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MEAT PRODUCTIVITY OF YOUNG LOCAL GOATS IN THE CONDITIONS OF KARAKALPAKSTAN

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ABSTRACT

The article presents balance and methods of additional feeding 4,0-4,5 and 9-10 month aged local male goatlings. Indicators of meat productivity were defined in experiment by their ages, chemical broberties of meat and muscular tissues were studied. The information is given about foraging in the condition of pasture and influence of additional feeding on living weight of goatlings.

KEYWORDS: *Goatlings, Meat Production, Additional Feeding, Slaughter Weight, Slaughter Output, Chemical Composition Of Muscle Tissue.*

INTRODUCTION

The coarse-haired goats of Karakalpakstan are an aboriginal breed widespread in all regions of the Republic. They are characterized by unpretentiousness to feed and care and good adaptability to harsh natural and economic conditions. These qualities are valuable biological characteristics of the breed, formed in the process of long-term natural and massive artificial selection. Local goats were bred in close to natural conditions. Their productivity was influenced by such factors as climate, vegetation of natural pastures, terrain, soil, etc.

Economic methods of goat breeding provided for a minimum of protection of animals from unfavorable environmental conditions, and massive artificial selection, obviously, was carried out in the direction of increasing the viability and size of goats. Thus, the variability of coarse-wooled goats proceeded along the path of adaptation of the organism to the harsh and changing natural conditions of the external environment, that is, in the direction of creating hardy viable animals that can put up with scarce feeding conditions, a kind of sharply continental climate, in favorable feeding conditions, quickly create fatty reserves and at the expense of them to transfer the winter lack of fodder.

Local coarse-haired goats, in contrast to such cultivated, highly productive breeds as the Zaanen or Angora, are characterized by a lack of narrow specialization and low productivity. They are bred mainly for meat, milk and wool.

A strong and dry constitution is inherent in the goat of Karakalpakstan. The physique is adapted to the desert-pasture lifestyle. They have strong bones with relatively long and thick tubular head bones.

The degree of knowledge of the problem. The experience of the development of world goat breeding shows that in all goat-breeding countries of the world, an increase in the efficiency of the industry is associated with a more complete use of the meat productivity of goats.

Thus, 5372.4 thousand tons of goat meat are produced annually in the world [8]. It is noted that on average 438.3 million heads are slaughtered for meat annually, 146.0 million heads are slaughtered in China alone, while the average world carcass weight over the past 50 years, it has increased from 10.7 kg to 12.3 kg, or by 14.9%. The heaviest carcasses throughout the period under review were produced in Oceania; in 2009-2013 their weight was 23.3-23.5 kg. In other parts of the world, the mass of goat carcasses was in the range of 10.6-12.4 kg.

The lightest carcasses of goats over the past 13 years have been produced by Argentina (6.6 kg), meat production per one average goat per year can be considered as a generalizing parameter characterizing the conditional meat productivity of each individual animal of the entire goat population of a particular region or country, as well as production efficiency of this type of meat at all stages of its production technology [7]. Meat production per average goat for the period 1961-2013 increased in the world from 3.2 kg to 5.7 kg, or 78.1%. Throughout the entire period, the leader in this indicator until 2012 was Europe - 7.1 kg per head. In Israel, this figure was the highest in the world and amounted to 40.9 kg.

The production of goat meat per capita in the world is determined by the same factors as in other branches of animal husbandry. Per capita production of goat meat worldwide between 1961 and 2013 increased from 0.4 to 0.7 kg per year, or by 75.0%.

The largest amount of goat meat per person is produced in Mongolia - 22.4 kg.

Goat meat is a dietary food product and the meat of young animals is of particular value among the local population, therefore, the study of the meat productivity of goats is an urgent problem. In this regard, the purpose of our research was to study the meat productivity of goats in the year of their birth.

The object of the research: were local goats of different sex, age and constitutional types of animals.

Research methodology. The study of meat productivity was carried out on goats immediately after beating and at 9-10 months of age, after feeding with feeding. At the same time, according to the methodology [1] of SNIIZHK, the following indicators were determined: pre-slaughter weight-weighing of goats after 24 hours of starvation, slaughter weight, weight of fresh and chilled carcasses, chemical composition of muscle tissue. The chemical analysis of muscle tissue was carried out according to generally accepted methods in the laboratory of the Nukus branch of SamVMI.

Research results. The study of meat productivity was carried out on goats immediately after beating and at 9-10 months of age, after feeding with feeding. At the same time, according to the SNIIZhK method, the following indicators were determined: pre-slaughter weight-weighing of goats after 24 hours of starvation, slaughter weight, weight of steam and chilled carcasses, chemical composition of muscle tissue. The data obtained are shown in Table 1 below.

TABLE 1 SLAUGHTER INDICATORS OF GOATS IN THE YEAR OF THEIR BIRTH, N = 3

Indicators	Slaughter age for meat (months)	
	4,0-4,5	9-10
Weight, kg:		
Before-hole	14,8±0,08	27,3±0,16
steamedmascara	7,64±0,12	13,9±0,13
internalfat	0,16±0,03	0,8±0,02
Slaughter	7,8±0,1	14,7±0,13
lethalyield,%	52,7	53,8
chemical composition of muscle tissue,%		
Moisture	71,1	66,4
drymatter	28,9	33,6
Fat	7,5	8,9
Protein	17,4	21,2
Ash	4,0	3,5

Analysis of the data shown in Table 1 shows that the meat productivity of goats is in direct proportion to the age of slaughter. So, the front-slaughter weight at 9-10 months of age was 12.5 kg or 84.4% more than in goats of 4.0-4.5 months of age, and the weight of the steamed carcass was 6.26 kg or 70, sixteen%. The difference in slaughter yield was 1.1%.

The emergence of such a significant difference was also facilitated by the fact that goats at 9-10 months of age were slaughtered for meat after preliminary feeding with feeding, that is, sixty days before slaughter, in addition to grazing on pastures, the goats were additionally given one kilogram of pasture hay in the morning and in the evening - by 0.3 kg of concentrated feed.

The same animals showed a greater accumulation of internal fat - 0.64 kg.

Analysis of the results of the obtained data showed that the meat of young goats is characterized by softness and tenderness, which is evidenced by a high moisture content, while there was more moisture (by 7.1%) in the meat of goats when beating, they also had a lower content of fat and protein - by 18.7 and 21.8 percent, respectively.

TABLE 2 LIVE WEIGHT OF ADULT ANIMALS, KG

Animal groups Considered	Animal groups Considered	Spring Autumnn	Spring Autumnn
		M±m	M±m
Adultgoats	25	31,1±0,36	40,4±0,72
Goatsadults	25	41,2±0,53	60,1±0,54

Analysis of table -2 shows that the carcass yield when slaughtering goats, depending on fatness, ranges from 37 to 50% of live weight, and the maximum yield is given by fattened wallops. Unlike the meat of local sheep, goat meat has a poorly developed upper fat layer, but there is more internal fat [3]. The best quality meat is produced by young woods 6-7 months old in autumn slaughter [5,6,]. Some of the rolls used as leaders of goat and sheep flocks are kept for up to 5-6 years.

Local goats are distinguished by high mobility and quick response to environmental conditions. The head of local breeds of goats is of medium size, with a wide forehead, the nasal bones are mostly concave, less often there is a straight profile and a single convex one. The ears are large, thick, drooping or semi-drooping, overgrown with covering hair from the outside. The skin is thin, subcutaneous fat deposits are poorly expressed [2,4].

The average live weight of goats at birth is 2.6 kg, of goats - 2.9. The mass of young animals born in twins at birth is 14-15% less than singles. By 1.5-2 years old, under satisfactory keeping conditions, twin kids in live weight catch up with the ones.

The maximum weight of goats reaches 5-6 years of age, and after 3-5 years, its growth is insignificant.

TABLE-3 LIVE WEIGHT OF KIDS AT WEANING FROM THEIR MOTHERS (4.0-4.5 MONTHS OF AGE), KG

Period	Period	heads	M±m	C %
birth sex animals	Birth sex animals	17	14,1±0,11	2,8
February Goats	February Goats	19	15,1±0,13	3,9
Goats	Goats	24	13,7±0,18	2,9
March Goats	March Goats	23	14,1±0,18	2,8
Goats	Goats	25	12,9±0,16	2,3
April Goats	April Goats	25	13,4±0,18	2,9

The results of the table indicate that, the live weight depends on the period of birth, in the month of February there is a much larger live weight (14.1-15.1 kg) compared to April (12.9-13.4 kg).

CONCLUSIONS

Thus, the results of the conducted studies allow us to state that young local goats in the conditions of Karakalpakstan are characterized by relatively good meat productivity, while it is more profitable to kill them for meat in the year of birth at 9-10 months of age after pre-feeding with feeding. This technological approach will contribute to both increasing meat production and improving its quality [9].

References:

1. Abokeev V. V. et al. Methodology for assessing the meat productivity of sheep. Stavropol SNIIZhK, 2009-35 p.
2. Ismailov M. et al. - Sutdor echchichilikda naschilik ishlari J. Zooveterinary Medicine T. No. 6 27 b.
3. Kichin V. I. - Goats, sheep breeding and care M. 2016 170 pp.

4. Kosimov M. A. - Goat breeding Dushanbe 2005. 70 pages.
5. Plotnikova E.V. - Goats and Sheep M. 2014, 317 pages.
6. Orekhov A. A - Productive goat breeding M. "Kolos" 1974 230 pp.
7. Safarov T. - Economic and biological characteristics of local goats in Tajikistan. Dushanbe 2017, 20 pages
8. Holmanov A. M. et al. Production of goat meat in the world J. Sheep, goats, wool business M. No. 1 2016 pp. 31-36.
9. Toreshova A. U. - Productive Features Of Goats Under Different Conditions In The Northern Region Of Karakalpakstan. Avtoreferat for the degree of doctor of philosophy (phd) in agricultural sciences. Samarkand-2019