

THE TOUR OF THE BREED AND BREEDING OF KAZILARNING MEAT PRODUCTIVITY

Tokhtaev Ozod Bariddinovich,
Independent Researcher, SDVMChB University

Rozibaev Nuraddin Rakhimovich,
Ph.D., Professor, Academician of the Turan
Sciences Academy, ChPITI Institute

Abstract

The article presents the fact that the meat productivity of sheep can change depending not only on the conditions of their feeding and maintenance but also on their breed and breed. It was found that rams from the III group of the breed $\frac{3}{4}$ edilboy x $\frac{1}{4}$ jaidari, had higher meat productivity, at the age of 12 and 18 months of development, than crossbred lambs from the I group of purebred jaidari and in the II group of pure jaidari and crossbred $\frac{1}{2}$ edilboy x $\frac{1}{2}$ jaidari.

Keywords. Zhaidari, edible, breed, genotype, sheep, lamb, ram, ewe, live weight.s.

Introduction

In the CIS countries of Kazakhstan, Kyrgyzstan, Turkmenistan, and especially Tajikistan, the breeding of hump sheep breeds is widespread. In Russia and Belarus, sheep breeds with fine and semi-fine wool have been bred the most, and today, attention is paid to breeding hump sheep breeds. In these countries, the focus is on producing high-quality young mutton in demand in the international market. Taking this into account, it is important and urgent to use the genetic potential of hump sheep breeds in the meat-fat direction and create productive flocks with high meat productivity on this basis, using their valuable biological characteristics to increase the meat productivity of sheep.

The sheep breeding sector is of great importance in providing the population of our republic with mutton and mutton products. To this end, several important measures are being taken to improve the breeding and productivity characteristics of existing meat-and-fat sheep by improving optimal pasture feeding conditions and introducing modern technologies into production.

Many scientists show that in sheep farming The level of meat productivity and the quality composition of mutton are influenced by the physical maturity of animals. With age, the quality of mutton changes due to the development of muscle and fat tissues. The muscles of adult animals contain less water, and meat has a higher energy value. The results of research by A.Kh. Khaitov and U.Sh. Dzhuraeva shows that The relative weight of fat in humped sheep breeds is expressed as a percentage of live weight. Total fat in 12-month-old

Hisar sheep is 6.96%, in Tajik sheep - 6.31%, in Jaidari breed - 4.71%. Of this, body fat is respectively 2.49; 2.09; 1.57%, internal fat-0.25; 0.22; 0.24%, buttock fat-4.22; 3.99; is 2.91%. Also, in adult Hisar sheep, these indicators are total fat - 17.77%, in Tajik sheep - 19.18%, in Jaidari breed - 21.37% [1; 2; 3].

The chemical composition of the longest back muscles of the F2 genotype rams with a $\frac{3}{4}$ x $\frac{1}{4}$ Romanov breed and $\frac{3}{4}$ Edilboy breed had a moisture content of 74.94%; total dry matter - 25.06%, of which fat - 4.32%; protein - 19.70%; ash - 1.04%, which was 0.71 and 0.18% lower than that of the pure Romanov breed and F1 genotype peers with a $\frac{1}{2}$ x $\frac{1}{4}$ Romanov breed and $\frac{3}{4}$ Edilboy breed, while the total dry matter and fat content were 0.71 and 0.26; 0.91 and 0.3% higher, respectively. This is of great importance in sheep breeding for breeding sheep with high meat productivity and quality and increasing the volume of mutton production. The results of the studies showed that the pure Romanov breed and its first and second-generation crosses with the Edilboy breed were characterized by high growth at all ages. At the same time, due to the effect of the results of crossing, hybrid rams were characterized by slightly higher absolute and daily growth characteristics of live weight, which indicates a higher relative growth rate and its growth coefficient by age.

E. Dilboy rams at birth was -4.58 kg, at 4 months -37.58 kg, at 6 months -55.16 and 8 months -72.56 kg, which is 0.46; 3.46; 5.14; and 6.94 kg higher than that of purebred Edilboy sheep, respectively. It is economically efficient to fatten and sell rams up to one year old. The cost of meat from rams slaughtered up to one year old is lower than that of mature rams, that is, costs are less, while the meat has high marbling, low-fat content, juicy and tender meat, and is in high demand in the market. This indicates the efficiency of breeding sheep of the new type Edilboy breed.

The results of a comparative study of Kalmyk rump and Buryat local breeds of rams in the direction of coarse-wooled meat-fat productivity in terms of live weight and body dimensions showed that Kalmyk breed rams were characterized by higher indicators. For example, the live weight of first-line pedigree rams of Kalmyk and Buryat breeds was 89.5 kg, which was 17.9 kg or 20.4% higher than that of Buryat breed counterparts. At weaning, the live weight of hybrid lambs was 3.2 kg higher than that of pure Buryat breed counterparts. [4; 5; 6; 7; 8; 9].

Place and methods of research. Scientific research was conducted in 2022-2024 at the "Shohrukh" breeding farm in the sheep breeding direction of the Akhangaron district of the Tashkent region. For the research, 57 purebred Zaydari lambs were selected as the objects of the I control group, similar in origin and age, 59 lambs with the $\frac{1}{2}$ Edilboy and $\frac{1}{2}$ Zaydari genotypes were selected as the II group, and 59 lambs with the F2 crossbred lambs of the $\frac{3}{4}$ Edilboy x $\frac{1}{4}$ Zaydari breed were selected as the III group.

Live weight, absolute, relative growth and average live weight of lambs were studied using the methods of V.I. Fyodorov (1973) and S.T. Brody (1945).

The obtained data were processed using variational statistical methods. The average indicator of the characteristics (X), its error (Sx), variability (Cv), and reliability criteria of

the comparative indicators (td, P) were determined using the method of E.K. Merkurjeva (1970).

Research Results

Depending on the breed of animals, their breeding characteristics, their direction of production, natural climate and pasture conditions, as well as pasture productivity, and even under the same conditions, they show different growth rates. This means that the growth and development of sheep are different.

Mutton is the most consumed product among our people after beef compared to other livestock meat, and it is highly valued. Mutton production is a type of product that is mainly raised year-round or in seasonal pasture conditions and is produced at low cost. This is due to the ability of the Angora to absorb feed, gain weight quickly, and gain high live weight when grazing on natural pasture feed in the spring and summer seasons and after harvesting in the fall.

In the conditions of a market economy, wool trade has decreased sharply, but the demand for mutton is increasing. In order to find ways to meet this priority, one of the important and urgent tasks is to increase the meat productivity of sheep of various breeds and breeds and to increase the production of high-quality mutton.

Live weight and slaughter weight of lambs are one of the most important indicators of meat productivity, and their ratio can be used to estimate slaughter yield in farm animals. However, there are several other parameters: chilled carcass weight, rump weight, and slaughter yield without rump and with rump calculated on their basis.

We performed a controlled slaughter of rams at 12 and 18 months of age to study meat production, which was kept under the same pasture feeding conditions (Table 1).

Table 1 Meat and fat yield of 12-month-old rams, kg (n=3).

Indicators	I		II		III	
	$\bar{X} \pm C\bar{x}$	Cv,%	$\bar{X} \pm C\bar{x}$	Cv,%	$\bar{X} \pm C\bar{x}$	Cv,%
Weight before slaughter	49.0 ± 0.59	6.53	52.40 ± 0.45	4.71	55.25 ± 0.46**	4.68
No matter what	20.58 ± 0.43	3.65	22.58 ± 0.57	4.34	24, 30 ± 0.23**	1.63
Dumba vase	3.28 ± 0.14	7.20	3.87 ± 0.12	5.27	4.64 ± 0.17**	6.34
Ički ěglar important	0.26 ± 0.01	7.91	0.57 ± 0.03	8.03	0.71 ± 0.01**	2.81
My weight	24.12 ± 0.21	1.48	27.02 ± 0.26	1.66	29.75 ± 0.19**	1.10
Slaughter cost,%	49.2 ± 0.36	1.27	51.6 ± 0.38	1.27	53.8 ± 0.29**	0.92

Note: ** P>0.999.

According to the data of Table 1, the pre-slaughter weight of the rams with the second joint of the Edilboy and Jaidari breeds was 55.25 kg, the weight of the tail was 24.30 kg, the fat of the buttocks was 4.64 kg, the internal fat was 0.71 kg, the weight of the carcass was 29.75 kg, and the yield of the carcass was 53.8%. and 2.85 kg (P>0.999) for purebred and first-

generation counterparts of the Edilboy and Zaydari breeds, respectively; 3.72 kg ($P > 0.999$) and 1.72 kg ($P > 0.999$) for 1.36 kg ($P > 0.999$) and 0.77 kg ($P > 0.999$) for 0.45 kg ($P > 0.999$) and 0.14 kg ($P > 0.999$) for 5.63 kg ($P > 0.999$) and 2.73 kg ($P > 0.999$) for 3.72 kg ($P > 0.999$) for 14.6% ($P > 0.999$) and 2.2% ($P > 0.999$) were characterized by high indicators.

The results of the controlled slaughter of rams at the age of 18 months are presented in Table 2.

Table 2 Meat and fat yield of 18-month-old rams, kg (n=3).

Indicators	I		II		III	
	$\bar{X} \pm C\bar{x}$	Cv,%	$\bar{X} \pm C\bar{x}$	Cv,%	$\bar{X} \pm C\bar{x}$	Cv,%
Weight before slaughter	61.05 ± 0.61	5.35	64.9 ± 0.68	5.74	68.82 ± 0.44**	3.52
No matter what	26.25 ± 0.20	1.33	28.23 ± 0.32	1.95	30.96 ± 0.38**	2.15
Dumba vase	4.15 ± 0.10	4.34	4.86 ± 0.12	4.27	5.84 ± 0.08**	2.46
Internal fat weight	0.66 ± 0.02	7.35	0.77 ± 0.02	4.86	1.03 ± 0.04**	7.39
My weight	30.76 ± 0.26	1.47	33.86 ± 0.29	1.84	37.83 ± 0.24**	1.10
Slaughter cost,%	50.3 ± 0.56	1.93	52.8 ± 0.35	1.13	54.9 ± 0.38**	1.19

Note: ** $P > 0.999$.

The table data shows that at the age of 18 months, according to the slaughter results, rams with $\frac{3}{4}$ Edilboy x $\frac{1}{4}$ Jaidari cross achieved high results. For example, in group III, F_2 The pre-slaughter weight of hybrid rams was 68.82 kg, half-weight was 30.96 kg, rump fat was 5.84 kg, visceral fat was 1.03 kg, and slaughter weight was 37.83 kg, which was 7.77 kg or 12.7% ($P > 0.999$); 4.71 kg or 17.9% ($P > 0.999$); 1.69 kg or 40.7% ($P > 0.999$); 0.37 kg or 56.0% ($P > 0.999$); 7.07 kg or 23.0% ($P > 0.999$); 4.6% ($P > 0.999$) higher than that of purebred counterparts in group I. Similarly, in group II, the Edilboy breed and the Zaydari breed were characterized by higher results than their counterparts in the $\frac{1}{2}$ x $\frac{1}{2}$ breeding, respectively: 3.92 kg or 6.0% ($P > 0.999$); 2.73 kg or 9.6% ($P > 0.999$); 0.98 kg or 20.2% ($P > 0.999$); 0.26 kg or 33.7% ($P > 0.999$); 3.97 kg or 11.7% ($P > 0.999$); 2.1% ($P > 0.999$).

Conclusion

According to the results of the controlled slaughter of the second-generation hybrid rams of the $\frac{3}{4}$ Edilboy x $\frac{1}{4}$ Jaidari breed in group III, regardless of gender, the pure Jaidari in group I was found that the first-leg hybrid lambs of the $\frac{1}{2}$ Edilboy x $\frac{1}{2}$ Zaydari breed in group II were higher than those of the first-leg hybrid lambs. From these results, it can be concluded that the slaughter indicators of sheep can vary not only depending on the feeding and housing conditions but also on their breed and pedigree.

References

1. Davletova A.M., Kosilov V.I. Slaughter performance of Edilbaev sheep rams. Sheep, goats, wool business. 2013. No. 3. P. 11-12.
2. Dvalishvili V.G. Feeding level and productivity of Russian type of Edilbaevskaya sheep. // Zh. "Zootechny". 2020, No. 5, pp. 10-14.

3. Erokhin A.I., Karasev E.A., Magomadov T.A., Olkhovoy A.I. Formation of meat content in sheep during postnatal ontogenesis. Sheep, goats, wool business. 2006. No. 3. P. 39-45.
4. Esengaliev K.G., Traisov B.B., Bozymov A.K., Sundetbaeva A.A. Productivity of Akzhiak linear sheep meat and wool breed. Sheep, goats, wool business. 2013. No. 3. P. 6-8.
5. Malchikov RV, Yuldashbaev YuO, Kubatbekov TS, Gadiev RR, Yaremko VV, Abdurasulov AH Weight growth of lambs Romanov breed and its mixture with Edilbaevsky OshGU Bulletin. Agronomy, veterinary medicine, zootechnics. No1. 2022. Pp. 68–78.
6. Mitypova E.N., Tsybikova R.N. Improvement of sheep of the aboriginal Buryat coarse-wool breed in the direction of increasing productivity. Bulletin of the Altai State Agrarian University. No. 1 (147), 2017. P. 104-110.
7. Konik N.V. Meat productivity of rams of different origin. Zootechnics. 2010. No. 9. P. 23-25.
8. Khaitov A.Kh., Dzhuraeva U.Sh. Growth of adipose tissue in fat-tailed sheep. Agricultural Sciences: Veterinary Science and Animal Science. No. 3, 2020. P. 112-117.
9. Yuldashbaev Yu.A., Kosilov V.I., Nikonova E.A., Mironova I.V. Influence of the genotype of rams on the chemical composition of the longissimus dorsi muscle. Agronomy, veterinary science, animal science. No. 3 (4), 2024. P. 34-41.