

## PENGARUH JENIS KELAMIN DAN UMUR POTONG TERHADAP KOMPOSISI KIMIA DAN SIFAT SENSORIS DAGING AYAM MERAWANG

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### INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh jenis kelamin dan umur potong terhadap komposisi kimia dan sifat sensoris daging ayam Merawang. Materi yang digunakan yaitu 12 ekor ayam Merawang yang terdiri atas 6 ekor jantan dan 6 ekor betina dengan 3 ekor umur 10 minggu dan 3 ekor umur 20 minggu. Penyembelihan menggunakan metode halal dan hasil akhir karkas hasil *parting*. Sampel daging ayam bagian dada, paha atas, dan paha bawah ditimbang untuk uji komposisi kimia. Sampel daging ayam bagian dada dipotong ukuran 2x2 cm untuk uji sifat sensoris. Variabel analisis komposisi kimia meliputi kadar air, protein, lemak, karbohidrat, dan abu, sedangkan variabel analisis sifat sensoris meliputi warna, aroma, tekstur, keempukan, dan daya terima. Data komposisi kimia dianalisis menggunakan Rancangan Acak Lengkap pola faktorial 2x2. Data sifat sensoris dianalisis menggunakan *non-parametrik Friedman*. Data dianalisis menggunakan bantuan *software Statistical Package for Social Science (SPSS)* versi 25. Hasil analisis data menunjukkan bahwa perbedaan jenis kelamin berpengaruh nyata terhadap kadar air, protein, lemak dan warna daging ( $P < 0,05$ ). Perbedaan umur potong berpengaruh nyata terhadap kadar protein, lemak, karbohidrat dan abu daging ( $P < 0,05$ ). Terdapat interaksi antara jenis kelamin dan umur potong terhadap lemak dan keempukan daging ( $P < 0,05$ ). Kesimpulan hasil penelitian adalah kadar lemak betina sebesar  $4,74 \pm 1,55\%$  lebih tinggi dibanding jantan sebesar  $3,15 \pm 0,80\%$  sedangkan kadar air jantan sebesar  $74,87 \pm 1,02\%$  lebih tinggi dibanding betina sebesar  $73,49 \pm 0,88\%$  dan protein jantan sebesar  $19,56 \pm 1,74\%$  lebih tinggi dibanding betina sebesar  $18,53 \pm 1,29\%$ . Skor sifat sensoris warna jantan sebesar  $3,59 \pm 0,51$  lebih tinggi dibanding betina sebesar  $3,37 \pm 0,48$ . Kadar lemak umur 10 minggu sebesar  $2,89 \pm 0,51\%$  lebih rendah dibanding umur 20 minggu sebesar  $4,99 \pm 1,29\%$ . Kadar karbohidrat umur 10 minggu sebesar  $0,99 \pm 0,35\%$  lebih rendah dibanding umur 20 minggu sebesar  $1,60 \pm 0,24\%$ . Kadar protein umur 10 minggu lebih tinggi sebesar  $20,30 \pm 1,09\%$  dibanding umur 20 minggu sebesar  $17,78 \pm 0,62\%$ . Kadar abu umur 10 minggu lebih tinggi sebesar  $1,71 \pm 0,09\%$  dibanding umur 20 minggu sebesar  $1,41 \pm 0,16\%$ . Kadar lemak betina umur 20 minggu sebesar  $6,13 \pm 0,40\%$  lebih tinggi dibanding jantan umur 20 minggu serta jantan dan betina umur 10 minggu sedangkan skor sifat sensoris keempukan daging ayam Merawang jantan umur 10 minggu

sebesar  $3,66 \pm 0,51$  lebih tinggi dibanding betina umur 10 minggu serta jantan dan betina umur 20 minggu.

Kata Kunci: Ayam Merawang, Jenis kelamin, Umur potong, Komposisi kimia, Sifat sensoris

## **THE EFFECT OF SEX AND SLAUGHTER AGES ON THE CHEMICAL COMPOSITION AND SENSORIAL CHARACTERISTIC OF MERAWANG CHICKEN**

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### **ABSTRACT**

This study aimed to determine the effect of sex and age of slaughter on the chemical composition and sensorial characteristic of Merawang chicken meat. The materials used was 12 Merawang chickens consisting of 6 males and 6 females with 3 chickens aged 10 weeks and 3 chickens aged 20 weeks. Slaughter using the halal method and the final product of the carcass parting. Samples of chicken breast, thigh, and drumstick were weighed for chemical composition test. Samples of chicken breast were cut into 2x2 cm sizes for sensory characteristic test. Chemical composition analysis variables include moisture, protein, fat, carbohydrates, and ash content, while sensorial characteristic analysis variables include color, flavor, texture, tenderness, and acceptability. Chemical composition data were analyzed using a completely randomized design with a 2x2 factorial pattern. Sensorial characteristic data were analyzed using Friedman's non-parametric analysis. Data was analyzed using the Statistical Package for Social Science (SPSS) version 25 software. The results showed that sex differences had a significant effect on water content, protein, fat and meat color ( $P < 0.05$ ). The slaughter age treatment affected the levels of protein, fat, carbohydrates and ash content of Merawang chicken meat ( $P < 0.05$ ). There was an interaction between sex and age of slaughter on fat and tenderness of meat ( $P < 0.05$ ). The conclusion of the study was that the fat content of the female was  $4,74 \pm 1,55\%$  higher than males which was  $3,15 \pm 0,80\%$ , while the water content of the males was  $74,87 \pm 1,02\%$  higher than females which was  $73,49 \pm 0,88\%$ . Protein content of the males was  $19,56 \pm 1,74\%$  higher than females which was  $18,53 \pm 1,29\%$ . The sensorial score for color of males was  $3,59 \pm 0,51$  higher than females which was  $3,37 \pm 0,48$ . The fat content at 10 weeks of age was  $2,89 \pm 0,51\%$  lower than 20 weeks which was  $4,99 \pm 1,29\%$ . The carbohydrate content at 10 weeks of age was  $0,99 \pm 0,35\%$  lower than 20 weeks which was  $1,60 \pm 0,24\%$ . The protein content at 10 weeks of age was  $20,30 \pm 1,09\%$  higher than 20 weeks which was  $17,78 \pm 0,62\%$ . The ash content at 10 weeks of age was  $1,71 \pm 0,09\%$  higher than 20 weeks which was  $1,41 \pm 0,16\%$ . The fat content of females aged 20 weeks was  $6,13 \pm 0,40\%$  higher than males aged 20 weeks and males and females aged 10 weeks, while the sensorial score for tenderness of males Merawang chicken aged 10 weeks was  $3,66 \pm 0,51$

more higher than females aged 10 weeks and males and females aged 20 weeks.

Keywords: Merawang chicken, Sex, Slaughter ages, Chemical composition, Sensory characteristic