

ABSTRAK

KUALITAS FISIK YOGHURT SUSU KAMBING DENGAN PENAMBAHAN KAYU MANIS (*Cinnamomum verum*)

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Penelitian ini bertujuan untuk mengevaluasi pengaruh penambahan kayu manis (*Cinnamomum verum*) terhadap kualitas fisik yoghurt berbahan dasar susu kambing, yang meliputi parameter nilai pH, total asam, dan viskositas. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan empat perlakuan, yaitu tanpa penambahan kayu manis (P0), serta penambahan kayu manis dengan konsentrasi 0,1% (P1), 0,2% (P2), dan 0,3% (P3), masing-masing dengan lima ulangan. Hasil penelitian menunjukkan bahwa penambahan kayu manis berpengaruh sangat nyata terhadap nilai pH ($P < 0,01$), namun tidak berpengaruh nyata terhadap total asam dan viskositas ($P > 0,05$). Penambahan kayu manis 0,2% dinilai sebagai konsentrasi optimal yang mampu memodifikasi nilai pH sehingga total asam dan viskositas masih memenuhi standar mutu yoghurt. Dengan demikian, penggunaan kayu manis pada level tertentu berpotensi meningkatkan kualitas fungsional yoghurt susu kambing tanpa mengganggu proses fermentasi.

Kata kunci: kayu manis, pH, susu kambing, total asam, viskositas.

ABSTRACT

PHYSICAL QUALITY OF GOAT MILK YOGHURT WITH THE ADDITION OF CINNAMON (*Cinnamomum verum*)

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This study aimed to evaluate the effect of cinnamon (*Cinnamomum verum*) addition on the physical quality of goat milk-based yoghurt, focusing on pH value, total acidity, and viscosity parameters. A Completely Randomized Design (CRD) was employed, consisting of four treatments: no cinnamon addition (P0), and cinnamon addition at concentrations of 0.1% (P1), 0.2% (P2), and 0.3% (P3), each replicated five times. The results showed that cinnamon addition had a highly significant effect on pH value ($P < 0.01$), but no significant effect on total acidity and viscosity ($P > 0.05$). The 0.2% cinnamon concentration was identified as the optimal level that modified the pH while maintaining total acidity and viscosity within acceptable quality standards for yoghurt. Therefore, the use of cinnamon at a certain concentration has the potential to enhance the functional quality of goat milk yoghurt without disrupting the fermentation process.

Keywords: *cinnamomun verum*, goat milk, pH, total acid, viscosity.