

PENGARUH LAMA PEREBUSAN (PENGUNGKEPAN) DAN JENIS OTOT TERHADAP KUALITAS FISIK DAN MIKROSTRUKTUR DAGING AYAM PERANAKAN BANGKOK AFKIR

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh lama perebusan (pengungkepan) dan jenis otot terhadap kualitas fisik dan mikrostruktur daging ayam Peranakan Bangkok afkir. Sampel yang digunakan berupa daging ayam Peranakan Bangkok yang telah afkir berumur sekitar 1,5 tahun pada bagian dada dan paha. Penelitian ini dilakukan dengan perlakuan lama perebusan 1 jam, 2 jam, dan 3 jam. Data yang diambil meliputi kualitas fisik (nilai pH, daya ikat air, susut masak dan keempukan) serta mikrostruktur daging dengan pengulangan sebanyak tiga kali. Data hasil uji kualitas fisik dianalisis variansi dengan pola RCBD (*Randomized Completely Block Design*) dan perbedaan rata-rata diuji dengan *Duncan's New Multiple Range Test*. Hasil pengamatan mikrostruktur dianalisis secara deskriptif dengan membandingkan hasil foto mikroskop secara melintang dan membujur. Hasil analisis kualitas fisik menunjukkan bahwa lama perebusan mempunyai pengaruh yang nyata terhadap nilai pH, susut masak, daya ikat air, dan keempukan ($P < 0,05$). Perbedaan jenis otot berpengaruh nyata terhadap nilai pH ($P < 0,05$), tetapi tidak berpengaruh nyata terhadap daya ikat air, susut masak, dan keempukan. Hasil foto mikroskop secara melintang menunjukkan adanya pengurangan pada lebar antara serabut otot, sedangkan secara membujur menunjukkan peningkatan jumlah serabut otot yang terpotong seiring dengan bertambahnya waktu perebusan. Kesimpulan yang diambil dari penelitian ini adalah peningkatan waktu perebusan dapat meningkatkan kualitas fisik dan mikrostruktur daging ayam Peranakan Bangkok afkir serta kualitas daging dada ayam Peranakan Bangkok afkir yang direbus relatif tidak berbeda dengan daging paha.

Kata kunci: Ayam Peranakan Bangkok afkir, Lama perebusan, Kualitas fisik, Jenis otot, Mikrostruktur

THE EFFECT OF BOILING (SIMMERING) DURATION AND MUSCLE TYPES ON PHYSICAL QUALITY AND MICROSTRUCTURE OF CULLED THAI INDIGENOUS GRADE CHICKEN MEAT

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ABSTRACT

The research was conducted to investigate the influence of boiling (simmering) duration and muscle types on physical and microstructure quality of culled Thai Indigenous Grade chicken meat. The samples were meat of culled Thai Indigenous Grade chicken around 1.5 years old on the breast and thigh side. The treatments of this research were 1 hour, 2 hour, and 3 hour of boiling duration. The data parameters were the physical quality (pH value, water-holding capacity, cooking losses and tenderness) and the microstructure with three repetition. The results of physical quality were analyzed variance with the pattern of RCBD (Randomized Completely Block Design) and the mean differences were tested with Duncan's New Multiple Range Test. Microstructures were analyzed with descriptive analysis by comparing the results of transversely and longitudinally photo micrographs. Statistical analysis of physical quality test showed that boiling duration had significant effect on pH value, water-holding capacity, cooking loss and tenderness ($P < 0.05$). Differences muscle types affected significantly on pH value ($P < 0.05$), but had no significant effect on water-holding capacity, cooking loss, and tenderness. The transversely micrograph images showed a reduction in the gap of muscle fibers. The longitudinally micrograph images showed the increasing of fragmented muscle fibers. The conclusions were the boiling duration can increase the physical quality and microstructure of culled Thai Indigenous Grade chicken and the boiled breast muscle of culled Thai Indigenous Grade chicken had no differences quality with boiled thigh muscle.

Keyword: Culled Thai Indigenous Grade chicken, Boiling duration, Physical quality, Muscle types, Microstructure