

14th
INTERNATIONAL
SYMPOSIUM

MODERN
TRENDS
IN LIVESTOCK
PRODUCTION



BOOK OF ABSTRACTS


4 - 6 October 2023, Belgrade, Serbia

Institute for Animal Husbandry
Belgrade - Zemun, SERBIA

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THE INFLUENCE OF POLLEN IN THE CHICKEN DIET ON THE SHARE OF TISSUE IN MAJOR CARCASS PARTS AND ON THE CHEMICAL COMPOSITION OF DARK AND WHITE MEAT**Veselin Petričević¹, Miloš Lukić¹, Zdenka Škrbić¹, Maja Petričević¹, Simeon Rakonjac², Vladimir Dusković², Danijel Milenković¹**¹Institute for Animal Husbandry, Autoput 16, 11080, Belgrade-Zemun, Republic of Serbia²Faculty of Agronomy, University of Kragujevac, Čacak, Republic of Serbia

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Abstract: The goal of the research was to examine the effect of adding different concentrations of pollen to broiler feed mixtures on the share of tissue in major carcass parts and the chemical composition of dark and white meat. The research was carried out in the Institute for Animal Husbandry using Cobb 500 hybrid chickens up to the age of 42 days. A total of 1200 day-old chicks of both sexes were divided into 5 groups. There were 6 repetitions for each group. During the test, broilers were fed with two mixtures (starter and finisher), food and water were ad libitum during the test, and the composition of the mixtures differed in the amount of added pollen. No pollen was added to the control group (C). Chickens of the (I) group consumed mixtures with the addition of 0.25% pollen, in (II) group 0.5% was added, in group (III) 0.75% was added, while in group (IV) 1.0% pollen was added. At the end of the experiment, one bird was taken from each treatment and of both sexes from each repetition using the random sample method, a total of 60 chickens, from which after slaughter and dissection, the thighs and breast were taken, to determine the share of muscle, fat and bone tissue and skin. After that, samples of thigh muscle tissue and breast were taken with the aim of determining the chemical composition of dark and white meat. By processing the obtained data, significant differences ($p < 0.05$) were determined for the proportion of fat tissue in the thighs. Chickens of group III had significantly lower ($p < 0.05$) share of fat tissue in thighs compared to chickens of group I. The share of muscle and bone tissue and skin did not differ under the influence of the examined factor. By processing the obtained data for the chemical composition of dark and white meat of broiler chickens of both sexes, no significant differences ($p > 0.05$) were found in the content of water, fat, ash and protein under the influence of different diets. The use of mixtures with different levels of pollen addition in the diet of broiler chickens did not have a negative effect on the quality of chicken meat.

Key words: chickens, pollen, chemical composition of meat

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