



EFFICIENCY OF EARLY ADULT SHEEP USE IN KARAKUL BREEDING

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Article history:	Abstract:
Received: 14 th May 2021 Accepted: 26 th May 2021 Published: 26 th June 2021	Karakul breeding is an important branch of grazing livestock and plays a huge role in solving the problems of food independence. The systematic use of only highly productive rams for mating, which transfer their valuable qualities to the offspring well, is the most important condition for improving the qualitative composition of the herd and increasing its productivity. The use of animals at an early age is of great importance for the rapid change of their generations and acceleration of the pace of breeding work. This work is devoted to the study of the reproductive qualities of rams at early age use.
Keywords: Ram, fertility, reproduction, sperm	

MATERIALS AND METHODS:

In order to study the reproductive qualities of rams of different ages and colors, an experimental (first group) and control (second group) animals were formed. The first group included 7-month-old black and harsh rams. The second (control) group included 1.5-year-old adult rams. A group of 7-month-old rams was purposefully prepared for the breeding company. For this purpose, a selection of rams was made from the groups of early spring lambing in the amount of 9 heads. To prepare for the breeding company, additional feeding of the animals was made, starting from 3.5 months of age. During this period, they received 0.4 kg of barley and 0.8 kg of hay. At 7 months of age, they received 0.5 kg of barley, 0.6 kg of carrots, 2 eggs and 1.5 kg of hay. Studied the fertilizing ability of rams and the yield of lambs per 100 queens. The studies were carried out in the conditions of the farms of the Samarkand and Navoi regions of the Republic of Uzbekistan.

RESULTS AND ITS DISCUSSION

The quality and quantity of sperm depends on a number of factors and, above all, on adequate feeding, which depends on the presence of biologically complete protein, minerals and vitamins in the diet.

When conducting the experiment, we based on the "Recommendations for the organization of artificial insemination of Karakul sheep" (1981), where it is indicated that the concentration of sperm should be at least 2.10 billion or rams by the beginning of mating should give ejaculate with an estimate of at least G-8, 0.

Sperm quality indicators of rams at different ages are shown in table No. 1

In our studies, the volume of ejaculate ranged from 0.74 to 0.92 milliliters, and on average 0.82 ml per cage. The concentration of sperm ranged from 2.08 to 2.35 billion / ml and resistance 22-26 thousand. The sperm was thick with an activity of 8 points.

When using the same rams at 1.5 years of age, the ejaculate volume was from 0.92 to 1.02 ml, and on average 0.96 ml, the semen volume increased by 0.14 ml, the semen concentration was 3.09 billion / ml and resistance 29.58 thousand. There was no big difference between rams of different colors in terms of sperm quality. Only the age difference in semen volume was noted.

As the results of the study show, adult rams produce slightly more and better sperm quality, but these differences are not statistically significant. The semen of the rams meets the minimum requirements for adult rams.

Experience has shown that with proper feeding and keeping, young rams have sperm in quality and quantity that meet the requirements and they can be used to check the quality of offspring at 7 months of age.

Table 1
Sperm quality indicators of rams of different ages and colors

Age	Cage made (qty)	Sperm received (ml)	The volume of one ejaculate (average)	Resistance, thousand (average)	Concentration in 1 ml (billion)
Sheep in black color (n=9)					
7-month-old	43	37,9	0,88	23,11	2,24
1,5 year-old	63	62,3	0,98	29,58	3,08
Sheep in harsh color (n=9)					
7-month-old	44	36,2	0,82	23,4	2,25
1,5-year-old	63	60,9	0,96	29,54	3,09

It is advisable to check the rams after beating for sexual activity, taking into account the higher nervous activity. According to Pavlov I.P., in this case, we mean the selection among them of individuals with the desired type of GNI, that is, animals with a balanced disposition, moderation in the manifestation of sexual reflexes, the persistence of their fixation and the stability of ejaculation during mating.

Animals with an active type of GNI are less desirable, since such rams are active only at the beginning of mating, but then become passive as a result of rapid sexual exhaustion.

Sheep with a weak type of GNI, which are characterized by fearfulness, inhibited reaction to the uterus and hunting, and frequent refusal to sit on her, are completely undesirable.

The fertilizing ability of uterus in karakul breeding depends primarily on the quality of the semen of the rams.

Table 2
Fertility of uterus, %

Sheep color	Sheep age					
	7-month-old			1,5 year-old		
	Inseminated (head)	Inseminated uterus	Explained %	Inseminated (head)	Inseminated uterus	Explained %
Black	752	73	89,50 ±3,57	1224	129	92,22 ±2,38
Harsh	723	43	88,93 ±3,70	1192	090	91,44 ±2,52

In our studies, the fertilization rate of uterus when inseminated with sperm of 7-month-old black sheep was 89.50%.

When inseminated with the sperm of the same rams at 1.5 years of age, the fertility of the uterus increased by 2.72%, i.e. in the group as a whole 92.22%. However, the revealed difference is insignificant, i.e. There is not much difference in fertility between young (7 month old) and 1.5 year old rams. Similar data were obtained for a group of severely colored rams. So, the difference in the fertilizing ability of 7-month-old and 1.5 year old rams was 2.51%. However, research results show that the fertilizing ability of rams depends primarily on individual characteristics.

Fertility of sheep depends on genetic factors and environmental conditions: climate, feeding level, housing conditions, body condition, age, etc. Full and uniform feeding, proper care and good maintenance can maximize the potential of sheep fertility.

Research data show that young and adult rams showed natural fertility, which is characteristic of the Karakul sheep breeding. This indicator does not depend on the age of the rams, here their individual characteristics are more affected.

Table 3
The quality of the offspring of rams of different ages, %

Sheep age	Fur types						Classificatio		
	Jacket	Ribbed	flat	Caucasia	n	elite	I class		
Black colored									
7-month-old	69	4,75	5	14,	,69	5,44	2	9	62,
1,5 year-old	41	6,50	5	14,	,31	4,03	2	1	62,
Severely colored									
7-month-old	49	5,24	5	14,	,14	4,67	2	8	62,
1,5-year-old	01	7,42	5	12,	,33	4,81	2	9	62,

Testing the breeding performance of animals convinced us of one more circumstance. With all the difference in its general indicators, their noticeable increase and improvement with age is clearly visible. This means that early use of rams does not lead to a decline in their breeding performance at an older age. They do not reduce it, but increase it. Only when using well-prepared young rams and mothers for mating can you get the lambs necessary for evaluating them for the quality of the offspring.

CONCLUSIONS:

In karakul breeding, full and general feeding, proper care and good maintenance, you can achieve the maximum manifestation of the potential fertilization of sheep.

Karakul sheep, with proper preparation for the breeding campaign, in a young and adult state, showed natural fertility, which is characteristic of the Karakul sheep breed. This indicator does not depend on the age of the rams, here their individual characteristics are more affected.

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