

PENGARUH AIR KELAPA DENGAN DURASI PEMASAKAN BERBEDA
TERHADAP KUALITAS FISIKOKIMIA, SENSORIS,
DAN MIKROSTRUKTUR PADA BEBEK UNGKEP
PETELUR AFKIR

INTISARI

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Penelitian ini bertujuan untuk mengetahui pengaruh penggunaan media pemasakan dan lama masak dengan metode presto terhadap kualitas kimia (kadar air, protein, lemak, dan kolagen), kualitas fisik (warna, nilai pH, keempukan, susut masak, dan daya ikat air), sifat sensoris (warna, aroma, rasa, keempukan, dan daya terima) dan mikrostruktur daging bebek ungkep petelur afkir. Penelitian ini terbagi atas dua perlakuan, yaitu perbedaan media (air dan air kelapa) dan durasi pemasakan (15, 30, 45, dan 60 menit). Setiap perlakuan dilakukan pengulangan sebanyak tiga kali. Daging bebek yang digunakan adalah daging bebek bagian dada. Nilai sifat sensoris daging diperoleh melalui pengujian 30 orang panelis yang tidak terlatih. Kualitas fisikokimia dan mikrostruktur dianalisis menggunakan analisis Rancangan Acak Lengkap pola faktorial 2x4 (dua media masak dan empat durasi pemasakan). Sifat sensori dianalisis dengan analisis non parametrik uji *Friedman*. Perbedaan rerata akan diuji dengan *Duncan's New Multiple Range Test*. Berdasarkan hasil penelitian, faktor media dan lama pemasakan berpengaruh ($P < 0,05$) terhadap kualitas fisikokimia, sensoris, dan mikrostruktur daging bebek ungkep petelur afkir. Perlakuan media masak dan durasi pemasakan menurunkan kualitas kimia, daya ikat air, nilai pH, keempukan, profil tektur, warna *lightness*, dan *warna redness*, tetapi meningkatkan susut masak, warna *yellowness*, sifat sensoris, dan diameter serabut otot daging bebek ungkep petelur afkir. Berdasarkan hasil dapat disimpulkan bahwa perlakuan media air kelapa dengan durasi pemasakan presto selama 60 menit memberikan pengaruh dan hasil yang terbaik terhadap sifat sensoris daging bebek ungkep petelur afkir.

Kata kunci : Air kelapa, Bebek petelur afkir, Kualitas daging bebek ungkep

EFFECT OF COCONUT WATER AND DIFFERENT DURATIONS ON THE PHYSICOCHEMICAL, SENSORY, AND MICROSTRUCTURAL QUALITY OF BOILED REJECTED LAYING DUCK

ABSTRACT

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This study aim to determine the effect of cooking media and cooking duration using the pressure cooking method on the chemical composition (moisture content, protein, fat, and collagen), physical composition (color, pH value, tenderness, cooking loss, and water-holding capacity), sensory properties (color, aroma, taste, tenderness, and acceptability), and microstructure of boiled rejected laying duck meat. The study is divided into two treatments: differences in media (water and coconut water) and cooking durations (15, 30, 45, and 60 minutes). Each treatment was repeated three times. The duck meat used was from the breast. Sensory properties were evaluated by 30 untrained panelists. The chemical, physical, and microstructural compositions were analyzed using a 2x4 factorial design of a Completely Randomized Design (CRD) (two cooking media and four cooking durations). Sensory properties were analyzed using non-parametric Friedman's Test. The differences in means were tested using Duncan's New Multiple Range Test. Based on the research results, the factors of cooking media and cooking duration have an effect ($P < 0.05$) on the physicochemical, sensory, and microstructural quality of boiled rejected laying duck meat. The cooking media and cooking duration treatments reduced the chemical quality, water holding capacity, pH value, tenderness, texture profile, lightness color, and redness color, but increased cooking loss, yellowness color, sensory properties, and muscle fiber diameter of boiled rejected laying duck meat. Based on the results, it can be concluded that the treatment of coconut water media with a 60 minute pressure cooking duration has the best effect and results on the sensory properties of boiled rejected laying duck meat.

Keywords: Coconut water, Rejected laying duck, Quality of boiled duck meat