



## Scientific and Organizational Foundations for the Effective Use of the Genetic Potential of Karakol Sheep

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**Annotation:** The article highlights the conducted studies on the effective use of Rereditare and productive features of black karakul sheep. Scientific and organizational ways of increasing this potential are determined.

**Keywords:** Karakol sheep, lambs, color, flower type, class, heredity, potential, selective sorting.

Breeding Karakol sheep is a complex process, increasing its efficiency depends not only on their genetic improvement, but also on organizational issues aimed at the effective use of heredity. The most basic categories of organizational issues include the formation of sheep breeding groups of the same name and the organization of breeding work at the level of need. In this case, first of all, a qualified assessment of lambs at birth is carried out, their separation from mothers into the same groups according to the type of flower, class and size (width) of the flower depending on the level of development, the establishment of identical fathers of sheep. for these indicators, the introduction of artificial insemination based on sheep insemination plans is important.

The implementation of these organizational measures should be scientifically substantiated, which will make it possible to effectively use the genetic potential of sheep. This position is supported by most scientists, such as A. Gaziev, S. Yu. Yusupov (2015), A. Gaziev (2007), R. G. Valiev, N. Rakhmatov (1978), Zh. A. Parzhanov and others (2020) , D. T. Rizaeva (2020) and others.

**Purpose of the study.** The purpose of the study is to determine ways to improve the efficiency of using the genetic potential of Karakol sheep.

**Source and research methods.** In this direction, research work was carried out on sheep of the black Karakol breed of the breeding LLC "Jongeldi Karakolchilik" of the Bukhara region. For this, experimental and control groups were formed, 620 sheep sorted into one group, and 565 sheep not sorted. At the same time, 620 sheep of a semicircular paddock of the elite and 1st category were included in the experimental group, and sheep of different flower types and classes were included in the control group of 565 sheep. The efficiency of use of the sheep's capabilities was determined depending on the quality indicators of the received generations. Lambs were evaluated on the basis of the manual "Management of breeding work in animal husbandry and evaluation of lambs" (Yusupov S.Yu. et al., 2015) and the experimental data obtained were processed by variational-statistical methods (Plukhinsky N.A., 1969).

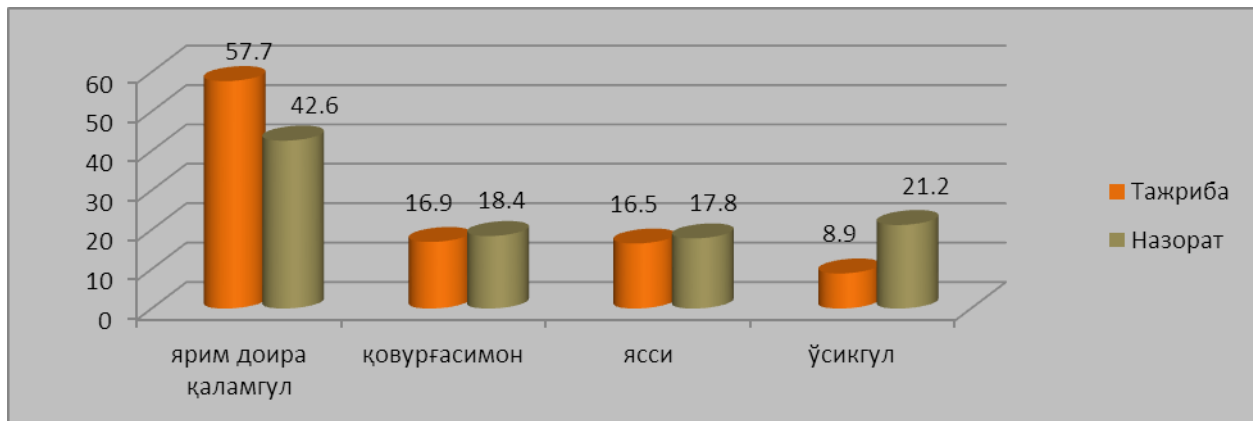
**Research results.** In the course of research under conditions of different levels of organization of breeding work, the appearance of flower types, which are the main seller of sheep and affect the

manifestation of many traits, was studied in the offspring. The data are summarized in Table 1 and Figure 1.

**Table 1. Distribution of received generations by types of flowers**

Group of sheep	Derived generations	Flower type generation, % (X±Sx)			
		Semicircular pencil flower	Ribbed	Flat	Tall flower
Experience	496	57,7±2,22 <sup>x)</sup>	16,9±1,68	16,5±1,67	8,9±1,28 <sup>x)</sup>
Control	452	42,6±2,33	18,4±1,82	17,8±1,80	21,2±1,92

X)-P<0,001



**Figure 1. Distribution of received generations by types of flowers**

The results of the study show that dividing the same sheep into the same groups results in offspring with significantly higher flower type scores. This can be seen from the analysis of the numbers. At the same time, it was found that in the offspring of the experimental group, the weight of the offspring of the flower of the precious semicircular pencil exceeded the offspring of the control group at a statistically high level of significance (P<0.001) and it was noted that this superiority was 15.1 percent. The clear superiority of the experimental group can be seen from the results obtained by the mass of unestimated growths of the flower type. At the same time, in the offspring of the experimental group, the weight of lambs with an incremental flower type (8.9±1.28%) compared with the offspring of the control group (21.2±1.92%) was statistically significantly (P<0.001) reduced. almost 2.5 times, that is, there is a significant increase in the level of use of the genetic potential of sheep.

**Conclusion.** According to the research results, it can be concluded that the selection of sheep has a significant effect by forming identical groups of sheep. Carrying out only one organizational measure increases their genetic potential for the semicircular pencil flower type by 15.1% and reduces it to 12.3% for the incremental flower type.

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