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RELATIONSHIP OF MILK PRODUCTIVITY OF COWS AND THEIR LEVEL OF REPRODUCTIVE ABILITY, DEPENDING ON THE LINEAR SUPPLIES

Statement of the problem. The most important role in the intensification of cattle owned by improving the reproductive ability of the animals to the level specified by their genetic potential.

Growing requirements for obtaining a rhythmic production of animal and the offspring of highly productive animals resulted in reduction of deep and complex studies of the physiological mechanisms regulating the reproductive functions of animals, taking into account the performance of their feeding and.

Condition of studying the problem. The relationship between milk production of cows and their fertility was examined, but no consensus on the impact of the level of milk yield on reproductive ability of cows is still no. J. Johanson, J. Rendel, A. Grawert (1970), analyzing the results of the Swedish, American and German researchers on the subject have concluded that the relationship between high performance and low fertility caused only by environmental factors.

BP Zavertyaev, summarizing numerous experimental data notes that in herds there are manufacturers whose daughters variously combine productive and reproductive traits. In addition, the direction and magnitude of the links between these traits in the progeny of individual bulls also subject to fluctuations that are caused not only by the variety of environments, but also physiological and genetic characteristics of heifers, as well as other factors.

Improving reproductive function in cattle has always been a problematic issue, but at the present time is of great practical and scientific interest. Especially the issue concerned the high-animal and animal genotypes of new, as in violation of the reproductive functions, especially in cattle, reducing the period of their economic use, reduces the level of milk production, and hence the profitability of the industry as a whole.

The main indicators characterizing the efficiency of production, include duration between calving period, the duration of the service period, insemination index and coefficient of reproductive ability of cows.

The aim of the study was to investigate the association between milk production and reproductive ability of cows at first lactation.

Objectives and methodology of research. The object of our research were the cows - heifers (n = 69) of the central zone type Ukrainian Red dairy breed "Chumak" Dnepropetrovsk region Dnepropetrovsk region. Studies were conducted in 2012. We studied the relationship of milk productivity of cows with reproduction ability and the calculated regression link between the basic attributes of productivity.

The obtained research results are processed statistically using a PC and use the software, Microsoft Excel software with Microsoft Office 2003.

The research results. Analysis of the experimental data shows that with the increase of milk production worsens the reproductive ability. Thus, the highest yield of milk in the first lactation

milk yield and content of milk fat inherent in animals belonging to the line Reflection Sovereign (5254 kg milk, fat content of 3,8 %, and the yield of milk fat 199,5 kg). However, this line of heifers were low herd reproductive ability indicators: service period is 164 days, between calving period - 437 days, the coefficient of reproductive ability – 0,87 Index Doha – 46,0.

Cows, heifers belonging to a line of Chevalier, characterized by the best indicators of reproductive ability in comparison with that of other animals genotypes (service period - 107 days between calving period - 364 days, the coefficient of reproductive ability – 1,01 Index Doha – 54,9) . But animal milk productivity of the line below the average herd. From one cow line Chevalier received an average of 5148 kg of milk fat content of 3,8% and a yield of 196,9 kg milk fat. However, in all cases, the comparison of the average performance of animal productivity difference was not statistically significant.

Aligned features characterizes the degree of consolidation, and we believe that the value of the coefficient of variation fully reflect the level of roughness features.

In fresh cows line Cavalera largest coefficient of variation on the basis of "lactation" - 42.4% and service period – 81,6 %, between calving period – 13,8%, the coefficient of reproductive ability – 25,1 %, the index of Doha – 13,5 %. In animals, the line R. Siteyshn these figures respectively lowest: 22,8; 18,5; 0,1; 29,2 and 14,7 % respectively.

The high level of variability in milk fat was in fresh cows Ingansera line – 16,6%, and the lowest - in the animals line R. Siteyshna – 10,1 %. Swipe milk yield variability in animals studied lines ranged from 10,1% (cows line R. Siteyshna) to 17,8 % (heifers Ingansera line).

Calculation of the regression coefficient between the above performance characteristics possible to establish that, when changing the herd by 1% fat milk – 1,5 day value changes the service period. However, when changing to 1 day service period – 0,125 % change in milk fat percentage. But the magnitude of the regressive attitude indicators in animals of different linear accessory changes 0,063 (in animals R. Siteyshna line) to 0,188 (in line Ingansera Rustavi). Thus it is obvious that, along with the signs of the mean and the error on the basic characteristics of productivity, regression, correlation relationship signs reflect the quality of their orientation, it is appropriate to use in the selection process with the livestock and milk production release schedule.

Conclusion. With the increase of milk production trend decrease of reproductive function of cows that should be used in the selection process with the livestock.