The Value of the Selection of Karakul Sheep According to the Body Type

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Abstract: In the article there are given the results of selection of Karakul sheep on body type, distribution of gimmer in body weight at birth depending on the selection, analysis of changes in body weight, indicators exterior features gimmer and outlined the author's view of the role of these signs of Karakul sheep. Main principles of selection at this stage of the research consisted of the selection and pairing larger in body type specimens of the original group. By this selection and compilation of parental pairs of animals mating had the opportunity to carry out genetic improvement of living mass of the lambs at birth and further precocity.

Key words: Large-body · Corpus area · Live weight · Measurements · Intermediate genetic group and body type

INTRODUCTION

Many years of scientific research conducted at the Karakul sheep, show that unilateral screening and selection only lamb pelt, without sufficient consideration of their exterior features and body type actually decreased viability of animals. It required careful study of the genetic and Para typical factors on productivity of Karakul sheep and development of such methods of selection, which in certain conditions cultivation allow you to create a population of black Karakul sheep large type, producing large size of the area of Karakul sheep and lambs have considerable potential of growth and development in postnatal ontogenesis.

MATERIALS AND METHODS

Main principles of selection at this stage of the research involved in the selection and pairing larger in body type specimens of the original group. By this selection and compilation of parental pairs of animals mating was planned to perform the genetic improvement of live weight of lambs at birth and further precocity.

Flock for the intended use of the livestock consisted of 729 head of ewes and first-class elite, middle helix group, jacket type without extreme deviations wool-constitutional type. The lambing ewe were divided by body type: on stretched - 175, whipping - 191, breast - 156 and massive- 207 sheep. To describe the features of a constitution of these groups of animals used a graphical method - exterior profiles. Thus for the 100 percent average measurements taken by the herd as a standardized measure and the average measurements of the studied group of animals was calculated as a percentage of the standard. This method has also been selected and sheep producers for pairing

In order to achieve the intended purpose of scientific and economic experiment was conducted as follows.

1. Scheme of crossing.

<table>
<thead>
<tr>
<th>No.</th>
<th>Entire male sheep</th>
<th>Lambing ewe</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jacket astrakhan type of elite class, straddling body type, at the age of 3.5 years</td>
<td>Jacket type, elite and first class stretched by body type, at the age of 3.5 years (175 animals)</td>
</tr>
<tr>
<td>2</td>
<td>Same whipping by body type, at the age of 3.5 years</td>
<td>Jacket type, elite and first class, whipped by body type, at the age of 3.5 years (191 animals)</td>
</tr>
<tr>
<td>3</td>
<td>Jacket type, the elite class, the thoracic on body type, at the age of 2.5 years</td>
<td>These same characteristics, aged 2.5 years (156 animals)</td>
</tr>
<tr>
<td>4</td>
<td>Jacket astrakhan type of elite class, massive aged 3.5 years</td>
<td>The same characteristics at the age of 3.5 years, according to a massive body type (207 animals)</td>
</tr>
</tbody>
</table>
RESULTS AND DISCUSSION

Managing system of Karakul sheep breeding, based on the year-round pasture content, provides for a relatively high share of influence of natural selection. In this regard, in the breeding work with Karakul sheep, priority consideration should be given to the selection of sheep, with the best development of signs, ensuring adaptability.

One of the promising genetic resources for improving large karakul lambs of fertility, in our opinion, is to secure a desirable offspring inherited traits, using for this purpose various combinations interbreed crossing, as well as important practice more rapid exchange of genetic information between populations (herds) or individuals sheep.

To get more offspring weight and body size, large pick for mating lambing ewe, because the dimensions of the maternal organism predetermine mostly live weight and body size of offspring V.A.Krasota, [1].

I.A. Zozulya, I.M. Klachko established that the selection of the animals on the basis small body in many cases leads to the formation of small livestock. Of horse breeds, in particular, the modern breed of heavy haulers that were received in the result of systematic work on increase of the massiveness, enlargement of the size of their body Svechin K.B., [2].

M.F. Ivanov [3] based on the results of inters train breeding sheep found that the magnitude of newborn lambs is in direct communication with a body size of the parent body.


I.I. Muratov and D.D. Arsenyev (Erohin A. I.) [6] studied the live weight of Romanov sheep at the age of 4 years depending on the value of this indicator at 10 days of age. The authors found that the magnitude of the body mass of the lambs at an early age can serve as a predictive indicator of this characteristic in animals in adulthood (r = +0.30±0.017).

By M.A. Ermenkov and A.C. Golodnov [5] precocity of young and primarily on its size at birth is great influence body types from both parents. Such opinions and judgments give reason to believe that the body types are the basic background in determining the level of development of productive and biological characteristics of Karakul sheep and quite promising inclusion body type (index) in the main parameters when selecting to create a sheep large type.

To justify the necessity of the adoption of this characteristic as one of the leading breeding characteristics when creating Karakul sheep large type, we have conducted research in conditions Zakarauskos-Moyinkum zone Karakul Kazakhstan.

Set a goal, we did not find a particular method of research in this area in any zootechnical or scientific literature. In this regard by their own studies, we were guided by the methodological scheme.

![Distribution results of lambs on birth weight depending on the variant of the pairing](image)

Fig. 1: Results distribution lambs on birth weight depending on the variant of the pairing.
Next, to study the breeding performance of the desired type of animals taken into account the dynamics of growth and development of gimmer, resulting from different pairing option. To this end, they were assigned to live weight and measurements and organized the experimental group.

As a result, the output distribution at gimmer larger lambs has been found that the parental couples paired index Body “blockiness” had the advantage over the other, as compared with the other they were respectively 5.7, 8.6, 9.0, 4.0 percent more large lambs.

From parental pairs of elongated body received 32.6 percent of large lambs with an average weight of 4.8 kg. From massive and breast parental pairs were obtained respectively 29.7; 28.9%, lambs, with an average body weight of 4.6 kg

It is well known that live weight at birth is an important indicator, which characterizes not only the development of the lamb in the fetal period, but his subsequent viability and growth.

Considering the dynamics of the live weight of gimmer, obtained from different pairing options, it can be seen that the growth of live weight from gimmer II variant pairing in the suckling period was more intense and by the time of weaning on growth they surpassed peers I variant 1.5 kg, III-2.8 kg, IV-3.3 kg with significant difference (Table 1).

Also note that such measurements gimmer as body length, chest girth, have a great influence on the body and having a dominant character, increased more intensively and have growth rates of 1.9. The height at the withers and rump height growth rate ranges from 1.4 to 1.5 (Table 2).
It should also be noted that the advantage (dominance) on these measurements is mainly manifested in the age of 4.0 months. Index of chest girth of gimmer from parental pairs of I-St variant amounted to 72.9 cm, bright from the parent II-nd variant - 73.9 see Indicator slanting body length, respectively 61.5; 63.2 cm.

Further, during the experiment were examined correlative relationship between pairs of parental traits in the experimental group and the intermediate obtained in offspring genetic groups are shown in Table 3.

There is a positive correlation coefficient in the power of lambing ewe and offspring between slanting body length and width of the breast - 0.509; chest girth and chest width - 0.700; girth and depth of chest - 0.070. Higher here the link found between the same measurements, which were respectively - 850 mm; 0.950; 1; 0,650 and 0,655.

It should be noted that between measurements chest depth and width of chest, slanting body length and the height at the withers there are mainly low positive relationship (Table 3).

CONCLUSION

Thus, to create a sheep large type prospectively inclusion body type («index») among the major signs of the selection. Such variants of selection and, under appropriate conditions, feeding and housing of animals, can greatly improve the precocity of young animals in order to live weight at the time of weaning lambing ewe was more than 30 kg and provide the desired body type animals.

REFERENCES