

Dika Febrianto 20230620009: Efektivitas Marinasi Daging Ayam Petelur Afkir Pada Sari Buah Nanas Terhadap pH Daging, Susut Masak Dan Kadar Air. Dosen Pembimbing 1: **Nurina Rahmawati,S.Pt.,M.P** Dosen Pembimbing 2: **Dyah Nurul Afiyah,S.Pt.,M.Si.**

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh efektivitas marinasi daging ayam petelur afkir pada sari buah nanas terhadap pH daging susut masak dan kadar air. Penelitian dilaksanakan pada tanggal 22 sampai 29 Oktober 2024. Menggunakan penelitian metode percobaan dengan rancangan acak lengkap (RAL) sebanyak 4 perlakuan lama perendaman kontrol (P0), 30 menit (P1), 60 menit (P2) dan 90 menit (P3) serta 5 ulangan. Variabel yang diamati yaitu pH, susut masak dan kadar air. Data dianalisis dengan uji ANOVA menggunakan uji F, jika terdapat efektivitas maka dilanjutkan uji Duncan.

Hasil penelitian menunjukkan nilai pH sebelum marinasi berkisar 5,8-6,0 sementara pH setelah marinasi mengalami penurunan. Penelitian ini efektif terhadap kadar air namun tidak efektif pada pH dan susut masak. Marinasi menurunkan pH daging dengan P3 menghasilkan pH terendah (5.2 ± 0.44), yang mendukung proses tenderisasi daging. Susut masak tertinggi pada P0 ($48.8 \pm 7.59\%$), sedangkan nilai susut masak terendah pada P3 ($44.6 \pm 7.89\%$). Kadar air tertinggi pada P0 ($77.8 \pm 0.79\%$) sedangkan terendah pada P3 ($74.4 \pm 1.58\%$). Penurunan kadar air dipengaruhi oleh enzimatik dari bromelin yang memecah struktur protein sehingga air mudah keluar dan mempengaruhi kadar air. Perlakuan marinasi terbaik adalah P3 yang meningkatkan kualitas daging melalui penurunan pH, susut masak, dan kadar air. Guna menjaga keseimbangan kualitas fisik daging (pH, susut masak dan kadar air) disarankan menggunakan waktu perendaman yang optimal 90 menit. Perlakuan ini dapat diterapkan sebagai metode marinasi untuk meningkatkan kualitas daging ayam petelur afkir.

Kata Kunci: Marinasi, daging ayam petelur afkir, sari buah nanas pH, susut masak, kadar air.

Dika Febrianto 20230620009: Effectiveness of Marinating Retired Laying Hen Meat in Pineapple Juice on Meat pH, Cooking Loss and Water Content. Supervisor 1: **Nurina Rahmawati,S.Pt.,M.P**
Supervisor 2: **Dyah Nurul Afiyah,S.Pt.,M.Si.**

ABSTRACT

This study aims to determine the effectiveness of marinating retired laying hen meat in pineapple juice on meat pH, cooking loss, and water content. The research was conducted from October 22 to October 29, 2024. It utilized an experimental method with a completely randomized design (CRD) consisting of four treatment durations: control (P0), 30 minutes (P1), 60 minutes (P2), and 90 minutes (P3), with five replications. The observed variables included pH, cooking loss, and water content. Data were analyzed using ANOVA with an F-test; if effectiveness was found, Duncan's test was conducted.

The results showed that the pH value before marination ranged from 5.8 to 6.0, while the pH after marination decreased. The study was effective regarding water content but not effective for pH and cooking loss. Marination lowered the meat pH, with P3 resulting in the lowest pH (5.2 ± 0.44), supporting the meat tenderization process. The highest cooking loss occurred in P0 ($48.8 \pm 7.59\%$), while the lowest cooking loss was in P3 ($44.6 \pm 7.89\%$). The highest water content was in P0 ($77.8 \pm 0.79\%$), while the lowest was in P3 ($74.4 \pm 1.58\%$). The decrease in water content was influenced by the enzymatic activity of bromelain, which breaks down protein structures, allowing water to easily escape and affecting water content. The best marination treatment was P3, which improved meat quality through the reduction of pH, cooking loss, and water content. To maintain a balance in the physical quality of the meat (pH, cooking loss, and water content), it is recommended to use an optimal marination time of 90 minutes. This treatment can be applied as a marination method to enhance the quality of retired laying hen meat.

Keywords: Marinating, retired laying hen meat, pineapple juice pH, cooking loss, water content.

DAFTAR ISI

HALAMAN JUDUL.....	i
ABSTRAK.....	ii
<i>ABSTRACT</i>	iii
LEMBAR PERSETUJUAN.....	iv
LEMBAR PENGESAHAN.....	v
PERNYATAAN ORISINALITAS SKRIPSI	vi
RIWAYAT HIDUP	vii
KATA PENGANTAR	viii
DAFTAR ISI.....	ix
DAFTAR TABEL	xii
DAFTAR GAMBAR	xiii
DAFTAR LAMPIRAN	xiv
BAB I	1
PENDAHULUAN.....	1
1.1 Latar Belakang	1
1.2 Rumusan Masalah.....	2
1.3 Tujuan Penelitian	3
1.4 Manfaat Penelitian	3
1.5 Hipotesis.....	3
BAB II.....	4
TINJAUAN PUSTAKA.....	4
2.1 Ayam Petelur	4
2.2 Daging Ayam Petelur	5

2.3 Buah Nanas.....	5
2.4 Marinasi.....	6
2.5 Pengukuran Derajat Keasaman (pH)	7
2.6 Susut Masak.....	7
2.7 Kadar Air	8
2.8 Penelitian Terdahulu	9
BAB III	13
METODOLOGI PENELITIAN	13
3.1 Waktu dan Tempat Penelitian.....	13
3.2 Alat dan Bahan.....	13
3.2.1 Alat.....	13
3.2.2 Bahan	13
3.3 Metode Penelitian	13
3.4 Variabel Penelitian.....	14
3.5 Prosedur Penelitian	14
3.5.1 Persiapan Alat Dan Bahan.....	14
3.5.2 Pembuatan Sari Buah Nanas	14
3.5.3 Marinasi Daging Ayam Petelur	14
3.6 Prosedur Pengambilan Data.....	16
3.6.1 Nilai pH.....	16
3.6.2 Susut Masak.....	16
3.6.3 Kadar Air.....	16
3.7 Analisis Data.....	17
BAB IV	18
HASIL DAN PEMBAHASAN	18
4.1 Kualitas Fisik	18

4.1.1 Derajat Keasaman (pH)	19
4.1.2 Susut Masak	22
4.1.3 Kadar Air	23
BAB V	26
KESIMPULAN DAN SARAN	26
5.1 Kesimpulan	26
5.2 Saran.....	26
DAFTAR PUSTAKA	27
Lampiran.....	32