

PENGARUH MARINASI DENGAN SARI BELIMBING WULUH (*Averrhoa bilimbi* L.) TERHADAP KUALITAS FISIK DAN SENSORIS BAKSO DAGING KAMBING

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh marinasi menggunakan belimbing wuluh pada daging kambing terhadap kualitas fisik dan sensoris bakso daging kambing. Penelitian ini dilakukan dengan menggunakan empat macam perlakuan marinasi pada daging kambing yaitu dengan konsentrasi 0, 15, 30, dan 45% cairan belimbing wuluh. Marinasi dilakukan selama 30 menit pada suhu ruang. Kualitas fisik yang diuji meliputi pH, daya ikat air (DIA), dan tekstur, sementara uji sensoris meliputi penilaian warna, aroma, rasa, tekstur, dan daya terima secara keseluruhan oleh panelis. Uji kualitas fisik dianalisis menggunakan rancangan acak lengkap (RAL) *One Way Anova* dan dilanjutkan dengan uji *Duncan's Multiple Range Test* (DMRT) untuk variabel yang berbeda nyata. Uji kualitas fisik dianalisis menggunakan uji non-parametrik *Kruskal-Wallis Test* dan dilanjutkan dengan *Mann-Whitney* untuk variabel yang berbeda nyata. Hasil penelitian menunjukkan bahwa peningkatan konsentrasi belimbing wuluh berpengaruh nyata ($P < 0,05$) menurunkan nilai pH dan DIA, serta mempengaruhi beberapa parameter tekstur bakso yaitu *springiness* dan *gumminess*. Pada uji sensoris, perbedaan level konsentrasi berpengaruh nyata ($P < 0,05$) terhadap aroma, rasa, dan daya terima bakso daging kambing. Bakso dengan marinasi konsentrasi 45% memberikan hasil terbaik pada kualitas fisik dan sensoris pada penelitian ini.

Kata kunci : Bakso, daging kambing, marinasi, belimbing wuluh, kualitas fisik, kualitas sensoris.

THE EFFECT OF MARINATION USING BELIMBING WULUH (*Averrhoa bilimbi* L.) JUICE ON THE PHYSICAL AND SENSORY QUALITY OF GOAT MEATBALLS

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ABSTRACT

This study aimed to determine the effect of marinating goat meat using belimbing wuluh on the physical and sensory quality of goat meatballs. The research involved four marination treatments with different concentrations of belimbing wuluh solution, namely 0%, 15%, 30%, and 45%. The marination process was carried out for 30 minutes at room temperature. The physical qualities tested included pH, water-holding capacity (WHC), and texture, while the sensory evaluation covered color, aroma, taste, texture, and overall acceptability by a panel of evaluators. The physical quality tests were analyzed using a completely randomized design One-Way ANOVA, followed by Duncan's Multiple Range Test (DMRT) for significantly different variables. Sensory quality tests were analyzed using the non-parametric Kruskal-Wallis test, followed by the Mann-Whitney test for significantly different variables. The results showed that increasing the concentration of belimbing wuluh had a significant effect ($P < 0.05$) on decreasing the pH and WHC values, as well as affecting certain texture parameters such as springiness and gumminess. In the sensory test, differences in concentration levels significantly affected ($P < 0.05$) the aroma, taste, and overall acceptability of goat meatballs. Meatballs marinated with 45% belimbing wuluh concentrations showed the best results in the physics and sensory quality.

Keywords: Meatballs, goat meat, marination, belimbing wuluh, physical quality, sensory quality.