

ISSN 2518-1483 (Online),
ISSN 2224-5227 (Print)

2021 • 1

ҚАЗАҚСТАН РЕСПУБЛИКАСЫ
ҰЛТТЫҚ ҒЫЛЫМ АКАДЕМИЯСЫНЫҢ

БАЯНДАМАЛАРЫ

ДОКЛАДЫ

НАЦИОНАЛЬНОЙ АКАДЕМИИ НАУК
РЕСПУБЛИКИ КАЗАХСТАН

REPORTS

OF THE NATIONAL ACADEMY OF SCIENCES
OF THE REPUBLIC OF KAZAKHSTAN

PUBLISHED SINCE 1944



ALMATY, NAS RK

Бас редакторы
х.ғ.д., проф., ҚР ҰҒА академигі
М.Ж. Жұрынов

Редакция алқасы:

Адекенов С.М. проф., академик (Қазақстан) (бас ред. орынбасары)
Баймұқанов Д.А. проф., академик (Қазақстан)
Бенберин В.В., проф., академик (Қазақстан)
Березин В.Э., проф., корр.-мүшесі (Қазақстан)
Берсимбаев Р.И. проф., академик (Қазақстан)
Величкин В.И. проф., корр.-мүшесі (Ресей)
Елешев Р.Е., проф., академик (Қазақстан)
Жамбакин Қ.Ж., проф., академик (Қазақстан)
Илолов М.И. проф., академик (Тәжікстан)
Кригер Виктор проф. (Германия)
Локшин В.Н. проф., академик (Қазақстан)
Огарь Н.П. проф., корр.-мүшесі (Қазақстан)
Перни Стефано проф. (Ұлыбритания)
Потапов В.А. проф. (Украина)
Прокопович Полина проф. (Ұлыбритания)
Раманкулов Е.М., проф., корр.-мүшесі (Қазақстан)
Семенов В.Г., проф., академик (Россия)
Сикорски Марек проф., (Польша)
Уразалиев Р.А., проф., академик (Қазақстан)

«Қазақстан Республикасы Ұлттық ғылым академиясының баяндамалары»

ISSN 2518-1483 (Online),

ISSN 2224-5227 (Print)

Меншіктенуші: «Қазақстан Республикасының Ұлттық ғылым академиясы» Республикалық қоғамдық бірлестігі (Алматы қ.).

Қазақстан Республикасының Ақпарат және қоғамдық даму министрлігінің Ақпарат комитетінде 29.07.2020 ж. берілген № KZ93VPY00025418 мерзімдік басылым тіркеуіне қойылу туралы куәлік.

Тақырыптық бағыты: наноматериалдар алу, биотехнология және экология саласындағы бірегей зерттеу нәтижелерін жариялау.

Мерзімділігі: жылына 6 рет.

Тиражы: 500 дана.

Редакцияның мекенжайы: 050010, Алматы қ., Шевченко көш., 28; 219, 220 бөл.;

тел.: 272-13-19, 272-13-18,

<http://reports-science.kz/index.php/en/archive>

© Қазақстан Республикасының Ұлттық ғылым академиясы, 2021

Типографияның мекенжайы: «NurNaz GRACE», Алматы қ., Рысқұлов көш., 103.

Главный редактор
д.х.н., проф., академик НАН РК
М. Ж. Журинов

Редакционная коллегия:

Адекенов С.М. проф., академик (Казахстан) (зам. гл. ред.)
Баймуканов Д.А. проф., чл.-корр. (Казахстан)
Бенберин В.В., проф., академик (Казахстан)
Березин В.Э., проф., чл.-корр. (Казахстан)
Берсимбаев Р.И. проф., академик (Казахстан)
Величкин В.И. проф., чл.-корр. (Россия)
Елешев Р.Е., проф., академик (Казахстан)
Жамбакин К.Ж., проф., академик (Казахстан)
Илолов М.И. проф., академик (Таджикистан)
Кригер Виктор проф. (Германия)
Локшин В.Н. проф., академик (Казахстан)
Огарь Н.П. проф., чл.-корр. (Казахстан)
Перни Стефано проф. (Великобритания)
Потапов В.А. проф. (Украина)
Прокопович Полина проф. (Великобритания)
Раманкулов Е.М., проф., чл.-корр. (Казахстан)
Семенов В.Г., проф., академик (Россия)
Сикорски Марек проф., (Польша)
Уразалиев Р.А., проф., академик (Казахстан)

Доклады Национальной академии наук Республики Казахстан»
ISSN 2518-1483 (Online),
ISSN 2224-5227 (Print)

Собственник: Республиканское общественное объединение «Национальная академия наук Республики Казахстан» (г. Алматы).

Свидетельство о постановке на учет периодического печатного издания в Комитете информации Министерства информации и общественного развития Республики Казахстан № KZ93VPY00025418, выданное 29.07.2020 г.

Тематическая направленность: *публикация оригинальных результатов исследований в области получения наноматериалов, биотехнологии и экологии.*

Периодичность: 6 раз в год.

Тираж: 500 экземпляров

Адрес редакции: 050010, г.Алматы, ул.Шевченко, 28; ком. 219, 220; тел. 272-13-19, 272-13-18,
<http://reports-science.kz/index.php/en/archive>

© Национальная академия наук Республики Казахстан, 2021 г.

Адрес типографии: «NurNaz GRACE», г. Алматы, ул. Рыскулова, 103.

E d i t o r i n c h i e f

doctor of chemistry, professor, academician of NAS RK

M.Zh. Zhurinov

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

Adekenov S.M. prof., academician (Kazakhstan) (deputy editor in chief)**Baimukanov D.A.** prof., academician (Kazakhstan)

Benberin V.V., prof., academician (Kazakhstan)

Berezin V.Ye., prof., corr. member. (Kazakhstan)**Bersimbayev R.I.** prof., academician (Kazakhstan)**Velichkin V.I.** prof., corr. member (Russia)**Eleshev R.E.**, prof., academician (Kazakhstan)**Zhambakin K.Zh.**, prof., academician (Kazakhstan)**Iolov M.I.** prof., academician (Tadjikistan)**Krieger Viktor** prof. (Germany)**Lokshin V.N.** prof., academician (Kazakhstan)**Ogar N.P.** prof., corr. member (Kazakhstan)**Perni Stephano** prof. (Great Britain)**Potapov V.A.** prof. (Ukraine)**Prokopovich Polina** prof. (Great Britain)**Ramankulov E.M.**, prof., corr. member. (Kazakhstan)**Semenov V.G.**, prof., academician (Russia)**Sikorski Marek** prof., (Poland)**Urazaliev R.A.**, prof., academician (Kazakhstan)**Reports of the National Academy of Sciences of the Republic of Kazakhstan.****ISSN 2224-5227****ISSN 2518-1483 (Online),****ISSN 2224-5227 (Print)**

Owner: RPA "National Academy of Sciences of the Republic of Kazakhstan" (Almaty).

The certificate of registration of a periodical printed publication in the Committee of information of the Ministry of Information and Social Development of the Republic of Kazakhstan No. **KZ93VPY00025418**, issued 29.07.2020.**Thematic scope:** *publication of original research results in the field of obtaining nanomaterials, biotechnology and ecology.*

Periodicity: 6 times a year.

Circulation: 500 copies.

Editorial address: 28, Shevchenko str., of. 219, 220, Almaty, 050010, tel. 272-13-19, 272-13-18,

<http://reports-science.kz/index.php/en/archive>

A.A. Torekhanov¹, N.K. Zhumadillayev²

¹ NPJSC "National Agrarian Scientific- Educational Center, Nur-Sultan, Kazakhstan, Nur-Султан, Қазақстан;

² Implementation and Production of the K.U. Medeubekov", branch of the Kazakh Research Institute of Animal Husbandry and Lump Production" LLP, Almaty, Kazakhstan.

E-mail:torekhanov.aibyn@mail.ru, nurzhan-2270@mail.ru

ETTI MERINOS – KAZAKHSTANI EXPORT-ORIENTED MEAT BREED

Abstract. Sheep breeding in Kazakhstan is a traditional branch of animal husbandry. The development of the industry is facilitated by the presence of large areas of pasture lands, as well as the existing valuable gene pool of breed resources, created by national selection and long-term work of scientists-breeders.

The republic has great potential for the further development of sheep breeding industry and is able not only to meet the population's need for mutton, but also to become a major exporter. The restoration and further development of domestic sheep breeding should be based on rational use of genetic potential of animals and natural pastures of the country for the cost-effective production of high quality sheep products that meet international standards.

The article deals with the development of fine-wool sheep breeding in Almaty, Zhambyl and South Kazakhstan regions, improvement of meat characteristics of the South Kazakh merino. The experience of using "etti merino" rams-producers in farms of Turkestan region showed that meat merino rams have a positive effect on meat productivity of the South Kazakh merino, and at the same time do not worsen their wool characteristics. The information on the population number of sheep of "Etti Merino" breed for 2020, the class composition of the ewes on farms, productivity of rams-producers in a number of generations, assessment of the quality of the offspring of 6-7 month old rams, wool productivity of the breeding groups of female sheep are presented.

Key words: livestock production, sheep breeding sector, beef breed, fine fleece breed, productivity, peasant farms, breeding, gene pool.

Introduction. The analysis of world sheep breeding shows that in the last decade in developed sheep breeding countries, in particular in the EU and the Russian Federation, national programs on development of meat sheep and lamb production have been developed and implemented, the share of which in the total value of all sheep breeding products reaches more than 90%.

China is the world's leader in mutton production. The population number of sheep in this country is more than 140 mln animals, the priority is meat and fine wool sheep breeds.

Australia has the second largest sheep population, and the Merino breed makes up the bulk of the sheep population. According to statistics, there are five sheep per one Australian, and the livestock population is about 100 mln heads.

In countries with developed sheep breeding - Australia, New Zealand, Great Britain - special priority is given to sheep breeding of combined meat and wool direction. Modern trends in development of sheep breeding at global and regional levels are focused on production of lamb and mutton, both on industrial basis, and in pasture system, taking into account the use of all available resources.

The world sheep population is stable, mainly due to meat sheep breeds, the wool sheep population is constantly decreasing, even in the leading countries in wool production. The decline in demand for coarse wool is forcing sheep breeders in different regions of the world to reorient their farms towards meat production.

Materials and research methods. In 2011, scientists and breeders of the republic created meat and fine-wool sheep breed "Etti merino" (EM), which is initially oriented as a breed with export products [1]. They combine high meat productivity, early maturity, maximum payback of feed by products, as well as the ability to produce merino wool at the level of world standards. Due to high economic efficiency, at present, merino meat sheep are in great demand in sheep breeding farms of the republic.

When creating the breed, pure-bred breeding was used, as well as crossing of Kazakh fine-wool female sheep with rams-producers of German meat merino sheep. Works in this direction started already in the 1980s in Almaty region. Using rams of the Polvars breed, the "Sarybulak" intra-breed type of Kazakh fine-wool sheep was created, the main difference of which was their large size, high live weight and high wool shear. In the process of improvement, it turned out that a high live weight is not a sufficient sign of meat animals, therefore, for this purpose, in 2002, sheep of the Merinofleischschaf breed were brought from Germany to improve meat characteristics of the Kazakh fine-wool breed.

Results and discussion. The increased demand for mutton is observed in Kazakhstan. This is quite natural, considering that mutton in comparison with meat of other animal species, contains 2.5-3 times less cholesterol than beef and pork. In addition, the biological value of sheep meat is characterized by high quality indicators, and the concept of environmentally friendly products for sheep meat corresponds to reality as closely as possible, since sheep graze on pastures all year round.

The development of sheep breeding is due to the presence of large areas of natural pastures. However, the reserve for increasing production of sheep products is determined not by the increase in the population number of livestock, but by the increase in productivity of animals. These requirements are now fully met by sheep of meat production direction. This is also shown by the development of world sheep breeding, since production of meat most effectively justifies their costs.

In our republic, fine-wool sheep breeding is developed in Almaty, Zhambyl and South Kazakhstan regions, where there are about 2.5 million fine-wool sheep. Breeding in fine-wool sheep breeding of the republic is carried out in two directions: meat and wool - fine-wool sheep with high meat productivity and wool with fiber fineness of 22-26 mkm (Kazakh fine-wool, etti-merino); wool-meat - fine-wool sheep with high fineness of wool fiber 18-22 mkm (South Kazakh merino, Kazakhstan merino) [2].

As a result of the long-term selection and breeding work, the sheep with fine wool of 60-64 quality, shearing of washed wool 2.5-3.0 kg, live weight of ewes 65-75 kg, rams-producers 100-120 kg, characterized by high meat productivity were obtained. Already 4 months aged lambs are able to reach 35-50 kg of live weight, the average daily gain in body weight of lambs with intensive fattening is 250-350 g with minimal feed costs.

It is especially important that the "etti merino" sheep are distinguished by their unpretentiousness and don't demand feed [3]. Sheep are large enough, with strong constitution, without defects in the exterior, mobile, well adapted to keeping in conditions of sharply continental climate of the south-east of Kazakhstan, able to withstand long distances when changing seasonal pastures. They are suitable for keeping in the sands of Saryesik-Atyrau, Moyinkum, Zhamankum, Sarytaukum, where the breed was created. Now they are reproduced in other sandy areas of the Southern Balkhash region, more than 10 territorial names, where annual precipitation is within 150 mm and the herbage is thinned. In summer they are driven to mountain pastures for 150-200 km and kept in these conditions for only 2-2.5 months. However, most of the flocks are now found in these arid pastures all year round. No other meat-fine fleece breeds in the world are kept in such extreme conditions.

There are more than 40 thousand ewes on basic farms, where the population number of breeding animals is steadily increasing every year. The live weight of meat merino in the "Yernur" farm in 2017 was on average 71.7 kg (maximum 92 kg), wool shearing - 6.9 kg, in one-year-old ewes the average live weight was 59.3 kg, with wool shearing - 6.4 kg (maximum 8.6 kg). In 2018, the live weight of 518 ewes averaged 72.1 kg (maximum 95 kg), shearing -6.5 kg (maximum 10.5 kg); in ewes respectively 63.6 kg (maximum 75.0 kg) and shearing 6.2 kg (maximum 9.0 kg).

Along with this, rams of the new breed "Etti merino" are used as improvers in farms of Turkestan, Zhambyl regions of Kazakhstan and in Russia to increase meat productivity [4,5].

To improve meat characteristics of the South Kazakh merino, 35 heads rams-producers of the breed "Etti merino" were brought to a number of farms in Kazygurt district of Turkestan region. At the same time, the obtained offspring from crossing was characterized by high live weight in rams: 4.2-4.5 kg, ewes: 4.0-4.5 kg versus in SKM rams: 3.9-4.2 kg, ewes: 3, 7-4.0 kg; at 4 months age, the live weight of crossbred rams was 33.0-36.0 kg, 30.5-33.5 kg in ewes, while purebred rams weighed: 32.7-33.4 kg, ewes-28.6 -31.2 kg. Average daily gains in crossbred rams were 260.0 g, ewes - 235.8 g; in SKM rams - 219.2 g, ewes - 205.0 g. At the age of 4.5 months, carcasses weighing 17.6 kg were obtained from hybrid

lambs, purebred - 16.5 kg, slaughter output, respectively - 49.5%, 47,5% and meat coefficient in hybrids 4.5, in the South Kazakh merino -3.5.

The experience of using "etti merino" rams in the farms of Turkestan region showed that meat merino rams have a positive effect on meat productivity of the South Kazakh merino, and at the same time do not worsen their wool characteristics.

At present, breeding work on improvement of the "etti merino" sheep is being carried out in 11 basic farms in Almaty region. In total, these farms contain 43.5 thous. heads, of which 32.9 thous.heads. – breeding stock (table 1).

Table 1 – Information on population number of sheep of the breed "Etti merino" for 2020.

п/п	Farm	Number of heads	Including, heads.		
			rams	ewes	one year ewes
Etti merino					
1	APC «BF Almaty»	16 223	350	13 000	2 873
2	PF «Khilnichenko V.P.»	9 985	250	8 100	1 635
3	LLP «Shanyrak»	5 930	230	4 000	1 717
4	PF "Saryev S.M"	4 280	180	3100	1000
5	PF "Kalizhan"	2 460	260	1500	700
6	PF "Merey"	1120	40	730	350
7	PF "Aray"	925	25	650	250
8	PF "Aydin"	580	20	400	160
9	PF "Yernur"	715	15	500	200
10	PF "Orken"	1360	60	1000	300
11	PF «Kanat»	920	20	600	300
TOTAL		43 595	1 430	32 980	9 185
Other breeds					
12	Kazakh fine-wool PF" Nurbekov A.N"	6950	350	4500	2100
13	South Kazakh merino PF "Batyr"	3250	150	2000	1100
SUB-TOTAL		10 200	450	6 500	3200
TOTAL		57 865	1 900	40 080	15 885

In addition, the work is underway with the Kazakh fine-wool breed and South Kazakh merino, where "etti merino" rams-producers are used to improve meat productivity: only 10.2 thous. heads, of which 6.5 thous.- breeding stock. Research work is carried out in 13 farms, where there are 57.8 thous. heads of sheep, including 40.1 thous. ewes [6].

In 2020, the results of individual appraisal of one-year-old ewes were the best (table 2). Animals of the elite and 1st class in the peasant farms "Yernur", "Aydin", "Merey" and "Arai" accounted for 100%, in the APC "Breeding farm Almaty", LLP "Shanyrak", PF "Sariyev S.M.", and "Khilnichenko V.P." - respectively 94.4%; 98.3; 97.0; 99.3%.

There are 10 lines of rams-producers in the breed, characterized by high development of meat qualities and differing from each other in development of particular breeding traits (Table 3).

The PC "Breeding farm Almaty" has four lines, three lines were laid on the rams-producers imported from Germany and one line-on the ram-producer of own reproduction.

Line No. 113 - the ancestor of the line is characterized by large growth (height at the withers 88 cm), long body (oblique body length 88 cm) and excellent meaty forms.

Line No. 707 - the ancestor of the line had pronounced meat forms, it is distinguished by a squat body shape (height at the withers is 80 cm).

Line No. 719 - the ancestor of the line received the highest rating in Germany in terms of average daily body weight gain and muscle development.

Table 2 – Class composition of ewes by farms

Farm	Heads, total	Elite		I-class		II-class		defect	
		heads	%	heads	%	heads	%	heads	%
APC «BF Almaty»	2873	861	30,0	1851	64,4	139	4,8	22	0,8
LLP «Shanyrak»	1717	765	44,5	924	53,8	19	1,1	13	0,7
PF «Khilnichenko V.P.»	1635	779	47,6	845	51,7	1	0,1	10	0,6
PF "Saryev S.M"	1000	440	44,0	530	53,0	24	2,4	6	0,6
PF "Yernur"	200	120	60,0	80	40,0	-	-	-	-
PF "Aray"	250	155	62,0	95	38,0	-	-	-	-
PF "Merey"	350	205	58,6	145	41,4	-	-	-	-
PF "Aydin"	160	105	65,6	55	34,4	-	-	-	-
PF "Kalizhan"	700	240	34,3	424	60,6	32	4,6	4	0,6
PF "Orken"	300	105	35,0	190	63,3	3	1,0	2	0,7
Total	9185	3775	41,1	5139	55,9	218	2,4	57	0,6

Line № 08295 - the ancestor of the line -is ram of own reproduction, characterized by a large length of wool (11.5 cm) with good meat characteristics.

In addition, the work is currently underway to lay 2 new lines for the French rams of il de France breed (IDF):

- *line No. 3762* for ram No. KZB05623762 of French breeding, characterized by high live weight, well-defined meat forms, early maturity of offspring and high wool shearing;

- *line No. 3758* for ram No. KZB05623758 of French selection, the ancestor is characterized by better overgrowth of the main parts of body, with high rates of meat forms [7].

Table 3 – Productivity of linear rams-producers

Farm	Line	n	Live weight, kg	Sheared wool, kg	Wool length, cm
APC «BF Almaty»	113	5	119,9±1,90	12,2±0,45	11,1±0,00
	707	5	113,7±0,75	11,2±0,25	10,7±0,03
	719	5	119,3±2,70	11,9±0,30	11,1±0,06
	08295	5	116,7±2,75	11,75±0,35	12,1±0,06
PF "Saryev S.M"	024	3	108,1±3,84	10,3±0,62	10,7±0,21
	587	3	110,2±3,66	10,6±0,51	10,4±0,11
	6120	3	105,3±2,88	10,4±0,58	10,3±0,10
PF "Aray"	07570	2	115,0±2,0	11,9±0,45	12,1±0,45
	048	2	116,6 ± 0,06	11,4 ± 0,30	11,4 ± 0,31
PF "Yernur"	5119	2	105,8 ± 0,31	11,9 ± 0,16	11,3 ± 0,14

In the PF "Saryev S.M." there are three lines. Two lines № 587 and № 024 were laid for German rams-producers and one for the producer of own reproduction - № 6120.

Line No. 587, the ancestor of the line, in assessment by its own productivity, was characterized by high average daily gain in live weight (22% more compared to the average indicators of peers).

Line no. 024 - the ancestor was characterized by better coat of the main parts of the body, with high rates of meat forms.

Line No. 6120 - has a thick coat, high shearing and well-defined meat forms.

Breeding in the PF "Aray" is carried out in 2 lines.

The ancestor of line No. 07570 - ram of own reproduction was characterized by high live weight, high wool shearing and well-defined meat forms.

The second line is based on *the ancestor # 048* brought from the APC "Breeding farm Almaty" and is characterized by better meat forms than line # 07570 and high wool shearing.

In the PF "Yernur" there is one *line No. 5119*, the ancestor is a ram-producer purchased from the PF "Aray", which has high rates of meat forms, and is characterized by better overgrowth of the main parts of the body and high shear of wool.

Since breeding in lines has been carried out for a long time, an analysis of productive indicators was carried out by main breeding characteristics of the descendants of the lines. So it turned out that in all lines there is progress in main breeding traits and their offspring are characterized by the same traits.

To increase the early maturity of meat merino, linear rams with a high live weight of 45-50 kg and with high average daily gain from 375 g to 400 g are selected for breeding for use in mating in the year of birth and identification of improvers among them.

As a result of selection of linear rams-producers by the quality of offspring at 7-8 months, it shows that 7-8-month-old rams have early maturing offspring and have high average daily growth and steadily transmit them to their offspring. The daughters of the assessed rams at the age of one year have good live weight: 45.1-48.1 kg, wool shearing: 3.7-3.9 kg, and elite and class I output: 70.5-73.1%.

In the basic farms "Khilnichenko V.P.", "Yernur", "Aray" and "Meray" (table 6) with a total number of ewes 9 thous. heads, breeding work is being carried out to increase wool shearing.

Sheep of peasant farms "Yernur" and "Aray" are characterized by the highest wool productivity, where the live weight of the ewes is 71.5-72.5 kg and the shear of physical wool is 6.8-6.9 kg with the yield of washed wool 3.93 kg. In the farm "Meray" and "Khilnichenko" the indicators are lower, the live weight of ewes is 69.9-70.1 kg, sheared wool 5.6-6.3 kg and the yield of washed wool is 3.13-3.48 kg.

Also, great attention is paid to increasing the natural multiplicity of the breed, as rams-producers from twin litters are used on breeding flocks. As a result, high yield of lambs was obtained in the PF "Yernur" and "Aray", where 150 lambs were obtained from each hundred ewes, the PF "Khilnichenko V.P." 115 lambs for every 100 ewes. On average, all farms have 129 lambs per 100 ewes.

In order to study meat qualities of the experimental groups of animals in the PF "Aydin", the "Nurbekov A.N" farm and the "KazRILP" LLP, 4 months aged rams were slaughtered. In the farm "Nurbekov A.N" and the farm "Aydin", rams-producers of "Etti Merinos" have been used for a long time and breeding has been carried out to increase meat productivity for more than 15 years.

The slaughter results showed that the slaughter indicators of lambs on three farms do not have sharp differences, but are characterized by very high yield of carcasses in purebred EM rams.

The study of the morphological composition of carcasses showed high yield of flesh in EM rams - 82.8%, KT lambs 80.5% and this is a very high indicator, at the same time, the fat output in the flesh is small - from 7.9% to 5, 5%, respectively, the relative rate of bones is low 16.7-19.5 %.

The analysis of morphological composition of carcasses showed that lambs are characterized by high meat parameters and low content of fatty tissues, which is confirmed by the indicators of meat content factor 4.1 - 5.0.

Further integration of the republic into the world economy dictates the need to reorient sheep breeding of Kazakhstan towards production of high-quality assortments of ecologically pure mutton, especially lamb, which are in high demand both on domestic and foreign markets [8].

Based on this, in order to increase the competitiveness of domestic sheep breeding, it is necessary to preserve and improve the existing gene pool of promising domestic early maturing meat and wool breeds, i.e. special attention should be paid to the signs that provide the increase in meat productivity, fertility, milkiness and early maturity.

А.А. Тореханов¹, Н. К. Жумадилаев²

¹ «Ұлттық аграрлық ғылыми-білім беру орталығы» КеАК, Нұр-Сұлтан, Қазақстан;

² К.У. Медеубеков атындағы қой шаруашылығы ҒЗИ, «Қазақ мал шаруашылығы және жемшөп өндіру ҒЗИ» ЖШС филиалы, Алматы, Қазақстан.

ЕТТИ МЕРИНОС – ҚАЗАҚСТАНДЫҚ ЭКСПОРТҚА БАҒДАРЛАНҒАН ЕТ ТҰҚИМЫ

Аннотация. Қазақстандағы қой шаруашылығы мал шаруашылығының дәстүрлі саласы болып табылады. Саланың дамуына жайылымдық жерлердің үлкен аудандарының болуы, сондай-ақ отандық селекция мен селекционер-ғалымдардың көпжылдық жұмысы нәтижесінде пайда болған асыл тұқымды ресурстардың қолда бар құнды гендік қоры ықпал етеді.

Республика қой шаруашылығы саласын одан әрі дамыту үшін үлкен әлеуетке ие және халықтың қой етіне деген қажеттілігін қанағаттандырып қана қоймай, ірі экспорттаушы болуға да қабілетті. Отандық қой шаруашылығын қалпына келтіру және одан әрі дамыту халықаралық стандарттарға жауап беретін жоғары сапалы қой шаруашылығы өнімін рентабельді өндіру үшін жануарлар мен елдің табиғи жайылымдарының генетикалық әлеуетін ұтымды пайдалануға негізделуге тиіс.

«Етті меринос» тұқымдық қошқарларды Түркістан облысы шаруашылықтарында пайдалану тәжірибесі келтірілген, етті меринос қошқарлары Оңтүстік Қазақстан мериносының ет өніміне оң әсер етеді және жүн сапасын нашарлатпайды.

2020 жылға арналған «Етті меринос» тұқымды қой басы бойынша мәліметтер, шаруашылықтар бойынша ұрғашы тоқтылардың сыныптық құрамы, бірқатар тұқымдағы тұқымдық-қошқарлардың өнімі, 6-7 айлық қошқар тұқымының сапасы бойынша бағасы, саулық қойлардың селекциялық топтарының жүн өнімі ұсынылды.

Түйін сөздер: мал шаруашылығы, қой шаруашылығы саласы, етті тұқым, биязы жүнді тұқым, өнімділік, шаруа қожалықтары, селекция, гендік қор.

А.А. Тореханов¹, Н. К. Жумадиллаев²

¹НАО «Национальный аграрный научно-образовательный центр», Нур-Султан, Казахстан;

²НИИ овцеводства им. К.У. Медеубекова),

филиал ТОО «Казахского НИИ животноводства и кормопроизводства», Алматы, Казахстан

ЕТТИ МЕРИНОС – КАЗАХСТАНСКАЯ ЭКСПОРТОРИЕНТИРОВАННАЯ МЯСНАЯ ПОРОДА

Аннотация. Овцеводство в Казахстане является традиционной отраслью животноводства. Развитию отрасли способствует наличие больших площадей пастбищных угодий, а также существующий ценный генофонд породных ресурсов, созданный отечественной селекцией и многолетней работой ученых-селекционеров.

Республика обладает большим потенциалом для дальнейшего развития овцеводческой отрасли и способна не только удовлетворить потребность населения в баранине, но и стать крупным экспортером. Восстановление и дальнейшее развитие отечественного овцеводства должно основываться на рациональном использовании генетического потенциала животных и природных пастбищ страны для рентабельного производства высококачественной овцеводческой продукции, отвечающей международным стандартам.

В статье рассматриваются вопросы развития тонкорунного овцеводства в Алматинской, Жамбылской и Южно-Казахстанской областях, улучшения мясных характеристик Южно-Казахстанского меринуса. Опыт использования баранов-производителей "Етті меринос" в хозяйствах Туркестанской области показал, что мясо баранов-меринусов положительно влияет на мясную продуктивность южноказахских меринусов и в то же время не ухудшает их шерстные характеристики.

Представлены сведения по поголовью овец породы «Етті меринос» на 2020 год, классный состав ярок по хозяйствам, продуктивность линейных баранов-производителей, баранов-производителей в ряде поколений, оценка по качеству потомства 6-7 месячных баранчиков, шерстная продуктивность селекционных групп маток.

Ключевые слова: животноводство, овцеводческая отрасль, мясная порода, тонкорунная порода, продуктивность, крестьянские хозяйства, селекция, генофонд.

Information about authors:

Torekhanov Aibyn Adepkhanovich, Doctor of Agricultural Sciences, Professor, Chairman of the Board of NPJSC "National Agrarian Scientific - Educational Center", Nur-Sultan, Kazakhstan, torehanov.aibyn@mail.ru, <https://orcid.org/0000-0001-6502-0692>;

Zhumadillaev Nurzhan Kudaibergenovich, candidate of economic sciences, Deputy Director for Implementation and Production of the K.U. Medeubekov "a branch of the Kazakh Research Institute of Animal Husbandry and Lump Production" LLP, Almaty, Kazakhstan, nurzhan-2270@mail.ru, <https://orcid.org/0000-0002-6707-4333>

REFERENCES

- [1] Kasenov T.K. New breed "Etti merinos". Almaty, 2011. 350 p.
- [2] Torekhanov A.A., Kasenov T.K. A new breed of sheep "Etti Merinos" has been developed in Kazakhstan // Newsletter du BCTi Zettre d information du bureau de cooperation technique international des organizations d elevage francaises. 2011. N4. P. 12-15.
- [3] Kasenov T., Torekhanov A., Karamshuk I. Recommendations on development and breeding of meat merinos. Almaty, 2012. 32 p.
- [4] Turekhanov A. Opportunities for the development of sheep breeding // "Akikat" magazine. Almaty, 2013. № 9. P. 110-114.
- [5] Zhumadillaev N. K., Kasenov T. K. Selection for the development of meat quality - the future of merino sheep breeding of Kazakhstan: Mother. Scientific-practical conference "Achievements and prospects of scientific support of sheep breeding". Almaty, 2014. p. 157-162.
- [6] Azhimetov N.N., Eskara M.A., Zhumadillaev N.K. The use of sheep in gene pool of domestic and imported selection in the improvement of southern Kazakh merinos». Shymkent, 2014. 11 p.
- [7] Azhimetov N.N., Zhumadillaev N.K. The results of the use of meat fine-fleece breed "Etti merinos" on the southern Kazakh merinos // "Success of modern natural science". M., 2015. № 10. P. 59-60.
- [8] Aitmukhanbetova D., Aidarkhanova T. The main ways of economic development // News of the National Academy of Sciences of the Republic of Kazakhstan. 2020. N2(56). з. 14-20.

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 work described 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 originality detection service Cross Check <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://www.nauka-nanrk.kz)

ISSN 2518-1483 (Online), ISSN 2224-5227 (Print)

<http://reports-science.kz/index.php/en/archive>

Редакторы: *М. С. Ахметова, Д. С. Аленов, А. Ахметова*

Верстка на компьютере *А. М. Кульгинбаевой*

Подписано в печать 12.02.2021.

Формат 60x881/8. Бумага офсетная. Печать – ризограф.
10,25 п.л. Тираж 500. Заказ 1.