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Meat and Interior Features Rams of Different Genotypes.

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ABSTRACT

This article presents the scientific experimental data on the meat productivity of the offspring obtained from crosses of the Stavropol breed ewes with different fineness of wool and ram' producers breed Australian Merino.

Keywords: live weight, carcass yield, carcass, organs, ram.

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INTRODUCTION

To increase the production of poultry products apply advanced farming introductory crossbreeding. Introduction hybridization is used in cases when bred mainly breed satisfies economic and technological requirements, but need to improve certain properties.

Introductory crossing gives the breed an influx of new forces while retaining its main advantages. Accordingly, for the opening of crossing a selected breed and of its members, which would be the maximum development of those properties for which hybridization is perform [1, 2, 6].

MATERIALS AND METHODS

As a result, crossing the Stavropol breed ewes with rams of different genotypes according to the scheme of the experiment (Table. 1) was obtaining offspring.

Table 1: The experimental setup

Group	Rams		Ewes	
	Breed and the fineness of wool	The number	Breed and the fineness of wool	The number
I	AMM** (19,6 мкм)	2	St (18,1-20,5 мкм)	61
II	St** (22,3 мкм)	2	St (20,6-23,0 мкм)	65
III	AMM (19,6 мкм)	2	St (20,6-23,0 мкм)	54
IV	St (22,3 мкм)	2	St (18,1-20,5 мкм)	61

**Note: St - Stavropol breed; AMM - Australian merino meat.

At the end of experiment, performed in the control animals slaughtered 8 months aged for 3 heads in each group as described.

At slaughter taken into account:

- Body weight before and after soaking the hungry;
- The mass of carcasses;
- Slaughter weight;
- Slaughter yield;
- The mass of chilled carcasses;
- Weight of internal fat;
- Mass of internal organs (heart, lungs, liver, kidney and spleen);
- The mass of stomach contents and without content;
- The length of the large and small intestine;
- The mass of the pair of sheepskin and its area;
- The mass of spilled blood.

To determine the varietal composition was produced carcasses graded cutting and boning to determine the yield of flesh and bones [5, 7, 8].

RESULTS AND DISCUSSION

After starving exposure, studied the indicators given in the table 2. Analysis of meat productivity of sheep (Table 2) revealed to slaughter weight of impurities in the average of the two groups (groups 1 and 3) was 47.8 kg, which is more than the average of the purebred sheep 2.45 kg or 5.4 %. If we compare by groups, the greatest mass slaughter hybrids were 3 groups (48.2 kg), which occurred as a result of cross-breeding ewes wool 64th quality rams Australian Meat Merino and surpassed 1.2 and 4 of this group figure 0.8; 3.1 and 2.6 kg or 1.7; 6.9 and 5.7%. If we compare this figure among purebred animals, the highest pre-slaughter live weight of different animals Group 4 45.6 kg, which is above the peer group 2 to 0.5 kg or 1.1%.

Table 2: Key indicators of meat productivity rams (n = 3)

Indicators	Group			
	1	2	3	4
Live weight exposure to the hungry, kg	49,1±0,67	46,4±0,95	50,0±0,76	46,9±0,74
The live weight of slaughter, kg	47,4±0,67	45,1±0,95	48,2±0,76	45,6±0,74
Carcass kg	20,0±0,67	19,2±0,95	21,1±0,76	19,0±0,74
Internal fat, kg	0,85±0,67	0,60±0,95	0,80±0,76	0,65±0,74
Destructive weight, kg	20,85±0,666	19,80±0,945	21,90±0,764	19,65±0,737
Slaughter yield,%	44,0	43,9	45,5	43,1
The mass of chilled carcass kg	19,4	18,7	20,3	18,5

The average weight of carcasses at the hybrids 1 and 3 groups was 20.6 kg, which is more than the average weight of carcasses' of purebred animals 1.5 kg or 7.6%. Among the experimental groups, the greatest mass of carcasses were 3 groups of animals (21.1 kg), which surpassed 1.2 and 4 peer groups of 1.1; 1.9 and 2.1 kg or 5.5; 9.9 and 11.1%.

By weight of internal fat hybrid animals as superior thoroughbred. Median hybrids at 1 and 3 group was 0.83 kg, 0.2 kg, or 7.5% higher than in the animals of groups 3 and 4.

Stopping analyzing mass carcass shows that the highest rate in the animals of groups 1 and 3, and 21.4 kg, which exceeds the rate of animals and 4 groups of 2 to 1.7 kg, or 8.7%.

Just had the best crossbred sheep carcass yield and the average for the two groups it was 44.8%, which is more than the average 2 and 4 groups of 1.3%. The highest carcass output was in a group of three animals of 45.5%, which is higher comparing with their peers by 1.5; 1.6 and 2.4%. If we compare this indicator for cross between the 1 st to the 3rd group of purebred and second to fourth group, the superiority of the group have received from ewes wool 64 th quality.

As Metals and morphological composition of carcasses had the advantage of hybrids derived from, the sheep breeds of Australian merino meat. The average yield of pulp have reached 75%, which is above the average purebred peers by 0.9%.

The biggest factor meat' yield at 8 months was a sheep in the group 3 and amounted to 3.05. A sheep was at least 4 groups (2,83) have occurred with the wool of ewes 70th quality.

The highest percentage of output cuts 1st grade had allowed third group (88.9%), which surpassed 1.2 animals and 4 groups for this indicator by 1.0; 1.3 and 2.1%.

Interior indicators rams of different origin show that the best development of the internal organs were observed crossbred sheep obtained from rams Australian merino meat that exceeded the average purebred peers in the blood spilled by 7.1%, the mass of the heart - 11.4%, light - 12 ,9; liver - 11.5; Kidney - 6.2; Spleen - 14.3% by weight and 7.2% stomach. When compared in groups, the best development of the internal organs differed sheep third group received from ewes' wool 64th quality Australian meat merino sheep. They surpassed the 1, 2, and 4 groups of blood spilled by weight of 5.5; 9.9 and 10.1%; heart weight - 4,8; 15.0 and 13.0%; light weight - 9.3; 10.7 and 11.3%; liver - 6.2; 10.4 and 8.4%; kidney - 10.2; 13.0 and 10.2%; spleen - 13.3; 21.4 and 21.4%; stomach weight - 6,5; 11.3 and 11.3%.

Hybrid animals of the two groups are superior purebred peers' length of the small intestine [9]. The median length of the small intestine have reached 30 meters, which is higher than the average purebred animals 0.5 m or 2.6%. Individual pots of group 3 had the best result of the length of the small intestine (30.3 m) and exceeded 1, 2 and 4 in the group of 2.0; 3.4 and 3.8%.

Along the length of the large intestine had the advantage on the side of crossbred animals. At a total length of intestine superior crossbred rams 1 and 3 groups in an average of purebred 2 and 4 groups was 2.4%. The longest was at the sheep intestines of group 3 (38.4 m), which were obtained by crossing mares with wool 64th quality Australian sheep meat merino surpasses 1, 2 and 4 group 1.6; 2.9 and 3.5%.

Analysis of the development of the internal organs of experimental animals revealed that crossbred rams received by producers of sheep meat breed Australian Merino had the best development of the internal organs compared to purebred peers [10]. Among the groups allocated barany3 first group obtained by crossing mares with wool 64th quality Australian meat merino sheep.

Breeding sheep obtained from rams breed Australian merino meat compared to purebred peers by weight sheepskin exceed 2.4%. The heaviest sheepskins were 3 groups of animals (6.4 kg) greater than 1, 2, and 3 groups of 1.6; 3.2 and 4.9%. The weight ratio of sheepskins to the pre-slaughter live weight from crossbred sheep was 13.3%, which is less than the 0.3% purebred.

By area of sheepskins, crossbred sheep outnumbered purebred 1.8 dm², or 2.0%.

Thus revealed that meat and interior parameters, the offspring resulting from the sheep breeds of Australian meat merino superior purebred animals [11, 12]. In turn, the comparison between groups, the crossbred rams third group received from cross of uteruses with wool 64th quality Australian meat merino sheep had the best meat and interior performance.

CONCLUSION

Based on the above material we can conclude:

- Hybrids group III had the superiority of pre-slaughter weight (48.2 kg) above the peers I; II and IV groups of 1.7; 7.4 and 6.2%, with the II and IV groups reliable differences (P <0,05; P <0,05). The highest yield of slaughter animals in the group III (45.6%), which is higher compared to other peer groups, 1.6; 2.6 and 2.8%. Maximum weight of chilled carcasses were animals of group III (20.7 kg) and had an advantage over their peers I; II and IV groups of 6.1; 12,5 and 13,1% (P <0,01).
- Individual pots of Group III at the age of 8 months myasnosti ratio (3.05) were superior to their peers I; II and IV groups of 4.1; 6.3 and 7.8%.
- By weight sheepskins rams superior animals of group III I, II and IV of 1.6; 3.2 and 4.9%. By area of sheepskins in crossbred rams were superior to purebred 2.0%.

REFERENCES

[1]   Chernobay E. N., Guzenko V. I. Productive Characteristics of the Lambs to Get Of Ewe, Who Were Subject To Prental Shearing / Research Journal of Pharmaceutical, Biological and Chemical Scinces. July-August. RJPBCS/ 6(4) Page No. 957.
[2]   Vladimir Ivanovich Trukhachev, Nikolai Zakharovich Zlydnev,Sergei Alexandrovich Oleynik, and Vitaly Yuryvich Morozov. Res J Pharm Biol Chem Sci 2015;6(6):613-616.
[3]   Vladimir Ivanovich Trukhachev, Nikolai Zakharovich Zlydnev,Sergei Alexandrovich Oleynik, and Vitaly Yuryvich Morozov. Res J Pharm Biol Chem Sci 2015;6(6):1314-1316.
[4]   Vladimir Ivanovich Trukhachev, Nikolai Zakharovich Zlydnev, Nikolai Viktorovich Samokish. Res J Pharm Biol Chem Sci 2015;6(6):1321-1327.
[5]   Vladimir Ivanovich Trukhachev, Galina Petrovna Starodubtseva, Olga Vladimirovna Sycheva, Svetlana Ivanovna Lubaya, and Marina Vladimirovna Veselova. Res J Pharm Biol Chem Sci 2015;6(4):990-995.
[6]   Vladimir Ivanovich Trukhachev, Vladimir Vsevolodovich Sadovoy, Sergei Nikolayevich Shlykov, and Ruslan Saferbegovich Omarov. Res J Pharm Biol Chem Sci 2015;6(2):1347-1352.
[7]   Natalja Jurevna Sarbatova, Vladimir Jurevich Frolov, Olga Vladimirovna Sycheva, and Ruslan Saferbegovich Omarov. Res J Pharm Biol Chem Sci 2015;6(4):962-965.
[8]   Ivan Vyacheslavovich Atanov, Vladimir Yakovlevich Khorol'skiy, Elena Anatolievna Logacheva, Sergey Nikolaevich Antonov and Ruslan Saferbegovich Omarov. Res J Pharm Biol Chem Sci 2015;6(6):671-676.
[9]   Anatoliy Georgievich Molchanov, Valeriy Georgievich Zhdanov, Aleksandr Valentinovich Ivashina, Alexey Valerevich Efanov, Sergei Nikolayevich Shlykov and Ruslan Saferbegovich Omarov. Res J Pharm Biol Chem Sci 2015;6(6):633-637.
[10]   Vladimir Vsevolodovich Sadovoy, Sergei Nikolayevich Shlykov, Ruslan Saferbegovich Omarov, and Tatiana Viktorovna Shchedrina. Res J Pharm Biol Chem Sci 2014;5(5): 1530-1537.

[11]   Shaliko Zhorayevich Gabriyelyan, Igor Nikolaevich Vorotnikov, Maxim Alekseevich Mastepanenko, Ruslan Saferbegovich Omarov, and Sergei Nikolayevich Shlykov. Res J Pharm Biol Chem Sci 2015;6(3):1345-1350.
[12]   Vladimir Vsevolodovich Sadovoy, Viktor Ivanovich Guzenko, Sergei Nikolayevich Shlykov, Ruslan Saferbegovich Omarov and Tatiana Viktorovna Shchedrina. Res J Pharm Biol Chem Sci 2015;6(6):613-616.