CHARACTERISTICS OF THE QUALITY OF EGG PRODUCTION IN THE GEESE POPULATION IN THE AREA OF BIHOR C0UNTY

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RESEARCH ARTICLE

Abstract

In our country, the foundations for raising geese according to intensive principles were laid as early as 1977, when the first pure line of the Dutch Rhine White breed, exploited for meat production, was imported. Later, other pure lines were imported from the early mentioned breed, as well as from other breeds. At the present time, for the production of goose meat and fatty liver in our country, a series of commercial hybrids obtained as a result of crosses between pure lines belonging to the Landaise breed with pure lines of Dutch Rhine White are grown. Selection work on geese is aimed at improving the production of eggs, as well as meat and fatty liver. In the area of Bihor county, it was possible to carry out some studies in three breeders possessing the Dutch white Rhine breed, in pure condition, 24 males and 86 females being analyzed. Due to the seasonal specificity of reproduction in geese, the average number of eggs obtained/adult goose was 41.4, in the period January-July.

Keywords: White Rhine Dutch breed, Dynamics of incubation eggs weight, Eggs yield and lazing intensity

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INTRODUCTION

Although this species is characterized by a strong seasonality of egg production, the population prefers it for other valuable productions, namely meat, fluff and fatty liver, lending itself very well to making traditional products, especially in the western part of the country.

The imported lines, as well as the native biological material, formed the reproductive queen on which the work was carried out to obtain commercial hybrids specialized for both meat and fatty liver production.

MATERIAL AND METHOD

The number of individuals analyzed from the three farms of the study was 110 individuals, of which 24 were males and 86 were females.

The specimens studied from the Dutch breed, being distributed as follows: 28 females and 7 males, respectively 35 individuals in the first farm, 26 females and 4 males, respectively 30 birds in the second farm, and 36 females and 9 males representing 45 birds in the third farm.

In order to carry out the research, the following were used: digital analytical and technical balances, X-ray machines, computer equipped with spreadsheet software, depending on the experimental method approached.

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

The obtained experimental data were centralized and processed statistically.

RESULTS AND DISCUSSIONS

The seasonal nature of egg production in the species Anser anser, the laying period being comprised, as a rule, between the second half of January and June, totaling 19 peak weeks.

In the case of the studied populations, the egg laying peak was reached in the 5th week, that is, when the birds were 37 weeks old (Fig. 1).

At the time of hatching, the intensity of laying was 11.4%, to reach the maximum of 57.86%, after which it decreased continuously, until the birds reached the age of 50 weeks (8.92%).

On average, for the 3 studied populations, fertility values were recorded around the reference of 85% (fig. 2).

The hatchability had high values, especially due to the good fertility of the eggs introduced for incubation. The analyzed parameter varied between 82.9% (peak of laying) and 80.5% (end of laying) (fig.3).

And the hatching percentage showed acceptable values, but located in a larger range of variation.

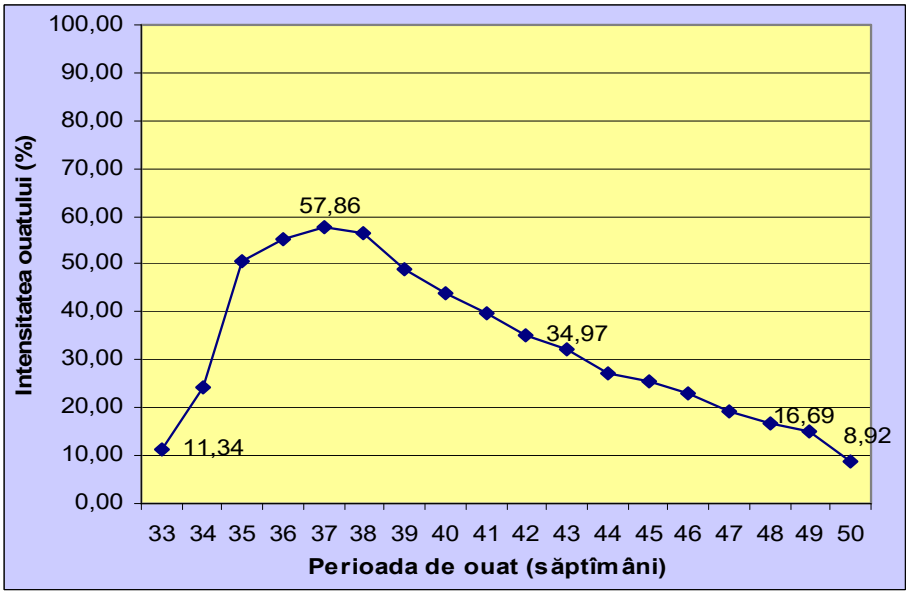

Fig. 1 Average value of the laying intensity in those 3 farms of White Rhine Dutch geese

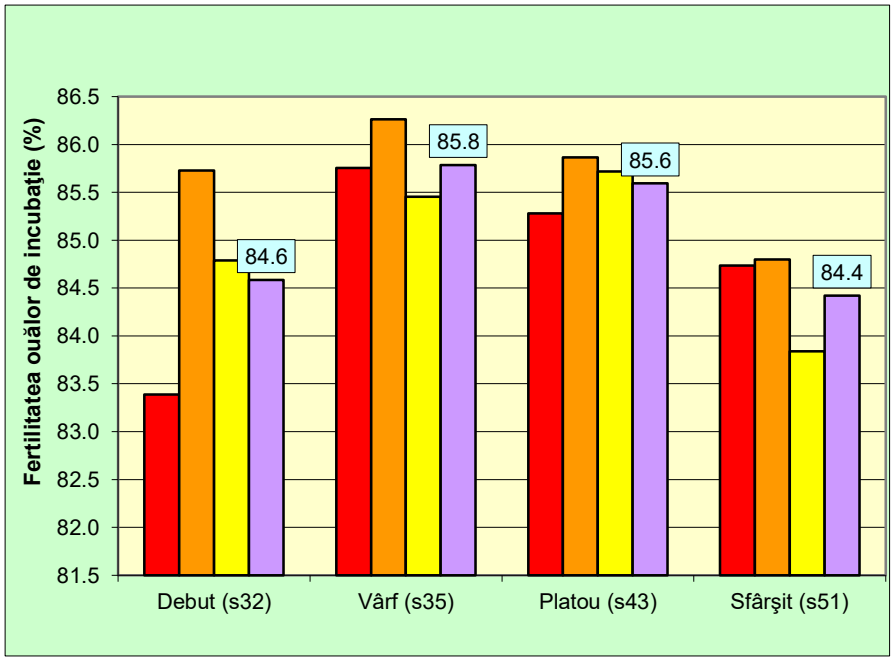

Fig. 2 Fertility of the incubation eggs in geese farms, White Rhine Dutch breed

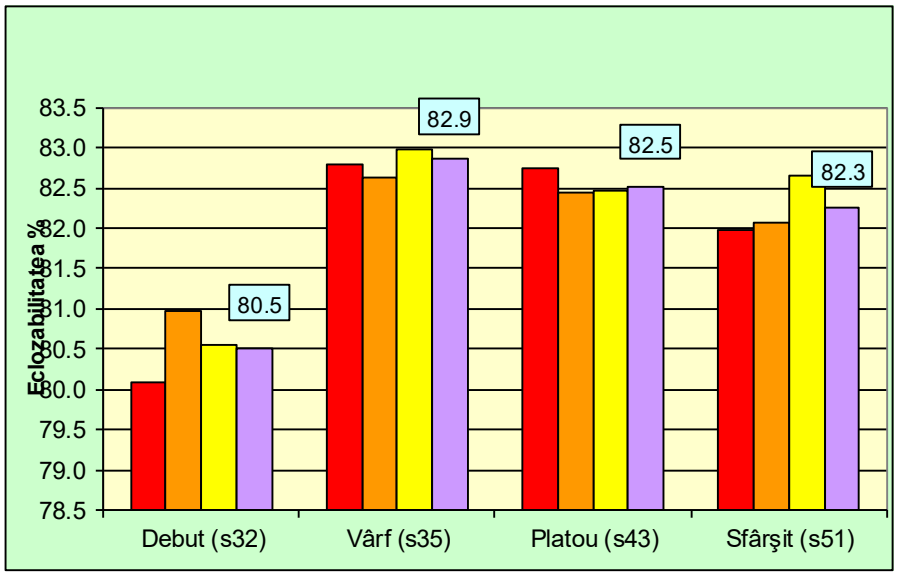

Fig. 3 Hatchability of the incubation eggs in geese farms, White Rhine Dutch breed

CONCLUSION

Within the herds studied, it is necessary to improve by artificial selection the performance regarding the numerical production of eggs and the production of meat and fatty liver.

The selection for egg production is difficult, due to the seasonal nature of egg laying.

For this reason, the selection must be combined (own performances + family average for females and through the performances of collateral relatives of the opposite sex, for males). (Dodu M. 2010).

Females that produce a low number of eggs can be eliminated from reproduction and following assessments regarding the opening of the ischia, performed at the top of the laying. Geese with too low value for this character are removed.

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