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HEREDITY OF QUALITY INDICATORS OF YOUNG KARAKUL SHEEP

Abstract. One of the leading signs that determine the quality of a doodle is the figure of a doodle. Figuredness is the degree of quantitative spread over the area of positive curls. There are 3 degrees of figure: I - full figure (3/3), when positive curls are spread over the entire area of the skin on the lamb (back, sides and belly); II - medium (2/3), positive curls spread over two-thirds of the area (on the back and sides); III - small curvature (1/3), only the lamb's back is covered with positive curls.When bonding lambs, the figure, indicating the spread of positive curls over the area of the skin, should be taken into account primarily as a leading sign of classiness of the lamb.

Key words: astrakhan, figure, smushki, jacket type, selection, heredity, curl, selection.

Relevance of the topic. Karakul breeding as a specific branch of sheep husbandry occupies a special place in the economy of the desert and semi-desert zones of the republic. Karakul sheep are one of the most valuable breeds that are world famous. The main products of these sheep are noble, valuable fur - karakul skins with a beautiful pattern, obtained from the slaughter of karakul lambs.

The purpose and objectives of the study. The aim of the study is to determine the influence of the degree of figure of a karakul with various selection options for obtaining high-quality young growth and first-class karakul in the conditions of the Aral Sea deserts.

The practical value of the work lies in the fact that a selection technique is recommended for use - selection of rams and first-class pockets with 3/3 karakul curly shape and their uniform selection, which allows to increase the selection efficiency.

Material and research methods. In the experiment, we used 2 sheep-improving elites of the “selective” elite, strong constitution, medium-sized curl with a full degree of curly figure 3/3 curly with a parallel-concentric pattern, at the age of 2.5 years. All animals were in the same pasture-feeding conditions.

Sheep were artificially inseminated with freshly obtained sperm from October 20 to November 20 according to the requirements of the “Instructions for Artificial Insemination of Sheep”

During the lambing period, the lambs were individually awarded according to the “Instructions for Bonoring Karakul lambs with the basics of breeding.”

Commercial quality and properties of karakul were studied in a dry-salted state, then by commissioned acceptance in accordance with the methodology developed by A.M. Ombaev, B. Aktuov and Zh.A. Parzhanov

Wool productivity was studied from the spring coat of experimental animals at different ages and was used to the length of individual types of hairy hairs (spine, transitional hair, fluff). 30 bright colors with various degrees of shape, selected according to the analogue method, were trimmed with an individual account of the hair cut (autumn - spring) from 8 months of age to 2.5 years.

The implementation of practical proposals will contribute to the creation of broodstock for the production of high-quality offspring and obtaining first-class astrakhan.

One of the important areas of breeding and breeding work in karakul breeding is the selection of parental pairs for offspring with the desired type of pattern. And although, as you know, tastes change

over time, the jacket style has been considered one of the most valuable for many years, according to the unanimous opinion of experts. The main advantages of such a doodle are its clear symmetrical pattern and evenness of the main signs characterizing the quality of the hairline.

The smushky type is the result of a combination of quantitative (length, curl width, hair length, etc.) and qualitative (silkiness and shine of the hair, type of pattern, etc.) signs over the entire area of the skin. To obtain the desired doodle, you need to strive for the optimal level of development of individual characteristics.

The data for two years of experience on the distribution of lambs of a jacket type, depending on the selection options are shown in table 1.

Table 1 – Inheritance of lambs of a jacket type, depending on the selection options in percent

Option	Numberoflambs, heads	Dryingtype, M±m			
		jacket	ribbed	flat	Caucasian
1 year					
I	260	81,0±2,44	10,0±1,86	3,0±1,05	6,2±1,50
II	256	73,8±2,75	12,9±2,10	2,2±1,01	10,2±1,89
III	250	67,2±2,97	14,4±2,22	3,2±1,11	15,2±2,27
2 year					
I	114	87,9±3,09	6,0±2,25	1,8±1,25	4,3±1,93
II	102	81,4±3,87	8,8±2,82	2,0±1,39	7,8±2,67
III	94	75,5±4,46	8,5±2,89	4,3±2,10	11,7±3,33

In accordance with the data in table 14, a uniform selection according to the jacket type in all cases provides an increase in the specific gravity of this type (67.2-81.0%). However, the offspring of the first year of experience in the first variant of selection with a full degree of curvature (3/3) surpasses the analogues of the second and third variants with an average (2/3) and a small (1/3) degree of curvature curly by 7.2-13.8% . The difference is statistically significant ($P < 0.01$; $P < 0.001$). The offspring of the second variant of selection also exceeds peers of the third variant of selection by a significant amount ($P < 0.01$).

An analysis of the results of the second year of the experiment on the inheritance of jacket-type lambs from the uterus of the studied groups shows that the uterus in the first variant gave the highest yield of jacket-type lambs (87.9%) compared with analogues of the II and III variants (81.4-75.5 %). The difference is statistically significant ($P < 0.01$).

It should be noted that in the second year of the experiment, the quality of the offspring by astrakhan types significantly improved in terms of the yield of the specific weight of the jacket type. Lambs of the second year of experience in all variants of selection exceeded analogues of the first by 6.9-8.3%. The difference is statistically significant ($P < 0.01$).

Thus, we can conclude that for the repair of one's own herd it is necessary to use queen bees with a full degree of 3/3 karakul shape, form them into separate flocks and purposefully conduct selection on this basis, which will improve the quality of the karakul.

One of the leading signs that determine the quality of a doodle is the figure of a doodle. Figuredness is the degree of quantitative spread over the area of positive curls. There are 3 degrees of figure: I - full figure (3/3), when positive curls are spread over the entire area of the skin on the lamb (back, sides and belly); II - medium (2/3), positive curls spread over two-thirds of the area (on the back and sides); III - small curvature (1/3), only the lamb's back is covered with positive curls.

When bonding lambs, the figure, indicating the spread of positive curls over the area of the skin, should be taken into account primarily as a leading sign of classiness of the lamb.

Data on the inheritance of the degree of figure of the karakul offspring, depending on the selection options are shown in table 2.

The data in table 15 show that lambs with full 3/3, medium 2/3 and small 1/3 degree figures of the karakul were obtained from various selection options. The smallest yield of jacket-type lambs with an undesirable low degree of curvature indicates a positive long-term selection for karakul curly.

Table 2 – Inheritance of the degree of figure of the karakul offspring, depending on the selection options in percent

Option	Numberoflambs, heads	The degree of karakul figure,M±m		
		complete - 3/3	average - 2/3	small- 1/3
1 year				
I	201	67,1±3,25	30,3±3,18	2,4±1,06
II	181	57,7±3,60	38,6±3,55	3,7±1,38
III	161	39,9±3,79	54,7±3,85	5,4±1,75
2 year				
I	100	78,0±4,16	21,0±4,09	1,0±1,00
II	83	65,1±5,26	32,5±5,17	2,4±1,09
III	71	47,9±5,97	47,9±5,97	4,2±2,04

The offspring of the first year of experience in the first variant of selection for specific gravity with the desired full degree of figureiness exceeds in this indicator analogues of the second and third variants of selection, respectively, by 9.4-31.4%. The difference is statistically significant (P <0.01; P <0.001). The offspring in the II variant with an average degree of curvature also exceeds the analogues of the III variant in yield with the desired full degree of curvature - 3/3 by a significant amount (P <0.01).

An analysis of the inheritance of the degree of karakul figure in lambs of the second year of experience allows us to choose the optimal selection option for the accumulation of animals of the desired type (table 2).

Taking into account the data of table 15 in the second year of experience, as in the first, the general pattern of inheritance of the degree of figure of the karakul is preserved.

It should be noted that the specific gravity yield with a full degree of karakul figure, the lambs of the second year of experience exceeded the analogues of the first year by 7.4-10.9%. The difference is statistically significant (P <0.01).

Thus, the reason for the lack of severity of the figure of a karakul is the simultaneous onset of curl formation in various parts of the skin, regardless of the length of the hair. This fact indicates an independent combination of the sign of curl in different parts of the skin, despite the length of the hair, as well as differences in the maturation periods of the parents and the need for selection for the length of the curl with equalization of the hair length and synchronization of curl throughout the body.

Therefore, summarizing what has been said, it is obvious that the figure of a karakul has a non-additive effect of genes and is inherited polygenically.

Conclusion. The conducted studies at the Baizak breeding farm on karakul sheep of a jacket type with varying degrees of karakul shape in order to obtain the greatest amount of high-quality products allow the following conclusions:

The purposeful selection of parental pairs and the assessment of animals by the degree of karakul figure showed the advantage of sheep with a full degree of karakul figure 3/3. They differ in live weight and exterior features during all periods of life. Lambs in the first variant of selection with a degree of curvature 3/3 turned out to be the largest (4.3 ± 0.06 kg) and exceeded their counterparts in the second variant with an average degree of curvature 2/3 by 0.30 kg, in the third variant with a small the degree of karakul figure 1/3 per 0.40 kg. These differences persist in adulthood.

A certain relationship with the degree of figure is the fecundity of animals. The offspring yield per 100 queens was minimal in the III variant of selection (96.8%). In the group with a small degree of figure, a relatively high percentage of mother uterus was obtained (7.4%).

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ҚАРА ҚАРАКӨЛ ҚОЙЛАРЫ ТӨЛІНІҢ САПАЛЫҚ КӨРСЕТКІШТЕРІНІҢ ТҰҚЫМ ҚУАЛАУЫ

Аннотация. Қаракөл қойларының басты сапалық ерекшеліктерінің бірі қаракөлдің фигуралығы. Фигуралық белгі деп – ол елтірінің көлемімен бұйралардың біртекті таралуын айтады. Фигуралықтың үш типі ажыратылады: 1 толық фигуралық (3/3) толық бұйралардың теріде біртекті таралуы (арқа жонында, бүйірі

мен бауырында), II ортаңғы (2/3), толық сапалы бұйралар үштен екі бөлігінде (арқа жоны мен бүйірінде); III аз бұйралы фигуралық терінің (1/3) бөлігінде сапалы бұйралар тек арқасында шоғырланған..

Бонитировка жасағанда қаракөл қозыларының фигуралығы елтірі көлемінде бұйралардың дұрыс, біртекті таралуын ең негізгі белгі ретінде қарастыратынын ескерген жөн.

Түйін сөздер: қаракөл, фигура, елтірі, жакетті тип, селекция, тұқым қуалаушылық, бұйралану, таңдау.

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НАСЛЕДСТВЕННОСТЬ КАЧЕСТВЕННЫХ ПОКАЗАТЕЛЕЙ МОЛОДНЯКА КАРАКУЛЕВЫХ ОВЕЦ

Аннотация. Одним из ведущих признаков, определяющих качество каракуля, является фигурность каракуля. Фигурность – это степень количественного распространения по площади положительных завитков. Различают 3 степени фигурности: I – полная фигурность (3/3), когда положительные завитки распространены по всей площади шкурки на ягненке (спина, бока и брюхе); II – средняя (2/3), положительные завитки распространены на двух третях площади (на спине и боках); III – малая фигурность (1/3), положительными завитками покрыта только спина ягненка.

Ключевые слова: каракуль, фигурность, смушки, жакетный тип, селекция, наследственность, завиток, подбор.

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