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DEPENDENCE OF MILK PRODUCTION OF MONBELYARD COWS ON THE CHARACTERISTICS OF BODY STRUCTURE

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Abstract
This article provides information on the characteristics of increasing the weight of cows in the direction of milk productivity in herds and improving the efficiency of using cows by selecting and mating the Montbelyard cows brought from France, taking into account the types of body structure.

Keywords: Montbelyard breed, cow, milk, milk fat, milk protein, dry matter, 4% milk, milk-meat, meat-milk, body structure, exterior.

1. Introduction.

It is important to develop the direction of cattle breeding in order to meet the ever-increasing need of the population of our republic for milk and meat products.

As a result of recent years of scientific research, the improvement of the methods of breeding and crossbreeding of cattle, the use of selection methods, the growing of young growing cattle in accordance with certain goals, keeping them in their own optimal preservation methods, preparing heifers for birth, and milking new-born cows in the first 90 days of lactation after giving birth. , the leading breeds in the production of cheese and cheese products with high milk fat and milk protein, such as Simmental and Montbelyard breeds imported from abroad, are brought to our republic from European countries with developed animal husbandry. Acclimatization works are being carried out in the rapidly changing climate of our region. This, in turn, is of great importance in the full development and improvement of the genetic potential of the bred cattle breeds.

Montbelyard cows imported from France are a mixed breed of milk-meat cattle. Adaptation of this breed of cattle to local climatic conditions, increase of milk and meat productivity, fat and protein content of milk, live weight, further improvement of udder and fodder characteristics of cows are urgent nowadays.

Cattle of this breed are bred mainly in the mountainous regions of our republic. Productivity of Montbelyard cattle is affected by environmental and genetic factors. But productivity characteristics of cattle of this breed have not been sufficiently studied due to various factors.

2. Materials and Methods

Cattle of the Montbelyard breed are double productive, that is, in the direction of milk and meat productivity. Therefore, it is important to create varieties of them according to the direction of productivity, depending on the needs of the economy. This can be achieved only by using methods of cattle mating. This indicates the importance of organizing the mating of cattle taking into account their body structure during the mating process. Taking this into account, we studied the descendants of purebred Montbeliard cattle imported from France at the cattle farm of "Ergash ota" LLC breeding farm in Ukurochirchik district of Tashkent region.

For this purpose, cows of the Montbeliard breed in the III and higher milking periods were selected based on their similarity in body structure. Group I (n=15) were divided into milk-meat type and group II (n=15) were divided into group II (n=15).

A.S. Vsyakikh (1981) manual was used to study the type of body structure of cows in I, II and III lactation periods.

The live weight of cows was determined on the basis of weighing MOL-2 cards individually up to the 3rd month of lactation, and the milk yield was determined by conducting a control milking during the 305th day of the milking period.

According to the milk yield of feeding cows during lactation, the maintenance was the same in all groups.

3 Results and Discussion

During the lactation of the cows in group I, on average, 4791.9 and 4560.7 feed units were consumed per head in group I and group II. Our studies have shown that the milk yield of cows during lactation depends on their body composition. (table)

Table Milk yield during lactation of cows in experimental groups

Indicators	Groups			
	I		II	
	X ± Sx	Cv,%	X ± Sx	Cv,%
Amount of milk, kg	4447,5±59,3	8,83	4073±61,4	4,98
Fat in milk, %	3,81±0,02	3.77	3,88±0,03	2,77
Protein in milk, %	3,60±0,03	2,71	3,64±0,02	1,95
Milk fat yield, kg	169,45±6,85	5,64	158,03±7,1	3,55
Milk protein yield, kg	160,1±4,8	6,56	148,29±5,3	3,70
Amount of 4% milk, kg	4236,2±71,7	5,64	3950,8±38,7	3,39
Dry matter, %	12,51		12,55	
Skimmed milk solids, %	8,68		8,69	
Milk sugar, %	4,51		4,52	

According to the analysis of the data in the table, the milk yield of cows depends on the types of their body structure. For example, the milk yield of cows of the milk-meat type of group I was 374.5 kg (9.5%) higher than that of cows of the meat-milk type of group II, and the yield of milk fat was 11.4 kg (6.8%), respectively. it was found that the yield of protein was 12.1 kg (7.4%), the amount of 4% milk was 285.4 kg (6.8%).

Dry matter, skimmed milk solids and milk sugar content of milk of cows in all groups were within the standard requirements.

Our obtained data indicate that selection of cows in herds according to their body structure and subsequent mating is important in increasing their productivity.

It should be noted that regardless of body structure, our data shows that cows of all groups have good genetic potential for milk production. For example, the amount of milk in group I is 1032.2 kg (32.26%) and in group II - 574.1 kg (17.94%) of the standard requirements of cows of the Montbelyard breed in III and higher lactations, the fat content of cows' milk is 0.29 and 0.29, respectively. It was found that 0.32% and 0.29 and 0.31% of protein in milk were high. In cows of groups I and II, the yield of milk fat was 50.1 and 33.7 kg, and the yield of milk protein was 47.1 and 30.8 kg higher than the standards of the Montbelyard breed, respectively. These data indicate that cows of the Montbelyard breed, regardless of body structure, have high quality indicators of milk.

4. Conclusions

Thus, as a result of the conducted research, the use of Montbelyard cows in dairy herds is of great importance in increasing the volume of milk production. In this regard, taking into account that Montbelyard cows are in the direction of double productivity, selection and mating in herds taking into account the types of their body structure will expand the possibilities of increasing the weight of cows in the direction of milk productivity in herds. This indicates that it is of great practical importance in increasing the speed of creating high-yielding dairy herds and improving the efficiency of using cows.

REFERENCES

1. Abylkasymov D., Vakhoneva A., Sudarev N. Tip teloslozheniya i produktivnoe dolgoletie molochnykh korov. //Molochnoe i myasnoe skotovodstvo. Moscow, 2010. - #7. - S. 12-15.
2. Ashirov M.E. Soatov U.R. Produktivnye kachestva korov and zavisimosti ot tipa teleslozheniya. "Zootechnics". Magazine. Moscow. 2015 g. #8. S. 19-20.
3. M Ashirov, U. Soatov, G Erdanova Productivity characteristics of Montbeliard breed cows in the conditions of Uzbekistan. E3S Web of Conferences 258, 04038 (2021) UESF-2021 https://doi.org/10.1051/e3sconf/202125804038
4. M Ashirov, Soatov U.R. B Ashirov, KH. Donaev Dairy productivity of the Swiss breed breeder of different genotypes in Uzbekistan. E3S Web of Conferences 258, 04035 (2021) UESF-2021 https://doi.org/10.1051/e3sconf/202125804035
5. Ashirov M.I. Soatov U.R. Productive potential of schwyz breed cows of different industrial type and genotype. ACADEMICIA: International Multidisciplinary Research Journal. India-2020. Volume: 10 Issue: 6 July 2020, p. 137-142.