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EXAMINING THE MEAT PRODUCTIVITY OF BLACK KARAKUL SHEEP IN THE USTYURT PLATEAU CONDITIONS AND THE EFFECTIVENESS OF SUPPLEMENTARY FEEDING IN PASTURE ENVIRONMENTS.

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Abstract:

This article examines the relationship between meat productivity and constitutional types of black Karakul sheep in the conditions of the Ustyurt plateau. Additionally, conclusions are drawn regarding the effectiveness of supplementary feeding in pasture conditions.

Keywords: Ustyurt coat, black Karakul sheep, meat productivity, complementary feeding regime, constitution types, conclusions.

Karakul sheep breeding is one of the crucial sectors in the Republic of Uzbekistan, with its primary products being valuable karakul pelts as well as sheep meat, which holds significant importance.

This sector occupies a special place in the economy of the desert and semi-desert regions of the republic. It is particularly important for utilizing pastures in the Ustyurt plateau conditions and for meeting the food needs of the local population.

Today's economic situation dictates that in the context of market relations between producers and consumers of karakul products, the demand for meat production is increasing.

Karakul sheep are distinguished by their high meat productivity. The slaughter yield of ewes after intensive fattening reached 55.7%, with their live weight being 23.0 kg. After weaning, these indicators in 4-5 month old ram lambs were 49.2% and 14.0 kg, respectively [97. p.108].

Due to insufficient research on methods to increase meat productivity of Karakul sheep and the lack of developed efficient feeding technologies, mutton production has not reached an adequate level.

In recent years, changes in market conditions, demands of the market economy, and increasing food requirements have sparked interest in meat production from Karakul sheep.

During our experimental work, we conducted research on natural pasture conditions and 90-day supplementary feeding.

Experiments on fattening young lambs under pasture conditions.

During the experimental work, 4.5-5.0-month-old lambs were separated at the weaning period, and separate herds were formed. These herds were allowed to graze on good pastures for a 90-day period, with 7.5-8.0-month-old male lambs intended for meat production.

In our experimental work, we studied the meat productivity of black Karakul lambs in the conditions of the Ustyurt plateau. We employed natural pasture technology and supplementary feeding methods. The experimental results were obtained and summarized in Table 1 below.

Table 1
Meat productivity of young lambs (7,5-8,0 months old) under pasture conditions

Parameters	Types of Constitutions (n=15)		
	Coarse	Sturdy	Delicate
Live weight before fattening (kg)	21,9±1,2	20,7±1,4	19,4±1,3
Live weight after fattening (in kg)	33,8±2,3	32,3±2,9	30,5±2,3
Absolute growth, kg	11,9±0,7	11,6±0,8	11,1±0,6
Daily growth, kg	132,2±9,8	128,9±8,7	123,3±8,1
Carcass weight, kg	17,8±1,1	17,9±1,2	15,3±1,4
Slaughter output, %	52,6	53,2	50,1

From the analysis of the data presented in Table 1, it can be concluded that the live weight before fattening for lambs of the coarse type was 21,9 kg, for the strong type 20,7 kg, and for the fine type 19,4 kg (P<0,05). Accordingly, the live weight after fattening was 33,8 kg, 32,3 kg, and 30,5 kg respectively.

During fattening, the absolute growth indicators in coarse-type lambs were 11,9 kg, in strong-type lambs 11,6 kg, and in fine-type lambs 11,1 kg (P<0,05). Correspondingly, the daily growth rates were 132,2 g, 128,9 g, and 123,3 g respectively. The carcass weight after slaughter in lambs of the coarse type was 17,8 kg, in lambs of the strong type 17,9 kg, and in lambs of the fine type 15,3 kg. The slaughter yield was 52,6%, 53,2%, and 50,1% respectively.

Sheep meat production in natural pasture conditions is characterized by low cost, but young lambs may not fully realize their potential for fattening in pasture conditions.

Therefore, in our research work, we placed 4.5-5.0 month old lambs in a fattening center for 3 months with the goal of fattening them based on supplementary feeding. In this case, during the lambing process, young male lambs were formed into separate herds and fed in the evening using a semi-pasture method, using good pastures. With supplementary feeding, a ration was compiled using local feeds from the farm, and feeding was carried out once a day using the same ration.

Table 2

Supplementary feeding ration for young lambs from 4,5-5,0 months to 7,5-8,0 months of age

Ration composition	Feed expenditure					
	1st month		2nd month		3rd month	
	quantity	feed unit	quantity	feed unit	quantity	feed unit
Alfalfa hay, kg	0,8	0,36	1,0	0,45	1,0	0,45
Cottonseed meal, kg	0,20	0,24	0,25	0,30	0,30	0,36
Ground barley, kg	0,20	0,20	0,25	0,25	0,30	0,30
Premixes, g	10	-	15	-	15	-
Salt, g	8	-	10	-	12	-
Total	**-**	**0,8**	**-**	**1,0**	**-**	**1,1**

Additional feeding was carried out in semi-pasture conditions with the organization of supplementary feeding, and in the evening, supplementary feeding was carried out in barn conditions, taking the main feed from the pasture.

The amount of feed was gradually increased by dividing the cottonseed meal, alfalfa hay, and ground barley grown on the farm into 90 days of additional feeding in the 3rd stage. In this case, additional premixes were added at a rate of 10 g per head per day to meet the feed requirement for minerals.

The results of supplemental feeding in our experimental work are presented in Table 3 below.

Table 3

Results of fattening young lambs on a 3-month supplementary diet,

Parameters	Types of Constitutions (n=15)		
	Coarse	Sturdy	Delicate
Live weight before fattening (kg)	21,3±1,4	20,1±1,7	18,9±1,5
Live weight after fattening (in kg)	38,8±2,3	37,4±2,9	35,8±2,1
Absolute growth, kg	17,5±0,5	17,3±0,7	16,9±0,5
Daily growth, kg	194,4±9,9	192,2±11,2	187,8±8,3
Carcass weight, kg	20,8±1,3	20,4±1,6	18,7±1,2
Slaughter output, %	53,6	54,5	52,1

From the analysis of the data presented in Table 3, it can be concluded that the live weight before fattening belongs to the coarse type.

21,3 kg, in the strong type – 20,1 kg and in the fine type – 18,9 kg. Accordingly, the live weight after fattening was 38,8 kg; 37,4 kg and 35,8 kg. During fattening, the absolute growth indicators in coarse-type lambs were 17,5 kg, in strong-type lambs – 17,3 kg, and in fine-type lambs – 16,9 kg. Accordingly, the daily growth rate was 194,4 g; 192,2

g and 187,8 g respectively. The weight of the carcass after slaughter was 20,8 kg in coarse-type lambs, 20,4 kg in strong-type lambs, and 18,7 kg in fine-type lambs. The slaughter yield was 53,6%; 54,5% and 52,1% respectively.

In conclusion, animals of the coarse and sturdy type demonstrated good fattening ability under natural pasture conditions, whereas animals of the delicate type showed poor tolerance to environmental factors. It was determined that the latter had limited capacity to fully exhibit their fattening ability in pasture conditions.

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