Meat Performance of the Hen's Breed Oravka after Reproductive and Laying Period

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Abstract

The aim of this research paper was evaluated the meat performance cocks and hens of breed Oravka after reproductive and laying period. The results from this study show that carcass yield cocks and hens of Oravka were higher in comparison with STN 46 64 15 (72.84, respectively 71.02%). We recorded that sex had statistically significant effect on some carcass characteristics (live weight, carcass weight, breast weight, things weight and back weight). Anyhow, we found that sex affected abdominal fat weight (in profit of hens) and percentage of some carcass parts - percentage of breast (in profit of hens) and percentage of things and back (in profit of cocks).

Keywords: cock**,** hen, live weight, meat production, Oravka

1. Introduction

Magdelaine et al. (2008) showed that relatively low and competitive pricing of poultry compared to other meat, the absence of cultural or religious obstacles, and dietary and nutritional qualities are the main factors explaining its attractiveness.

The success of poultry meat production has been strongly related to improvements in growth and carcass yield, mainly by increasing breast proportion and reducing abdominal fat (Griffin, 1996).

The hens after laying period just the by-product. Therefore we can not put special demands on the quality of hen meat. They are used especially for cooking - preparation of soups (Uhrín et al., 1993).

The aim of this study was evaluated meat performance of native hen's breed Oravka after reproductive and laying period.

2. Materials and methods

Birds were placed in breeding pen of special poultry house for controlled breeds of poultry at University Experimental Farm in Kolíňany. Feeding and watering were *ad libitum*. Feeding of poultry was providing by commercial feed mixtures with identical content during analysed period. Birds were exposed to natural light as a practiced in rural areas of South-West Slovakia.

The slaughter analysis of 5 cocks and 10 hens realised in laboratory of Department of Poultry Science and Small Animal Husbandry of SUA in Nitra.

The cocks and hens were weighed before slaughter and then were slaughtered, bled, plucked and weighed to determine blood and feather losses. The carcass was separated into breast, legs, back, wings, head and giblets (liver, heart, gizzard and neck).

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3. Results and discussion

In this study Oravka cocks compared to hens shows statistically high significantly (P<0.01) higher live weight and carcass weight, which were supplemented statistically significantly (P<0.05) higher breast weight, things weight and back weight. Our results corresponded with results by Marks (1990) that sex significantly affected live weight and carcass composition.

The results of giblets shows that heart weight, liver weight and gizzard weight were statistically non significant between (P>0.05) sexes.

By contrast, the abdominal fat weight was statistically significantly (P<0.05) better in Oravka hens than cocks. These results were in agreement with Sonaiya and Benyi (1983) who found that sex differences are to know to influence abdominal fat weight. The Oravka cocks showed the statistically significant (P<0.05) highest neck weight compared with hens. The effect of sex on carcass characteristics is shown in Table 1.

Oravka cocks and hens achieved higher values of the carcass yield (72.84, respectively 71.02%) in comparison with normed value of STN (Slovak Technical Norm) 46 64 15 (70.00%). Similarly, Uhrín et al. (1993) recorded carcass yield of after laying hens Hisex White 70.46% and Shaver Starcross 288 71.93%.

Table 1. The effect of and sex on carcass characteristic of Oravka males and females

	Sex		t
	Cocks	Hens	
Live weight (g)	2971.70±73.68	2458.90±68.17	++
Carcass weight (g)	2137,60±61.58	1828,60±58,17	++
Breast (g)	530.50±21.48	465.10±18.08	+
Thighs (g)	619.50±36.67	494.60±29.80	+
Back (g)	536.00±14.01	430.60±11.24	+
Wings (g)	240.00±15.11	202.80±13.03	ns
Heart (g)	11.30±2.08	9.80±1.40	ns
Liver (g)	49.30±9.54	47.80±7.04	ns
Gizzard (g)	45.90±5,01	47.30±4.57	ns
Neck (g)	74.80±2.89	49.30±1.62	+
Fat	30.30±18.50	81.30±35.91	+
Carcass yield (%)	72.84±1.65	71.02±1.01	ns

ns = P>0.05; + = P<0.05; ++ = P<0.01

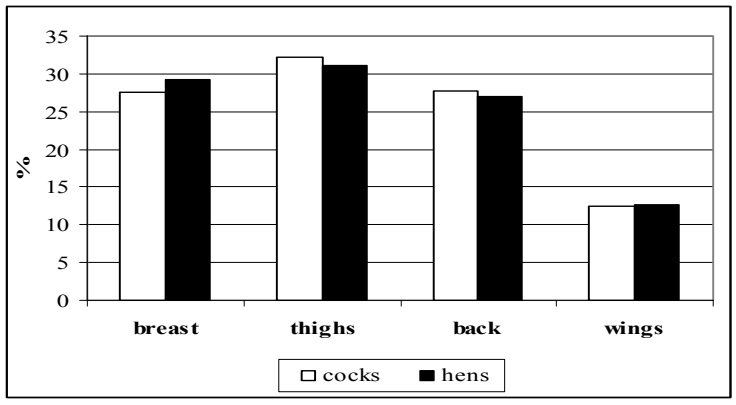

Figure 1. Percentage of carcass parts of cock and hens after reproduction and laying period

From Figure 1 resulted that higher percentage of breast was recorded at Oravka hens (29.20%) in comparison with cocks (27.54%). By contrast, in case of cocks, we found higher percentage of things (32.17%) and back (27.83%) than hens (31.05, respectively 27.03%). The wings weight between sexes was similar (12.26 vs. 12.73%). These results were compatible with those of Lazzari and Paganni (1999) who observed higher breast proportion of females than males

4. Conclusions

The results from this study show that carcass yield cocks and hens of Oravka were higher in comparison with STN 46 64 15. In term of meat efficiency from cocks and hens after reproduction and laying period we can allege that this kind of meat is used especially for preparation of soups and additive for production of meat products from poultry.

We recorded that sex had statistically significant effect on some carcass characteristics (live weight, carcass weight, breast weight, things weight and back weight). Anyhow, we found that sex affected abdominal fat weight and percentage of carcass parts (especially percentage of breast, things and back).

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