

PENGARUH MARINASI DENGAN JUS BUAH MANGGA PAKEL (*Mangifera foetida* L.) TERHADAP KUALITAS FISIK DAN MIKROSTRUKTUR STEAK DAGING SAPI

Khafidlotul Ngilmi
21/476983/PT/08899

INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh marinasi menggunakan jus buah mangga pakel pada level konsentrasi 0%, 25%, 50%, 75%, dan 100% jus buah mangga pakel. Pembuatan steak menggunakan daging Sapi Peranakan Limousin Jantan berumur 2 hingga 3 tahun bagian sirloin seberat 150 gram dengan lama marinasi dengan jus buah mangga selama 60 menit. Pengujian dilakukan untuk mengetahui pengaruh marinasi dengan jus buah mangga pakel terhadap kualitas fisik dan mikrostruktur steak daging sapi. Pengujian dilakukan sebanyak 5 pengulangan serta dilakukan uji mikrostruktur. Parameter yang diamati adalah kualitas fisik pH, daya ikat air, keempukan yang meliputi *hardness*, *cohesiveness*, *resilience*, *springiness*, *gumminess*, *chewiness*, serta dilakukan uji mikrostruktur. Data pengujian kualitas fisik yang diperoleh dianalisis menggunakan Rancangan Acak Lengkap (RAL) pola searah (*One Way Anova*) dan apabila terdapat hasil uji yang signifikan maka akan dilakukan pengujian lanjutan menggunakan *Duncan's New Multiple Range Test* (DMRT). Data hasil pengujian mikrostruktur dilakukan analisis secara deskriptif. Hasil penelitian menunjukkan marinasi menggunakan jus buah mangga Pakel dengan level konsentrasi yang berbeda berpengaruh terhadap kualitas mikrostruktur dan *hardness* steak pada level marinasi dengan konsentrasi 100% jus buah mangga, akan tetapi tidak berpengaruh nyata terhadap nilai pH, daya ikat air, *cohesiveness*, *resilience*, *springiness*, *gumminess*, dan *chewiness* steak daging sapi.

(Kata kunci: Sirloin, Steak, Mangga, Mikrostruktur. Marinasi, Kualitas fisik.)

THE EFFECT OF MARINATION WITH PAKEL MANGO FRUIT JUICE (*Mangifera foetida* L.) ON THE PHYSICAL AND MICROSTRUCTURE QUALITIES OF BEEF STEAK

Khafidlotul Ngilmi
21/476983/PT/08899

ABSTRACT

This study aims to determine the effect of marination using pakel mango fruit juice at concentration levels of 0%, 25%, 50%, 75%, and 100%. The steak was prepared using 150 gram sirloin cuts from 2 to 3 year old male Limousin crossbred cattle, marinated with mango fruit juice for 60 minutes. Testing was conducted to assess its impact on the physical quality and microstructure of the beef steak. Physical quality testing was performed with 5 repetitions, and microstructure analysis was also carried out. The observed parameters included physical quality (pH, water holding capacity, tenderness encompassing hardness, cohesiveness, resilience, springiness, gumminess, chewiness) as well as microstructure analysis. The physical quality test data were analyzed using a Completely Randomized Design with a one-way ANOVA pattern, and if significant results were found, further testing was conducted using Duncan's New Multiple Range Test (DMRT). Microstructure test data were analyzed descriptively. The results showed that marination with mango fruit juice at different concentration levels affected the microstructure and hardness quality of the steak at concentration level of 100% mango fruit juice but did not significantly influence pH value, water holding capacity, cohesiveness, resilience, springiness, gumminess, chewiness of the beef steak.

(Keyword: Sirloin, Steak, Mango, Microstructure, Marination, Physical quality)