

Some Selection Indicators of Progenies from Different Mating Options

Mamatov Baxtiyor Salimovich, Doctor of Agricultural Sciences (PhD), senior researcher
Gaziyev Adxam, Doctor of Agricultural Sciences (DSc), senior researcher
Scientific Research Institute of Karakul Breeding and Desert Ecology.

Abstract. The article contains the results of studies on the study of colors and curl indicators of the offspring of the color of the coloring of surs obtained from the rebounds by colors and curl types.

Key words: Karakul sheep, offspring, coloring, coloring, severity of color, curl type, class, selection.

Introduction. Karakul sheep's high fur properties, ability to adapt to severe extreme conditions, and resistance to food shortages caused their spread to many countries of the world. Currently, sheep of this breed are bred in more than 40 countries of the world.

It should be noted that the improvement of the breed and product quality of Karakul sheep largely depends on the selection work carried out in the herd, that is, selection and the use of targeted breeding methods in the breeding of these selected animals. In this direction, it can be said that one of the largest areas of the field is a sandy desert. In this situation, it was found that the selective characters are manifested at a higher level than in other regions. But this high level does not mean that the genetic potential of the breed is fully revealed.

From this point of view, in the area of the selected topic, improvement of selection characteristics of Karakul sheep in the sandy desert area, development of effective scientific methodical bases of breeding and selection, which ensure their manifestation to a higher level, are among the current problems.

The level of study of the topic. It is considered important to use information about the correlation between characters in the practice of selection, and its ability to accelerate the selection process and increase its effectiveness has been noted by many advocates (A. Gaziev, 2007, O.T. Kukenov, 2010).

Flower parameters and their degree of relation to preservation were studied in black-ribbed black-type Karakul sheep. Research has shown that they play an important role in the preservation of flowers.

Taking into account the characteristics of Karakul sheep, the levels of improvement in flower, color, and quality of wool were observed in the researches of S.Yu.Yusupov, A.Gaziev, B.S.Mamatov, A.J.Boltaev (2017), and others. Conducted by S. Yusupov, U. T. Fazilov, B. S. Mamatov, A. J. Boltaev (2016), T. Kosaev, J. Parzhanov in the direction of studying the characteristics of the manifestation of selective characters in black and gray Karakul lambs.

Analyzing the results of research in this direction, it can be seen that there are many unused reserves in the genetic potential of Karakul sheep. From this point of view, researches in the direction of development of selection bases of effective breeding of sheep based on the characteristics of heredity, interrelationship of important selection traits, the results of mating with different variants on the traits are of great scientific and practical importance.

The purpose of the study. The study of the manifestation of selective traits in offspring during mating of semicircular Kalamgul type Sur Karakul sheep in different variants in Kyzylkum conditions.

Research methods. The works within the scope of the subject were carried out in Karakul sheep belonging to the high classes of different flower types of pure color, bred in "Yangikazgan Nurli Diyor" LLC of Navoi region. Zootechnical, statistical analysis methods are used in the performance of works.

Evaluation of selective traits in lambs was carried out in accordance with the "Manual for conducting breeding work and evaluation (auditing) of lambs in Poultry" (2015).

Using the statistical method, the average arithmetic index (\bar{X}) and its error ($S\bar{x}$) of the manifestation levels of signs were determined (N.A. Ploxinskii, 1969).

Research results. Some color characteristics, flower type and class indicators were studied in the sur-colored generations obtained during the research.

Diversity and color expression. In the conducted selection works, the expression of color and the levels of expression of color, which are considered as important indicators, were studied in the generations obtained as a result of mating experimental sheep according to color. The obtained results are presented in Table 1.

Table 1
Color characteristics of offspring from different mating options, % ($\bar{X} \pm S\bar{x}$)

Indicators	Pairing option	
	Silver x silver (n =423)	Diamond x Silver (n =234)
Diversity		
Silvery	72,8±2,16	40,5±3,20
Diamond	14,7±1,72	44,4±3,24
Golden	9,0±1,39	8,5±1,82
Others	3,5±0,79	6,5±1,61
Color expression		
Excellent	42,3±2,40	44,4±3,24
Good	48,0±2,42	38,9±3,18
Not enough	9,7±1,51	16,7±2,43

The obtained results show that this feature is manifested in different levels in the offspring depending on the mating options of the sheep for their color. In the homogenous mating of sheep with silver color, a high proportion of offspring of this color (72.8±2.16%) was observed, and in the heterogeneous mating of sheep with diamond and silver colors, it was noted that the parents' colors had almost the same indicators in the offspring. (respectively 40.5±3.20 and 44.4±3.24%). It should be noted that mating in both variants reduces the weight of non-costly variegation in offspring (3.5±0.79 and 6.5±1.61%).

The offspring obtained from mating both variants are characterized by high indicators of excellent color expression (42.3±2.40 and 44.4±3.24%). It should be noted that in the mating of "diamond x silver" option, offspring with good color expression decrease to a certain extent, and offspring with insufficient color expression increase to a certain extent, and this situation should be taken into account in the selection process.

Flower types and class of genera. In addition to color and variegation indicators, which are considered important selection characteristics of brown sheep, it is important to study the distribution of generations according to this indicator in the conditions of mating them according to flower type. In order to determine the effectiveness of the conducted research, the class indicators of the obtained generations were studied. The results of the study are summarized in Table 2.

Table 2
Flower type and class of offspring obtained from different mating options, % ($\bar{X} \pm S\bar{x}$)

Indicators	Pairing option	
	S.p.f x S.p.f (n =480)	S.p.f x ўсиқгул (n =177)
Flower type		
Semicircular pencil flower	64,4±2,18	53,1±3,75
Ribbed pencil flower	16,9±1,71	22,0±3,11
Flat pen flower	12,7±1,51	9,1±2,16
Ўсиқгул	6,0±1,08	15,8±2,74
Class		
Elite	18,1±1,75	16,4±2,78

Class I	64,6±2,18	57,1±3,72
Class II	14,2±1,59	21,4±3,08
Invalid	3,1±079	5,1±1,65

The results of the research show that almost 3/2 of the offspring (64.4±2.18%) obtained in the conditions of homogenous mating of sheep of semicircular pencil type belong to this type. The weight of low-value osikgul-type offspring is maximally reduced (6.0±1.08%). It should be noted that in the population of Karakol sheep, depending on the level of selection work, a certain amount of low-value Osikgul type sheep can be found. Reducing their weight is one of the important tasks of breeding. In this regard, the research conducted in this regard shows that when mating sheep of this type with valuable semicircular kalamgul type rams, the osikgul type offspring is reduced to a certain level (15.8±2.74%) and the possibility of obtaining semicircular kalamgul type offspring is up to 53.1±3.75%. It is effective to take this situation into account during the selection process.

The results of the research show that there are possibilities to increase the selection efficiency on a general scale to 87.2% based on the mating of sheep according to flower type in different variants. It was found that this indicator was 73.5 percent in the case of heterogeneous pairing by flower type. In this case, it is reasonable to focus on increasing the selection efficiency to increase the weight of elite class lambs.

Summary. In the breeding works, the breeding of sheep in various variants according to color and flower type was increased. According to the obtained results, 77.8% of offspring were silver, 14.7% diamond, and 9.0% golden lambs. In heterogenous mating of sheep of diamond and silver color, these indicators were recorded to be 40.5, 44.4, and 8.5 percent, respectively.

List of used literature:

1. Gaziev A. Breeding and genetic aspects of the effective use of the potential of the Karakul sheep in Uzbekistan. //AND. "Livestock, feed production and veterinary medicine." Almaty, Bastau LLP, 2007, p. 28-30.
2. Kosaev T., Parzhanov Zh. Praaral environmental type of sheep of the Sur of Bukhara silver color. "The breeding and technological aspects of the development of productive cameling, Karaculestvo and arid feed production in Kazakhstan." Shymkent. 2012. p. 84-86.
3. Kukenov O.T. Solidios of the Saribel type of Surkar Karakul sheep. // Diss. Tashkent. : 2010. 122 p.
4. Kukenov O.T., Mamatov B.S., Nazarova M., S.Yu. Yusupov. Use the plant's Saribel plant type of "Saribel" of a flower Surkar Karakul sheep. // Tashkent. №3, 2014, 32-33 p.
5. Yusupov S.Yu., Gaziev A., Bobokulov N.A., Yuldashov N., Fazilov U.T., Hakimov O'.N. and others. Guide to conducting breeding work and evaluating lambs in sheep farming. Tashkent.: 2015. 31 p.
6. Yusupov S.Yu., Gaziev A., Fazilov U.T., Mamatov B., Boltaev A. Correlation of Karakol traits and their significance in selection. // Tashkent. No. 5, 2016, pp. 34-35.
7. Yusupov S.Yu., Gaziev A., Fazilov U.T., Mamatov B., Boltaev A. Experiments on improvement of flower index and class of Sur Karakol lambs. // Tashkent. No. 10, 2017, pp. 34-35.