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EXPLORING THE FLOWER PERFORMANCE OF SUR COLORED KARAKUL SHEEP

Nazarova Moxira Azamatovna,
Rajabov Okhunjon Tuygun o‘g‘li,
Latipov Zohir Abduhalim o‘g‘li,
Shavkatov Shahzod Sherzod o‘g‘li,
Juraqulova Zarnigor Sattor qizi

Abstract: *This article provides data on the quality of flowers in the offspring using flat-type genotypes in the breeding of sur colored karakul sheep. Among them, the color of the sur is distinguished by its wool coat and the sharpness of the tip, and the sur karakul provides the color and variety of the skins. This feature of Sur skins determines their high price and wide consumer demand.*

Keywords: *karakul sheep, wool fiber, lamb, flat flower type, ribbed flower type, semicircular pen flower type, overgrown flower, solid, loose, flower level, sur karakul skins, single flower, fiber flower.*

Introduction

The history of the origin and further development of the Karakul sheep breed, which is one of our national prides and unique in the world, is connected with the Kyzylkum desert. This breed is now enriched with a variety of precious colors.

Among them, the color of the sur is distinguished by its wool coat and the sharpness of the tip, and the sur karakul provides the color and variety of the skins. This feature of Sur skins determines their high price and wide consumer demand.

Sur karakul sheep of Bukhara breed is one of the most valuable color groups of the breed, and the demand for karakul products of this color is high in the domestic and foreign markets. In this regard, one of the most pressing issues is the effective use of the potential of these colored sheep, improving the quality and expanding the range of products.

Generation of flower types. In our research, research has been conducted to study the heredity of sur colored flat type sheep by flower type. The data are summarized in Table 1

Table 1

Distribution of generations into flower types according to pairing options

Pairing option	n	Flower types of generations, % (X±Sx)			
		Flat	Semicircle pencil flower (pencil flower)	Ribbed	Ribbed
Flat x flat	123	54,2±4,49	17,3±3,41x)	21,5±3,70x)	7,0±1,89x)
Flat x semicircle pencil flower (pencil flower)	118	43,4±4,56	27,9±4,13x)	15,9±3,37x)	12,8±3,08x)
Flat x ribbed	87	39,6±5,23	22,1±4,45x)	34,5±5,10x)	3,8±12,05x)
Flat x grown up	50	32,0±6,0	46,0±4,0	6,0±2,0	16,0±6,0

X-P<0,05; X) - P<0,001

The data show that insemination of sheep using flat-type rams increases the weight of pencil flower of this type in generations. The yield of such generations is the highest in the “flat x flat” pairing variant (54.2 ± 4.49%), while in the remaining variants it is 43.4 ± 4.56 and 39.6 ± 5.23%, respectively. The yield of semi-circular pencil flower and rib-type lambs varies depending on which type of lamb is involved in mating. There is a certain increase in the weight of lambs of the semicircular pencil flower type (27.9 ± 4.13) and lambs of the rib type (34.5 ± 5.10).

In addition to the facts, it should be noted that insemination based on the use of flat-type rams in all cases ensures that the yield of this type of offspring is statistically high (P <0.05; 0.001).

It is known that the reproduction of flower indicators evaluated at birth of karakul sheep is polygenic in nature, and their reproduction depends to some extent on genotypic factors as well as on the influence of the external environment, which is difficult to take into account. In this regard, it can be said that the use of multiple homogeneous mating methods in the insemination of karakul sheep can also increase the occurrence of traits in the offspring to a certain extent, but does not maximize, there is a different distribution between each trait.

The length of the flowers. The length of the flowers is an important factor in the selection of karakul sheep, and its length ensures that the karakul skin is beautiful and the picture is clear. Numerous studies have found that lambs belonging to the ribbed and flat flower types are characterized by long flowers. From this point of view, the use of this type of sheep in the selection process is effective.

It should be noted that the same type of flowers at the skin level leads to longer flowers in the offspring.

The study studied the degree of distribution of generations by flower length under the conditions of insemination of flat-type sheep (Table 2, Figure 1).

Table 2

Distribution of generations by flower length

Pairing option	n	Distribution of generations by flower length, % (X±Sx)		
		Long	Medium	Short
Flat x flat	123	53,7±4,50	36,5±4,34^{x}	9,8±2,68$^{x)}$
Flat x semicircle pencil flower (pencil flower)	118	41,5±4,55	44,1±4,57	14,4±3,23$^{x)}$
Flat x ribbed	87	56,3±5,32	34,5±5,10^{x}	9,2±3,10$^{x)}$
Flat x grown up	50	12,0±6,0	66,0±6,0	22,0±4,0

The results summarized in Table 2 confirm the results of previous studies that the use of flat-type sheep in the insemination process leads to an increase in the weight of long-flowered lambs.

In the process of insemination, the use of flat-type rams, depending on the type of flower of paired sheep, was found to increase the weight of long-flowered lambs to 41.5-56.3%, reduce the weight of short-flowered lambs to 9.2-9.8%, and medium-weight lambs.

The results of the study show that the use of flat-type sheep in all cases provides a statistically reliable result (R <0.001) higher than the yield of short-flowered offspring on long-flowering offspring, which is effective in the selection process.

Width of flowers. It is an important selection indicator and is one of the defining characteristics of pedigree. Its size varies significantly depending on the type and shape of the flowers at the skin level. Semicircular pencil flowers and flowers are mainly medium-sized, partly small and large, flat and ribbed pencil flowers and petals are medium and large.

Karakol flowers are divided into 3 groups according to their width in sur colored lambs - small (up to 5 mm), medium (5-9 mm) and large (over 9 mm) flowers.

In terms of selection importance, flowers of medium width are valuable. The selection of sheep with this width range, the commodity properties of astrakhan skins are highly valued.

Centuries of selection and targeted insemination for this trait have led to its genetic strengthening in sheep. At the same time, it was observed that in the “flat x flat” and “flat x rib” mating variants, an insignificant part (2.3-2.4%) of the lambs had small flowers and a significant part (19.5-21.8%) had large flowers.

The participation of semi-circular pencil flower type sheep in the breeding process leads to a doubling of the weight of small-flowered lambs, a certain increase in the weight of medium-flowered lambs (1.4-3.7%), a decrease in the weight of large-flowered lambs by 4.2-5.5%. detected. This is an important selection condition

and it is effective to use in breeding work aimed at improving this indicator. From this point of view, the levels of flower size in different pairing options in the offspring were studied, and the results obtained are summarized in Table 3.

Table 3

Flower width of generations

Pairing option	n	Distribution of generations by flower width, % (X±Sx)		
		Small	Medium	Large
Flat x flat	123	2,4±1,38	78,2±372	19,5±3,57
Flat x semicircle pencil flower (pencil flower)	118	5.1±2,03	79,6±3,71	15,3±3,31
Flat x ribbed	87	2,3±1,61	75,9±4,59	21,8±4,43
Flat x grown up	50	-	70,0±4,0	30,0±4,0

The results of the study of flower width in the offspring obtained in the breeding of flat-type sheep show that the majority of them (75.9-79.6%) have a medium size in terms of flower width.

Strength of flowers and location picture. In determining the pedigree and productivity of lambs, the strength of the astrakhan flowers and the picture of their location on the skin are important signs.

The strength of flowers depends in many ways on the density of wool fibers, the ratio of fiber types, length and fineness, and the structure of the flower.

Numerous studies have found that the shortness of wool fibers in the skin of lambs significantly increases the durability of flowers.

The formation of the location picture of flowers occurs on the basis of existing laws of development of wool fibers in animals and is determined by the methods and direction of selection.

Most scientific studies have shown that the formation of a picture of flowers occurs in the early stages of embryonic development of lambs, i.e. with the

appearance of wool fiber follicles, while visible images are formed with the appearance of secondary flow wool fibers on the skin surface.

The shapes of the flower pictures depend on the flower types and shapes of the lambs. The semicircle pencil flower type is mostly parallel to the type of grown up - straight to the concentric, flat and ribbed types, while the type of grown up is characterized by mixed indeterminate flower pictures. From this point of view, it is possible to increase the weight of the offspring belonging to a particular type of flower by carrying out selection and fertilization work depending on the picture of the flower.

Conclusion

In general, it can be concluded that the use of flat-type genotypes in the breeding of sur colored sheep allows a known and significant improvement in the quality of flowers in the offspring.

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