

## KOMPOSISI KIMIA DAN KADAR KOLESTEROL DAGING AYAM HASIL PERSILANGAN MERAWANG DAN KUB DENGAN JENIS KELAMIN DAN UMUR POTONG BERBEDA

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### INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh jenis kelamin dan umur potong terhadap komposisi kimia dan kadar kolesterol daging ayam hasil persilangan Merawang dan KUB. Materi yang digunakan adalah 20 ayam hasil persilangan Merawang dan KUB berjumlah 5 ekor jantan dan 5 ekor betina setiap umur 8 dan 10 minggu. Penelitian dilaksanakan tanggal 17 Desember 2022 – 10 Maret 2023. Pemeliharaan ayam dilakukan di Kronggahan, Sleman mulai dari DOC hingga umur 10 minggu. Penyembelihan menggunakan metode halal untuk memperoleh karkas dilanjutkan *parting* dan *deboning*. Sampel daging bagian paha atas, paha bawah dan dada dihaluskan dan ditimbang sesuai kebutuhan uji komposisi kimia dan kolesterol. Variabel yang diamati yaitu kadar air, protein, lemak, abu, karbohidrat dan kolesterol. Analisis komposisi kimia dengan metode proksimat sedangkan kolesterol dengan *Lieberman Burchard*. Data uji komposisi kimia dan kolesterol dianalisis menggunakan Rancangan Acak Lengkap pola faktorial 2 x 2 dan diolah menggunakan software *Statistical Package for Social Science* (SPSS) versi 25. Hasil analisis data menunjukkan bahwa jenis kelamin berpengaruh nyata terhadap kadar air, protein, lemak, abu ( $P < 0,05$ ) dan kolesterol daging ( $P < 0,01$ ). Umur potong berpengaruh nyata pada kadar air, protein, abu ( $P < 0,05$ ), dan kolesterol daging ( $P < 0,01$ ). Tidak terdapat interaksi antara jenis kelamin dan umur potong terhadap komposisi kimia dan kadar kolesterol. Hasil penelitian yang didapatkan adalah kadar air daging jantan  $75,70 \pm 0,58\%$  lebih tinggi dari betina  $75,11 \pm 0,54\%$ , kadar protein daging jantan  $18,99 \pm 0,63\%$  lebih tinggi dari betina  $18,22 \pm 0,74\%$ , kadar lemak daging betina  $2,28 \pm 0,58\%$  lebih tinggi dari jantan  $1,67 \pm 0,41\%$ , serta kadar kolesterol daging jantan  $45,55 \pm 3,36$  mg/100 g lebih tinggi dari betina  $40,87 \pm 2,06$  mg/100 g. Kadar air daging umur 8 minggu  $75,71 \pm 0,58\%$  lebih tinggi dari umur 10 minggu  $75,10 \pm 0,52\%$ , kadar protein daging umur 8 minggu  $18,94 \pm 0,71$  lebih tinggi dari umur 10 minggu  $18,28 \pm 0,73$ , kadar abu daging umur 8 minggu  $1,49 \pm 0,06\%$  lebih tinggi dari umur 10 minggu  $1,40 \pm 0,06\%$ , serta kadar kolesterol umur 8 minggu  $40,93 \pm 2,49$  mg/100 g lebih rendah 10 minggu  $45,49 \pm 3,16$  mg/100 g.

Kata kunci: Ayam Hasil Persilangan Merawang dan KUB, Jenis Kelamin, Umur Potong, Komposisi Kimia, Kadar Kolesterol

## **CHEMICAL COMPOSITION AND CHOLESTEROL LEVEL OF CHICKEN MEAT FROM CROSS-BREEDING OF MERAWANG AND KUB CHICKENS WITH THE DIFFERENT SEX AND AGE**

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### **ABSTRACT**

This study aimed to determine the effect of sex and age of slaughter on the chemical composition and cholesterol levels cross-breeding of Merawang and KUB chicken. The material used was 20 cross-breeding of Merawang and KUB chickens consisting of 5 males and 5 females chicken every 8 and 10 weeks of age. The research was conducted on 17 December 2022 – 10 March 2023. Chicken rearing was carried out in Kronggahan, Sleman from DOC to 10 weeks of age. Chickens slaughtered in a halal method to obtain carcass, then parted and deboned. Drumstick, thigh, and breast meat samples were mashed and weighed according to the chemical composition and cholesterol test. The variables observed in this research included moisture content, protein, fat, ash, carbohydrates, and cholesterol. Analysis of chemical composition by proximate method while cholesterol by Lieberman Burchard. Data was analyzed using a completely randomized design with a 2 x 2 factorial pattern using the Statistical Package for Social Science (SPSS) version 25 software. The results showed that sex had a significant effect on the moisture, protein, fat, ash ( $P < 0,05$ ) and meat cholesterol ( $P < 0,01$ ). The slaughter age had a significant effect on the moisture, protein, ash ( $P < 0,05$ ) and meat cholesterol ( $P < 0,01$ ). There was no interaction between sex and slaughter age on chemical composition and cholesterol levels. The results obtained were male moisture content  $75,70 \pm 0,58\%$  higher than female moisture content  $75,11 \pm 0,54\%$ , male protein content  $18,99 \pm 0,63\%$  higher than female protein content  $18,22 \pm 0,74\%$ , female fat content  $2,28 \pm 0,58\%$  higher than male fat content  $1,67 \pm 0,41\%$ , and male cholesterol content  $45,55 \pm 3,36$  mg/100 g higher than female cholesterol levels  $40,87 \pm 2,06$  mg/100 g. The moisture content at 8 weeks of age was  $75,71 \pm 0,58\%$  higher than 10 weeks which was  $75,10 \pm 0,52\%$ , protein content at 8 weeks of age was  $18,94 \pm 0,71\%$  higher than 10 weeks which was  $18,28 \pm 0,73\%$ , ash content at 8 weeks of age was  $1,49 \pm 0,06\%$  higher than 10 weeks which was  $1,40 \pm 0,06\%$ , and cholesterol levels at 8 weeks of age was  $40,93 \pm 2,49$  mg/100 g lower than 10 weeks which was  $45,49 \pm 3,16$  mg/100 g%.

**Key words:** Cross-breeding of Merawang and KUB Chickens, Sex, Slaughter Age, Chemical Composition, Cholesterol Level