ТОРАЙҒЫРОВ УНИВЕРСИТЕТІНІҢ ХАБАРШЫСЫ

Химия-биологиялық сериясы

1997 жылдан бастап шығады

TORAIGHYROV
UNIVERSITY

ВЕСТНИК ТОРАЙГЫРОВ УНИВЕРСИТЕТА

Химико-биологическая серия

Издается с 1997 года

Павлодар

НАУЧНЫЙ ЖУРНАЛ
Торайгыров университета

Химико-биологическая серия
выходит 4 раза в год

СЕКЦИЯ «СЕЛЬСКОЕ ХОЗЯЙСТВО»

A. B. Amandykova[1], *I. M. Brel-Kiseleva[2], O. S. Safronova[3]
[1,2]Kostanay Regional University named after A. Baitursynov,
Republic of Kazakhstan, Kostanay;
[3]«Agricultural experimental station Zarechnoye» LLP,
Republic of Kazakhstan, Kostanay.
[1]ORCID: https://orcid.org/0000-0002-3437-8728
[2]ORCID: https://orcid.org/0000-0003-3715-9309
[3]ORCID: https://orcid.org/0000-0002-4436-3386
*e-mail: inessab7@mail.ru

BREEDING WORK – BASIS FOR THE CONSERVATION AND IMPROVEMENT OF KOSTANAY HORSES

The article analyzes the work on improving the horses of the Kustanay breed in the course of the evolution of the breed from the moment of approbation and evaluates the breeding stallions by the quality of offspring. It is established that the modern livestock of the Kustanay breed horses is characterized by superiority in terms of a set of characteristics in the context of the factory lines of 464 Neon and 494 Fort over the peers of the control group – both in breeding and athletic qualities. In this connection, the breeding stallions: Nauryztoy 9 (512 Nag – 2146 Torki 8) and Preferans 5 (525 Pegasus – 2101 Safari) are improvers according to the quality of offspring and can be used to lay two new lines in the Kostanay breed of horses.

The Kustanay breed of horses historically comprised five principal genetic lines: 30 Burelom, 45 Zaboy, 84 Zeus, 56 Dictor, and 162 Trostnik. Of these, the 84 Zeus line (classified as the main type) was the most predominant, representing 23 % of the total population. The 45 Zaboy line followed with a representation of 15 %. Meanwhile, the 30 Burelom line (top type), 162 Trostnik line (main type), and 56 Dictor line (top type) collectively accounted for 7.8 % and 9 %, respectively.

These data were collected and analyzed as part of the scientific and technical program BR 10764999, titled «Development of Technologies

for Effective Management of the Breeding Process and Preservation of the Gene Pool in Horse Breeding (2021–2023)». This initiative was conducted under the auspices of the Ministry of Agriculture of the Republic of Kazakhstan, with the goal of advancing breeding strategies and ensuring the conservation of the genetic resources of the Kustanay breed.

Keywords: breeding methods, breeding stallion, type, exterior, performance, athletic qualities.

Introduction

The primary achievement in advancing pedigree and sport horse breeding is intrinsically linked to the systematic and strategic organization of breeding practices. These practices must ensure not only the economically viable production and sale of horses but also facilitate highly effective selection processes. Such selection efforts are significantly more intricate compared to the breeding of other agricultural animals. Consequently, it is imperative to place a greater emphasis on implementing advanced and effective methodologies to enhance horse breeds [1].

Kazakhstan's equestrian sport increasingly relies on imported horse breeds, leading to a decline in domestic breeds like the Kustanay, which faces extinction. Urgent action is needed to boost their numbers, utilizing centuries-old breeding methods and expertise [2].

Due to the historical peculiarities of sport horse breeding, horses are characterized by the qualities of working capacity: agility, endurance, strength of constitution, ability to quickly recover [3].

Since its approbation in 1951, the Kustanay riding horse has been widely used in agriculture and equestrian sports. Thanks to dedicated breeding efforts at the Kustanay horse breeding factory («Kazak Tulpary» LLP), these horses developed strong conformation, endurance, and calm temperaments suitable for professional sports. However, following Kazakhstan's independence, the breed's numbers have sharply declined, threatening its survival and the valuable gene pool essential for domestic horse breeding.

To preserve and increase the Kustanay horse breed, the «Road Map» for 2022–2027 was approved in 2021. This initiative aims to enhance the breed's numbers and popularity while promoting national equestrian sports and raising awareness of this unique breed.

One of the methods of preservation and further improvement of horses of Kustanay breed is selection. The logical continuation of selection is selection, directed on correction of undesirable features of parents, unification of valuable hereditary features and their manifestations in future offspring. Selection and selection together constitute a system of breeding, the practical methods of which

should be based on the general laws of development of optimal linear structure of the breed [4].

Breeding history highlights various selection methods: mass, individual, unconscious, methodical, and more. Selection can be improving or equalizing, homogeneous or heterogeneous, and may consider kinship, using related or unrelated pairs [5; 6; 7].

Effective breeding of farm animals requires purposeful selection based on superior parental genotypes. Since genotype results in offspring are only evident after breeding, many specialists advocate using indirect, probabilistic methods to assess breeding merits rather than waiting for direct evaluation [8; 9; 10].

Specialists at «Kazak Tulpary» LLP are implementing measures to increase horse populations and enhance breeding intensity. They focus on early genetic shifts in breeding traits, emphasizing the combination of directional and stabilizing selection based on genotype characteristics.

The goal is to assess how established breeding lines influence the preservation and improvement of Kustanay horses. Tasks include analyzing pedigree and sporting traits, evaluating stallions based on offspring quality, and identifying effective selection methods for top stallions.

Materials and methods

The research, conducted from 2021 to 2023 at LLP «Kazak Tulpary» focused on Kustanay horses throughout the breed's development. Breeding books were analyzed for key measurements, including height, torso length, chest girth, and heel girth, along with data on performance and breeding use across lines.

We determined breeding and sporting traits in the current population based on stallion evaluations. Sporting qualities were assessed following guidelines for breeding and training riding horses. Offspring were categorized into three groups: Group I (Nauryztoy 9, line 464 Neon), Group II (Preferans 5, line 494 Fort), and a control group from other lines. Results were processed using biometric methods via Microsoft Office Excel.

Results and discussion

Since 1951, Kustanay horses have excelled in breeding and sports, with evolving selection methods prioritizing traits like endurance, jumping ability, and temperament.

The last fifteen years have been challenging for Kustanay horses, marked by a significant decline in population and participation in equestrian sports, along with changing breed composition due to decreased popularity and shifting breeding nuclei.

To assess the dynamics of selection and breeding efforts based on a set of traits that define the pedigree and sporting qualities of the Kustanay breed of

horses, an analysis was conducted covering the period of the breed's development and modern evaluation.

Historically, the Kustanay breed comprised five main lines: 30 Burelom, 45 Zaboy, 84 Zeus, 56 Dictor, and 162 Trostnik. Initially, the 84 Zeus line (main type) was the most prevalent, accounting for 23 % of the total stock. It was followed by the 45 Zaboy line, representing 15 % of the population. The 30 Burelom line (top type), 162 Trostnik line (main type), and 56 Dictor line (top type) contributed 7.8 % and 9 %, respectively.

During the 1960s and 1970s, the 45 Zaboy line surged in dominance, reaching 33 % of the population. However, by the 1980s and 1990s, significant shifts occurred. The representation of the 30 Burelom line nearly doubled, increasing from 7–11 % to 23 %, making it a prominent contributor to the breed. Simultaneously, the influence of the 45 Zaboy and 84 Zeus lines significantly declined, dropping to 5–12 %. Meanwhile, the 56 Dictor and 162 Trostnik lines maintained their intermediate positions, reflecting stable representation during this period.

This analysis highlights the evolving dynamics of genetic contributions among the Kustanay breed's lines, influenced by changing selection priorities and breeding strategies over time.

The lack of a permanent leader reflected changes in breeding priorities, shifting focus on desirable horse traits. Initially, riding qualities, particularly from the 84 Zeus line, were prioritized. Over time, emphasis shifted to the sharpness of the 30 Burelom line. A new riding line, 464 Neon, was established, followed by the formation of another riding line, 494 Fort, in the 1990s, highlighting the evolving direction of Kustanay breed development.

By 2000, three Kustanay breed lines – 56 Dictor, 162 Reed, and 75 Zaboy – had nearly disappeared. The 30 Burelom line became dominant at 21 %, while new lines 486 Triumph (8 %) and 494 Fort (13 %) retained their presence. The 464 Neon line emerged with the greatest numerical and qualitative dominance, marking a shift in breeding strategies and reflecting the evolving genetic structure of the breed.

Exterior is a key feature in horse selection, significantly impacting working capacity. At the Kustanay horse breeding factory, many large, well-structured stallions and mares have been used to improve pedigree qualities. Notably, evaluations of exterior traits have changed significantly since the breed's inception.

Table 1 – Dynamics of measurements and body build indices of horses of Kustanay breed in the control period

Group of horses	Measurements, cm				Body indices, %			
	height at withers	oblique torso length	chest girth	pastern girth	format	bonyness	compactness	chest girth
1951 (during testing)								
Stallions	159.6	158.8	187	20.0	99.4	12.5	117.7	117.1
Mares	155.4	155.2	185.2	19.5	99.8	12.5	119.3	119.4
2000								
Stallions	160.2	159.6	187.4	20.4	99.6	12.7	-	-
Mares	157.4	156.1	185	19.5	-	-	-	-
2022								
Stallions	163.3	162.5	188	20.6	99.5	12.6	111.6	121
Mares	160.3	158.8	185.6	20.1	99	12.5	116.8	115.7
Requirements for grading instructions								
Stallions	160	-	186	20.5	-	-	-	-
Mares	158	-	188	19.5	-	-	-	-

And so according to the data of Table 1 it follows that in comparison with the requirements of the instruction on boniting (All-Russian Research Institute of Horse Breeding – 1991), the measurements in the accounting periods of time of animals exceed the standard of the breed.

Kustanay horses by virtue of their origin and due to the sharp improvement of technology of cultivation, training and testing, were characterized by high endurance, sharpness. Kustanay horses are one of the sharpest among half-blood breeds and are inferior only to the thoroughbred horse breed.

Analyzing the data in Table 2 reveals that the Kustanay breed significantly outperforms the Budyonovskaya and Akhalteke breeds in sharpness and has a clear advantage across most distances. Exceptions include the 3200 m distance, where Budyonovskaya horses are faster by 0.01 seconds (3:29 vs. 3:30), and the 1000 m distance, where Akhalteke horses hold a slight edge of 0.3 seconds (1:04.1 vs. 1:04.4).

Table 2 – Records of horses of the Kostanay breed in comparison with other horse breeds (sharpness min., sec.)

Breed	Distance, m												
	1000	1200	1400	1500	1600	1800	2000	2400	2800	3000	3200	4000	7000
Kustanayskaya	1.04.4	1.14.0	1.27.0	-	1.40.6	1.54.4	2.07.4	2,34,7	3.06.0	3.19	3.30	4.37.0	8,18,8
Budenovskaya	1.06.0	1,14,4	1,34,2	1.36	1.43	1.54.8	2.09.9	2,35,9	3,19,6	3.19	3.29	4.40.0	8,25,5
Akhal-Teke	1.04.1	1,16,7	1.28.5	1,40,2	-	-	-	-	3.09.6	-	-	-	-
Thoroughbred	0.58.0	1,11,4	1.25	-	1.37	1.49	2.02.0	2,27,2	2.57.0	3.11.0	3,22,2	4.22.0	8.11

The Kustanay breed ranks second after the Thoroughbred in terms of sharpness across multiple distances, including 1200 m, 1400 m, 1600 m, 1800 m, 2000 m, 2400 m, 2800 m, 4000 m, and 7000 m. This highlights the breed's exceptional speed and endurance, placing it among the top-performing horse breeds for medium and long-distance races. The Kustanay breed is in the second place after the thoroughbred.

Kustanay horses, tested from two years old onward, excelled in sharpness and improved yearly. With excellent musculoskeletal systems, endurance, and calm temperaments, they rival and can surpass other riding breeds in performance.

At present in «Kazak Tulpary» LLP the work on appointment of stallions-producers as continuers of factory lines, formed in 1980–1990, such lines as: line 464 Neon and line 494 Fort is carried out.

We selected offspring based on pedigree and sporting qualities, evaluating stallions by ranking their offspring's type, origin, measurements, and performance results.

Multifactor analysis enables early evaluation of young stallions by phenotype and athletic qualities in their offspring. In countries like Germany and Poland, stallions and mares are tested based on athletic development during short training sessions at 1.5–2 years.

The principle of ranking has significant advantages over the simple distribution of sires by places taken, because in this case the evaluation of the sire depends on the expression of the trait in his offspring, and not on the number of evaluated successors.

Table 3 shows the evaluation of the offspring of the studied stallion sires from the lines: 464 Neon – stallion Nauryztoy 9 and 494 Fort – stallion Preferans 5 on the quality of offspring, which was carried out according to the results of offspring boning on several breeding traits, allocated in II groups: Group I include traits: evaluation of type, trunk, limbs, measurements. Group II includes evaluation of expression by athletic qualities, each of which was evaluated on a 10-point scale.

Table 3 – Dynamics of phenotype evaluation of offspring in the section of lines by I group of evaluated traits, point

Torso (body)					Limbs (foundation)		Point	Stallion category
head	neck	breast	sides	croup	front	rear		
Group I Offspring of stallion Nauryztoy 9								
9.5±0.5	9.5±0.4	10.0	9.5±1.5	9.5±2.7	9.5±0.1	9.5±.8	9.5	Improver
Group II Offspring of the stallion Preference 5								
9.2±1.2	9.5±3.1	9.0±0.3	9.2±1.8	9.5±1.3	9.5±0.5	9.5±.8	9.0	Improver
Group III control								
8.5±4.2	9.0±2.8	8.5±0.5	8.0±2.6	9.0±0.5	8.0±0.8	8.5±1.7	8.0	Neutral

Based on the information in Table 3 – I and II group of young stallion-productive stallion Nauryztoy 9 received 9.5 points, on the group of stallion-productive stallion Preferans 5 – 9.0 points. These indicators exceed the average level for young stallions of other stallions, considered in the control III group.

Table 4 continues the evaluation of the studied offspring in the section of different genotypes by type and exterior.

Table 4 – Dynamics of intermediate evaluation of offspring exterior in the section of lines by I group of evaluated traits, point

Groups	Point for exterior		
	M±m	δ	Cv
Group I classical distances (n=5)	7.5±0.13	0.52	6.92
Group II long distance (n=5)	7.5±0.16	0.52	7.01

From the data of Table 4 it is seen that youngsters of Group I, trained on classical distances on the ball evaluation for exterior, received on average (7,5±0,13), and for Group II, trained on long distances (7,3±0,16), no reliable difference between the compared groups was revealed.

Table 5 summarizes the results of the final evaluation of breeding stallions on the quality of offspring by type and exterior.

Table 5 – Results of the final evaluation by type and exterior of offspring in the section of lines by I group of evaluated traits

No.	Nickname	n=14	Point			Total points	Rank
			Type	Exterior	Measurements		
1	Nauryztoy 9	6	8	8	9	25	I
2	Preference 5	8	8	8	9	25	I

Based on the data from Table 6 regarding the evaluation of stallions-producers by offspring type and exterior quality, it can be concluded that the stallions Nauryztoy 9 and Preferans 5 occupy high levels of excellence. During the assessment, these stallions were ranked as I Rank, categorized as Improvers, and classified in the Elite class, demonstrating their superior breeding potential.

Table 6 shows the evaluation of stallions-producers on the sporting efficiency of their offspring.

Table 6 – Results of evaluation of the stallions-producers under study by their sporting efficiency, score

Group of horses Stallion's name	Index						
	Motor qualities						
	Number of steps per				Movement style		Average score
	step by step	point	lynx	point	lynx point	gallop point	
1 group	32±2.5	9.3	17.4±1.8	7.5	4	4.5	6.3
Group II	30.5±2.4	9.0	18±3.5	6.5	4	4.6	6.0
Requirements for instructions	25-39	5-10	14-19	10-5	5	5	-

According to the data in Table 6, the offspring of stallion breeders of breeder lines – 464 Neon and 494 Fort meet the given requirements set by the instruction for motor qualities.

In the racing season horses of Kustanai breed and their litters participated in the presented 4 distances.

Table 7 – Racing year 2022–2023

May 21, opening of the 2022 season/number, goals			
1000 m	1800 m	5000 m	18,000 m
4	6	12	17
May 20, 2023 / number, goals			
9	8	7	16
June 18, 2022/number of goals			
1200 m	2000 m	7000 m	20,000 m
5	8	7	14
June 19, 2023 / number, goals			
9	8	7	eleven
July 6, 2022 /number, goals			
1400 m	2400 m	7000 m	20,000 m
4	4	6	8
July 6, 2023 / number, goals			
4	6	8	9
August 20, 2022 / number, goals			
1200 m	2400 m	7000 m	20,000 m
4	5	10	8
August 19, 2023 / number, goals			
5	4	8	10
September 10, 2022 / number, goals			
1600 m	2400 m	7000 m	20,000 m
September 23, 2023 / number, goals			
6	7	8	10

The 2022 racing season had a total participation of 39 head at the beginning of the season, and went down at the end of the season as horses get injured in the process of racing, which amounted to – 18 head. In 2023, the total number of herds amounted to 40 heads at the end of the season respectively.

In 2022, Kostanay horse breeding won 14 awards: 8 third places, 4 seconds, and 2 firsts. Horse registrations in Kazakhstan total 173 heads: 25 stallions, 60 mares, and 88 young horses.

Breeding of horses of Kustanay breed is engaged in more than 10 private owners Kostanay region, Akmola region, North-Kazakhstan and East-Kazakhstan region, 3 farms in the Republic of Kazakhstan and 1 private owner in the Russian Federation.

It is necessary to increase the breeding nucleus of horses of Kustanai breed with selection and selection, followed by breeding tests and further work on the quality of offspring and working capacity.

Conclusions

Research indicates that Kustanay horses consistently exhibit superior productivity and pedigree qualities compared to world breeds. Evaluations of stallions from breeding lines 464 Neon and 494 Fort show they outperform control group peers in both pedigree and modern stock assessments.

Stallions Nauryzton 9 and Preferans 5 are recognized for improving offspring quality and can establish two new lines in the Kustanay breed.

To ensure future growth, we propose: preserving the breed's linear structure through purebred breeding combined with effective stabilizing and homogeneous selection. Additionally, we aim to enhance the Kustanay horse's market demand as a sport horse and for private ownership.

References

1 **Brel-Kiseleva, I. M., Safronova, O. S., Aubakirov, M. Zh.** Reserves to improve the efficiency of domestic horse breeds in the Republic of Kazakhstan [Текст]. Volume 23, Issue 2, Pages 833 – 838, 2017

2 **Амандыкова, А. Б., Брель-Киселева И. М., Сафронова О. С.** Мониторинг состояния лошадей костанайских пород в Северном Казахстане [Текст] // Вестник науки Казахского агротехнического университета им. С. Сейфуллина, 2022. – часть II. – № 3. – С. 121.

3 **Политова, М. А.** Сравнительная характеристика методов оценки спортивной работоспособности лошадей по результатам выступлений в выездке [Текст] / М. А. Политова, А. В. Дорофеева // Известия Санкт-Петербургского государственного аграрного университета, 2021. – № 1 (62). – С. 148.

4 **Садыкулов, Т. С.** Разведение и селекция сельскохозяйственных животных [Текст] / Т. С. Садыкулов. – 2003. – 376 с.

5 **Тореханов, А. А., Карымсаков Т. Н., Бегембеков К. Н., Баккожаев А. А.** Современные аспекты племенной работы в скотоводстве [Текст] // Казахский агротехнический университет им. С. Сейфуллина. – Астана. – 2013. – С. 10–12.

6 **Малюгина, И. Л., Стефаниди М. С.** Принадлежность к линиям и семействам лошадей тракененской породы в выездке и их спортивная работоспособность [Текст] / И. Л. Малюгина, М. С. Стефаниди // Вестник АПК Верхневолжья, 2023 – № 1(61). – С. 60–61.

7 **Четвертакова, Е. В.** Теоретические основы селекции: курс лекций [Текст] / Е. В. Четвертакова // Краснояр. гос. аграр. ун-т. – Красноярск, 2012. – С. 18.

8 **Tkachyova, I. V.** Stud horses breed sunder the restructuring of Ukraine's economy [Текст]. // Science and Technology Progress: Collection of Works. – 2010. – 52. – P. 44.

9 **Salkebayev, S., Tleuov, A., Akimbekov, A., Turabayev, A.** Meatand milk productivityof horsesin centraland South-Western Kazakhstan. [Текст] // Journal of Rural Economic Science in Kazakhstan. – 2004. – 8. – P. 43.

10 **Меллер, У.** Доклад на конференции спортивного коннозаводства 28 января 2016 г. / У. Меллер. [Доклад на конференции по спортивному коневодству 28 января 2016 г.] [Текст] // Коневодство и конный спорт – 2016. – № 1. – С. 10–11.

References

1 **Brel-Kiseleva, I. M., Safronova, O. S., Aubakirov, M. Zh.** Reserves to improve the efficiency of domestic horse breeds in the Republic of Kazakhstan [Text]. – 2017. – Volume 23. – Issue 2. – P. 833–838.

2 **Amandykova, A. B., Brel-Kisseleva, I. M., Safronova, O. S.** Monitoring the condition of the horses of the Kostanay breeds in northern Kazakhstan [Monitoring the condition of the horses of the Kostanay breeds in northern Kazakhstan] [Text] // Vestnik nauki Kazahskogo Agrotekhnicheskogo universiteta im. S. Sejfullina, 2022. – Chast II. – № 3. – P. 121.

3 **Politova, M. A., Dorofeeva, A. V.** Sravnitel'naya harakteristika metodik ocenki sportivnoj rabotosposobnosti loshadej po rezul'tatam vystuplenij v vyezdke [Comparative characteristics of methods for assessing the sports performance of horses according to the results of performances in dressage] [Text] // Izvestiya Sankt-Peterburgskogo gosudarstvennogo agrarnogo universiteta, 2021. – № 1 (62). – P. 148.

4 **Sadykulov, T. S.** Razvedenie i selekciya selskohozyajstvennyh zhivotnyh [Breeding and selection of agricultural animals] [Text]. – Almaty. – 2003. – 376 p.

5 **Torekhanov, A. A., Karymsakov, T. N., Begembekov, K. N., Bakkozhaev, A. A.** Sovremennye aspekty plemennoj raboty v skotovodstve [Modern aspects of breeding work in cattle breeding] [Text] // Kazahskij agrotekhnicheskij universitet im. S. Sejfullina. – Astana, 2013. – P. 10–12.

6 **Malyugina, I. L., Stefanidi, M. S.** Prinadlezhnost k liniyam i semejstvam loshadej trakenenskoj porody v vyezdke i ih sportivnaya rabotosposobnost [Belonging to the lines and families of horses of the Trakenese breed in dressage

and their sports efficiency] [Text] // Vestnik APK Verhnevolzhya, 2023 – № 1(61). – P. 60–61.

7 **Chetvertakova, E. V.** Teoreticheskie osnovy selekcii: kurs lekcij [Theoretical bases of selection: a course of lectures] [Text] // Krasnoyar. gos. agrar. un-t. – Krasnoyarsk, 2012. – P. 18.

8 **Tkachyova, I. V.** Stud horses breed sunder the restructuring of Ukraine's economy (2010) [Text]. // Science and Technology Progress : Collection of Works, 52, p. 44.

9 **Salkebayev, S., Tleuov, A., Akimbekov, A., Turabayev, A.** Meatand milk productivityof horsesin centraland South-Western Kazakhstan. [Text] // Journal of Rural Economic Science in Kazakhstan. –2004. – 8. – P. 43.

10 **Meller, U.** Doklad na konferencii sportivnogo konnozavodstva 28 yanvarya 2016 g. [Report at the conference of sport horse breeding 28 January 2016] [Text] // Konevodstvo i konnyj sport – 2016. – № 1. – P. 10–11.

*А. Б. Амандыкова[1], *И. М. Брель-Киселева[2], О. С. Сафронова[3]*
[1,2]Ахмет Байтұрсынұлы атындағы
Қостанай өңірлік институты,
Қазақстан Республикасы, Қостанай қ.;
[3]«Заречное ауыл шаруашылығы
тәжірибе станциясы» ЖШС,
Қазақстан Республикасы, Қостанай қ.

АСЫЛ ТҰҚЫМДЫ ЖҰМЫС-ҚОСТАНАЙ ТҰҚЫМДЫ ЖЫЛҚЫЛАРДЫ САҚТАУ МЕН ЖЕТІЛДІРУДІҢ НЕГІЗІ

Бұл жұмыста Қостанай тұқымды жылқылардың сынақтан өткен сәттен бастап тұқым эволюциясы процесіндегі жетістіктеріне талдау жүргізілді және ұрпақ сапасы бойынша өндіруші айғырларды бағалау жүргізілді. Қостанай тұқымды жылқылардың қазіргі заманғы Саны бақылау тобының құрдастарынан – асыл тұқымды және спорттық қасиеттері бойынша 464 Неон мен 494 Форт

бекіністің зауыттық желілері бойынша белгілер кешені бойынша артықшылығымен сипатталатыны анықталды. Осыған байланысты, өндіруші айғырлар: Наурызтой 9 (512 Наг-2146 – Торки 8) және Преферанс 5 (525 Пегас – 2101 Сафари) ұрпақтарының сапасын бағалау бойынша жақсартушылар болып табылады және қостанай жылқы тұқымына екі жаңа жол салу үшін пайдаланылуы мүмкін.

Қостанай тұқымында бес негізгі тобы болды: 30 Бурелом, 45 Забой, 84 Зевс, 56 Диктор және 162 Тростник. Ең көп таралған 84 Зевс тобы (негізгі тип) болды, оған малдың 23 % кірді; одан кейін Забой тобы 15 % көрсеткішпен болды; 30 Бурелом өкілдері (ат типі), 162 Тростник (негізгі тип) және 56 Диктор (ат типі) сәйкесінше 7, 8 және 9 % болды.

Зерттеу Қазақстан Республикасы Ауыл шаруашылығы министрлігінің 2021–2023 жылдарға арналған «Жылқы шаруашылығында селекциялық үрдісті тиімді басқару және генофондты сақтау технологияларын әзірлеу» BR 10764999 ғылыми-техникалық бағдарламасы аясында жүзеге асырылды.

Кілтті сөздер: өсіру әдістері, айғыр өндірушісі, түрі, сыртқы түрі, өнімділігі, спорттық қасиеттері

*А. Б. Амандыкова[1], *И. М. Брель-Киселева[2], О. С. Сафронова[3]*
[1,2]Костанайский региональный
университет имени А. Байтурсынова,
Республика Казахстан, г. Костанай;
[3]ТОО «Сельскохозяйственная
опытная станция Заречное»,
Республика Казахстан, г. Костанай.

ПЛЕМЕННАЯ РАБОТА – ОСНОВА СОХРАНЕНИЯ И СОВЕРШЕНСТВОВАНИЯ ЛОШАДЕЙ КУСТАНАЙСКОЙ ПОРОДЫ

В статье проанализирована работа по совершенствованию лошадей кустанайской породы в процессе эволюции породы с момента апробации и выполнена оценка жеребцов-производителей по качеству потомства. Установлено, что современное поголовье

лошадей кустанайской породы характеризуется превосходством по комплексу признаков в разрезе заводских линий 464 Неона и 494 Форта над сверстниками контрольной группы – как по племенным, так и по спортивным качествам. В связи с чем, жеребцы-производители: Наурызтой 9 (512 Наг – 2146 Торки 8) и Преферанс 5 (525 Пегас – 2101 Сафари) по оценке качества потомства являются улучшателями и могут быть использованы для закладки двух новых линий в кустанайской породе лошадей.

В кустанайской породе имелось пять основных линий – 30 Бурелома, 45 Забоя, 84 Зевса, 56 Диктора и 162 Тростника. Наибольшее распространение имела линия 84 Зевса (основной тип), к ней относилось 23 % поголовья; за ней следовала линия Забоя с показателем 15 %; представители линий 30 Бурелома (верховой тип), 162 Тростника (основной тип) и 56 Диктора (верховой тип) имели соответственно 7,8 и 9 %.