacteria, viability of probiotic, total acidity, pH, viscosity and sensory (aroma, taste and color). Observational data were analyzed using analysis of variance with a significance level of 5% using Co-Stat. The significant data were further tested with the Honestly Significant Difference Test (BNJ). The results showed that the ratio of extracts waxy corn and skim milk had a significantly different effect on the total number of lactic acid bacteria, viability of probiotic, pH, viscosity, and sensory value of waxy corn yoghurt. It is recommended to use ratio of 75% : 10% waxy corn extract and skim milk to obtain yoghurt with the following characteristics total number of lactic acid bacteria 11.23 log CFU/mL, the viability of probiotic with storage 4 hours 10.25 log CFU/mL, total acidity 0.63%, pH 4.74, viscosity 460 cP and sensory sensory value by scoring and hedonic were accepted.

Keywords: skim milk, waxy corn, extract, yoghurt

ABSTRAK

Yoghurt berbahan baku jagung pulut termasuk salah satu bentuk diversifikasi pangan yang dapat memberikan efek kesehatan bagi tubuh. Jagung pulut memiliki kandungan nutrisi yang baik namun pengolahannya masih terbatas. Penelitian ini bertujuan untuk mengetahui pengaruh perbandingan sari jagung pulut dan susu skim terhadap mutu *yoghurt* jagung pulut. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) faktor tunggal yaitu perbandingan sari jagung pulut dan susu skim dengan perbandingan 85% : 0%, 80% : 5%, 75% : 10%, 70% : 15%, 65% : 20%, dan 60% : 25% dengan 3 kali ulangan sehingga diperoleh 18 unit percobaan. Parameter yang diuji yaitu total bakteri asam laktat, viabilitas probiotik BAL, total asam, derajat keasaman (pH), viskositas dan organoleptik (aroma, rasa dan warna). Data hasil pengamatan dianalisis menggunakan analisis keragaman dengan taraf nyata 5% menggunakan Co-Stat. Data yang berbeda nyata diuji lanjut dengan Uji Beda Nyata Jujur (BNJ). Hasil penelitian menunjukkan bahwa perbandingan sari jagung pulut dan susu skim memberikan pengaruh yang berbeda nyata terhadap total bakteri asam laktat, viabilitas BAL pada garam empedu dengan penyimpanan selama 0 jam dan 4 jam, pH, viskositas dan organoleptik *yoghurt* jagung pulut. Direkomendasikan perlakuan perbandingan sari jagung pulut dan susu skim untuk mendapatkan *yoghurt* dengan karakteristik total BAL 11,23 log CFU/mL, viabilitas BAL pada garam empedu dengan penyimpanann 4 jam 10,25 log CFU/mL total asam 0,63%, pH 4,74 dan viskositas 460 cP serta mutu sensoris secara skoring dan hedonik yang diterima.

Kata kunci: sari, jagung pulut, susu skim, *yoghurt*