PENGARUH JENIS KELAMIN TERHADAP KUALITAS FISIK DAN MIKROSTRUKTUR DAGING AYAM HASIL PERSILANGAN MERAWANG DENGAN KUB YANG DIPOTONG PADA UMUR 10 MINGGU

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh jenis kelamin terhadap mikrostruktur dan kualitas fisik daging ayam hasil persilangan Merawang dengan KUB yang dipotong pada umur 10 minggu. Penelitian ini menggunakan ayam hasil persilangan Merawang dengan KUB sebanyak 10 ekor yang terdiri dari 5 ekor ayam jantan dan 5 ekor ayam betina dengan umur 10 minggu. Penelitian dilaksanakan tanggal 17 Desember 2022 sampai 10 Maret 2023. Pemeliharaan ayam dilakukan di Kronggahan, Sleman mulai dari DOC hingga umur 10 minggu. Proses penyembelihan ayam dilakukan sesuai dengan metode halal untuk memperoleh karkas kemudian dilakukan *parting* dan *deboning*. Pengamatan mikrostruktur daging ayam hasil persilangan Merawang dengan KUB dilakukan dengan membuat preparat histologi dari daging dada (*musculus pectoralis major*) kemudian dilakukan pengamatan dengan irisan melintang dan membujur serta pengukuran diameter serabut otot. Variabel kualitas fisik daging antara lain, warna, pH, daya ikat air, susut masak, dan keempukan. Pengujian kualitas warna daging dilakukan menggunakan metode Chromamater. Gambaran histologi daging ayam hasil persilangan Merawang dengan KUB dianalisis secara deskriptif. Data diameter serabut otot dan sifat fisik daging yang telah diperoleh kemudian dianalisis menggunakan *independent sample t-test* menggunakan software *Statistical Package for Social Science* (SPSS) versi 25. Hasil penelitian menunjukkan bahwa jenis kelamin berpengaruh nyata ($P<0,05$) terhadap diameter serabut otot dan daya ikat air daging ayam hasil persilangan Merawang dengan KUB. Rataan diameter serabut otot dan daya ikat air daging ayam jantan hasil persilangan Merawang dengan KUB berturut-turut sebesar 28,69 ± 0,56 µm dan 50,33±0,85%, sedangkan rataan diameter serabut otot dan daya ikat air daging ayam betina berturut turut sebesar 27,16 ± 0,11 µm dan 43,38±2,81%.

Kata kunci: Ayam Persilangan, Jenis Kelamin, Kualitas Fisik, Mikrostruktur.

THE EFFECT OF SEX ON THE PHYSICAL QUALITY AND MICROSTRUCTURAL OF CHICKEN MEAT FROM THE CROSS-BREEDING OF MERAWANG WITH KUB SLAUGHTERED AT 10 WEEKS OF AGE

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ABSTRACT

This study aimed to determine the effect of sex on the microstructural and physical quality of chicken meat from cross-breeding of Merawang with KUB chicken slaughtered at 10 weeks of age. The material used 10 cross-breeding of Merawang with KUB chickens consisting of 5 male chickens and 5 female chickens aged 10 weeks. The research was conducted on 17th December 2022 until 10th March 2023. Chicken rearing was carried out in Kronggahan, Sleman from DOC to 10 weeks of age. The chickens were slaughtered accordance to the halal method to obtain carcasses and then parted and deboned. Microstructural observation of chicken meat from cross-breeding of Merawang and KUB chickens was carried out by making histological preparations from breast meat (*pectoralis major muscle*) then observed with tranverse and longitudinal slices and measuring the diameter of the muscle fibers. The physical quality variables of meat include color, pH, water holding capacity, cooking loss, and tenderness. Physical quality testing of meat color was carried out based on the Chromamater. The histology of chicken meat from cross-breeding of Merawang with KUB chickens was analyzed descriptively. Data on the diameter of the muscle fibers and the physical quality of the meat that has been obtained were then analyzed using *independent sample t-test* using the Statistical Pakcage for Social Science (SPSS) version 25 software. The results showed that sex had a significant effect ($P<0.05$) on muscle fiber diameter and water-holding capacity of chicken meat from cross-breeding of Merawang with KUB chickens. The mean muscle fiber diameter and water holding capacity of male were 28.69 ± 0.56 µm and 50,33±0,85%, respectively, while the mean muscle fiber diameter and water holding capacity of female were respectively of 27.16 ± 0.11 µm and 43,38±2,81%.

Keywords: Cross-breeding Chickens, Sex, Physical Quality, Microstructural.