



PENGARUH KONSENTRASI ASAM ASETAT TERHADAP KUALITAS GELATIN KULIT *PICKLE* KAMBING

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh dari perbedaan konsentrasi asam asetat terhadap kualitas gelatin kulit *pickle* kambing. Bahan utama yang digunakan pada penelitian ini yaitu kulit *pickle* kambing. Perlakuan yang diberikan yakni ekstraksi gelatin menggunakan tiga konsentrasi asam asetat berbeda, yaitu sebesar 0,25 M; 0,5 M; dan 0,75 M. Parameter yang diukur meliputi rendemen, kadar air, kadar abu, kadar protein, kekuatan gel, dan pH. Data kualitas fisik dan kimia dianalisis dengan ANOVA pola searah, kecuali pada parameter rendemen dilakukan analisis deskriptif. Apabila terdapat perbedaan yang nyata maka dilanjutkan dengan uji DMRT (*Duncan's Multiple Range Test*). Hasil yang diperoleh adalah perbedaan konsentrasi asam asetat tidak berpengaruh nyata terhadap kadar air dan kadar protein gelatin, namun berpengaruh nyata terhadap kadar abu, kekuatan gel, dan pH gelatin. Nilai rendemen tertinggi didapatkan sebesar 13,61% pada konsentrasi asam asetat 0,5 M, kadar abu terendah didapatkan sebesar $1,77 \pm 0,40\%$ pada konsentrasi asam asetat 0,75 M, kekuatan gel terbaik didapatkan sebesar $224,20 \pm 21,57$ g *bloom* pada sampel dengan perendaman asam asetat 0,25 M, dan nilai pH $5,99 \pm 0,02$ didapatkan pada sampel dengan perendaman asam asetat 0,25 M. Penelitian ini memberikan kesimpulan bahwa kualitas gelatin dari kulit *pickle* kambing berdasarkan kekuatan gel didapatkan nilai terbaik pada perendaman asam asetat 0,25 M.

(Kata kunci: Kulit *pickle*, asam asetat, gelatin, kualitas fisik, kualitas kimia)



THE EFFECT OF ACETIC ACID CONCENTRATION TO QUALITY OF GOAT PICKLED SKIN GELATIN

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ABSTRACT

This study aims to determine the effect of different concentrations of acetic acid on the quality of goat pickled skin gelatin. The main material used in this study was goat pickled skin. The treatment given was gelatin extraction using three different concentrations of acetic acid, namely 0.25 M; 0.5M; and 0.75 M. Parameters measured included yield, moisture content, ash content, protein content, gel strength, and pH. Physical and chemical quality data were analyzed by one-way pattern ANOVA, except for the yield parameter, a descriptive analysis was carried out. If there is a significant difference then proceed with the DMRT (Duncan's Multiple Range Test). The results obtained were that differences in acetic acid concentrations did not significantly affect the water content and protein content of the gelatin, but significantly affected ash content, gel strength, and pH of the gelatin. The highest yield value was 13.61% at 0.5 M acetic acid concentration, the lowest ash content was obtained at $1.77 \pm 0.40\%$ at 0.75 M acetic acid concentration, the best gel strength was obtained at 224.20 ± 21.57 g bloom in samples with 0.25 M acetic acid immersion, and a pH value of 5.99 ± 0.02 were obtained in samples with 0.25 M acetic acid immersion. This study concludes that the quality of gelatin from goat pickled skin based on gel strength obtained the best value in 0.25 M acetic acid immersion.

(Keywords: Pickled skin, acetic acid, gelatin, physical quality, chemical quality)