

### **Main ways of rising productivity of herd of cattle of Ukrainian black-motley dairy**

**The purpose.** To determine features of formation of highly productive herd of cattle of Ukrainian black-motley dairy breed.

**Methods.** Abstract-logical, zoo-technical, statistical.

**Results.** In conditions of the fastened growing of animals, owing to selection of cows of an advisable type, assessment of the first heifers on a complex of indications and bulls - on quality of offspring and owing to scientifically justified system of feeding milk productivity of herd was enlarged for 13%. Use of general mixed rations has enabled to achieve milk yields of 7000 kg for each fodder cow with fat content of 3,64 and protein of 3,24%.

**Conclusions.** Duration of productive use of cows is more than 4 lactations. They observed step-by-step consolidation of cows of a desirable type, and also their productivity due to the conforming production technique of milk is stable increased.

**Key words:** production technique of milk, productivity of herd, desirable type, fastened growing.

The process of forming a herd of bovine animals should be carried out continuously, for many generations, based on the study of the results of the previous selection. The issue of developing a new breeding theory in domestic cattle breeding has now arisen to improve the condition of breeding and commodity livestock. The main direction of further breeding work with the breed for the future is its consolidation. Analysis of recent research and publications. Intensification of the dairy industry is based on the breeding of animals of specialized breeds whose genetic potential is being realized through improved feeding conditions, a system for growing young livestock and improving the management of herds [2, 5]. As stated by M.V. The breeding and breeding work plays an important role in the intensification of dairy cattle breeding, which makes it possible, from generation to generation, to increase the productivity of animals based on the use of selection and selection, the intensive rearing of pedigree young animals, the maximum utilization of bull-enhancers and linear breeding, as well as provision of complete normalized feeding [6, 7]. The high efficiency of dairy cattle breeding in European countries has become possible because they have largely completed the transition to new economically sound systems of production and use of feed. The essence of such systems is the development and implementation of the production of the concept of priority forage crops and the methods of harvesting feed from them and the introduction of the same type, throughout the year, feeding animals with full-fledged feed mixes [3]. As a result of purposeful breeding in Ukraine, valuable tribal herds of Ukrainian black and red-rumpy dairy breeds with a genetic potential of 6,000 - 7,000 kg of milk, 3.8-4% of fat, and a live weight of full-age cows reach 600-650 kg [8]. The formation of highly productive herds is a fairly long breeding process (at least 10-12 years), during which 3-4 generations of animals change. During this period, it is necessary to preserve a certain scientifically grounded selection direction for the accomplishment of the tasks, the realization of which is possible only in the presence of a long-term plan of breeding and breeding work [4]. Selection of cows for

milk production primarily depends on the degree of influence on this feature of the main genetic and environmental factors, which can significantly improve the desired characteristics [9]. The profitability of milk production depends on the genetic potential, productive and long-term use of livestock throughout life [1]. The duration of use of cows is determined not only by paratypic factors but also by genotype of animals, in particular their belonging to the breed and the line [10]. Among the measures that promote the productivity of dairy herds, the growing of the first-born cows of the desired type and their level of productivity, the use of modern standardized methods of estimating animals for the phenogenicity and genotype, the development and implementation of optimized selection programs based on the principle of large-scale selection is of paramount importance. The purpose of the research is to improve the herd of cattle of Ukrainian black-and-white milk breed due to: the selection of the cows of the desired type; evaluation of first-born cows by a set of signs and pedigrees on the quality of descendants; scientifically grounded feeding system. Materials and methods of research. The research was carried out on the breeding records in the herd of Ukrainian black-and-white milk breeding breeding plant for cattle of the State Enterprise "Experimental farm" Stepne "of the Institute of Pig Production and Agro-Industrial Production of the National Academy of Sciences of Ukraine." According to the materials of zootechnical and pedigree records, based on the monthly monthly control doses, the following indicators were determined and analyzed: hopes of milk (kg), fat content in milk (%), milk fat content (kg), protein content in milk (%), milk protein (kg). An estimation of cows according to the type of body structure on a 100-point scale is made using the main measurements of body parts. Genealogical affiliation of animals is established by breeding documents. Research results. During the year, a group of cows of the desired type of Ukrainian black-and-white dairy breed was found 100 goals. with milk production at the end of lactation, an average of 8772 kg of milk, 3.52% fat content and 3.13% protein content (table). This is a strong constitution animal, with a flat back and a well-defined dairy triangle, with a cup-shaped mustache, correct shapes and sizes of dyed.

This group included 55% of cows with 3rd lactation, whose milk yield was 7647 kg of milk with fat and protein content of 3.5% and 3%, respectively, milk yield of 267 kg; with 2 lactation 26%, with a productivity of 7,990 kg of milk, with a fat content of 3,54 and 3,12% milk, respectively, and a milk fat yield of 276,4 kg; With 1 lactation, 19% of cows with a tedium were selected for 7679 kg of milk, 3.51 fat content and 3.19% protein content in milk, and milk fat was 254.7 kg. Nowadays (compared to 2009) the indicators of milk productivity of the desirable type of cows have increased considerably: hopes - by 940 kg, yield of milk fat and protein - by 26.5 and 26.6 kg, respectively. The number of heads corresponding to the selection of the cats of the desired type increased during the reporting period from 58 to 100 goals. The record label of the steppe breeding plant in 2013 was the cow of Spark 868 with a live weight of 583 kg, the total milk yield of which amounted to 24 301 kg of milk with a fat content of 3.44% and a protein content of milk of 3,08% for two lactation. During the year, at the 3rd month of lactation, a preliminary assessment of the first-born cows of Ukrainian black-and-white milk breed was carried out on its own productivity, which enables to predict the potential of future milk production in subsequent lactation. Due to this measure, the selection effect is greatly increased in relation to the increase of the genetic potential of the herd. In total in 2013, 116 initial estimates were assessed, of which 39 lactations were completed. On average, the milk yield of the first-born cows is: hopes - 6808 kg, milk fat and protein - 244.4 and 206.3 kg, fat content - 3.59 and protein - 3,03%. On the whole, in terms of dairy productivity, the group of primrose cows exceeded the standard breed for a truce of 2920 kg. One of the best first-born cows in 2013 was Fabulous 5300431842 with a tally of 9002 kg of milk, milk and fat content of protein - respectively 3.65 and 3.09%. On average, over 5 years, the milk productivity of the first-born cows is: hopes - 5612 kg, which exceeds the standard in the breed for 2212 kg, the fat content in milk - 3,55%, protein - 3,20,

which corresponds to the breed standard, alive weight - 524 kg. It has been established that the lactic productivity of the first-born cows depends on their hereditary qualities transmitted from their parents. In addition, in breeding, it is very important to increase the milk yield of cows with the rational use of evaluated on the quality of the descendants of cows-breeders. The whole herd of cows is seeded in families of pure-bred bulls-breeders of Holstein and Ukrainian black-and-white milk breeds. In the reporting year, a scheme for the individual fixation of bulls-pupils has been developed, depending on the productivity and lines of the ancestors. Currently, the herd of experimental farms includes 194 first-born cows, which make up 46.2%, of which 171 heads are completed with lactation. (40.7%). The number of cows with 2 and 3rd and older complete lactation is, respectively, 98 goals. (23.3%) and 128 goals. (30.5%). Such a number of first-born cows testifies to the existing reserves of an increase in the herd's stock in the holding. In 2013, the average herd's figures were: hopes - 7068 kg of milk with a fat content of 3.6% and a protein of 3.03%, the release of milk fat and protein - 254,8 and 214,2 kg, the average number of days of dreams - 361, The average live weight of cows is 590 kg. During the years of research, the productivity of the herd has increased: the first-born cows-for 1323 kg of milk, for the 2nd complete lactation - by 1195 kg, for the 3rd and older lactation - by 1324 kg, the content of milk fat and protein correspond to the standard. Feeding is one of the important issues of technological support for cows attached to cows. The feed-feed production, distribution and management of feeding systems depend to a large extent on the amount of nutrients consuming cows, their productivity, labor costs and resources for the implementation of this technological process. Feeding on a mixed diet is due to the mixing of all feeds. With each of them, cows receive feed, silage and haylage at the same time. This cow's feed is much more delicious, it eats more, feels healthier and produces more milk. Regardless of the season, a pedigree plant uses a scientifically substantiated feeding system from storage with feed mixes. Their use in feeding cattle prevents feed losses by up to 10%, and also facilitates the mechanization of their distribution by the modern "Triple" feeding fodder. This system of feeding has a number of significant advantages over others, both from the organizational and economic side, and from the physiological for animals. First, regardless of weather conditions (rain, other adverse climatic conditions), feed is delivered to the animals at the same time, without breaking the rhythm and the order of their life. Secondly, it is not necessary for an animal organism twice a year (autumn, spring) to move from green fodder to canned and vice versa. All animal feeding rations are balanced in accordance with scientifically sound standards and strictly controlled by content: dry matter; raw and digestible protein; sugar and starch; by the level of exchange energy; for energy-protein and sugar-protein ratio. All this together allowed to achieve a milk supply of over 7,000 kg from each feed cow with a fat content of 3.64% and a protein of 3.24%. The duration of productive use of cows is more than 4 lactations.

## **Conclusions**

The obtained results indicate that the consolidation of the desired type of cows gradually takes place, and the performance indicators are stably increasing. The number of heads corresponding to the rates of selection of the cows of the desired type increased from 58 to 100 goals, and their milk productivity increased by 940 kg, milk fat content - by 26.5 kg, milk protein yield - by 26.6 kg. The average productivity of the first-born cows has grown by the hopes of 1200 kg of milk, the fat content of milk and the protein corresponds to the breed standard. The use of mixed diet rations allowed the milk to be delivered over 7,000 kg from each fodder cow with a fat content of 3.64% and a protein of 3.24%. The duration of productive use of cows is more than 4 lactations.

## Bibliography

1. Bodak N. L. Adaptive and genetic aspects of the lifetime use of black-and-dairy dairy cattle / N.L. Bodak, Yu.P. Polupan // Breeding and genetics of animals. - 2001. - Vip. 34. - P. 160 - 161.
2. Genetic-population processes at breeding of animals / I.P. Petrenko, MV Zubets, D.T. Vinnichuk, AP Petrenko; for ed. Ip Petrenko - K.: Agrar. science, 1997. - 478 pp.
3. Gnoyev VI Feed base for year-round cow feeding of the same type / VI. Coniferous // Materials International science-practice Conf., September 16 - 18, 2003 - Lviv, 2003. - P. 111 - 115.
4. Zhurenko V. Components of creation of high-yield dairy herd / V. Zhurenko, O. Voznyuk, O. Skoromna // Livestock of Ukraine. - 2010. - No. 3. - P. 2 - 5.
5. Balanced Feeding of Highly Productive Cows (Reference Manual) / L.A. Zabolotnov, SG Kuznetsov, V.T. Vinokurova et al. - Borovsk, 2013. - M.: ZAO "New printing technologies". - 245 s.
6. Zubets MV Dairy cattle breeding / M.V. Tooth. - K.: Harvest, 1988. - 227 pp.
7. Norms and rations of high-quality feeding of high-yielding cattle: handbook.; for sciences Ed. G.O. Bogdanova, V.M. Kandibi - K.: Agrar. science, 2012. - 296 pp.
8. Ruban Yu.D. Livestock and milk and beef production technology. Textbook for college students, 2nd form., Revised., Supplement / Yu.D. Ruban - X.: Estapada, 2005. - 577 pp.
9. Sarapkin VG Productive longevity of cows depending on paratypic factors / V.G. Sarapkin, SV Aleshkina // Zootechnye. - 2007. - No. 8. - P. 4 - 7.
10. Stavetska R.V. Duration of productive use of cows as a factor of breeding and economic progress in dairy cattle breeding / R.V. Stavetska // Breeding and genetics of animals. - 2001. - Vip. 34. - pp. 210-21.

Received on 01/23/2015.