

PRODUCTION PARAMETERS OF SLOVAK NATIONAL HEN'S BREED ORAVKA

PARAMETRII PRODUCTIVITĂȚII LA RASA DE GĂINI SLOVACĂ ORAVKA

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Our work describes the results of egg production and egg weight of hen's breed Oravka in years 2004 - 2008. Observation of production parameters of hen's breed Oravka realised in special poultry house for controlled breeds of poultry at University Experimental Farm in Koliňany. In analyzed period 2004 to 2008 we observed flock of breed Oravka with ten females and one male. This poultry flock was selecting from young birds per year. The egg production we evaluated as average number of eggs for accelerated 7-month laying period (1 month - 30 days). The eggs were weighed individually from every hen for period 10 days in each month. On basis of achieved results we observed progressive increase of egg production and egg weight. The egg production of breed Oravka increased about 3.10 eggs/hen (2.06 %) between years 2004 and 2008. Massive improvement we recorded at parameter of egg weight (3.30 g - 6.30 %) in analyzed period. The selection programme of breed Oravka will target the increase of egg production and egg weight in accordance with standard of breed (egg production 180 - 200 eggs, egg weight 58 g)

Keywords: poultry, Oravka, egg production, egg weight

Introduction

Szwaczkowski et al. (2003) showed that genetic improvement of poultry is based on two alternative approaches: crossbreeding and selection. Crossbreeding leads to the creation of more heterozygotes and in consequence to greater genetic variation in the population. In contrast, selection determines both genetic gain and inbreeding rate.

The breed of hen Oravka was created by crossbreeding of the regional hens with Rhode Island, Wyandotte and New Hampshire. Oravka was recognised as breed in year 1990. The original breeding goal to create a dual-purpose poultry breed with good egg production, growth ability and adaptability on alternative outdoor rearing

was fulfilled during the individual stages of breeding programme, which started in the 1950's (Hrnčár and Weis, 2007).

Hrnčár (2008) noted that in agreement with standard of breed Oravka is the eggs yield 180 to 200 eggs with a brownish shell, the minimum hatching egg weight is 58 g.

Material and Methods

Observation of production parameters of hen's breed Oravka realised in special poultry house for controlled breeds of poultry at University Experimental Farm in Kolíňany.

In analyzed period 2004 to 2008 we observed flock of breed Oravka with ten females and one male. This poultry flock was selecting from young birds per year. Birds were placed in breeding pen provided with a trap nest for identification of egg. All birds were leg-banded for identification.

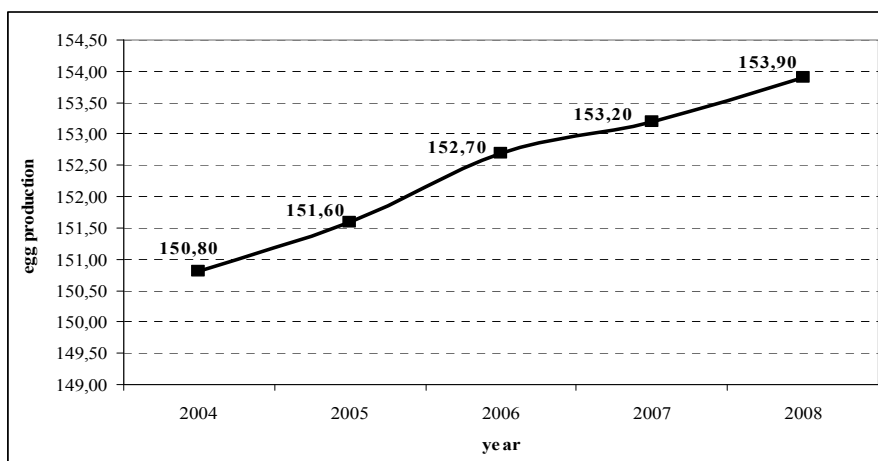
Feeding and watering were *ad libitum*. Feeding of poultry was providing by commercial feed mixtures with identical content during analysed period. Birds were exposed to natural light as a practiced in rural areas of South-West Slovakia.

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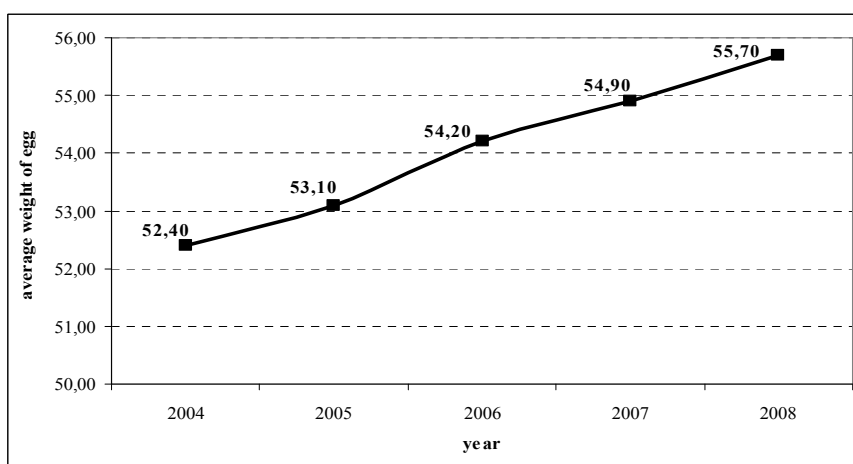
Results and Discussion

As shown in Graph 1, during analyzed period of year 2004 - 2008 we found increased average egg production from 150.80 eggs/hen (year 2004) to 153.90 eggs/hen (year 2008). In comparison, Benková et al. (2003) showed that the egg production of breed Oravka in gene reserve for analyzed period of years 1996 - 2001 had increased tendency and in the 2001 year was the average production 155 eggs/hen.



Graph 1. Trend of average egg production of breed Oravka in years 2004 - 2008

From Graph 2 resulted that average egg weight had also increased tendency. We observed average weight of eggs 52.40 g in year 2004. This value increased at rate 55.70 g in year 2008. The egg weigh increased during the laying period. Benková et al. (2003) detected average egg weight 49.48 g in year 1996, 54.87 g in year 1998 and 55.24 g in year 2001.



Graph 2. Trend of average egg's weight increase of breed Oravka in years 2004 - 2008

Conclusions

The hen's breed Oravka is dual-purpose breed of poultry with good egg production, growth ability and adaptability on alternative outdoor. In analyzed period 2004 - 2008 we achieved improvement in parameters egg production and egg weight. In case of egg production we observed deference 3.10 eggs/hen (2.06 %) in benefit of year 2008. The improvement of egg weight in 2008 was accentuated in comparison with increase of egg production and achieved difference 3.30 g (6.30 %) in space of years 2004 - 2008. The selection programme of Oravka will target the increase of egg production and egg weight in accordance with standard of breed (egg production 180 - 200 eggs, egg weight 58 g)

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