



BREEDING IN GOAT BREEDING IN VARIOUS FIELDS

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Annotation:

This article explores the topic of breeding work in various directions of goat breeding. The main aspects of breeding selection are discussed, such as parent selection, genetic potential assessment and improvement of the quality of the breeding stock. Various methods of breeding are discussed, including animal selection, breeding and performance monitoring. Practical examples of successful breeding in goat farming are also given. This article will be useful for professionals and researchers in the field of goat farming, as well as for farmers who are interested in improving the genetic potential and productivity of their herd of goats.

Keywords: breeding, goat breeding, breeding, breeding improvement, genetic diversity, selection, genetic technology, productivity, animal health

Breeding is based on breeding, i.e. selection of animals from the existing population. Without breeding, each individual has equal opportunities to reproduce. Selection can create favorable conditions for reproduction of desirable animals. The traits improved by selection are divided into two large groups - qualitative and quantitative. A feature is called qualitative if its manifestations can be divided into qualitatively different categories. Quality attributes include suit, color and shine of wool, blood groups, horniness or comosity, etc. Qualitative traits are inherited in accordance with the laws of Mendel, and depend little on external conditions. Most of the economic-useful features are quantitative. Quantitative topics can take on different meanings within broad boundaries. Quantitative features include body mass, wool trimming, down-down, wool fiber diameter, etc. Many inherited deposits are involved in the formation of quantitative features. It is not possible to determine the share of influence of each of them individually, so breeders in their work for a long time could not successfully use even very complicated Mendelian schemes. By the mid-30s of the 20th century, it was established that in quantitative trait genetics, it was not the effect of individual genes in certain individuals (which is not measurable at all), but the inheritance of traits in a group of individuals (populations), such as in a breed or part of that breed.





The main objectives of breeding in Uzbekistan are:

- Creation, conservation, reproduction and management of breeding resources to improve breeding and productive animal qualities;
- Reliable accounting of the origin, productivity, type and other qualities of breeding resources used in the breeding process;
- Testing of breeders on the quality of offspring;
- Obtaining animals with new beneficial genetic traits;
- effective use in breeding of the most valuable world gene pool;
- preservation of local and vanishing domestic breeds gene pool;
- Improvement of breeding and productive qualities and accelerated reproduction of highly productive animals in commercial herds;
- Improving the economic efficiency and competitiveness of the entire livestock sector.

The main objective of goat breeding is to increase the number of high-yielding goats, strengthen their constitution and health, increase living mass, increase the speed of maturity and multiply of goats. Tribal work must be carried out in each farm regardless of whether it is tribal or commercial.

It is known that only goats of strong constitution and good build are capable of high productivity. A strong constitution is particularly important for goats in extreme conditions of year-round grazing. Vital mass is important in selection. Larger goats are better developed and more productive, producing more wool, down, meat, milk and larger goat areas.

The task of breeding goats in the wool productivity direction is to improve the quality of wool and increase its trimming. The main technological advantages of goat wool (mogera) are uniformity, tonicity, length, specific gloss, strength, thickness and yield of pure fiber. Wool, even rough but homogeneous, is more desirable for industry than wool is thinner but not even. Therefore, when carrying out breeding work with wool goats, one should strive to get animals with runes consisting of transitional hair and close to it in length and tonin rough down. An indicator of the uniformity of wool is the coarse curl in one plane, along the entire length of the pigtails starting from the hair root. It is undesirable to twist the wool around the vertical axis of the pigtail, as it makes it difficult to read the wool and indicates the presence of fine down.

Selection of animals with uniform wool leads to an increase in its equation in length, since these features are interrelated. Tonina. An important technological advantage of homogeneous semi-coarse wool is its tonin. Wool obtained from young must have tonin 29 - 34 mkm (48 - 50 quality), and from adult goats - 31 - 43 mkm (40 - 48 quality). Too fine wool is not desirable, because it contains a large amount of fine



down, giving the wool "satisfy", while goats with a finer wool more intensively shearing. When breeding goats for tonin, it should be borne in mind that with age Angora wool becomes coarser (Erokhin A.I. 2001).

The longer the wool, the better the quality of yarn made from it. In addition, long-haired goats get more wool than shorthair. When grown during the year, the true length of wool on the main body parts of adult goats should not be less than 18 cm, and at six months - 11 - 12 cm.

In breeding work, it is important to strive for increased gloss, strength and thickness of wool, maintaining optimal fat content, at which the yield of pure fiber does not exceed 80 - 85%. A higher yield of pure wool is undesirable, as in this case the fibre is dry and its processing properties are impaired. Soviet wool goats are common, and Angora goats, with few exceptions, molt. This leads to the loss of some of the wool, as the molt begins early in spring, when the climate of the goats cannot be cut. Therefore, in goat wool breeding it is important to strive for the breeding of goats with non-washing wool (Erokhin A.I. 2001).

Breeding work with specialized dairy goats should be aimed at:

- Increasing milk production and fat content;
- extension of lactation period in local dairy goats;
- More even distribution of the number of months of labour;
- Increased feed payment by products;
- fertility improvement.

Goats of all high-pitched breeds are multiple, and small-milked goats typically bring one baby goat. Record-breakers give you two to five goats for a leg. As already mentioned, the milk content of goats can be combined with down and, to a certain extent, with wool production. In dairy goats tend to breed hornless animals. In the herds of goats Zaanen, Toggenburg, Anglo-Nubian breeds are selected for comost. In Switzerland and Germany, the horns of dairy goats are considered a large error, and horned animals are not even recognized as purebred. Goat breeders believe that lumpy dairy goats are more convenient to keep, as they are more calm, not aggressive behavior. Comoth is the dominant characteristic, and horniness is recessive, so horned offspring may be born in swollen parents. Therefore, it is necessary to work on increasing homozygosity on this topic (Zelensky G.G.).

In goat farming, thoroughbred breeding and various types of breeding are used. Thoroughbred breeding is used to preserve and improve the breed "clean". In breeding factories, breeding farms and breeding farms only thoroughbreds are used. In order to preserve genetic diversity in thoroughbred breeding "blood freshening" is used, i.e. manufacturers of the same breed as the uterus, but from other farms.



Thoroughbred farming may be used on commercial farms where there are breeding-grade goats.

Line breeding is one of the methods of breeding in breeding herds. The ancestor of the line uses a breeding goat, distinguished for any economically useful reason and well-communicating its valuable qualities to offspring. These manufacturers are selected with a similar uterus. In some cases, for faster and more reliable fixation in the line of the desirable trait, resort to related breeding (inbreeding) on the ancestor. Inbreeding leads to increased homozygosity, including for lethal and sublethal genes. If these genes become homozygous, non-viable goats are born. Inbreeding should be used very carefully, mating goats and goats not close to the degree of kinship, for example half-brothers with half-sisters. In addition, to avoid possible harmful effects of inbreeding on related mating pick goats and queens with good health, a strong constitution, grown in various conditions. If the constitution of inbred goats is even slightly weakened, kinship breeding ceases. Line breeding is not used on commercial farms. Breeding is the opposite method of thoroughbred breeding. It is used on commercial and tribal farms to develop new or improved goat breeds. In goat breeding, introductory, absorbing and reproductive crossings are used.

In the United States, the use of absorbing crossbreeding of local goats with Angora goats of Turkish origin has quickly created a large array of Angora goats. The closer the animals of the breed are to each other, the faster the conversion process of the improved breed proceeds. The intensity of this process depends on the degree of consolidation of the improving rock. With the use of producers of such old breed as Angor, the conversion of coarse-haired goats proceeds faster than with the use of young Soviet wool breeds. Natural climatic conditions play a big role. They need to be conducive to the development of improvement characteristics in the sink crossing areas. The disadvantage of adsorption hybridization is that the manure not only assumes the quality of the improving rock but also loses the positive properties of the absorbed. For example, when Orenburg goats are crossed with Pridonian goats, the fluff is significantly increased, but at the same time the diameter of down fiber can increase from 16 to 18-19 μm , which makes it unsuitable for the manufacture of laces "spider webs".

Absorption crossings do not yield positive results in areas where natural and climatic conditions do not correspond to the biological requirements of the animal improvement. For example, the interbreeding of local dairy goats with the African samar in Russia in the early 20th century ended in failure. For the same reason, the mass cross-breeding of local coarse-haired CIS goats by Angora goats was abandoned. When upgrading the herd by adsorption hybridization, it should be taken into account





that the pome from the cultural breed is more demanding to feed and maintain than the native goats.

Reproduction crossing is usually used for breeding. The aim is to combine the desired qualities of two or more species. Reproduction crossings are used when absorption crossings do not produce the expected effect, and cultural goats are poorly acclimatized locally. Reproductive breeding requires a high level of breeding work, good feeding conditions and maintenance. Academician M.F.Ivanov developed a technique for breeding new breeds of animals, which is based on the following principles:

- the use of close inbreeding on an outstanding manufacturer, the ancestor of a new breed in the case of severe rejections of unwanted animals;
- breeding "in itself" of the desired type of animals, mainly mixtures II, less often I and III generations;
- Laying lines on outstanding manufacturers;
- Creation of good conditions of feeding, maintenance and directed breeding of young.

This method was used to some extent in the breeding of the Soviet wool, Mountain Altai down and other breeds of goats. Industrial crossings are based on the heterosis effect, which is most pronounced in the first generation. Industrial cross-breeding is widely used in meat farming. Since there are no specialized meat goats in our country, this type of crossing is not currently used. Hybridization, i.e. interspecies and intergender crossbreeding in goat breeding, is under scientific research. The results of these studies show that new breeds can be created by hybridizing highly productive wool and down goats with wild goats.

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