

## Abstrak

### **PENGARUH BAKTERI ASAM LAKTAT, AKAR ALANG-ALANG, DAN PROPORSI SUSU KECAMBAH KACANG TANAH-SKIM TERHADAP FENOLIK, VITAMIN-C, DAN SENSORI HEDONIK YOGURT BERBASIS KECAMBAH KACANG TANAH UNTUK DISLIPIDEMIA**

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**Latar Belakang:** Dislipidemia dapat dipicu oleh stress oksidatif. Produk pangan kaya antioksidan diyakini mampu mengatasi stress oksidatif. Tujuan penelitian ini untuk mengetahui pengaruh proporsi susu kecambah kacang tanah (*Sucamta*) dan skim, sari akar alang-alang, BAL, dan interaksinya terhadap kadar antioksidan fenolik, vitamin C, dan sensori hedonik yogurt berbasis kecambah kacang tanah (*Yocamtala*).

**Metodologi:** Penelitian ini menggunakan Rancangan Acak Kelompok dengan perlakuan proporsi *Sucamta*:Skim (90:10; 80:20; 70:30), sari akar alang-alang (5%; 10%) dan BAL (0,3%; 0,5%). Kadar fenolik *Yocamtala* dianalisis menggunakan metode Folin Ciocalteu; vitamin C menggunakan metode titrasi iodium; sensori hedonik menggunakan metode skoring. Data dianalisis menggunakan Anova, dilanjutkan dengan DMRT bila terdapat signifikansi. Formula terbaik menggunakan indeks efektivitas.

**Hasil Penelitian:** Proporsi *Sucamta*:Skim dan kadar BAL meningkatkan kadar fenolik serta vitamin C ( $p < 0,05$ ). Sari akar alang-alang tidak berpengaruh terhadap kadar fenolik maupun vitamin C ( $p > 0,05$ ). Interaksi ketiganya meningkatkan kadar fenolik, vitamin C, dan sensori hedonik secara signifikan ( $p < 0,05$ ). Formula terbaik terbuat dari 70:30 *Sucamta*:Skim, 5% sari akar alang-alang, dan 0,3% BAL yang mengandung fenolik 934,86 mgGAE/L, vitamin C 69,42 mg/100g, probiotik  $1,68 \times 10^{11}$  CFU/mL, skor warna 3,96; rasa 3,58; aroma 3,52 dan kekentalan 3,86.

**Kesimpulan:** *Yocamtala* berpotensi sebagai minuman fungsional untuk penderita dislipidemia.

**Kata Kunci:** yogurt kecambah kacang tanah, akar alang-alang, BAL, fenolik, vitamin C dan sensori hedonik.

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## Abstract

### INFLUENCE OF LACTIC ACID BACTERIA, *IMPERATA CYLINDRICA* ROOT, AND PROPORTION OF PEANUT SPROUT-SKIM MILK ON PHENOLIC, VITAMIN C, AND HEDONIC SENSORY OF PEANUT SPROUT-BASED YOGURT FOR DYSLIPIDEMIA

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**Background:** Dyslipidemia can be triggered by oxidative stress. Food products rich in antioxidants are considered capable of overcoming oxidative stress. This research aimed to determine effect of peanut sprout milk proportion (*Sucamta*) and skim, *Imperata cylindrica* root extract, LAB, and their interactions on antioxidants phenolic, vitamin C, and sensory hedonic of peanut sprout yogurt (*Yocamtala*).

**Methods:** This study used randomized block design with treatment proportions of *Sucamta*:Skim (90:10; 80:20; 70:30), *Imperata cylindrica* root extract (5%; 10%), and LAB (0.3%; 0.5%). Phenolic content was analyzed using Folin Ciocalteu method; vitamin C using iodine titration method; and hedonic sensory using scoring method. Data analyzed using ANOVA, followed by DMRT if significance. The best formula uses an effectiveness index.

**Result:** Proportion of *Sucamta*:Skim and LAB increased phenolic and vitamin C ( $p < 0.05$ ). *Imperata cylindrica* root extract had no effect on phenolic or vitamin C ( $p > 0.05$ ). Interaction of three significantly increased phenolic, vitamin C and hedonic sensory ( $p < 0.05$ ). The best formula made from 70:30 *Sucamta*:Skim, 5% *Imperata cylindrica* root extract, 0.3% LAB which contains phenolics 934.86 mgGAE/L, vitamin C 69.42 mg/100g, probiotics  $1,68 \times 10^{11}$  CFU/mL, score of color 3.96; taste 3.58; aroma 3.52 and viscosity 3.86.

**Conclusion:** *Yocamtala* has potential as a functional drink for dyslipidemia.

**Keyword:** peanut sprout yogurt, *Imperata cylindrica* root, LAB, phenolic, vitamin C and hedonic sensory.

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