STUDY OF PRODUCTIVE INDICES IN A POPULATION OF TURKEYS FROM THE WESTERN PART OF THE COUNTRY

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RESEARCH ARTICLE

Abstract

Turkey flocks, the common breed, existed in our country since the beginning of the 18th century, coming from Europe, in the 20th century the imports of pure lines from valuable breeds began.

The first imports of breeding stock from the improved Bronze breed took place in 1950. These flocks were used predominantly in the south of the country, gradually valuable sires spread to other areas.

The interest in raising bronze turkeys in an intensive system decreased, because new genotypes with white plumage were introduced into the country, which provided carcasses of higher quality.

In Bihor County there are populations of turkeys in small flocks, compared, for example, with the palmipede species, for whose breeding there is a long tradition in the west of the country.

In three breeders it was possible to carry out studies of the improved Bronze turkey breed, 11 males and 80 females being analyzed.

Keywords: Dynamics of the body weight in the turkey youth females, improved Bronzed breed, Body weight dynamics of the both genders youth at the improved Bronze turkey breed

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INTRODUCTION

The origin of this breed is on the North American continent, being homologated in 1877. The vast majority of specimens, although phenotypically falling within the improved Bronze breed standard, show varying degrees of infusion with unimproved local populations, which is an undesirable fact, the purification of the breed representing a future goal.

MATERIAL AND METHOD

In the three farms studied, 91 individuals were subjected to the study, of which 80 were males and 80 were females.

Thus, the individuals of the improved Bronze breed were distributed as follows: 28 turkeys and 4 turkeys, respectively 32 individuals in the first farm, 20 turkeys and 2 turkeys, respectively 22 individuals in the second farm, and 32 turkeys and 5 turkeys, representing 37 birds in the third farm. To carry out the research, the following were used: digital analytical and technical balances, photography devices, computer equipped with spreadsheet software, depending on the experimental method used.

All the results obtained were compared with the reference values in the specialized literature (Sauveur B., 1988; Usturoi M.G., 1999; Vacaru-Opriş I. et al., 2002).

The experimental data obtained were centralized and statistically processed.

RESULTS AND DISCUSSIONS

The turkeys in the studied populations are classified, up to the age of 30 weeks, in the juvenile category, and will enter the reproductive activity at 31 weeks of age. The body weight of the juveniles recorded a spectacular evolution, especially in male chicks. In females, during the juvenile period, the weight dynamics did not reveal such a large amplitude as in males. The differences between the two sexes became evident after the 4th week of life, as it is known that the period of the first weeks after hatching is critical for the development of turkey poults.

The best performances were achieved by the male young from the second farm (an average of 17.2 Kg/head at the end of the juvenile period) and by the females also from the second farm (an average of 9.83 Kg/head at the same age) (Fig. 1). In adults, weight evolution followed an upward curve in males and in females it was characterized by slow growth until the peak of egg laying. Adult

turkeys continued to grow, reaching an average weight of 21.0 kg at the age of 54 weeks, under conditions in which the populations became very heterogeneous (Fig. 2). In the case of turkeys, 10.7 kg/head was reached at the peak of laying, and at the end of the productive period an average weight value of 9.7 kg/head was recorded, a fact confirmed by data from the specialized literature (Vacaru-Opriş I, 2002). The losses in the studied populations occurred during the juvenile growth period, due to an increased sensitivity of turkey poults in the first half of the juvenile period (fig. 3).

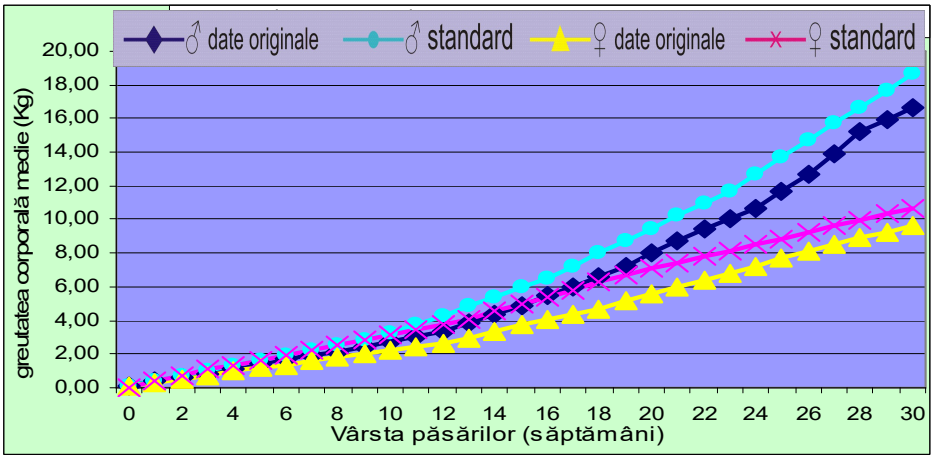

Fig. 1 Body weight dynamics of the both genders youth at the Improved Bronzed turkey breed

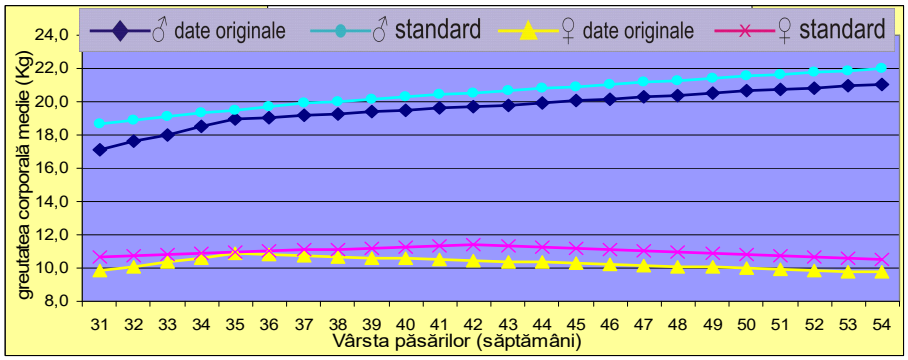

Fig. 2 Body weight dynamics of the both genders mature fowl, Improved Bronzed breed

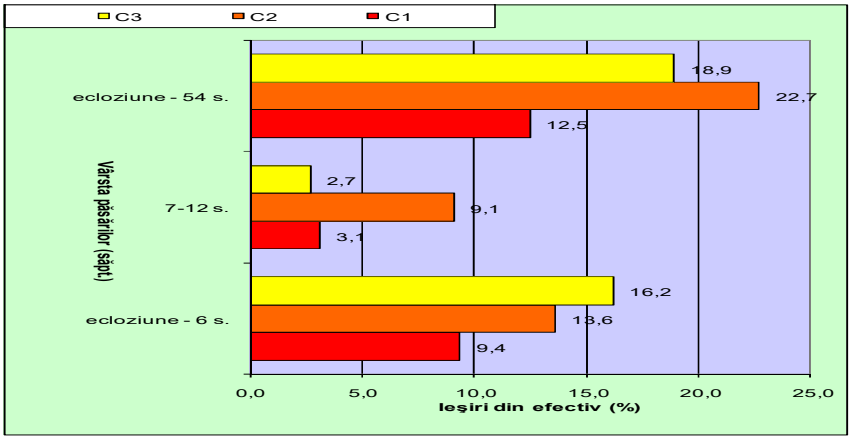

Fig. 3 Dynamics of flock casualties at the Improved Bronzed breed, from the 3 farms

CONCLUSION

The prospects for increasing the turkey population, especially the improved Bronze breed, in this area of the country are quite pessimistic. The reasons are primarily the local tradition of consuming palmipede meat, but also the special feeding and maintenance conditions for young turkeys.

At maturity, males reached an average weight of 21 kg (towards the upper limit of this breed's potential), and females 10.9 kg.

The study also determined a selection of valuable males, to be used to increase the fertility rate in other similar populations.

Paternal lines are introduced into the breeding process because they generate genetic progress in terms of growth rate, superior feed utilization and some carcass quality elements (live weight, % breast, etc.), and maternal lines must be selected for numerical egg production, for extending laying periods and for shortening hatching periods (Dodu M., 2010)

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