



USE IN INSEMINATION OF PEDIGREE RAMS OF DIFFERENT AGES AND QUALITY OF OFFSPRING OBTAINED FROM THEM

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ANNOTATION

In the article, rams are inseminated with seeds obtained from them in order to study the pedigree, valuable traits and characteristics of rams of different ages. The manifestations of flower types of the obtained generations and their belonging to flower types were studied. In the study, it was observed that in the offspring of rams aged 7.5-8.0 months, belonging to the semicircular pen type was higher than in the offspring of rams in the experimental group of the same age. Pedigree rams aged 17.5-18.0 years differed from rams of all groups in that their ability to pass on their traits was superior. Generations of rams aged 17.5-18.0 years also showed high results in terms of belonging to the elite 1st and 2nd classes.

Keywords: Karakul sheep, Karakalpak suri, rams, insemination, offspring, flower type, class, elite, 1st class, semicircular pepper, ribbed pepper, flat pepper, rose.

INTRODUCTION

More than 20 million hectares of the territory of the Republic of Uzbekistan are pastures, of which 16-17 million hectares are located in the desert region. Unlike other farm animals, karakul sheep have very valuable biological properties, they are able to breed in extreme desert conditions, sparsely vegetated, saline, arid pastures, without consuming absolutely green fodder in summer, autumn and winter, grazing, rapid maturation, rapid growth and is a breed of sheep that has the ability to provide very valuable products (astrakhan leather, meat, wool, fur and milk), while maintaining the characteristics of development. Today, the karakul industry plays a key role in providing the population with food, employment and living standards in the desert areas.

There are 3 types of sur sheep in Karakul sheep breed: Bukhara sur type includes gold, silver, siren and diamond colors, Surkhandarya sur type includes bronze, platinum, amber and gray colors, the third type of Karakalpak sur type includes sur bulbs, steel, apricot and lunar colors are available. It is the only breed of world-famous leather (fur) due to the unique attractiveness of the colors and variegations in its composition, elegant flowers and delicate wool fiber coating. Sur skins are sold at an average price of 30-35% more expensive than black skins. Therefore, the increase in the number of Karakalpak Sur Karakul sheep, the proper conduct of selection and breeding work will increase the quality of Sur skins.

In Karakalpak Suri, the lower part of the wool fibers is black, the ends are steel-like, the lower part of the wool fibers in the bulb is black, the ends are white, the lower part of the wool fibers in apricot is black or dark brown, the middle part is yellowish-brown, the ends are white-yellow. brown, the ends are golden.

LITERATURE REVIEW

Professor A.S.Akhmetshiev (1997) was engaged in fertilization, reproduction of the Karakalpak Suri in Kazakhstan, the creation of the nucleus of the population mass of the Suri. In his view, each variation of the color of the sur has its own hereditary nature. Color, on the other hand, is passed on to offspring with many genes located in different alleles. In Karakalpak Sur sheep, the highest level of bulb color is passed on to the

offspring (89.1). But an increase in the interstitial space in their head and tail reduces the rate of reproduction of this variety.

According to the results of the study of the levels of preservation of flowers in lambs and the variability of the main selection traits associated with it, in all regions the flowers on the skin of lambs change to a certain extent with age, i.e. spoilage and quality of flowers. At the same time, in the selection process, changes in the correlations of the characters in relation to certain age periods of the characters were identified (A.Gaziev., U.Fazilov., D.Rizaeva, 2014).

A study of the same selection of flower types showed that 86.7% of lambs born from ewes and rams with 100% semicircular type had semicircular type, 4.3% had ribbed type, 2.5% had flat type and 6.5% had rose type. E.Elemesov., A.M.Ombaev., M.A.Vinogradova (2009).

In the Republic of Uzbekistan K.D.Ochilov (2015) studied the selection principles of the creation of herds specializing in the breeding of Karakalpak Sur Karakul sheep, the genetic structure, wool cover and characteristics of the Turtkul plant type.

R.U.Turganbaev (2012) studied the principles of selection and breeding in the creation of specialized herds of Karakalpak Sur sheep, the color and diversity of Karakalpak Sur sheep, the transmission of diversity, morpho-histological properties of wool, wool productivity and valuable diversity.

A.Kh.Khatamov (2019) studied the features of the manifestation of barra-skin characteristics in the Karakalpak Sur Karakul sheep in different generations depending on different ethological types.

RESEARCH METHODS

Evaluation of Karakalpak Sur lambs of different ages obtained by insemination with rams of different ages, study of color and diversity, flower type and class. S.Yusupov et al., 2015.).

Biometric processing of the obtained data was carried out on the basis of (N.A.Plokhinsky, 1969).

RESEARCH RESULTS

The results of the study on the level of feeding of lambs at different ages during the study are presented in Table 1 below.

The table shows that at the age of 2.5–3 months, lambs in the control group consumed 0.485 kg/head of breast milk and stored 0.36 feed units and 28.4 g of digestible protein in the feed chase. The animals in the experimental group were supplemented with 0.6 kg/head feed blocks, which contained 0.73 feed units and 78.0 g of digestible protein. This means that the feed unit of the lambs in the control group is 50.6% higher than the feeding level, the digestible protein is 63.6% higher and the metabolic energy is 41.0% higher.

Table 1
The rate of feeding lambs at different ages

| Indicators | Ages | | | | | |
|---|----------------|------------|------------|------------|--------------|------------|
| | 2.5-3.0 months | | 7-8 months | | 10-11 months | |
| | control | experience | control | experience | control | experience |
| Amount of milk received, kg/head | 0,485 | - | - | - | - | - |
| Received pasture feed, kg/head | - | - | 1,23 | 1,23 | 1,33 | 1,33 |
| Supplementary feeding with feed blocks, kg/head | - | 0,600 | - | 0,450 | - | 0,615 |
| Supplementary feeding, kg/head | - | - | - | - | 0,300 | - |
| Quantity of feed unit | 0,36 | 0,73 | 0,63 | 0,80 | 0,70 | 0,86 |

| | | | | | | |
|-------------------------|------|-------|------|-------|------|-------|
| Digestible protein, g | 28,4 | 78,0 | 57,4 | 86,4 | 61,0 | 91,0 |
| Alternating energy, MDj | 6,66 | 11,29 | 9,56 | 11,47 | 9,70 | 12,35 |

In the fall, ie 7-8 months (56 days from 27 October to 22 December), the control group animals consumed 1.23 kg/head of pasture feed containing 0.63 feed units and 57.4 g of digestible protein. Animals in this age group consumed 1.23 kg/head of pasture feed and 0.45 kg/head of feed blocks (0.8 feed units and 86.4 g of digestible protein). During this period, 17.6% more than the norm was observed.

The third supplementary feeding was performed during the winter season (71 days from 25 December to 7 March). By this time, the level of feeding of animals from pastures does not meet their physiological requirements at all. Control group animals aged 10–11 months consumed 1.33 kg/head of pasture feed and 0.3 kg/head of farm supplementary feed, experimental group animals consumed 1.33 kg/head of pasture feed and 0.615 kg/head of feed blocks (0, 86 nutrient units and 91.0 g of digestible protein). During this period, it was observed that the nutritional performance of animals was 22.0% lower than the experimental group, 32.9% lower in digestible protein and 27.35% lower in metabolic energy.

When evaluating the quality of lambs in karakul breeding, it is important to know their flower types and grade. The skin of lambs belonging to the type of semicircular pencil flower is characterized by the presence of semicircular pencil flower pieces. Pencil flowers are long and medium length, the appearance of the flowers is clear and the wool fiber coating is medium length. This type of lamb is the leading type of breed.

Ribbed pen flower type lambs The flowers on the skin surface are ribbed in shape and are mixed with road flowers. The wool fiber cover is short, the flowers are curled towards the tail side of the lamb.

Flat pen flower type lambs skin is characterized by the presence of flat pen, partially road flowers. The degree of pigmentation and luster of the wool coat is strong, the flowers of the lamb are curled towards the tail side. The wool-fiber cover is a bit short.

The wool-fiber coat of the flower-type lambs is long and is distinguished by the fact that the flowers have grown. The flowers consist of loose grains or other less valuable flowers arranged irregularly on the skin of the lamb.

The results of the study of flower buds of the generations obtained in the study are presented in Table 2.

Table 2

Flower types of the obtained generations, % ($X \pm S_x$)

| A group of rams | n | Semicircle pencil | Ribbed pencil | Flat pencil | Caucasian |
|---------------------------|----|-------------------|---------------|-------------|-----------|
| 7.5–8.0 months old rams | | | | | |
| Control | 82 | 52,44±5,5 | 21,95±4,6 | 14,63±3,9 | 10,97±3,5 |
| Experience | 95 | 55,78±5,1 | 20,00±4,1 | 13,68±3,5 | 10,52±3,1 |
| 17.5–18.0 months old rams | | | | | |
| Control | 87 | 55,17±5,3 | 20,70±4,3 | 13,79±3,7 | 10,34±3,3 |
| Experience | 96 | 57,29±5,04 | 20,83±4,1 | 12,5±3,4 | 9,37±2,9 |

According to the analysis of the data in the table, in the offspring of rams in the control group at 7.5-8.0 months, the weight of lambs with semicircular pencil flowers was 52.44%, ribbed pencil flowers 21.95%, flat pencil flowers 14.63% and caucasian 10.97%. It was observed that the quality indicators of the experimental group were slightly higher. The advantage over the control group for semicircular pencil flowers was 3.34%, respectively. But the weight of less valuable flower types has increased.

17.5–18.0-month-old indicators showed an increase in both 7.5–8.0-month-old rams in both the control group and the experimental group. At this age, the proportion of semicircular lambs in the experimental group was 57.29%, with an advantage over the control group of 2.12%. From the above data it can be concluded that the selection work on the farm is focused on the type of semicircular pencil.

In Karakalpak sur karakul sheep, the appearance of the color of the sur to the elite (middle-aged) class in the form of a semicircular pencil flower is excellent and good. Sturdy, long and medium-length semicircular pencil flowers on the back and waist, medium and short pencils and grains on the sides, the picture is clear, in a parallel-concentric order, the quality of the wool fiber coating is strong or moderate, the skin is thin, dense, with flowers on the head and legs. The level of coverage is good, the lambs are well developed, the constitution is required to be strong.

In lambs belonging to the first class (middle-aged), the color of the sur is well developed. He allowed the Karakalpak surs to have a slightly darker line at the back waist length. It is also allowed to have a strong, medium-length and short semicircular pencil and pieces flowers on the back and waist, flowers on the sides, road flowers. The picture of flowers is adjacent-concentric or mixed. The quality of the wool fiber coating is required to be good.

The classes of the offspring obtained in the study were studied, and the results are presented in Table 3.

Table 3

Classes of derived generations, % ($\bar{X} \pm S_x$)

| A group of rams | n | Elite | 1st class | 2nd class | Expenditure on elite and 1st class lambs |
|---------------------------|----|-----------|-----------|-----------|--|
| 7.5–8.0 months old rams | | | | | |
| Control | 82 | 23.20±4.7 | 60.97±5.4 | 15.85±4.1 | 84.17 |
| Experience | 95 | 25.26±4.4 | 61.05±5.0 | 13.68±3.5 | 86.31 |
| 17.5–18.0 months old rams | | | | | |
| Control | 87 | 24.13±4.6 | 64.36±5.1 | 11.49±3.4 | 88.49 |
| Experience | 96 | 26.04±4.5 | 63.50±4.9 | 10.42±3.1 | 89.54 |

The analysis of the table data shows that 23.20% of the offspring from rams in the control group aged 7.5–8.0 months belonged to the elite class, and the proportion of elite and first-class lambs was 84.17%. In the experimental group, these figures were higher, at 2.06% and 2.14%, respectively.

An increase in the total weight of elite, elite and first-class lambs was observed in the offspring of experimental and control group rams aged 17.5–18.0 months. The offspring of the experimental group of rams in this age group were observed to be 1.91% higher in weight than the control group of elite lambs. According to this indicator, the quality of the experimental group generations is high.

CONCLUSION

When using pedigree rams in karakul breeding, it is necessary to take into account their age. Rams aged 17.5–18.0 months are sexually and physiologically mature and pass on their valuable traits to the next generation at a high level. In the resulting generations, flower types are manifested at a high level, and leather products are of high quality and export-oriented.

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