

PENGARUH PENAMBAHAN TEPUNG PORANG (*Amorphophallus oncophyllus*) TERHADAP KUALITAS SUSU ACIDOPHILUS

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INTISARI

Tujuan penelitian ini untuk mengetahui pengaruh persentase penambahan tepung porang terhadap kualitas susu acidophilus. Perlakuan yang diberikan adalah penambahan tepung porang dengan konsentrasi 0%, 0,1%, 0,2% dan 0,3% (b/v). Parameter yang diamati adalah kualitas mikrobiologis meliputi total *Lactobacillus acidophilus* dan total bakteri, kualitas kimia yaitu pH, persentase keasaman, dan total padatan, kualitas fisik meliputi viskositas dan persentase sineresis, serta kualitas sensoris meliputi tekstur, warna, rasa, aroma dan daya terima. Analisis data dilakukan dengan analisis variansi (ANOVA) pola searah, dilanjutkan uji Duncan's New Multiple Range Test (DMRT) dengan menggunakan tiga kali ulangan. Hasil penelitian menunjukkan bahwa penambahan tepung porang berpengaruh nyata ($P < 0,05$) terhadap viskositas, persentase keasaman, tekstur serta rasa susu acidophilus, namun tidak memberikan pengaruh terhadap total *Lactobacillus acidophilus*, total bakteri, nilai pH, kadar air, total padatan, sineresis, warna dan daya terima. Susu acidophilus dengan penambahan tepung porang memiliki rerata total *Lactobacillus acidophilus* 7,65 log cfu/ml, total bakteri 7,19 log cfu/ml, nilai pH 4,19, keasaman 0,82%, total padatan 14,16% \pm 3,01, viskositas 1667 cP serta persentase sineresis 18,01%. Rerata hasil uji sensoris untuk aroma sebesar 3,36 \pm 0,84, warna 3,55 \pm 0,72, rasa 3,86 \pm 0,72, tekstur 2,93 \pm 0,95, dan daya terima 3,10 \pm 0,89. Kesimpulannya, semakin tinggi persentase penambahan tepung porang sampai 0,3% dapat meningkatkan viskositas, persentase keasaman, tekstur dan rasa asam susu acidophilus. Kualitas susu acidophilus semua perlakuan memenuhi standar komposisi menurut Standar CODEX 243-2003 dan SNI.

Kata kunci : Susu, Susu acidophilus, *Lactobacillus acidophilus*, Tepung porang

EFFECT OF PORANG (*Amorphophallus oncophyllus*) FLOUR ADDITION ON THE QUALITY OF ACIDOPHILUS MILK

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ABSTRACT

The purpose of this study was to determine the effect of a percentage of porang flour addition on the quality of acidophilus milk. The treatments were the addition of porang flour with concentration 0%, 0.1%, 0.2%, 0.3% (w/v). Parameters measured were microbiological quality converging a total of *Lactobacillus acidophilus* and total bacteria, chemical quality include pH, percentage of acidity, and solid total, physical quality include viscosity and the percentage of syneresis, and the quality of sensory include texture, color, flavor, taste and acceptance. Data were analyzed by analysis of variance (ANOVA) undirectional pattern, continued Duncan's New Multiple Range Test (DMRT) using three applications. The result showed that the addition of porang flour were significant ($P < 0,05$) on viscosity, acidity, texture and flavour of acidophilus milk, but not significant effect on total *Lactobacillus acidophilus*, total bacteria, pH, water content, total solid, sineresis, color and acceptance. Acidophilus milk with the addition of porang flour had a mean total of *Lactobacillus acidophilus* of 7.65 log cfu/ml, total bacteria of 7.19 log cfu/ml, pH values of 4.19, 0.82% of acidity, solid total of $14.16\% \pm 3.01$, viscosity of 1,667 cP and syneresis percentage of 18.01%. Acidophilus milk result of organoleptic test were the scent of 3.36 ± 0.84 , color of 3.55 ± 0.72 , flavor of 3.86 ± 0.72 , texture of 2.93 ± 0.95 and acceptance of 3.10 ± 0.89 . In conclusion, the higher level of percentage until 0.3% of porang flour addition and increase the viscosity, acidity, texture and flavor of acidophilus milk. Quality of all acidophilus milk treatment meet standard compotition according to the Codex Standard and SNI 243-2003.

Keywords : Milk, Acidophilus milk, *Lactobacillus acidophilus*, Porang flour