

KUALITAS FISIK DAN MIKROSTRUKTUR DAGING BEBEK HIBRIDA JANTAN PADA UMUR POTONG YANG BERBEDA

Muhammad Dzaky Abdur Rafi

20/459713/PT/08539

INTISARI

Penelitian ini dilakukan untuk mengkaji pengaruh umur potong 8,10, dan 12 minggu terhadap kualitas fisik dan mikrostruktur daging bebek hibrida jantan yang dilakukan pada bulan September 2023 hingga Februari 2024. Bebek hibrida sebanyak 30 ekor diperoleh dari Istana Meri Farm Lumajang dan dipelihara di Tegal Jatimulyo, Jambidan, Banguntapan, Bantul. Pemotongan dilakukan pada umur 8, 10, dan 12 minggu dengan metode halal yang dilakukan di Abattoir dan diteliti di Laboratorium Ilmu dan Teknologi Daging, Fakultas Peternakan, Universitas Gadjah Mada. Daging dada yang diperoleh diamati kualitas fisik (warna, pH, daya ikat air, susut masak, keempukan) dan mikrostruktur dengan irisan melintang dan membujur. Data dianalisis dengan ANOVA dan uji lanjut DMRT menggunakan SPSS versi 26. Hasil penelitian menunjukkan umur potong berpengaruh nyata ($P < 0,05$) terhadap nilai kemerahan (a^*) (16,18%; 18,04%; 18,20%;), keempukan ($3,42 \text{ kg/cm}^2$; $3,02 \text{ kg/cm}^2$; $2,42 \text{ kg/cm}^2$), daya ikat air (45,64%; 57,96%; 57,59%), dan susut masak (37,85%; 30,81%; 30,25%). Hasil penelitian menunjukkan umur potong tidak berpengaruh nyata ($P > 0,05$) terhadap nilai kecerahan (L^*) (38,83%; 37,58%; 42,45%), nilai kekuningan (b^*) (10,13%; 9,64%; 8,60%), pH (6,28; 6,24; 6,39), dan diameter serabut otot ($19,49 \mu\text{m}$; $21,63 \mu\text{m}$; $23,24 \mu\text{m}$). Disimpulkan bahwa umur potong 10 minggu menghasilkan kualitas fisik dan mikrostruktur terbaik pada daging bebek hibrida jantan (persilangan bebek mojosari dan bebek peking).

Kata kunci: Bebek Hibrida, Sifat Fisik, Mikrostruktur, Jenis kelamin, Umur potong

PHYSICAL AND MICROSTRUCTURAL QUALITY OF MEAT MALE HYBRID DUCKS BY DIFFERENT SLAUGHTER AGE

Muhammad Dzaky Abdur Rafi
20/459713/PT/08539

ABSTRACT

This study aimed to investigate the impact of different slaughter ages (8, 10, and 12 weeks) on the physical quality and microstructure of male hybrid duck meat. The research was done between September 2023 and February 2024. A total of 30 hybrid ducks were acquired from Istana Meri Farm Lumajang and are currently being kept in Tegal Jatimulyo, Jambidan, Banguntapan, Bantul. The slaughtering process was conducted following halal methods at the Abattoir and researched at the Meat Science and Technology Laboratory, Faculty of Animal Science, Gadjah Mada University, when the animals were 8, 10, and 12 weeks old. The study examined the physical characteristics of the breast flesh, including its colour, pH level, water holding capacity, cooking loss, and softness. The microstructure of the meat was also analysed using transverse and longitudinal sections. The data were subjected to analysis of variance (ANOVA) and then to a Duncan's multiple range test (DMRT) using SPSS version 26. The findings indicated that the age at which the animals were slaughtered did not have a statistically significant impact ($P > 0.05$) on the lightness (L^*) values (38.83%; 37.58%; 42.45%), yellowness (b^*) values (10.13%; 9.64%; 8.60%), pH levels (6.28; 6.24; 6.39), and muscle fibre diameter (19.49 μ m; 21.63 μ m; 23.24 μ m). The study determined that a slaughter age of 10 weeks yielded the highest physical and microstructural quality in the flesh of male hybrid ducks, which are a crossbreed between Mojosari ducks and Peking ducks.

Key word: Hybrid ducks, physical characteristics, microstructure, gender, age at slaughter