

Phenotypic Parameters of Milk Production Specific to the Holstein Friesian Cattle Farm Located in Alba County

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Abstract. The massive importation of Holstein Friesian Cattle has increased in recent years the productivity of farms as a result of the precocity and growth of reproduction and milk production.

The productivity performances, the economicity and precocity, also the great adaptability of the Holstein Cattle, fact that led to a massive spreading of this breed of cattle all over the world, and the continuously fluctuation of the Romanian cattle structures, represent issues necessarily for us to make a good analysis of the Holstein Cattle Farm located in Alba County.

Keywords: breeding, production, milk, improvement, Holstein Friesian

Introduction. The massive importation of Holstein Friesian Cattle has increased in recent years the productivity of farms as a result of the precocity and growth of reproduction and milk production, issues highlighted by authors with interests in this area (Cziszter *et al.*, 2008; Maciuc, 2010; Cozma *et al.*, 2011).

The productivity performances, the economicity and precocity, also the great adaptability of the Holstein Cattle, fact that led to a massive spreading of this breed of cattle all over the world, and the continuously fluctuation of the Romanian cattle structures, represent issues necessarily for us to make a good analysis of the Holstein Cattle Farm located in Alba County.

Aims and Objectives. The main objective of this paperwork focuses on the analysis of productivity level specific to the Holstein Friesian Cattle bred at the S.C. Golden Prodimpex S.R.L. from Alba County. The basic issues of this research are related to the lower level of the technical and economic indicators, which the indigenous breeds develop, and the milk productivity as one of the objectives included in the breed improvement program.

Materials and Methods. Genetic potential lifting and the increase of both population and actual breed productivity represent important ways for increasing the milk productivity, in other terms more money and also the increasing of actual breed number and their qualitative improvement.

The biological studied material is the number of Holstein Friesian cattle, about 150 heads, bred at the S.C. Golden Prodimpex S.R.L. from Alba County. Established zooeconomic features were monitorized through 4 lactations and total analyzed farm and permitted to outline the main quantitative and qualitative features specific to milk productivity.

Results and Discussions. Taking into consideration the performance analysis in milk productivity based on the lactations from COP, between 2007 and 2011, we can say that the result is 5984.03 kg to an average of 19.42 kg/day, in terms of a medium milk production on a normal lactation, and 6679.07 kg to an average of 18.65 kg/day, in terms of a total lactation.

The obtained fat and protein percents from both total and normal lactation are satisfied, with values between 3.98 with 3.99 specific to fat percent and 3.40 with 3.41 specific to protein percent.

The milk production showed an increasing trend from the first to the third lactation, meaning 90% of the maximum lactation (6418.85 kg) (Fig. 1).

The programming of increasing the youth assures realisation at 18 months an optimal conditions for going to reproduction.

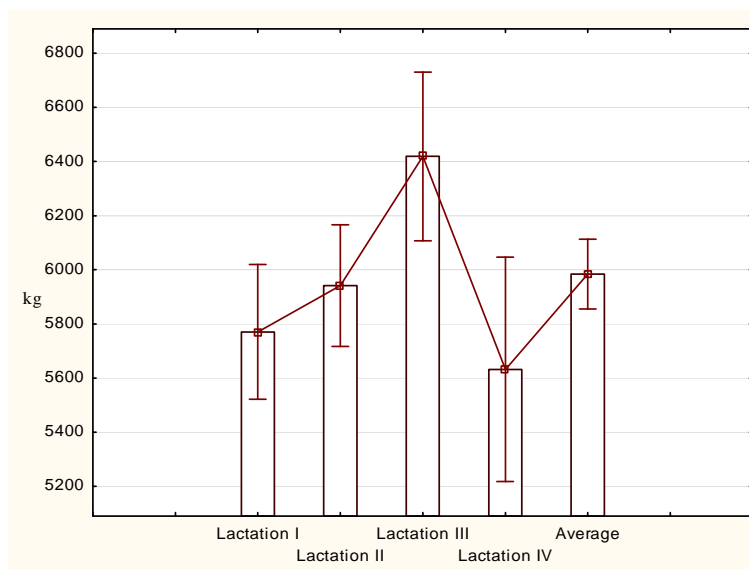


Fig. 1. Average milk production mean and standard error

The variability of individual milk production at farm level is quite high, minimum limit is 3117 kg and the maximum is 10219.2 kg.

Analyzing the calving interval at farm level can be seen that it is situated in the normal range, which is around 390 days, and in terms of the dry period in the dynamic of lactation is increasing.

Conclusion. Analysis of milk production indices indicate us the existence of plus variants, which can be form the nucleus of the basis for selection to improve the breed structure of analyzed farm.

To maintain the production indicators at the highest level is necessary to monitor uninterrupted, with the optimization of feeding and maintenance technology.

REFERENCES

1. Csiszter, L.T., S. Acatincai, A. Bognar, I. Tripon, D. Gavojdian, Simona Baul and Silvia Erina (2008). Study of morphological and milk production traits of a Romanian black and white cow population from the South-Western Romania. Bulletin UASVM Animal Science and Biotechnologies, 65(1-2), 156-160
2. Cozma, D., V. Ujica, I. Nistor, C. Dascalu and C.E. Nistor (2011). Contributions regarding studies on milk production and reproductive characteristics of the BNR population in Doaga-Vrancea farm. Lucrari Stiintifice, vol. 56, Seria Zootehnie, Iasi, 104-110.
3. Maciuc, V. (2010). Studies regarding productive life of a Friesian cow population. Lucrari Stiintifice, vol. 53, Seria Zootehnie, 227-232.