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REGULARITIES OF DEVELOPMENT OF COLTS OF THE KAZAKH BACTRIAN BREED

Abstract. Based on the studies, it was found that for parental couples with a coefficient of wool clip up to 0.8 at the age of one year, the amount of wool clip was 2.4 kg, which is significantly lower by 12.5% compared to herdmates from parents with a coefficient of wool clip of 0.9-1.4, and 29.2% lower in comparison with young one-year-olds obtained from parental couples with the coefficient of wool clip of 1.5 and above.

It was established that the real wool cut was lower in two-year-old females obtained from parents with a coefficient of wool clip of up to 0.8 and 1.5 and higher. In two-year-old females obtained from parental couples with the coefficient of the wool clip of 0.9-1.4, the real wool cut was 9.1% higher than predicted. In the future, during the selection, it is recommended to give preference to individuals with a coefficient of shear of wool 0.9-1.4.

In colts of the Kazakh Bactrian of the South Kazakhstan type obtained from female camels corresponding to the technological parameters of dairy productivity, exceeded their mates of the wool-meat direction of productivity in live weight by 17.8% (P<0.01), of the milk and meat direction - in (P <0.1)

After weaning, the intensity of growth and development is significantly reduced, which affected the increase in absolute live weight from 6 months to 9 months of age. After weaning, the colts from female camels of dairy productivity, the live weight increased by 11.9%, of the wool and meat productivity - by 34.0%, of the milk and meat direction of productivity - by 23.3%. That is, early weaning is not beneficial for colts from camels of the dairy direction of productivity. From one year to 15 months of age, young livestock from dairy camels have increased live weight by 17.1%, from wool and meat camels - by 19.1%, from milk and meat camels - by 16.6%.

From the age of 9 months to 15 months, the colts increased their live weight obtained from mothers with the coefficient of wool clip up to 0.8 by 58.7%, with the coefficient of 0.9-1.4 - by 55.3%, with the coefficient of 1.5 and above - by 91.1 % The height between the humps increases by 15.7%-11.4% -11.7% respectively. That is, all female camels are of wool-meat productivity directions. The effectiveness of conducting assessment and selection by the coefficient of wool clip has been proved in the conditions of Bayserke-Agro LLP.

Key words: Kazakh Bactrian, assessment, selection, technological parameters, colts, early ripeness.

The relevance of the topic. Camel breeding in the Republic of Kazakhstan is developing dynamically. There is an interest in agricultural enterprises of various forms of property to develop a productive direction of camel breeding.

A deterrent to the development of camel breeding in the Almaty region is the small number of females and producers. The rotation system of sampler-producers is violated, as a result of this the frequency of using moderate and even related mating of camels of reproductive age increases.

Many elaborations of local scholars regarding the use of approved methods for selection and breeding using commercial livestock are not effective.

One of the urgent problems in camel breeding is the long fructification period of the Kazakh Bactrian camels and low fertility up to 42%. Despite the available breeding achievements in Kazakh Bactrians, the effective methods for assessing dairy, meat and wool productivity have not yet been developed [1].
Reasonable methods of reproduction of the breeding stock of camels have not been worked out, taking into account the technological parameters of productivity.

In connection with the above, the choice of the research direction to improve breeding efficiencies and increase productivity through targeted selection and breeding of purebred camels of the Kazakh Bactrian in the conditions of the Bayserke-Agro Educational Scientific and Production Center is correct.

Therefore, the development of effective criteria for evaluating camels by productivity based on a study of the regularities of growth and development of camels is relevant.

**The aim of the research.** To develop processing technologies for increasing the productive capacity of camels and improving the breeding efficiencies of the purebred animals.

**Scientific novelty.** For the first time, the influence of technological parameters of productivity of the Kazakh Bactrian camels on their productivity and early ripeness was established in the post-dairy period. For the first time, the regularities of postembryonic growth and development of young camels in the Almaty region were found.

**The practical value of the research.** Criteria for reliable assessment and selection of camels of the Kazakh Bactrian breed by the productivity direction have been developed. Using various options for the selection of parental pairs made it possible to obtain offspring with the given productive and technological parameters. Scientific provisions, conclusions, and recommendations have been widely used in the selection of camels of the Kazakh Bactrian breed of the South Kazakhstan type under the conditions of Bayserke-Agro LLP.

**Research methods.** The object of the study was purebred Kazakh Bactrians of the South-Kazakhstan type.

Body measurements were studied according to the Instructions on the bonitation of camels 2014 [2]. The height between the humps was measured with an accuracy of 1.0 cm. The oblique body length and chest girth were measured with an accuracy of 1.0 cm, and the metacarpus girth was measured with up to 0.5 cm.

The live weight of camels was determined by individual weighing of animals on a stationary scale, as well as by calculation method at the request of Patent No. 15886 [3].

Morphofunctional features of the udder of camels were studied by the method by A. Baimukanov of 1972 [4]. The fat content in milk was determined using Milkotester device (2017). Total protein in milk was defined using AM-2 milk analyzer (2017).

The regularities of growth and development of the Kazakh Bactrian of the South Kazakhstan type born in 2019 was studied according to the common method [5]. We studied live weight and height at the withers in the postembryonic period.

The technological parameters for the selection of camels by dairy productivity were determined by the degree of full value of lactation and its impact on milk yield and fat content. Gradation of camels by the degree of full value of lactation was carried out in three ranks: up to 65 - 74; 75-84; 85 and more. The degree of full value of lactation in camels was determined according to the recommendation of professor A. Baimukanov by the formula [6].

\[
СПЛ = \frac{УФ}{УС} \times 100
\]

where СПЛ – degree of full value of lactation; УФ – real milk yield for the entire lactation period; УС – average daily milk yield in the third month of lactation; n – the number of days of lactation.

The milking capacity coefficient was determined by the requirement of the Patent of the Republic of Kazakhstan No. 22213 through the ratio of the real milk yield for the active period of lactation to live weight [7].

\[
КМ = \frac{УМ}{ЖМ}
\]

where КМ – the milking capacity coefficient; УМ – the milk yield per lactation; ЖМ – live weight.

Gradation by milking capacity coefficient was carried out in three ranks: up to 1.4; 1.5-1.9; 2.0 and more.

The influence of the fertility index on the real milk yield in experimental camels of the Kazakh Bactrian of the South Kazakhstan type was carried out according to the common method. The fertility index was determined by the formula proposed by professor A. Baimukanov [8].
\[ \Pi = 365 \times (n-1) \times 100/N, \]

where \( \Pi \) – the fertility index; \( n \) – number of coltings; \( N \) – the number of days between the first and last coltings.

The gradation by the fertility index was conducted in three ranks: up to 42; 42 - 47; 47 and more.

The influence of the gradation of the coefficient of wool clip (CWC) on the intensity of achieving the best finish and live weight was carried out in young males born in 2017 while the coefficient of wool clip is calculated by the formula \([9]\): 

\[ KH_{W} = \frac{HI_{W}}{\mathbb{K}M} \times 100 \]

where \( KH_{W} \) – coefficient of wool clip; \( HI_{W} \) – the amount of wool clip; \( \mathbb{K}M \) – live weight.

The gradation by the coefficient of wool clip was carried out in three ranks: up to 0.8; 0.9-1.4; 1.5 and above.

Biometric processing of digital materials was carried out according to the common method \([10]\).

**Research results.** Based on the studies, it was found that for parental couples with a coefficient of wool clip up to 0.8 at the age of one year, the amount of wool clip was 2.4 kg, which is significantly lower by 12.5\% compared to herdmates from parents with a coefficient of wool clip of 0.9-1.4, and 29.2\% lower in comparison with young one-year-olds obtained from parental couples with a coefficient of wool clip of 1.5 and above (table 1).

| Traits                                      | Parental coefficient of wool clip |
|---------------------------------------------|-----------------------------------|
|                                             | up to 0.8 | 0.9 - 1.4 | 1.5 and more |
| The number of estimated daughters, animals  | 5         | 5         | 6           |
| Live weight at birth, kg                    | 29.3±1.7  | 37.7±1.1  | 35.5±1.6    |
| Live weight at weaning, kg                  | 245.8±9.8 | 269.2±14.5| 239.1±19.1  |
| Wool clip at one-year-old age, kg           | 2.4±0.3   | 2.7±0.3   | 3.1±0.2     |
| Predicted wool clip at the age of two years, kg | 2.9     | 3.3       | 4.2         |
| Real wool clip at the age of two years, kg  | 2.8±0.2   | 3.6±0.4   | 3.7±0.4     |
| The yield of pure fiber at the age of one year, % | 95.2  | 95.5      | 95.5        |
| The yield of pure fiber at the age of two years, % | 96.5  | 96.6      | 96.5        |

It was established that the real wool clip was lower in two-year-old females obtained from parents with the coefficient of wool clip of up to 0.8 and 1.5 and more. In two-year-old females, the real wool clip obtained from parental couples with the coefficient of wool clip of 0.9-1.4 was 9.1\% higher than the predicted.

With that in mind, we believe that the coefficient of wool clip is a reliable criterion for assessing camels of the Kazakh Bactrian breed in terms of shearing. In the future, during the selection, it is advisable to give preference to individuals with the coefficient of wool clip of 0.9-1.4.

Concerning the study of the yield of pure fiber, it was established that the produced wool is characterized by high technological qualities due to targeted selection with camels of the Kazakh Bactrian breed. At the same time, the pure fiber yield of 95.2-96.6\% indicates the presence of inbreeding in the selection and breeding of parental couples. Therefore, to avoid mortality from the offspring in subsequent years, it is necessary to purchase sampler-producers from other regions of Kazakhstan.

In colts, as in calves, the early ripeness depends on the dairy productivity of their mothers. The regularities of milk formation as well as the formation of dairy productivity in cattle \([11]\) are to some extent identical to camels.

In Kazakh Bactrian colts of the South Kazakhstan type obtained from camels of the dairy productivity exceeded their mates of the wool-meat direction of productivity in live weight by 17.8\% (\(P<0.01\)), milk and meat in (\(P<0.1\)) (table 2).
Table 2 – Growth and development of colts in the post-dairy period, depending on the technological parameters of the breeding traits of their mothers (n=5)

| Technological parameters of productivity | Age     | Live weight, kg | Height between humps, cm |
|-----------------------------------------|---------|----------------|--------------------------|
| Dairy                                   | At birth| 40.3±1.9       | 109.7±2.1                |
|                                         | 3 months| 114.0±4.4      | 130.3±3.8                |
|                                         | 6 months| 169.9±6.3      | 145.1±3.3                |
|                                         | 9 months| 190.2±4.2      | 148.9±1.5                |
|                                         | 12 months| 232.7±5.7    | 155.4±1.1                |
|                                         | 15 months| 272.5±6.4     | 159.2±1.3                |
| Wool - meat                             | At birth| 34.2±1.5       | 104.0±2.4                |
|                                         | 3 months| 94.6±3.7       | 123.4±3.1                |
|                                         | 6 months| 144.5±5.1      | 137.2±3.5                |
|                                         | 9 months| 193.6±3.5      | 145.6±2.2                |
|                                         | 12 months| 240.1±4.7    | 151.1±2.7                |
|                                         | 15 months| 289.6±5.3     | 156.3±1.9                |
| Milk-meat                               | At birth| 36.8±1.9       | 107.1±1.8                |
|                                         | 3 months| 108.9±2.8      | 128.6±2.1                |
|                                         | 6 months| 156.2±6.1      | 141.9±2.5                |
|                                         | 9 months| 192.6±4.9      | 146.3±2.9                |
|                                         | 12 months| 242.4±5.2    | 152.8±2.7                |
|                                         | 15 months| 282.7±4.3     | 158.2±2.3                |

After weaning, the intensity of growth and development was significantly reduced, which affected the increase in absolute live weight from 6 months to 9 months of age. After weaning, the colts from female camels of dairy productivity, the live weight increased by 11.9%, of the wool and meat productivity - by 34.0%, of the milk and meat direction of productivity - by 23.3%. That is, early weaning is not beneficial for colts from camels of the dairy direction of productivity.

In young Kazakh Bactrians obtained from females of dairy productivity, the increase in live weight for the next 90 days (from 9 months to 12 months) was 42.5 kg, from the group of camels of wool-meat productivity direction - 46.5 kg and obtained from milk-meat female camels - 49.8 kg.

From one year to 15 months of age, young livestock from dairy camels have increased live weight by 17.1%, from wool and meat camels - by 19.1%, from milk and meat camels - by 16.6%.

From 2018 to 2020, the influence of the technological parameters of female camels on the growth and development of colts after weaning was studied. Weaning was performed at the age of 9 months (table 3).

When studying female camels of the main herd with technological parameters according to the degree of full value of lactation (DFL), it was found that with a degree of full value lactation of 75-84%, the height at the withers (8.8 cm) is intensively increased in colts from 9 months of age to one year old, in comparison with mates received from females with DFL of 65-74% (5.7 cm) and 85% and above (8.5 cm). Likewise, the live weight of colts from females is increasing intensively: with DFL of 75-84% (37.6 kg), with DFL of 65-74% (39.4 kg), and with DFL of 85% and above (41.1 kg) (table 3).

In the next three months, the colts have an increase in live weight: in those from female camels with DFL of 65-74% - 37.4 kg or 16.2%, with DFL of 75-84% - 16.2 kg or 6.8%, with DFL of 85% and above - 24.2 kg or 10.3%.

It has been found that in female camels with the milking capacity (MC) of up to 1.4; 5-1.9 and 2.0 and higher in the post-embryonic period, the live weight increases in camels from 9 months of age to one-year-old by 32.9% -19.9% -21.8%. From 12 months to 15 months of age by 14.1% -15.5% -12.45%. That is, in the first three months, the colts from female camels with MC of up to 1.4 grow intensively, in the next three months - the colts from camels with MC of 1.5-1.9.
Table 3 – The influence of the technological parameters of mothers on the growth and development of young stock in the post-dairy period

| Traits            | Age     | Technological parameters | Traits Age | The degree of full value of lactation, % |
|-------------------|---------|---------------------------|------------|------------------------------------------|
|                   |         |                           |            | 65-74 | 75-84 | 85 and higher |
| Live weight, kg   | 9 months| 192.1±3.7                 | 202.3±7.4  | 193.6±5.8 |
|                   | 12 months| 231.5±4.2                | 239.9±5.7  | 234.9±8.1 |
|                   | 15 months| 268.9±9.4                | 256.1±6.1  | 259.1±7.5 |
| Height between humps, cm | 9 months | 142.4±1.1               | 137.5±0.9  | 139.3±1.2 |
|                   | 12 months| 148.1±0.9                | 146.3±1.2  | 147.8±1.4 |
|                   | 15 months| 155.8±1.5                | 154.6±1.1  | 155.2±1.3 |
| Milking capacity  | up to 1.4 |                        | 1.5-1.9    | 2.0 and higher |
|                   | 9 months | 177.9±8.2                | 196.9±4.2  | 190.3±6.4 |
|                   | 12 months| 236.4±5.7                | 236.2±6.4  | 231.9±8.2 |
|                   | 15 months| 269.9±8.2                | 272.9±4.2  | 260.8±6.4 |
| Height between humps, cm | 9 months | 139.2±1.3               | 145.1±1.1  | 141.4±1.1 |
|                   | 12 months| 145.7±1.1                | 151.5±1.4  | 150.3±1.2 |
|                   | 15 months| 152.3±1.2                | 158.2±1.3  | 154.5±1.6 |
| Fertility index   | up to 42 |                        | 42-47      | 47 and higher |
|                   | 9 months | 181.6±6.2                | 191.5±3.7  | 172.1±8.5 |
|                   | 12 months| 237.1±8.7                | 246.5±5.4  | 235.6±6.8 |
|                   | 15 months| 271.6±5.9                | 281.3±4.3  | 275.4±9.2 |
| Height between humps, cm | 9 months | 140.9±1.7               | 141.4±1.5  | 141.1±1.6 |
|                   | 12 months| 143.4±1.5                | 148.1±1.8  | 146.8±1.4 |
|                   | 15 months| 164.3±1.9                | 156.4±1.6  | 151.7±1.3 |
| Coefficient of wool clip | up to 0.8 |                    | 0.9 -1.4   | 1.5 and higher |
|                   | 9 months | 168.9±7.1                | 187.6±4.9  | 190.1±8.3 |
|                   | 12 months| 221.3±5.8                | 245.1±6.2  | 233.7±6.8 |
|                   | 15 months| 268.1±6.3                | 291.5±5.8  | 281.2±7.1 |
| Height between humps, cm | 9 months | 131.3±1.7               | 139.5±1.3  | 147.1±1.5 |
|                   | 12 months| 141.1±1.4                | 146.1±1.8  | 152.8±1.1 |
|                   | 15 months| 151.9±1.3                | 155.4±1.6  | 164.3±1.3 |

The colts in the post-dairy period obtained from females with the fertility index of up to 42% develop more intensively, compared with mates received from camels with the fertility index of 42-47%, 47% and higher. From the age of 9 months to 15 months, the height at the withers increases by 16.6% - 10.6% - 7.5%. In terms of live weight, young camels from mothers with the fertility index of 47% and above 60.0% intensively grow, compared with the mates of 49.6% and 46.9%.

From the age of 9 months to 15 months, the colts increased their live weight obtained from mothers with the coefficient of wool clip up to 0.8 by 58.7%, with the coefficient of 0.9-1.4 - by 55.3%, with the coefficient of 1.5 and above - by 91.1 %. The height between the humps increases by 15.7% - 11.4% - 11.7% respectively. That is, all female camels are of wool-meat productivity directions. The effectiveness of conducting assessment and selection by the coefficient of wool clip has been proved in the conditions of Bayserke-Agro LLP.
Conclusions. To increase the early ripeness of the Kazakh Bactrian colts, it is needed to increase the selection of the breeding stock with the degree of full value of lactation of 75-84%, with the dairy productivity rank of 1.5-1.9, with the fertility index of 42-47% and the coefficient of wool clip of 0.9-1.4.

The studies have been carried out under the program of the Ministry of Agriculture of the Republic of Kazakhstan for 2018 - 2020. IRN: BR06249249 Development of the integrated system for increasing productivity and improving breeding qualities of farm animals by the example of Bayserke-Agro LLP.
Шоктық биіктігінің ұлғаоы бойынша бақылаудың боталдары 9 әйдән бір жақса дейін 6,5 см-6,4 см-7,9 см, 12 әйдән 15 айға дейін 6,6 см-6,7 см-4,2 см. 9 әйдән 15 айға дейін қарсык шоктық биіктігіне ұлғаоы 13,3 см-13,1 см-13,1 см. Алынған негізгі қос орқешінің түсінілігінің құрама 42 – 47 % әндірілік әндірілік құрама 49,6% және 46,9%. 

Негізгі ұйымдаш әндірілік әндірілік өндірілік нәтижелер Казак кос еркештә төменгінің инбридинг қашықтығына сәйкес. Оңіріліқ әндірілік 42 % әндірілік өндірілік нәтижелер Казак кос нәтижелерінен кейін 42 - 47 % әндірілік әндірілік нәтижелер Казак кос нәтижелерінен кейін 42 - 47 % әндірілік әндірілік нәтижелер Казак кос нәтижелерінен кейін 42 - 47 % әндірілік әндірілік нәтижелер Казак кос нәтижелерінен кейін 42 - 47 %. 

9 әйдән 15 айға дейін шаңырақ 0,8 коэффиціентінен өсірілді әндірілік өндірілік нәтижелер Казак кос кезделді. 0,9-1,4 - 55,3%, 1,5 және әңгірілік 91,1%. Орқешер арасындағы біріккен 15,7%-11,4%-11,7% ұлғаоы. Корытындығы, бірлік әңгірілік өндірілік 95,2-96,6% және 60,0 % әндірілік құрама 46,9%. 

Түйін сөзлер: казак бактерианы, өндірілік, өндірілік, технологиялық параметрлер, боталар, жетуші.

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ЗАКОНОМЕРНОСТИ РАЗВИТИЯ ВЕРБЛЮЖАТ ПОРОДЫ КАЗАХСКИЙ БАКТРИАН

Аннотация. Разработка критериев отбора по результатам оценки верблюдов породы казахский бактриан по коэффициенту настрига шерсти является актуальным направлением исследований, так как позволяет достоверно прогнозировать настриг шерсти у полученного потомства. На основании проведенных исследований установлено, что у родительских пар с коэффициентом настрига шерсти до 0,8 в верблюжатах в годовалом возрасте имели настриг шерсти 2,4 кг, что достоверно ниже на 12,5% в сравнении со сверстницами, полученными от родителей с коэффициентом настрига шерсти 0,9-1,4, и на 29,2% ниже в сравнении с молодняком годовалого возраста, полученными от родительских пар с коэффициентом настрига шерсти 1,5 и выше.

Установлено, что фактический настриг шерсти оказался ниже у двухлетних самок, полученные от родителей с коэффициентом настрига шерсти до 0,8 и 1,5 и выше. У двухлетних самок, полученных от родительских пар с коэффициентом настрига шерсти 0,9-1,4, фактический настриг шерсти оказался на 9,1% выше прогнозируемого. Исходя из этого, считаем, что коэффициент настрига шерсти является достоверным критерием оценки верблюдов породы казахский бактриан по показателям настрига шерсти. В дальнейшем при отборе отдавать предпочтение особям с коэффициентом настрига шерсти 0,9-1,4.

Касательно изучения выхода чистого волокна установлено, что продуцируемая шерсть характеризуется высокими технологическими качествами, обусловленными целенаправленной селекцией с верблюдами породы казахский бактриан. В то же время, показатель выхода чистого волокна 95,2-96,6% свидетельствует о наличии инбридинга при отборе и подборе родительских пар. Поэтому во избежание падежа у приплода в последующие годы необходимо провести закуп бура-производителей из других регионов Казахстана.

У верблюжат казахского бактриана южно-казахстанского типа, полученных от верблюдоматок, соответствующие технологическим параметрам продуктивности - молочное превосходили сверстници шерстно-мясного направления продуктивности по живой массе на 17,8% (Р<0,01), молочно-мясного на (Р<0,1).

После отъема интенсивность роста и развития значительно снижается, что повлияло на увеличение абсолютной живой массы с 6 месячного возраста до 9 месячного. После отъема у верблюжат от верблюдоматок молочной продуктивности живая масса увеличилась на 11,9%, шерстно-мясной – 34,0%, молочно-мясного – 23,3%. То есть, ранний отъем не выгоден для верблюжат от верблюдоматок молочного направления продуктивности.

У молодняка казахского бактриана, полученных от верблюдоматок молочной продуктивности, за последующие 90 дней ( с 9 мес. до 12 мес.) увеличение живой массы составило 42,5 кг, от группы верблюдоматок шерстно-мясного направления продуктивности – 46,5 кг и верблюдоматок молочно-мясного направления – 49,8 кг.

От годовалого возраста до 15 месячного возраста у молодняка от верблюдоматок молочной продуктивности живая масса увеличилась на 17,1%, шерстно-мясного – на 19,1%, молочно-мясного – 16,6%.
С 2018 г по 2020 г. изучали влияние технологических параметров верблюдоматок на интенсивность роста и развития верблюжат после отъема. Отъем производили в 9 мес. возрасте.

При изучении верблюдоматок основного стада с технологическими параметрами по степени полноценности лактации (СПЛ) установлено, что при степени полноценности лактации 75-84% у верблюжат с 9 месячного возраста до годовалого возраста интенсивно растет высота в холке (8,8 см), в сравнении со сверстницами, полученными от верблюдоматок со СПЛ 65-74% (5,7 см) и 85% и выше (8,5 см). Аналогично интенсивно увеличивается и живая масса у верблюжат от верблюдоматок со СПЛ 75-84% (37,6 кг), 65-74% (39,4 кг), 85% и выше (41,1 кг).

В последние три месяца у верблюжат увеличение живой массы составило от верблюдоматок со СПЛ 65-74% - 37,4 кг или 16,2%, 75-84% - 39,4 кг, 85% и выше - 41,1 кг. Аналогично интенсивно увеличивается и живая масса у верблюжат от верблюдоматок со СПЛ 75-84% (37,6 кг), 65-74% (39,4 кг), 85% и выше (41,1 кг). В последующие три месяца у верблюжат увеличение живой массы составило от верблюдоматок с коэффициентом молочности (КМ) до 1,4; 1,5-1,9 и 2,0 и выше в постэмбриональный период живая масса увеличивается у верблюжат с 9 месячного возраста до годовалого на 32,9%-19,9%-21,8%, с 12 месячного до 15 месячного возраста на 14,1%-15,3%-12,4%. То есть, в первые три месяца интенсивно растут верблюжат от верблюдоматок с КМ до 1,4, в последующие три месяца - верблюжат от верблюдоматок с КМ 1,5-1,9.

Установлено, что у верблюдоматок с коэффициентом плодовитости (КП) до 42% развивались более интенсивно, в сравнении со сверстницами, полученными от верблюдоматок с коэффициентом плодовитости 42-47%, 47 и выше. С 9 месячного возраста до 15 месячного возрастов высота в холке увеличивается на 16,6%-10,6%-7,5%, по живой массе интенсивно растут верблюжат от матерей с коэффициентом плодовитости 47% и выше 60,0%, в сравнении со сверстницами 49,6% и 46,9%.

По высоте в холке увеличение составило у подопытных верблюжат от 9 месячного возраста до годовалого 6,5 см-6,4 см-7,9 см, от 12 месячного возраста – до 15 месячного возраста 6,6 см-6,7 см-4,2 см. С 9 месячного возраста до 15 месячного увеличение высоты в холке составило 13,3 см-13,1 см-13,1 см. Полученные данные подтверждают наше опасение о инбридинге при разведении верблюдов казахского бактриана.

Верблюжата в постмолочный период, полученные от верблюдоматок, с индексом плодовитости до 42% развивались более интенсивно, в сравнении со сверстницами, полученными от верблюдоматок с индексом плодовитости 42-47%, 47 и выше. С 9 месячного возраста до 15 месячного возраста высота в холке увеличивается на 16,6%-10,6%-7,5%. По живой массе интенсивно растут верблюжата от матерей с индексом плодовитости 47% и выше 60,0%, в сравнении со сверстницами 49,6% и 46,9%.

То есть, не выявлена эффективность отбора по индексу плодовитости верблюдоматок основного стада. Подтверждается наше положение о необходимости закупа производителей.

Увеличили живую массу верблюжата с 9 месячного возраста до 15 месячного возраста, полученные от матерей с коэффициентом настрига шерсти до 0,8 на 58,7%, 0,9-1,4 на 55,3%, 1,5 и выше 91,1%. Высота между горбами увеличивается на 15,7%-11,4%-11,7%. То есть, все верблюдоматки являются шерстно-мясного направления продуктивности. Доказана эффективность ведения оценки и отбора по коэффициенту настрига шерсти в условиях ТОО «Байсерке-Агро».

Ключевые слова: казахский бактриан, оценка, отбор, технологические параметры, верблюжата, скороспелость.

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