

Length of Wool Fiber of Sheep Progeny of Semicircular and Ribbed Flowers

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Annotation: The article presents the results of a comparative study of the length of wool fiber of the offspring of black Karakol sheep of the factory type "Mubarak" with the parameters of the offspring of ribbed type sheep.

Keywords: Karakol sheep, lambs, factory type, class, wool length.

Relevance of the topic: Karakol farming is one of the important branches of livestock farming, characterized by its own characteristics, and the region of its development is desert areas characterized by harsh extreme conditions. Under these conditions, high-quality karakol sheep skins, meat, wool and sheepskin are produced.

The breeding value of Karakol sheep is determined depending on the type of flower, color indicators, class, quality of wool fiber and length. Sheep of the factory type "Mubarak" belong to the valuable groups of the Karakol breed of sheep.

A number of scientists have conducted effective research to improve the efficiency of Karakol sheep breeding. It should be said that the genetic characteristics of Karakol sheep of the "Mubarak" type and other types were studied by scientists I.N. Dyachkov, T.B. Chekhirinadze, S.E. Shaptakov (1981), T.B. Chekhirinadze, V.I. Barkovsky (1982), A. Gaziev, G. Vohidov, R. Matyakubov (1996), S. Yu. Yusupov, S. R. Bozorov (2001) and in the studies of others, in which the features of transmission, manifestation, heredity, and interdependence of important selection traits were determined.

It should be noted that sheep belonging to this group play an important role in improving the quality of the breed. To improve the genetic and productive performance of black sheep, the Mubarak type of stud is widely used throughout the world, especially in Uzbekistan.

Moreover, it is fair to say that comprehensive study of this factory type has virtually ceased in recent years. From this point of view, it is important to determine directions for further use based on studying its current state.

Purpose of the study: The purpose of the study was to study the degree of transmission of wool fiber length, which was calculated as one of the important breeding traits of the Mubarak factory type.

Research methods: Research was carried out on black breeding Karakol sheep at Mubarak LLC, Kashkadarya region. The study of the skin characteristics of lambs was carried out on the basis of the “Guidelines for breeding work and evaluation (audit) of lambs in karakul breeding.” (S. Yu. Yunusov et al., 2015).

The obtained data were processed by methods of variation statistics. (N.A. Plokhinsky, 1969).

Research results: One of the most important indicators when determining the breeding value of Karakol sheep is the length of the wool fiber formed on the surface of the skin. The shortness of wool fibers is a positive property that increases the value of sheep and Karakol leather products. The degree of expression of this indicator depends on many scientists, in particular, on the pasture climate and feeding conditions, the class of sheep, the length of wool and others.

During the research, the length of the wool fiber of elite and 1st class sheep of the semicircular-pencil-flower factory type "Mubarak" was compared with the parameters of the offspring of elite and 1st class sheep of the ribbed type. The data are summarized in Table 1.

Table 1. Comparison of wool fiber lengths from the offspring of semicircular and ribbed flower type sheep.

Sheep class groups	n	Length of wool-fiber generations, % (x+Sx)					
		8 mm	9 mm	10 mm	11 mm	12 mm	13 mm
Semicircle elite	122	18,0±3,48	35,2±4,32	37,8±4,38	2,8±1,41	3,7±2,09	2,5±1,41
Semicircle I	295	1,7±0,71	17,0±2,18	30,2±2,67	28,8±2,64	13,2±1,97	7,4±1,52
Balanced average	417	5,5±1,11	22,3±2,03	32,4±2,29	22,8±2,05	11,0±1,53	6,0±1,16
Ribbed Elite	53	47,2±6,85	35,8±6,58	13,2±4,64	-	3,8±2,62	-
Ribbed I	148	-	2,7±1,33	31,8±3,82	39,2±4,01	12,2±2,64	14,1±2,86
Balanced average	201	12,4±2,32	11,4±2,24	26,9±3,12	28,9±3,19	10,0±2,11	10,4±2,15

The table data shows that sheep of both groups have a fairly high genetic potential for the length of the wool fiber. At the same time, in the offspring of factory type “Mubarak” sheep, the weight of the offspring in an average balanced state with a wool fiber length of 8.0 mm is $5.5 \pm 1.11\%$, and in the offspring of elite class sheep - $18.0 \pm 3.48\%$, and in the offspring of 1st class sheep it was $1.7 \pm 0.71\%$.

Many researchers have noticed that the length of rib-shaped wool fiber is longer than the length of semicircular wool fiber. This can also be seen in our study. It was found that the shortest length of wool fiber is observed in the offspring of elite class sheep ($47,2 \pm 6,85 P^0,001$).

Conclusion: Karakol sheep of the Mubarak factory type are characterized by a sufficient level of genetic power along the length of the wool fiber, which is considered appropriate to use in the breeding process.

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