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SELECTION OF BREEDS BASED ON BLOOD GURUH OF CATTLE.

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Abstract.

Today, the increasing number of the population increases the need for food, to fulfill this task, first of all, the development of animal husbandry, which is the main basis of the dairy and meat industries, and the improvement of the quality of these indicators Solving issues such as performing such tasks is the task of today's actual science.

Based on this, it should be said that by increasing the milk yield of cows to 500-600 kg/ha in normal conditions and in the developed areas of cattle breeding to 4000 kg/ha, we can achieve sufficient satisfaction of the population's demand for milk and meat products.

Key words.

breed, blood group, genes, effect, allele, genotype, male, female, livestock.

Introduction.

It is impossible to solve this problem without the use of new methods and advances in genetics in the selection and breeding of dairy cattle. The creation of herds with improved productivity and increased resistance to production conditions in such a short period of time requires taking into account information on the structure of the genotype, metabolism and behavioral characteristics of animals. First of all, data on immunogenetics, which studied the hereditary characteristics of blood groups, is important, because it allows the use of individual characteristics of the organism as genetic markers in the selection of animals.

The main part.

At the heart of the new method of controlling the origin of animals lies the principle that the blood groups found in the offspring must be present in its parents and be passed on to the offspring according to Mendel's laws. The reliability of

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offspring is determined by antigens of parents and offspring (by phenotype) and alleles that make up the genotype (by genotype).

Alleles and genotypes are determined by family genetic analysis - comparing the blood groups of parents and offspring. For individual immunogenetic systems, the genotype of animals can be determined directly from the data of serological tests [1-4]. These systems include F and R. Antigens are transmitted as compounds in complex systems such as B, C, and C. According to the determined genotypes, the reliability of the information about the origin of the animals is then analyzed.

A normal person has two alternative alleles at each locus, one of which is passed on to its offspring. If an allele is found in offspring from non-parents, the paternity or maternal record in the stud book is excluded.

The most effective is regular monitoring of the reliability of the origin of animals of each generation, that is, it will be possible to monitor the process of passing alleles from father to son, grandson, etc.

But according to Z. I. Vagonis and his colleagues, the effectiveness of control of the origin of breeding animals depends on the number of reagents in the set of antisera used in the tests, especially in the B and C systems [5-10]. In addition, the level of reliability of the information written in the monograph necessarily depends on the heterogeneity of the populations, breeding methods and the quality of the obtained or purchased antisera.

According to these authors, using only 40 reagents for 10 immunogenetic systems of blood groups, accurate data can be established in 96% of cases where the origin of breeding animals is disputed.

In the study of blood groups of Alatau cattle, Bykovchenko B.G. and others found that, New 533 allelE BG2E3'F'O' bull females in the first lactation period BO1T1E'3F'K' to the allele milked 371 kg less milk than females with In the second lactation - 520 kg and the third - 1407 kg. BG2E'3F'O' The milk yield of Yaretz 1419 bull females with the allele was 223 kg less than that of females with the B allele in the first lactation, and 246 kg in the second lactation.

At the same time, the authors note that females of other bulls that inherited the alternative alleles of their fathers did not significantly differ in productivity from the average of the herd of animals of the Sychev breed. From his father BG3O1T1A',2E'3F'I'K' Bull Liker 586 females, which received the allele V.K. Lernushenko et al., had a significant advantage in milk production during lactation compared to sisters with allele B. BG1OT, it was also noted that the cows of the bull Arafon, who inherited the same allele, retained this advantage.

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E.G. Vorobyov noted that the difference in genotypes affects the live weight of cattle. The results of his research showed that the difference between parents in the number of certain genetic factors of blood groups was reflected in the growth of calves [11-14].

Application: The study of polymorphism of erythrocyte antigens of agricultural animals has expanded the possibilities of zootechnical science. For the first time, it became possible to objectively evaluate genetic processes in animal populations during the formation of new breeds and breed groups. Currently, with the help of blood groups, it is possible to give a quantitative description of phenomena such as the various crossings that lead to the phenomenon of heterosis.

Recently, in order to increase milk and meat productivity in our country, it is widely used to add the blood of imported animals to local breeds of cattle well adapted to the climate.

The intensification of animal husbandry has led to a drastic reduction in the diversity of animals and the reduction of pre-cattle ones. The desire to standardize storage and feeding conditions reduces the diversity of phases within breeds and lines.

This process can be observed not only at the phenotypic, but also at the genotypic level. Thus, the use of imported Swiss bulls in our research led to a decrease in the number of B-locus alleles from 40 to 25 in the "Savai" breeding farm, and from 33 in the "Izboskan" breeding farm. Up to 30 alleles. Perhaps these indicators depend on the intensity of use of parents, as well as their individual genetic characteristics. In addition, as we mentioned above, several of the same bulls were used in both farms.

The process of changing the gene pool as a result of using Swiss manufacturers is not only a reduction in the number of blood group alleles, but also the loss or appearance of a number of them [15-20].

For example, the B-system of the Sawai breeding farm BB2G2KO1TA`1B` such alleles were deleted; BB2G3KO1O' , BB2I1P`2, BI1O2A`1E`2J`2, BT2B``Q` At the same time, others appeared: BB2P`2, BI1O2A`1E`2 J`2, BO1T1E`2O`.

Conclusion.

Our data allows us to draw the following conclusions:

1. The gene pool and polymorphism of herds according to blood groups were determined in the leading breeding farms of Uzbekistan, where Swiss cattle were selected. In total, 60 erythrocyte antigens were found in the studied animals, their frequency ranging from 0.033 - z to 0.950 - f. The frequencies of 49 alleles in B-

system and 50 alleles in C-system were 0.0017-0.2045 and 0.0023-0.2283, respectively.

2. When using the same seeds, the gene pool of the herds did not change clearly, therefore, as a result of using the bulls Azot 2306, Antey 7438, Gerb 9457 and Shatun 3266, the progeny not only changed allele frequencies, but also eliminated some of them, of them (BB2I1P2; BT2B``Q`, BB2G2K01O`) va boshqalar paydo bo'ldi (BB2P`2; BI1O2A`2E`2Y`2 , BO1T1E`2O`).

3. In some breeding bulls, such as Azot 2306, Antey 7438, Gerb 9457 and Shatun 3266, only specific B-locus alleles have been identified, which can be used as genetic markers of lines. (I1Y2G`G"; B2P`2; b2 G3 O1 T1).

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