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THE IMPORTANCE OF THE PRESERVATION OF SCROLL INDICATORS IN KARAKUL BREEDING

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Abstract:

The article presents the results of studies on the study of the characteristics of the preservation of curly indicators in lambs of black and severe colors, depending on the breeding zones. Based on the analysis of the data obtained, the limiting boundaries of the safety of the studied indicators were determined.

Keywords: Karakul sheep, lambs, color, preservation of curls, variability, ecological breeding zone, age period.

INTRODUCTION.

To date, in the field of karakul breeding science, to a certain extent, the tasks of improving the quality of products, expanding its range, effective use of the breeding and productive potential of karakul sheep have been solved.

At the same time, there is still not fully utilized potential of Karakul sheep, which can manifest itself at a high level with an appropriate creative approach to the selection process.

One of such approaches to breeding is the study of indicators of the degree of preservation and variability of curls in Karakul lambs at different age periods. Large-scale research work on the study of these features and the definition of their tribal basis has not been carried out previously.

It is known that the rate of hair growth of Karakul lambs is considered an important indicator in the formation and variability of curls. Its ontogenesis takes place in three stages, two of which occur during the embryonic period (the first, at 110-120 days, is the primary guide hair, the second is the formation of various curls and patterns). The third, final stage occurs in the first week after birth, in which the curls undergo various changes.

In the studies of I.N. Dyachkov (1956) established a different daily hair growth rate during the embryogenesis of karakul lambs of various curly types. At the same time, this indicator for the semicircular type was 220 microns, for the ribbed and flat types 180 microns, for the Caucasian type 280 microns and this feature is inherited.

The peculiarities of the preservation of curl indicators from the moment of birth to 10-15 days of age in lambs of the semicircular type were studied by S.M. Budagov (1986), ribbed type G.D. Vakhidov (1988), A. Gaziev (2001) and other authors. There are very few studies in this direction, and in these studies the features of the preservation of curl indicators only up to 15 days of age were established and the limiting boundaries of the age period were not determined.

From this point of view, we can say that the use of these features in the breeding process will make it possible to create valuable genotypes of highly productive animals that produce export-oriented products.

MATERIAL AND METHODOLOGY.

The research was carried out on black and gray colored Karakul sheep in various breeding zones. Manifestation of smushkovy traits was assessed according to the "Instructions for the conduct of breeding in karakul breeding and grading of lambs" (Yusupov S.Yu. et al., 2015). Evaluation of the safety of curly indicators was carried out organoleptically by determining their specific gravity in different age periods in relation to the indicators of lambs at birth.

The obtained material was processed by the method of variation statistics (N.A. Plokhinsky,

In the course of the research, the degree of variability of the main breeding characteristics, depending on the preservation of the curls in lambs of various groups, was studied. The data obtained are summarized in Table 1.

As can be seen from the data in table-1., In all breeding zones, the curls on the skins of lambs with age are subject to a certain degree of variability, that is, the curls are destroyed and their quality decreases.

If the preservation of curls at birth is taken as 100%, then this indicator at 10-15 days of age in lambs of black color was 83.0 percent, and in lambs of sura color 84.0 percent. This indicator for ecological zones at the age of 16-22 days was 71.0 and 70.0 percent, at 25-30 days of age 47.0 and 45.0 percent, respectively. It should be noted

that a sharp destruction of the preservation of the curls is observed at the age of 23-30 days. Proceeding from this, it is preferable to direct the selection to the creation of groups, taking into account the safety of the curls in this particular age period.

Based on the research results, it can be concluded that the destruction of curls occurs due to the elongation of the hair. In all colors, with an increase in the age period, an elongation of hair length is observed; this indicator in the context of ecological zones at the age of 23-30 days in lambs of black and severe color was 33.6±0.49 and 35.6±0.53 mm, respectively. In the context of colors in all age groups, the advantage of black lambs was observed (P <0.001; 0.05).

It should be noted that with an increase in age, a decrease in the proportion of valuable, dense and long curls is observed on the surface of the skins of lambs. If you increase the period of preservation of curls in later age periods, it becomes possible to obtain karakul skins with a large size.

During the research, the degree of preservation of various forms of curls was studied (Fig. 1).

Table 1.
The degree of variability of the main breeding characteristics depending on the preservation of curls in lambs

Indexes	Lambs coloring							
	black (n=586)				sur (n=1005)			
	at birth	10-15 days	16-22 days	23-30 days	at birth	10-15 days	16-22 days	23-30 days
Preservation of curls, %	100,0	83,0	71,0	47,0	100,0	80,0	65,0	42,0
Variability of signs: Hair length, mm ($\bar{X}$±S$\bar{x}$)	9,23±0,15$^{x)}$	13,3±0,27$^{x)}$	22,0±0,36	33,6±0,49^{x}	10,1±0,17	20,5±0,31	28,3±0,41	35,6±0,53
The proportion of valuable curls, %	78,2	58,9	47,4	35,2	76,2	56,4	40,9	33,4
Specific gravity of dense curls, %	72,6	54,2	43,1	35,2	72,3	52,9	37,3	29,2
Specific gravity with PC VA PP pattern,%	73,0	70,6	64,5	52,9	73,1	65,4	62,9	48,1
The proportion of long curls, %	43,9	30,4	25,3	18,7	41,5	30,5	24,3	16,7

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

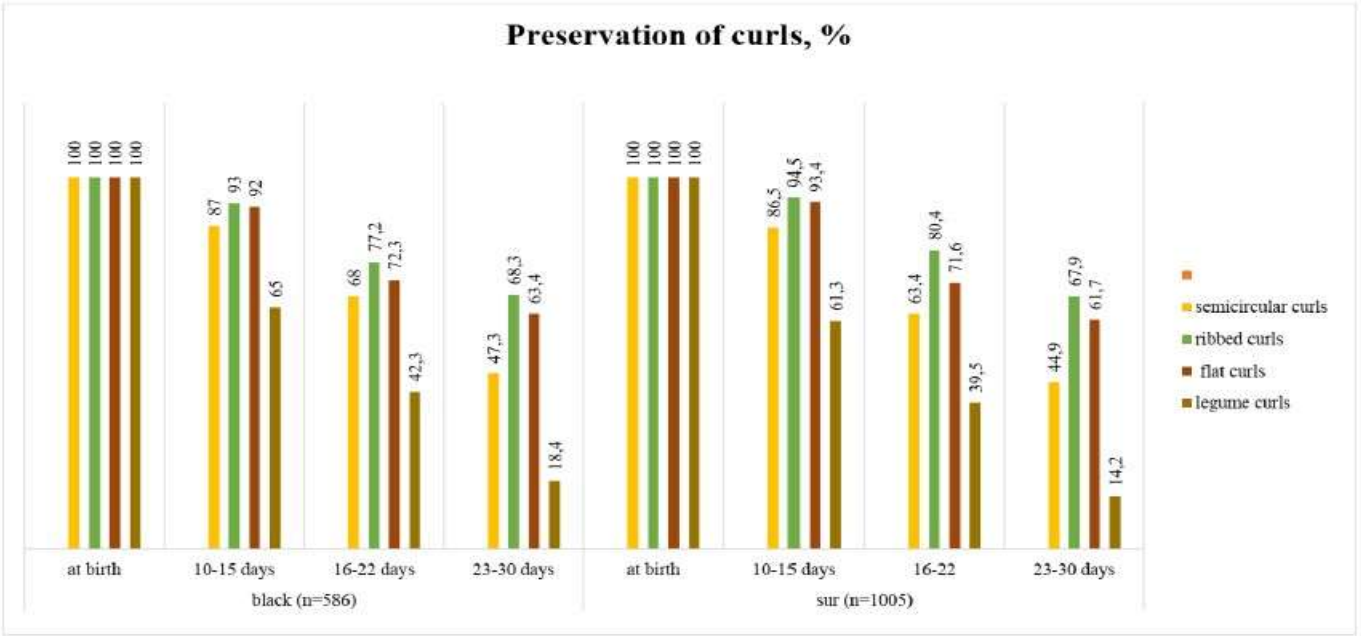

Fig. 1. Preservation of curls in various ecological zones.

The results obtained in this direction showed that the preservation of curls of different shapes in different age periods differs from each other. This indicator also depends on the color of the lambs. Thus, the highest degree of preservation of curls was noted in black lambs with ribbed flat curls. In lambs of black color at 23-30 days of age, the preservation of these curls was 68.3 and 63.4 percent, and in lambs of sura color, 67.9 and 61.7 percent, respectively. In all colors in this age period, there is a significant decrease in the preservation of legume curls (85.8-88.6%).

According to the research results, it follows that for each ecological breeding zone there are certain boundaries of the period of preservation of curls (Fig. 2).

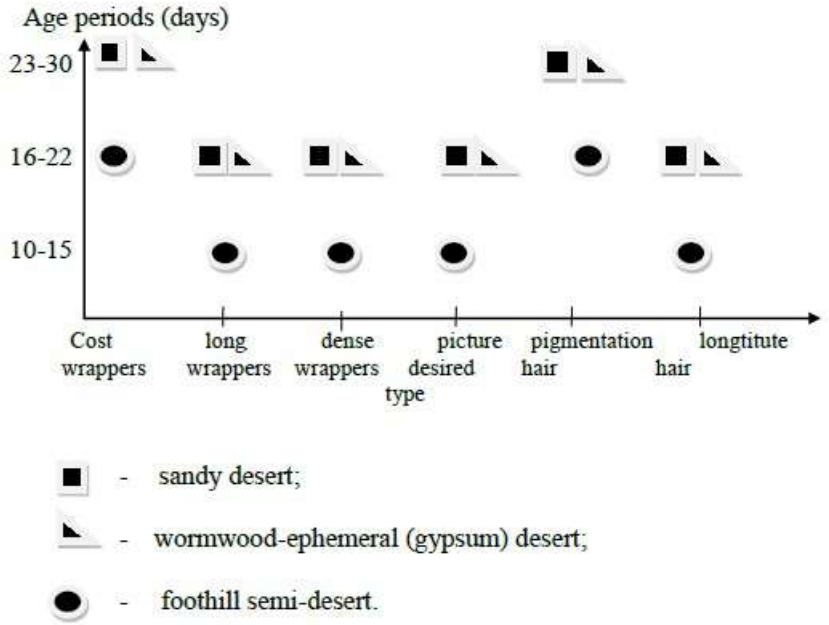

Fig-2. Deadlines for the selection of lambs for the preservation of curly traits in different breeding zones.

As can be seen from the data in Figure-2., When selecting on the basis of the near-side period in the conditions of sandy wormwood-ephemeral deserts, the age period is 16-22 days, and for the foothill semi-desert 10-15 days. For valuable curls and pigmentation in the conditions of the sandy and wormwood-ephemeral desert, lambs can be effectively selected even at 23-30 days of age.

OUTPUT.

The obtained material allows us to conclude that with increasing age on the surface of the skins of lambs, a decrease in the proportion of valuable, dense and long curls is observed. It should also be considered that the maximum shelf life of curl indicators is 16-22, and for the foothill semi-desert 10-15 days.

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