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Influence Of Technological Methods On Sheep Productivity Level At Different Weaning Periods In The Saratov Region Conditions.

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ABSTRACT

An important problem of modern sheep breeding in the areas of its traditional breeding is to increase the productivity of sheep through the use of the genetic potential of the domestic and world gene pool. Scientifically based application of modern breeding methods, improvement of production technology will contribute to a higher efficiency of the selection process. Sheep farming provides the industry with the most important raw materials and the population with food. Scientists are purposeful selection to achieve high productivity of animals, as in most farms the level of productivity and, especially, the quality of wool does not meet today's requirements. The cost of feed for production is still quite high. Therefore, the development of methods for more efficient use of the gene pool of existing sheep breeds, reducing feed costs, finding additional reserves that improve the economic performance of the industry is the most important task at the present stage of fine-wool sheep development In this article, we will focus on experimental studies performed to determine the effect of technological methods (weaning lambs at different age periods) on the level of productive characteristics of young sheep in the purebred breeding of the Stavropol breed on the basis of the breed farms of the Saratov region.

Keywords: weaning age, Stavropol breed, meat productivity, sheep.

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INTRODUCTION

In modern conditions of sheep breeding, weaning of lambs is usually performed at the age of 4.0-4.5 months, regardless of the breed, productive characteristics of sheep and the zone of their breeding. However, the long-term joint maintenance of queens with offspring has certain disadvantages, in particular, the 4.5-month suction period reduces the live weight of the queens and their fatness. One of the methods to eliminate this drawback is the use of technology for the early weaning of lambs from queens.

The early weaning of lambs is becoming increasingly widespread in practical application in countries with developed sheep breeding. However, there is still no consensus on the timing of the weaning of lambs, and this issue requires more careful consideration. [1-4, 6- 8].

MATERIAL AND METHODS

The studies were carried out in the conditions of CJSC New Life of the Novouzensky District of the Saratov Region An introductory crossing with the Manch merino breed sheep brought from the stud Lenin farm of Stavropol Region.

To study the rational age of weaning lambs from the queens, an experiment was conducted on the basis of the breed farms of the Saratov region on the periods of weaning lambs from mothers of March birth. Weaning was performed in 3- (I group), 3,5- (II group), 4.0- (III group) and 4.5 months old (IV group).

Evaluation of meat productivity was performed on rams up to 8 months of age. At birth, the Rams did not differ in body weight. When beating, the rams of 4.5 months of age exceeded the rams of 3.0 months of age by 16.41% (P> 0.999), at 8 months - by 6.75% (P> 0.999). At 8 months, the live weight of the rams of groups III and IV was almost equal. The rates were lower for rams of the early weaning period. Although the difference in the slaughter yield was small (only 0.43 abs. Percent), but due to the higher pre-slaughter weight, the superiority of the rams of the late weaning period over the rams of the early weaning period by weight of carcasses was 0.77 kg, or 7.62% (P > 0.99). According to the morphological composition of the carcass, the rams of late terms of weaning had a pulp of 1.8 abs. percent more than rams 3-month weaning. Accordingly, the coefficient of meatiness for the rams of the III and IV groups was 2.70-2.74, and for the Group I - 2.47. A similar trend was manifested in the varietal composition of carcasses. By the area of the “muscular eye”, which characterizes meat productivity, the difference between the I and IV groups was 0.33 cm².

RESULTS AND DISCUSSION

Table 1: Productive qualities of rams of the Stavropol breed in the conditions of the Saratov region

Indicators	Group			
	I	II	III	IV
Age, months	3,0	3,5	4,0	4,5
Live weight: at birth, kg	4,54±0,18	4,50±0,19	4,52±0,12	4,51±0,22
at weaning, kg	24,18±0,20	25,70±0,28	27,32±0,16	28,15±0,32
8 months	35,28±0,14	36,75±0,34	37,68±0,20	37,60±0,36
Pre-slaughter weight, kg	35,30±0,38	36,80±0,34	37,70±0,28	37,60±0,30
Carcass weight, kg	14,03±0,40	14,68±0,18	15,06±0,20	15,10±0,26
Slaughter yield,%	39,75	39,90	39,95	40,18

The obtained results allow us to conclude: in the production of mutton, it is advisable to use the late period of weaning lambs (4.0-4.5 months).

The impact of different terms of weaning lambs on the physiological state and productivity of the breeding stock directly was evaluated by the parameters of live weight and reproductive qualities. Weighing at weaning was done in order to determine the starting body weight when the uterus begins to prepare for insemination, feeding the factory constitution on the pastures without lambing. For 3 months of lactation, the

uterus of group I decreased the live weight by 2.2%, and the uterus of groups III and IV reduced the live weight to weaning lambs. Weighing the queens of all groups during the weaning period of lambs in group IV showed a generally predictable pattern: the extension of the lambing period to 4.5 months of age inhibits the recovery of the physiological state of the queens. This is confirmed by indicators of live weight of the queen before insemination. So, the uterus of the IV group had a live weight of 6.77% (P> 0.99) less than the uterus of the early weaning of lambs (3.0 months).

During insemination of the uterus of the I group, within 20 days they were fruitfully inseminated from the first time, in the III and IV groups, 2 and 5 heads came back into the hunt, respectively. The fecundity in the queen I females was 136.0%, and in the queen IV of the group (late weaning of lambs) - 116.0%. 34 lambs were obtained from queen I of the group (n = 25 heads), and only 29 from the queen IV groups (n = 25 heads). Uterus II and III groups gave 2 lambs less than uterus I group. In general, the conclusion is unambiguous - weaning differentially to meet the solution of specific problems.

CONCLUSION

Summarizing the obtained results, it can be concluded that when breeding sheep of the Stavropol breed in dry steppes and semi-deserts of the Saratov Trans-Volga region, the optimal age for lambs is 3.5-4.0 months. Early weaning (at 3 months) has a bad effect on the development and productivity of young stock, late weaning (at 4.5 months) negatively affects the preparation of dams for mating and their reproductive qualities.

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