ISSN 2224-526X

ҚАЗАҚСТАН РЕСПУБЛИКАСЫ
ҰЛТТЫҚ ҒЫЛЫМ АКАДЕМИЯСЫНЫҢ
Қазақ ұлттық аграрлық университеті

Х А Б А Р Л А Р Ы

ИЗВЕСТИЯ

НАЦИОНАЛЬНОЙ АКАДЕМИИ НАУК
РЕСПУБЛИКИ КАЗАХСТАН
Казахский национальный
аграрный университет

IZVESTIÂ

NATIONAL'NOJ AKADEMII NAUK
RESPUBLIKI KAZAHSTAN
Kazakh national
agrarian university

SERIÂ AGRARNYH NAUK

3 (51)

MAY – JUNE 2019

PUBLISHED SINCE JANUARY 2011

PUBLISHED 6 TIMES A YEAR

ALMATY, NAS RK

Б а с р е д а к т о р

Есполов Т.И.,
э.ғ.д, профессор,
ҚР ҰҒА академигі және вице-президенті

Р е д а к ц и я а л қ а с ы:

Байзаков С.Б., э.ғ.д, проф., ҚР ҰҒА академигі (бас редактордың орынбасары); **Тиреуов К.М.,** э.ғ.д, проф., ҚР ҰҒА академигі (бас редактордың орынбасары); **Елешев Р.Е.,** т.ғ.д., проф., ҚР ҰҒА академигі; **Рау А.Г.,** т.ғ.д., проф., ҚР ҰҒА академигі; **Иванов Н.П.,** в.ғ.д, проф., ҚР ҰҒА академигі; **Кешуов С.А.,** т.ғ.д., проф., ҚР ҰҒА академигі; **Мелдебеков А.,** а.ш.ғ.д., проф., ҚР ҰҒА академигі; **Чоманов У.Ч.,** т.ғ.д., проф., ҚР ҰҒА академигі; **Елюбаев С.З.,** а.ш.ғ.д., проф., ҚР ҰҒА академигі; **Садыкулов Т.,** а.ш.ғ.д., проф., академигі; **Баймұқанов Д.А.,** а.ш.ғ.д., проф., ҚР ҰҒА корр-мүшесі; **Сансызбай А.Р.,** а.ш.ғ.д., проф., ҚР ҰҒА корр-мүшесі; **Умбетаев И.,** а.ш.ғ.д., проф., ҚР ҰҒА академигі; **Оспанов С.Р.,** а.ш.ғ.д., проф., ҚР ҰҒА құрметті мүшесі; **Олейченко С.И.,** а.ш.ғ.д., проф.; **Кененбаев С.Б.,** а.ш.ғ.д., проф., ҚР ҰҒА корр-мүшесі; **Омбаев А.М.,** а.ш.ғ.д., проф. ҚР ҰҒА корр-мүшесі; **Молдашев А.Б.,** э.ғ.д., проф., ҚР ҰҒА құрметті мүшесі; **Сагитов А.О.,** б.ғ.д., ҚР ҰҒА академигі; **Сапаров А.С.,** а.ш.ғ.д., проф., ҚР АШҒА академигі; **Балгабаев Н.Н.,** а.ш.ғ.д., проф.; **Умирзаков С.И.,** т.ғ.д, проф.; **Султанов А.А.,** в.ғ.д., проф., ҚР АШҒА академигі; **Алимкулов Ж.С.,** т.ғ.д., проф., ҚР АШҒА академигі; **Сарсембаева Н.Б.,** в.ғ.д., проф.

Р е д а к ц и я к е ң е с і:

Fasler-Kan Elizaveta, Dr., University of asel Switzeland; **Koolmees Petrus Adrianus**, Prof. Dr., Utrecht University, The Netherlands; **Babadoost-Kondri Mohammad,** Prof., University of Illinois, USA; **Yus Aniza Binti Yusof,** Dr., University Putra, Malayzia; **Hesseln Hayley Fawn**, As. Prof., University of Saskatchewan, Canada; **Alex Morgounov,** Pr., International Maize and Wheat Improvement Center Turkey; **Андреш С.,** Молдова Республикасы ҰҒА академигі; **Гаврилюк Н.Н.,** Украина ҰҒА академигі; **Герасимович Л.С.,** Беларусь Республикасының ҰҒА академигі; **Мамедов Г.,** Азербайджан Республикасының ҰҒА академигі; **Шейко И.П.,** Беларусь Республикасының ҰҒА академигі; **Жалнин Э.В.,** т.ғ.д., проф., Ресей; **Боинчан Б.,** а.ш.ғ.д, проф., Молдова Республикасы; **Юлдашбаев Ю.А.,** а.ш.ғ.д, проф., РҒА корр-мүшесі, Ресей.

© Қазақстан Республикасы Ұлттық ғылым академиясы, 2019

Главный редактор

Есполов Т.И.,
доктор эконом. наук, проф.,
вице-президент и академик НАН РК

Редакционная коллегия:

Байзаков С.Б., доктор эконом. наук, проф., академик НАН РК (заместитель главного редактора); **Тиреуов К.М.,** доктор эконом. наук., проф., академик НАН РК (заместитель главного редактора); **Елешев Р.Е.**, доктор техн. наук, проф., академик НАН РК; **Рау А.Г.,** доктор техн. наук, проф., академик НАН РК; **Иванов Н.П.,** доктор ветеринар. наук, проф., академик НАН РК; **Кешуов С.А.,** доктор техн. наук, проф., академик НАН РК; **Мелдебеков А.,** доктор сельхоз. наук, проф., академик НАН РК; **Чоманов У.Ч.,** доктор техн. наук, проф., академик НАН РК; **Елюбаев С.З.,** доктор сельхоз. наук, проф., академик НАН РК; **Садыкулов Т.,** доктор сельхоз. наук, проф., академик НАН РК; **Баймуканов Д.А.,** доктор сельхоз. наук, проф., член-корр. НАН РК; **Сансызбай А.Р.,** доктор сельхоз. наук, проф., член-корр. НАН РК; **Умбетаев И.,** доктор сельхоз. наук, проф., академик НАН РК; **Оспанов С.Р.,** доктор сельхоз. наук, проф., Почетный член НАН РК; **Олейченко С.И.,** доктор сельхоз. наук, проф.; **Кененбаев С.Б.,** доктор сельхоз. наук, проф., член-корр. НАН РК**; Омбаев А.М.,** доктор сельхоз. наук, проф член-корр. НАН РК.; **Молдашев А.Б.,** доктор эконом. наук, проф., Почетный член НАН РК; **Сагитов А.О.,** доктор биол. наук, академик НАН РК; **Сапаров А.С.,** доктор сельхоз. наук, проф., академик АСХН РК; **Балгабаев Н.Н.,** доктор сельхоз. наук, проф.; **Умирзаков С.И.,** доктор техн. наук, проф.; **Султанов А.А.,** доктор ветеринар. наук, проф., академик АСХН РК; **Алимкулов Ж.С.,** доктор техн. наук, проф., академик АСХН РК; **Сарсембаева Н.Б.,** доктор ветеринар. наук, проф.

Редакционный совет:

Fasler-Kan Elizaveta, Dr., University of asel Switzeland; **Koolmees Petrus Adrianus**, Prof. Dr., Utrecht University, The Netherlands; **Babadoost-Kondri Mohammad,** Prof., University of Illinois, USA; **Yus Aniza Binti Yusof,** Dr., University Putra, Malayzia; **Hesseln Hayley Fawn**, As.Prof., University of Saskatchewan, Canada; **Alex Morgounov,** Pr., International Maize and Wheat Improvement Center Turkey; **Андреш С.,** академик НАН Республики Молдова; **Гаврилюк Н.Н.,** академик НАН Украины; **Герасимович Л.С.,** академик НАН Республики Беларусь; **Мамедов Г.,** академик НАН Республики Азербайджан; **Шейко И.П.,** академик НАН Республики Беларусь; **Жалнин Э.В.,** доктор техн. наук, проф., Россия; **Боинчан Б.,** доктор сельхоз. наук, проф., Республика Молдова; **Юлдашбаев Ю.А.,** доктор сельхоз. наук, проф., член-корр. РАН, Россия.

Известия Национальной академии наук Республики Казахстан. Серия аграрных наук.
ISSN 2224-526X
Собственник: РОО «Национальная академия наук Республики Казахстан» (г. Алматы)
Свидетельство о постановке на учет периодического печатного издания в Комитете информации и архивов Министерства культуры и информации Республики Казахстан **№ 10895-Ж**, выданное 30.04.2010 г.

Периодичность 6 раз в год
Тираж: 300 экземпляров

Адрес редакции: 050010, г. Алматы, ул. Шевченко, 28, ком. 219-220, тел. 272-13-19, 272-13-18
http://agricultural.kz/index.php/en/

© Национальная академия наук Республики Казахстан, 2019

Адрес типографии: ИП «Аруна», г. Алматы, ул. Муратбаева, 75

C h i e f E d i t o r

Espolov T.I.,
Dr. economy. Sciences, prof.,
Vice President and academician of the NAS RK

E d i t o r i a l B o a r d:

Baizakov S.B., Dr. of economy sciences, prof., academician of NAS RK (deputy editor); **Tireuov K.M.,** Doctor of Economy Sciences., prof., academician of NAS RK (deputy editor); **Eleshev R.E.,** Dr. Of agricultural sciences, prof., academician of NAS RK; **Rau A.G.,** Dr. sciences, prof., academician of NAS RK; **Ivanov N.P.,** Dr. of veterinary sciences, prof., academician of NAS RK**; Keshuov S.A.,** Dr. sciences, prof., academician of NAS RK; **Meldebekov A.,** doctor of agricultural sciences, prof., academician of NAS RK; **Chomanov U.Ch.,** Dr. sciences, prof., academician of NAS RK; **Yelyubayev S.Z.,** Dr. of agricultural sciences, prof., academician of NAS RK; **Sadykulov T.,** Dr. Farm. Sciences, prof., academician of NAS RK; **Baimukanov D.A.,** doctor of agricultural sciences, prof., corresponding member NAS RK; **Sansyzbai A.R.,** doctor of agricultural sciences, prof., corresponding member NAS RK; **Umbetaev I.,** Dr. Farm. Sciences, prof., academician of NAS RK; **Ospanov S.R.,** Dr. agricultural sciences, prof., Honorary Member of NAS RK; **Oleychenko S.N.,** Dr. Of agricultural sciences, prof.; **Kenenbayev S.B.,** Dr. Agricultural sciences, prof., corresponding member NAS RK; **Ombayev A.M.,** Dr. Agricultural sciences, Prof. corresponding member NAS RK; **Moldashev A.B.,** Doctor of Economy sciences, prof., Honorary Member of NAS RK; **Sagitov A.O.,** Dr. biol. sciences, academician of NAS RK; **Saparov A.S.,** Doctor of agricultural sciences, prof., academician of NAS RK; **Balgabaev N.N.,** the doctor agricultural sciences, Prof.; **Umirzakov S.I.,** Dr. Sci. Sciences, Prof.; **Sultanov A.A.,** Dr. of veterinary sciences, prof., academician of the Academy of Agricultural Sciences of Kazakhstan; **Alimkulov J.C.**, Dr. of tekhnical sciences, prof., academician of the Academy of Agricultural sciences of Kazakhstan; **Sarsembayeva N.B.,** Dr. veterinary sciences, prof.

E d i t o r i a l B o a r d:

Fasler-Kan Elizaveta, Dr., University of Basel Switzeland; **Koolmees Petrus Adrianus**, Prof. Dr., Utrecht University, The Netherlands; **Babadoost-Kondri Mohammad,** Prof., University of Illinois, USA; **Yus Aniza Binti Yusof,** Dr., University Putra, Malayzia; **Hesseln Hayley Fawn**, As. Prof., University of Saskatchewan, Canada; **Alex Morgounov,** candidate of agricultural sciences, International Maize and Wheat Improvement Center Turkey; **Andresh S.,** academician of NAS of Moldova; **Gavriluk N.N.,** academician of NAS of Ucraine; **Gerasimovich L.S.,** academician of NAS of Belorassia; **Mamadov G.,** academician of NAS of Azerbaijan; **Sheiko I.P.,** academician of NAS of Belorassia; **Zhalnin E.V.,** Dr. of technical sciences, professor, Russia, **Boinchan B.,** doctor of agricultural sciences, prof., Moldova; **Yuldashbayev Y.A.,** doctor of agricultural sciences, prof., corresponding member of RAS, Russia.

News of the National Academy of Sciences of the Republic of Kazakhstan. Series of Agrarian Sciences.
ISSN 2224-526X
Owner: RPA "National Academy of Sciences of the Republic of Kazakhstan" (Almaty)
The certificate of registration of a periodic printed publication in the Committee of Information and Archives of the Ministry of Culture and Information of the Republic of Kazakhstan N 10895-Ж, issued 30.04.2010

Periodicity: 6 times a year
Circulation: 300 copies

Editorial address: 28, Shevchenko str., of.219-220, Almaty, 050010, tel. 272-13-19, 272-13-18,
http://nauka-nanrk.kz / agricultural.kz

© National Academy of Sciences of the Republic of Kazakhstan, 2019

Address of printing house: ST "Aruna", 75, Muratbayev str, Almaty

N E W S
OF THE NATIONAL ACADEMY OF SCIENCES OF THE REPUBLIC OF KAZAKHSTAN
SERIES OF AGRICULTURAL SCIENCES
ISSN 2224-526X
Volume 3, Number 51 (2019), 45 – 50 **https://doi.org/10.32014/2019.2224-526X.34**

UDC 636.082.2:436.3 (524)

T. Sadykulov, Ye. Baimazhi, A. Kozhabergenov

Kazakh National Agrarian University, Almaty, Kazakhstan.
E-mail: toleukhan.sadykulov.40@bk.ru, erlik.baimazhi@yandex.ru, kozhabergenov79@yandex.ru

VARIABILITY OF SELECTIONED SIGNS OF DEGERESS SHEEPS DEPENDING ON THE QUALITY OF THE WOOL

Abstract. To obtain higher rates of meat and wool productivity of degeress semi-fine-grained sheep with different tint of wool of the modern population, in the conditions of the "Madi" breeding farm it is necessary to conduct a homogeneous selection of (48×48) animals with 48 quality of the wool.This selection, in comparison with other variants of homogeneous selection (50x50; 56x56; 58x58) gives more aligned highly productive offspring.

Keywords: sheepskin sheep breeding, degeress sheep, wool quality.

Introduction. Animal husbandry is the second group of branches of agriculture, the importance of which can not be overestimated. Animal husbandry does not develop in isolation from agriculture, but with it. In Russia and near abroad there are no purely cattle-breeding or purely agricultural areas, both branches are well represented everywhere, between which there are close bilateral ties [1].

Fat-tailed sheep breeding is one of the leading sectors of the domestic livestock of our country, whose share currently stands at more than 70% of the total sheep population. Breeding fat-tailed sheep has long been predefined climatic and economic conditions and national traditions of the indigenous population. They are characterized by exceptionally high meat content - as if by nature created to provide humankind with essential products, such as meat and fat. An important feature of these sheep is quite high hereditary - due to the precocity and exceptional stamina added to that the high meat productivity of sheep are able to exercise when poor conditions of feeding and maintenance. In addition, the main argument in favor of fat-tailed breeds of sheep is adapted to harsh local conditions.

Indicators of live weight of the individual best individuals of different age and sex groups of animals indicate a large genetic potential of the created herd of sheep, which is of great importance for future breeding [2].

Rational use of specific combinations of genetic potential of sheep breeds and the creation on this basis of promising populations with high meat productivity and consolidated by heredity, combined with valuable adaptive properties is one of the key conditions to improve the efficiency of meat-greasy wool (semi-rough) and meat-wool-greasy (semi-thin) fat-tailed sheep. With the same level of meat production more profitable and economically efficient farming is degeress meat and wool (semi-thin andsemi-rough) breed of sheep. To extend the area of cultivation, in 1995 degheress sheep was first brought to the new foothills breeding farms «MADI» Zhambyl district of Almaty region. Favorable climatic and forage conditions of this territory had a beneficial effect on the formation of economically useful traits degeress sheep. Currently, the livestock of this farm has the best gene pool on both interbreed types Degeress meat-wool sheep breed with semi-thin and semi-rough wool. Cognition of the laws of ontogenesis of farm animals is an important task of zootechnical science, as in the process of individual development, a particular individual acquires not only species and breed characteristics, but also its inherent individuality with all the features of the Constitution, exterior, temperament, viability and productivity.

Dry-steppe, semi-desert, desert, foothill-desert-steppe, foothill-desert, mountain-steppe zones are distinguished on the territory of the republic. The production of crops and agricultural products is located in view of zonal features [3].

Research work on two breeds of sheep was carried out in 8 breeding subjects of two regions of Kazakhstan (Almaty and Karaganda). With degheress fat-tailed sheep breed 8 breeding farms: "Kungey", "Antiki" Balkhash area, "MADI" Zhambyl district, "Akboz" of Panfilovsky district of Almaty, "Babati", "Sarsenbek", "Shormanov", "Gemsy" Aktogay district, Karaganda regions. The number of females of all breeding farms at degeress and Saryarka breeds of sheep is in excess of 25.0 and 27.5 thousand heads respectively. Breeding part of the breeding stock on both breeds is about 20 thousand heads.

The production of lamb and wool fat-tailed sheep should be maximum use of natural pasture forage that will greatly enhance the efficiency of breeding in the conditions of market economy.

The research work was carried out in the farm "MADI" Zhambyl district of Almaty region of Kazakhstan.

Materials and methods of research. The object of the study was degheress sheep meat and wool sheep breed with semi-thin wool.

To study the variability of breeding characteristics degeress semi-fine breeds of sheep, depending on the quality of the wool was held scientific - production experience in the context of breeding farms “MADI” Zhambyl district of Almaty region of Kazakhstan.

The determination of breeding and genetic parameters, as well as the processing of digital materials of experimental studies were carried out using the method of variation statistics according to N. A. Plokhinsky and E. K. Merkurieva using the computer program “Biomet”[4].

For the experiment was formed flock of ewes (3.5 years) 515 sheeps, consisting of 4 groups with different quality of wool: I group (103 sheeps) is the 48th in the quality of wool, II (137 sheeps) -50, the quality of the wool; III (150 sheeps) - 56th quality wool and IV (125 sheeps) - 58 - quality wool. For each experimental group of women appointed one sheep-manufacturer of quality wool. The experience was carried out according to the following scheme (table 1):

Table 1 – Scheme of selection and formation of groups of young animals

The parent pair with the matching coat quality Father Mother	Type of selection	Formed by a group of young offspring
48 x 48	homogeneous	I
50 x 50	homogeneous	II
56 x 56	homogeneous	III
58 x 58	homogeneous	IV

Because of uniform selection on quality of wool 4 groups of the received posterity which were in identical, traditionally accepted in economy, pasture conditions of feeding and the contents were formed.

Results and discussions. Lambs of all groups were born quite large, but at the same time, there were certain differences between them. Studies have shown (table 13) that the highest live weight at birth had lambs of group I, both y ovaries and y testes (4.7 and 4.5 kg, respectively). at the same time, the sheep surpassed peers II; III and IV groups by 0.1; 0.4 kg or 2.1; 8.5 and 8.5%, a brightness respectively by 0.1; 0.3 and 0.2 kg or 2.2; 6.6 and 4.4%. It shows the previously installed patterns of the Degheress sheep: the increase in weight of the animal as the coarsening of their hair. This trend is also evident in other groups, according to age, namely 4.5 -and 7 - month age. Thus, the bars and holes of the I –th group in 4.5 months had a live weight of 36.5 and 33.8 kg, in 7 months - 40.7 and 37.0 kg, respectively, which is 2.0; 3.6; 44.5 and 0.8; 1.5; 3.4%, a in 7 months of age at 3.8; 4.3; 7.4 and 0.8; 2.2; 2.8% higher than the same In all age groups, there is a natural decrease in the variability index (*Cv*), indicating good adaptive qualities of degeresssheep to these conditions of keeping and feeding.

It should be noted that enough high rate of growth and development degeress lambs in the suckling period. Up to 4.5 months of age bagels reached a liveweight in the range of 34.9 - 36.5 kg, the rate of growth y rams - 712 - 676 %, a y bright - 651 – 660 %.

Thus, the most intensive growth and development of lambs resulting homogeneous selection of parents on the quality of wool is installed in the first group, regardless of age.

The study of wool productivity y of young animals of all experimental groups (table 2) showed that they have quite high rates of hair cutting and exceed the level of minimum requirements for elite animals of one-year-old age. Thus, it amounted to I group -25,9 %; II -16,6 %; III -14,9% and IV -9,1 %, for the YARS -36,1; 28,5; 16,6% and 14,3%, respectively.

Table 2 – Variability of live weight of young animals, kg

Groups	Indicators	At birth	4,5 month	7 month
male				
I	n	50	47	45
	$\overline{X} \pm m_x$	4,7±0,11	36,5±0,57	40,7±0,40
	Cv	16,4	10,6	6,6
II	n	71	67	64
	$\overline{X} \pm m_x$	4,6±0,09	35,8±0,53	39,2±0,44
	Cv	17,4	12,1	8,9
III	n	65	62	59
	$\overline{X} \pm m_x$	4,3±0,08	35,2±0,42	39,0±0,24
	Cv	15,3	9,5	4,7
IV	n	59	56	52
	$\overline{X} \pm m_x$	4,3±0,10	34,9±0,52	37,9±0,29
	Cv	18,6	11,0	5,5
female				
I	n	48	45	42
	$\overline{X} \pm m_x$	4,5±0,10	33,8±0,49	37,0±0,21
	Cv	15,3	9,6	3,77
II	n	63	61	59
	$\overline{X} \pm m_x$	4,4±0,09	33,5±0,44	36,7±0,19
	Cv	15,9	10,3	4,0
III	n	79	73	68
	$\overline{X} \pm m_x$	4,2±0,06	33,3±0,34	36,2±0,16
	Cv	13,1	8,8	3,6
IV	n	63	57	56
	$\overline{X} \pm m_x$	4,3±0,08	32,7±0,42	36,0±0,18
	Cv	15,8	9,7	3,8

Table 3 – Cut hair of young animals aged 1 year, kg

Groups	Male				Female			
	n	$\overline{X} \pm m_x$	Cv	σ	n	$\overline{X} \pm m_x$	Cv	σ
I	44	5,4±0,15	18,0	0,97	42	4,7±0,12	17,0	0,80
II	62	4,8±0,08	13,7	0,65	58	4,2±0,10	18,1	0,76
III	58	4,7±0,09	15,9	0,74	68	3,6±0,04	10,8	0,39
IV	50	4,4±0,07	12,0	0,53	54	3,5±0,08	16,0	0,58

At the same time, the highest hair cut in the original turned out to be y of the bars and holes of the I group, which surpassed their peers II; III; IV groups, by 0.6; 0.7; 1.0 kg or – 11.1 V; 12,9; 18.5% of 0,5; 1,1; 1,2 kg or -10,6; 23,4; 25.5 %, respectively. The smallest haircut had the bars and holes of the IV group obtained from parent pairs with 58 - quality wool.

The study of the degree of variability of the trait is of particular importance in selection, since the presence of different genotypes in the population is an indispensable condition for further improvement of animals. Quite a wide range of phenotypic variability (*Cv*) of wool (12, 0 – 18, 0% y of sheep and 16,0–17,0% y of eggs) of the studied groups of young animals indicates the effectiveness of mass selection to improve the level of wool productivity of sheep.

Meat productivity is one of the main features that determine the quality of sheep. It known that meat-tallow and wool fat sheep have a combined direction of productivity. Therefore, a lot of attention paid to the study of meat and fat productivity.

We studied the meat-fat productivity of rams semi-fine sheep, depending on the quality of the wool at the age of 4.5 and 18 months (tables 4 and 5).

Table 4 – Results of control slaughter of sheep 4-4.5 months of age (7 heads in each group)

Indicators	Groups			
	I	II	III	IV
Pre-slaughter live weight, kg	37,5	36,0	36,5	35,0
Carcass weight, kg	17,04	16,17	16,30	15,10
Yield ink, %	45,44	44,91	44,65	43,14
The mass of the fat tail, kg	1,5	1,25	0,97	1,05
The output of the tail, %	4,0	3,47	2,65	3,0
Internal fat weight, kg	0,500	0,470	0,400	0,350
Internal fat yield, %	1,33	1,30	1,1	1,0
Slaughter weight, kg	18,86	18,07	17,95	16,55
Killer exit, %	50,3	50,2	49,17	47,28
The mass of the pulp, kg	13,74	12,67	12,60	11,40
The output of pulp, %	80,6	78,3	77,3	75,5
Bone mass, kg	3,3	3,5	3,6	3,7
Bone yield, %	19,3	21,6	22,0	24,5
Meat rate	4,16	3,62	3,55	3,08

Table 5 – Results of control slaughter of sheep in 18 months of age (7 heads in each group)

Indicators	Groups			
	I	II	III	IV
Pre-slaughter live weight, kg	67,3	64,5	62,0	60,3
Carcass weight, kg	29,0	27,0	25,8	24,5
Yield ink, %	43,01	42,86	41,61	40,63
The mass of the fat tail, kg	3,78	3,51	2,66	2,43
The output of the tail, %	5,61	5,44	4,29	4,03
Mass of internal fat, kg	2,65	2,47	2,16	1,93
The output of the internal fat, %	3,94	3,83	3,42	3,20
Slaughter weight, kg	34,8	32,5	30,8	29,4
Killer exit, %	51,71	50,38	49,67	48,75
The mass of the pulp, kg	23,1	21,2	20,0	18,6
The output of pulp, %	79,65	78,51	77,51	75,91
Bone mass, kg	5,9	5,8	5,7	5,7
Bone yield, %	20,34	21,48	22,10	23,26
Meat rate	3,91	3,65	3,51	3,26

The results of the control slaughter show that in all the examined groups of calves received are quite standard weight carcasses. The best slaughter qualities characterized the calves of the first group. Thus, the bars of the first group by mass of carcasses have superiority over peers II, III, IV groups by 5,4; 4,5; 12,8% of carcass yield and slaughter yield - 1,2; 1,8; 5,3% and 0,2; 2,3; 6,4%, respectively. O the superiority of meat-fat qualities of animals of group I indicate and record the output of tail - 4,0%, down from 3.47; 2.65 and 3.0% and the internal fat of 1.33% compared to 1.3; 1.1 and 1.0 %, and the yield of pulp is 80.6%, compared to 78.3 ; 77,3 and 75.5 %, respectively.

In addition, there is some superiority in meat-Sal qualities of animals of the II group. Despite the fact that the mass of carcasses they are not the best (16.17 kg, compared with 16.3 kg), the rest of slaughter they exceed their peers III, IV groups.

The results of the control slaughter of sheep 18 months of age showed that the observed trend in the control slaughter of sheep at the age of 4.5 months is maintained, the highest indicator of meat and fat productivity, again, is typical for the sheep of the First group. For example, the mass of carcasses I group (29, 0 kg), exceeded the rest II, III, IV groups by 7, 4; 12, 4; 18, 4%, respectively. Relatively good indicators marked animals of II group, their superiority over III, IV groups for carcass yield was 4.6; 10.2 percent, respectively. Indicators slaughter weight and slaughter yield established superiority of 7.0; and 12.9 and 18.4 % and 2.6; and 4.1% and 6.1%, respectively. According to the output of fat, the internal fat and the output of the pulp, although slight, the superiority of y animals of group II, compared with III, IV.

Therefore, it should be noted that in the foothill zone Southeast of Kazakhstan has rather favorable conditions for the breeding degheress mutton-wool fat-tailed sheep.

Discussion. The creation and improvement of a highly productive herd of gegeres fat-tailed sheep of various intrabreed zonal types, successfully combining meat - greasy and wool productivity, with high adaptive abilities allows extensive use of the gene pool of this breed to improve the breeding and breeding qualities of other breeds in different regions of Kazakhstan, both by introductory and and industrial and alternating crossbreeding.

Results. The rams of the degeres fat-tailed breed are used as a valuable breeding material for the qualitative transformation of the coat of a large array of local coarse-haired fat-tailed sheep in various regions of the country. In addition, rams with semi-subtle wool are successfully used for both industrial and alternating crossing with the uterus of a number of fine-wool breeds in order to maximize the effect of heterosis in meat productivity in hybrids.

С. Т. Садықұлов, Б. Е. Баймәжі , А. Кожабергенов

Қазақ ұлттық аграрлық университеті, Алматы, Қазақстан

ДЕГЕРЕС ҚОЙЫНЫҢ ЖҮН САПАСЫНА БАЙЛАНЫСТЫ СЕЛЕКЦИЯЛЫҚ БЕЛГІЛЕРІНІҢ ӨЗГЕРГІШТІГІ

Аннотация. Мақалада құйрықты биязылау жүнді дегерес қой тұқымының жүн сапасына байланысты бір текті жұп таңдау арқылы алынған ұрпақтарының негізгі шаруашылыққа пайдалы селекциялық белгілерінің өзгергіштігі мен кейбір биологиялық ерекшеліктерін зерттеунәтижелері келтірілген. Дегерес қойының өсіру аймағына жақсы бейімделген және неғұрлым ұнамды типтегі мал тобы анықталды.

Түйін сөздер: құйрықты қой шаруашылығы, дегерес қойы, жүн сапасы

С. Т. Садыкулов, Б. Е. Баймажи, А. Кожабергенов

Казахский национальный аграрный университет, Алматы, Казахстан

ИЗМЕНЧИВОСТЬ СЕЛЕКЦИОНИРУЕМЫХ ПРИЗНАКОВ ДЕГЕРЕССКИХ ОВЕЦ В ЗАВИСИМОСТИ ОТ КАЧЕСТВА ШЕРСТИ

Аннотация. В статье приведены результаты основных хозяйственно-полезных признаков и биологических особенностей потомства полученных однородного подбора родительских пар, в зависимости от качества шерсти дегересской курдючной полутонкорунных породы овец. Установлено наиболее желательный тип качества шерсти дегересских овец, хорошо приспособленных в условиях зоны их разведения.

Ключевые слова: курдючное овцеводство, дегересские овцы, качество шерсти.

Information about authors:

Sadykulov T., Dr. Farm. Sciences, prof., academician of NAS RK, Kazakh National Agrarian University, Almaty, Kazakhstan; toleukhan.sadykulov.40@bk.ru; https://orcid.org/0000-0002-7523-7788

Baimazhi Ye., Associate Professor, Kazakh National Agrarian University, Almaty, Kazakhstan; erlik.baimazhi@yandex.ru; https://orcid.org/0000-0002-7683-0209

Kozhabergenov A., Associate Professor, Kazakh National Agrarian University, Almaty, Kazakhstan; kozhabergenov79@yandex.ru; https://orcid.org/0000-0002-5963-1435

REFERENCES

[1] Omarkhanova Zh.M., Mukhambetova Z.S., Mataeva B.T. Meat cattle – as the main industry of animals // News of the National academy of sciences of the Republic of Kazakhstan. Series of agricultural sciences. 2018. Vol. 1.

[2] Dosmukhambetov T.M., Sadykulov T.S., Kineyev M.A., Ivanov N.P., Aliyev M.A. Genetic potential of Edilbaysky breed sheep of ESPC «Agro Bayserke» heard Magazine bulletin of National academy of sciences of the Republic of Kazakhstan. 2019. N 1.

Publication Ethics and Publication Malpractice
in the journals of the National Academy of Sciences of the Republic of Kazakhstan

For information on Ethics in publishing and Ethical guidelines for journal publication see http://www.elsevier.com/publishingethics and http://www.elsevier.com/journal-authors/ethics.

Submission of an article to the National Academy of Sciences of the Republic of Kazakhstan implies that the described work has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis or as an electronic preprint, see http://www.elsevier.com/postingpolicy), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder. In particular, translations into English of papers already published in another language are not accepted.

No other forms of scientific misconduct are allowed, such as plagiarism, falsification, fraudulent data, incorrect interpretation of other works, incorrect citations, etc. The National Academy of Sciences of the Republic of Kazakhstan follows the Code of Conduct of the Committee on Publication Ethics (COPE), and follows the COPE Flowcharts for Resolving Cases of Suspected Misconduct (http://publicationethics.org/files/u2/New_Code.pdf). To verify originality, your article may be checked by the Cross Check originality detection service http://www.elsevier.com/editors/plagdetect.

The authors are obliged to participate in peer review process and be ready to provide corrections, clarifications, retractions and apologies when needed. All authors of a paper should have significantly contributed to the research.

The reviewers should provide objective judgments and should point out relevant published works which are not yet cited. Reviewed articles should be treated confidentially. The reviewers will be chosen in such a way that there is no conflict of interests with respect to the research, the authors and/or the research funders.

The editors have complete responsibility and authority to reject or accept a paper, and they will only accept a paper when reasonably certain. They will preserve anonymity of reviewers and promote publication of corrections, clarifications, retractions and apologies when needed. The acceptance of a paper automatically implies the copyright transfer to the National Academy of Sciences of the Republic of Kazakhstan.

The Editorial Board of the National Academy of Sciences of the Republic of Kazakhstan will monitor and safeguard publishing ethics.

Правила оформления статьи для публикации в журнале смотреть на сайте:

www:nauka-nanrk.kz

http://agricultural.kz/index.php/en/

Редактор *М. С. Ахметова, Т. М. Апендиев, Д. С. Аленов*
Верстка на компьютере *Д. Н. Калкабековой*

Подписано в печать 11.06.2019.
Формат 60x881/8. Бумага офсетная. Печать – ризограф.
5,75 п.л. Тираж 300. Заказ 3.