

ISSUES CONCERNING THE INFLUENCE OF BODY WEIGHT ON THE DUCK POPULATION (*Anas platyrhynchos domesticus*) BREDIN BIHOR COUNTY

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Abstract

*Although the population prefers growing geese, there are medium-sized farms that have flocks of ducks from this race. Pekin breed presents valuable productive morphological indices and an amazing capacity of acclimatization, consequently, suited both for extensive and intensive operating systems. In the research carried out we studied the birds of the same three private farms, by the order Anseriformes, *Anas platyrhynchos domesticus* specie, Pekin breed, in Bihor county. 90 females and 15 males have been studied. The Pekin young male realized an average weight at 18 weeks of 2852.5 g / head starting from a one day old bud weight of 63.4 g / head. At female buds we noticed a similar trend, realizing at the end of the youth time, an average weight of 2366 g / head from 62.1 g / head at one day-age. In adult specimens, the weight is increasing at the same rate as at the young birds, until 27 – 28 weeks of age, after which the growth rate is reduced significantly. In males there is an average performance of 3551.1 g / head, meaning a plus of 21% extra weight compared to the weight measured at the end of youthtime and in females of 2982.5g/head, meaning 23.7% plus, using the same reporting criteria.*

Key words: Pekin breed, Body weight dynamics, mature duck males, mature duck females.

INTRODUCTION

In the sixteenth century, the breed was imported from China by the British, and mixed with local populations of other breeds, and it spread everywhere in Europe, in households, including in our country. Pekin breed is a heavy breed, suitable for meat production growth or fattening for fatty liver, or why not, as gene carrier for the formation of high-productivity hybrids.

In Romania the official import of genetic material of the Pekin breed took place in 1982 when 2 lines of this breed (001 and 005) were brought from the company Cherry Valey, UK, which led to the formation of the Romanian hybrid duck meat, named Rora.

MATERIALS AND METHODS

Three populations of Pekin ducks (*Anas platyrhynchos domesticus*) were selected as part of the study, from three private farms in Bihor County. The farms were named C1, C2 and C3, as follows: in farm C1 35

heads (5 males and 30 females), farm C2 with 28 heads (4 males and 24 females) and the farm C3 with 42 heads (6 males and 36 females).

The biological material used in the experiments consisted of birds of both sexes at different ages (hatching juvenile period, reaching sexual maturity, the active period of reproduction).

The gravimetric method was used to determine the body weight, by individual analytical balance weighing carried out at hatching and weekly for the young category, and monthly, for the adult category.

The data collected experimentally, in terms of studied characters that showed measurable and quantifiable properties, have been accumulated and statistically processed.

RESULTS AND DISCUSSION

Young Pekin male breed achieved an average weight of 2852.5 g / head at the age of 18 weeks, from a one day old bud weight of 63.4 g / head. For female buds we noticed a similar trend, realizing at the end of the juvenile period an average weight of 2366 g / head weight from 62.1 g / head, at one day.

In adult specimens the weight is increasing until 27 – 28 weeks of age, after which the growth rate is reduced significantly. Thus, on males we observe an average performance of 3551.1 g / head, meaning 21% extra weight from the end of youth, while females made an even greater weight gain, of 23, 7% , when using the same reporting criteria (Figure 1 and 2).

The best performance on weight gain were recorded at the females from the population of C2 (3023.7 ± 86.4 g / head at 65 weeks), and at the males of the same population (3597.8 ± 115.2 g / head at 65 weeks).

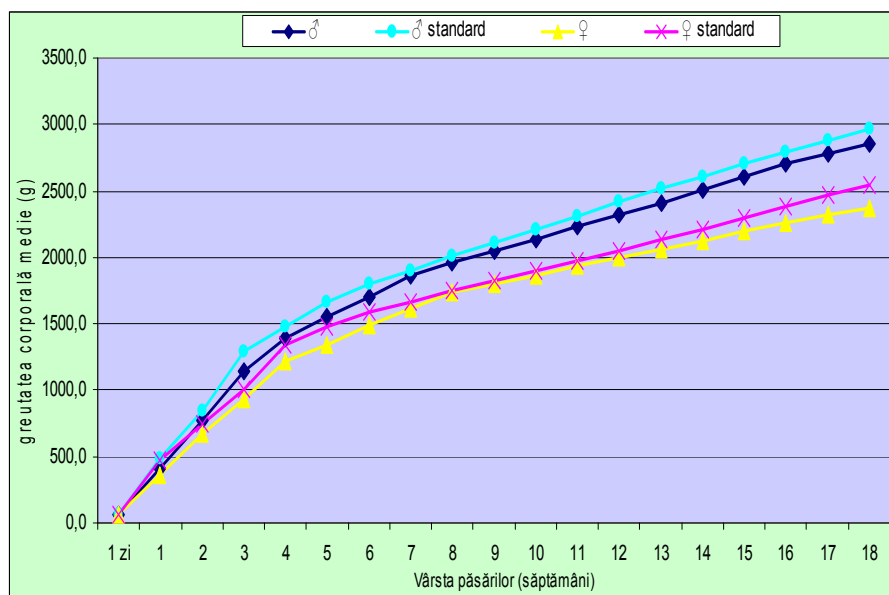


Fig. 1 - Body weight dynamics in duck youth, Pekin breed

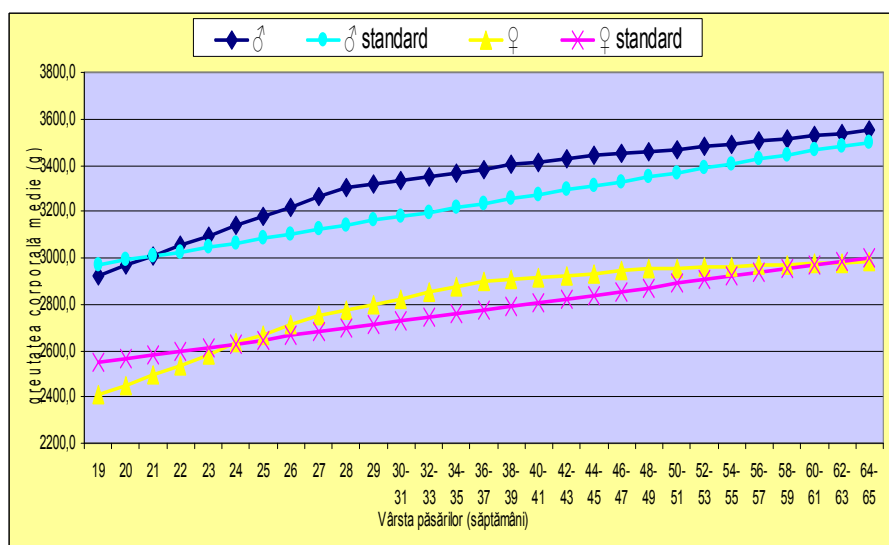


Fig. 2 Body weight dynamics in mature ducks of both genders, Pekin breed

CONCLUSIONS

The birds breed from Pekin breed had a good weight gain dynamic, achieving average adult body weight of 3.5 kg in males and almost 3kg in females, approaching the upper value of the potential of this breed (Dodu, 2010).

We also want to increase body weight in females and their selection to improve egg production.

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