# International Journal of Biological Engineering and Agriculture ISSN: 2833-5376 Volume 1 | No 5 | Nov-2022



# Hair Quality of Black Karakul Lambs from Different Types of Selection of Parents

Rizaeva D.<sup>1</sup>, Mamatov D.<sup>2</sup>

<sup>1, 2</sup> Samarkand State University of Veterinary Medicine, livestock and biotechnology

**Abstract:** The article presents these qualitative indicators of hairline silkiness and shine in Karakul lambs conducted research in the breeding plant "Dzhangeldy" of the Bukhara region, located in the South-Western part of the Kyzylkum desert.

**Keywords:** Smushkovy type, lambs, Karakul sheep, silkiness, gloss, hairline, selection, curls, pigmentation, breeding value, specific gravity.

**Introduction.** Qualitative indicators of the hairline of karakul lambs, such as silkiness and shine. They are one of the leading indicators in determining the breeding value of animals and the commercial suitability of astrakhan products.

Animal and astrakhan with well-pronounced curl indicators with a low level of hairline quality are rated low, sometimes they are rejected.

The manifestation of these indicators depends on many factors, such as the level of selection work, animal breeding conditions, etc.

**Object and research methods.** In connection with the foregoing, we conducted research at the Dzhangeldy breeding plant in the Bukhara region, located in the South-Western part of the Kyzylkum desert, to study the features of the manifestation of silkiness and shine of the hairline with different types of selection of parental pairs. The object of the study were purebred black Karakul sheep of jacket (230 head), ribbed (168 head), flat (150 head) and Caucasian (110 head) types. Implemented 4 options for the selection of animals.

Animals of the Jacket, Ribbed and Flat types carried out a homogeneous, heterogeneous selection of the Caucasian type using Ribbed rams of the smoshkov type. From these selection options, 172, 139, 114 and 83 lambs, respectively, were obtained and evaluated. The manifestation of these signs in lambs was also evaluated depending on the pigmentation of the hairline.

**Research results.** The silkiness and brilliance of the hairline show the softness of the hair and determine the tenderness and elegance of astrakhan products. Studies conducted in this direction show a certain dependence of the manifestation of these signs on the selection of parents (Tables 1 and 2).

The data presented in these tables show that the manifestation of the studied traits largely depends on the selection of parents according to the smushka type. At the same time, the highest yield of lambs with the best indicators of hairline quality was established from a homogeneous selection of animals of jacket, ribbed and flat fur types. With these types of selection, the proportion of lambs with strong and normal silkiness and luster was 83.0-87.7 and 78.4-91.2 percent, respectively.

Among them, the best result was noted from the selection of parents of a flat Smoshkov type.



Selection option		Quantity	Received	Hair silkiness, % (X±Sx)					
8	4	sheep,	offspring,	Strong	Normal	Inadequate	Rough	Strong and normal	
		head	Goal					silkiness with	
								intense	
								pigmentation	
Jacket	Jacket	230	172	26,1±3,35 <sup>x)</sup>	56,9±3,78	17,0±2,86	-	86,6±2,60 <sup>x)</sup>	
Ribbed	Ribbed	168	139	23,0±3,57 <sup>x</sup>	59,9±4,16	13,7±2,92	3,4±1,54	85,6±2,98 <sup>x)</sup>	
Flat	Flat	150	114	36,8±4,52 <sup>x)</sup>	50,9±4,68	$12,3\pm 3,07$	-	96,5±1,72 <sup>x)</sup>	
Ribbed	Caucasian	83	83	9,6±3,23	49,4±5,49	25,3±4,77	15,7±3,99	59,0±4,00	

### Table 1. Silkiness of hair of lambs obtained from different types of selection

### X-P<0.05 X)-P<0.001

#### Table 2. Luster of hairline of lambs obtained from different types of selection

Selection option Qu		Quantity	Received	hair shine,% (X±Sx)					
8	9	sheep,	offspring,	Strong	Normal	Inadequate	Glassy	Matte	Strong and
		head	Goal						normal shine
									at intensive
									pigmentation
Jacket	Jacket	230	172	29,1±3,46 <sup>x)</sup>	$53,5\pm 3,80$	8,7±2,15 <sup>x)</sup>	-	8,7±2,15	87,2±2,54 <sup>x)</sup>
Ribbed	Ribbed	168	139	24,5±3,65 <sup>x</sup>	53,9±4,23	$10,1\pm 2,56^{x}$	$2,9\pm1,35$	8,6±2,38	83,5±3,15 <sup>x)</sup>
Flat	Flat	150	114	30,7±4,32 <sup>x)</sup>	60,5±4,58	4,3±1,90 <sup>x)</sup>	4,5±1,94	-	93,9±2,24 <sup>x)</sup>
Ribbed	Caucasian	110	83	9,6±3,23	48,1±5,48	25,0±4,75	$5,3\pm 2,46$	12,0±3,57	66,2±5,19

## X -P<0.05 X)-P<0.001

It should be noted that the use of ribbed-type rams on Caucasian-type uterus contributed to some improvement in the quality of the hairline of the resulting offspring. At the same time, in this variant, the output of lambs with strong silkiness and strong shine of the hairline was observed in the offspring (9.6%), and lambs with normal silkiness and shine, respectively, amounted to  $49.4\pm5.49$  and  $48.1\pm5.48$  percent.

The results of studies on the effect of the intensity of hair pigmentation on silkiness and shine showed that in this case there is a slight improvement in these indicators by 2.0-5.1 percent.

Based on the results of the studies, it can be concluded that uniform selection, the use of ribbed rams on Caucasian wombs and taking into account the intensity of hair pigmentation contribute to a significant improvement in the silkiness and luster of the hair, and this should be taken into account in the breeding process with black karakul sheep.

#### References

- 1. Юсупов С.Ю., Газиев А. «Оценка ягнят и племенное дело в каракулеводстве» Ташкент 2015. с.31
- 2. Фазилов У.Т., Газиев А. Продуктивность каракульских овец. Самарканд 2015, 30 с.
- 3. Юсупов С.Ю. Селекция и племенные ресурсы в каракульском овцеводстве. Ташкент 2010, с. 206
- 4. Юсупов С.Ю. Конституциональная дифференциация и продуктивность каракульских овец. Ташкент 2005.
- 5. Rizayeva D.T. Qualitative Indicators of the wool cover of bleck sheep in a sandy desert with targeted selection. 2021/10, p. 318-320. e-ISSN:2792-3991 www.openaccessjournals.eu
- 6. Газиев А., Фазилов У.Т., Маматов Б.С., Ризаева Д. Селекция каракульских овец черной окраски в зоне песчаной пустыни. 2017 год, с. 1427-1430. elibrary id: 30590307 edn: ztkpir