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The Dairy Productivity Of Camels Depends On Their Species

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Abstract: This article provides information on the milk yield of camels depending on their species, as well as the chemical composition of the milk produced during lactation.
Key words: Dromedary camels, Bactrian camels, milk yield, camel age, camel constitution, complementary feeding, diet, season, lactation.

Introduction. In the Republic of Karakalpakstan, the development of livestock production, the production of dairy products based on the technology of obtaining high products from livestock and their processing, that is, the production of quality products, are among the main issues.

Camel breeding is one of the main directions of animal husbandry in the Republic of Karakalpakstan, which is of great importance in the development of desert pastures and meeting the demand of the local population for food products (meat, milk), industrial raw materials (wool, leather).

The ability of camels to adapt to harsh continental climates, to satisfy their needs even more than low-level productive pastures, to cross the island in sandy deserts, and to live a long life gave them the ability to maintain productivity. Thus, camels are considered to be the most important stock of animal breeding in these regions. It is possible to increase camel products by selection and mating methods. It provides the possibility of low-cost product production in advanced technologies for feeding and storage

Purpose of the experiment. It is intended to study the milk yield of camels depending on their type, the milk yield during the duration of lactation, and the chemical composition of camel milk in the conditions of a farm specializing in camel breeding.

Experimental methodology. One-humped and two-humped camels are divided into groups according to live weight, age (6-12 years), exterior and constitution, signs of similarity. Based on these characteristics, 2 groups were selected for research. In each group, 10 one-humped and two-humped camels are introduced with bushes. Milk productivity and chemical composition of milk during their lactation are studied.

The main part. The milk yield of camels depends on their type. Dromedaries are inferior to cattle in terms of milk production. The milk yield of Bactrians is somewhat lower than that of dromedaries, the first generation hybrids occupy an intermediate position between nar-maya dromedaries and Bactrians, hybrids are close to Bactrians.The maximum milk yield of camels corresponds to the first 6 months of the lactation period, which corresponds to the feeding period on spring, summer and autumn pastures. In late autumn and winter, with the onset of cold weather and the reduction of pastures, the milk yield of camels decreases. Due to the appearance of ephemeral plants in the spring, milk yield increases slightly, and then decreases again.

The milk yield of camels depends on the conditions of care and feeding. The correct combination of care in pastures and barns allows to dramatically increase the productivity of camels. Milk yield of camels, like large animals, depends on age and increases after each lactation. The lactation period is different in all breeds of camels, it is 500-560 days for dromedaries, and 517-539 days for Bactrians.

The physiology of lactation in camels has been little studied. The duration of the latent period of the milk ejection reflex is 30-90 seconds. In the first birth it will be longer. Milking speed is about 15-25 ml per second. Milking camels lasts 3-5 minutes. Early milking is the highest (30-40% milk yield), and evening milking is the lowest (20-25% milk yield).

One-humped camels produce an average of 2000-2500 liters of milk per year, and two-humped camels produce 1000-1200 liters of milk. The average milk yield is 4-6 liters per day. Wool productivity is 3-4 kg. They are milked 5-6 times a day in pasture conditions. Currently, this breed is widespread in the Kyzylkum zones of the Republic of Karakalpakstan, in the Ustyurt regions and in the Navoi region. Camels live 22-25 years according to their biological characteristics. Sexual maturity is considered from the age of 5 years. Maximum productivity can be achieved between 10-15 years. The average gestation period is 395 days.

Camels produce more milk than Asian domestic cattle. Previously, they were not used for camel milk purposes, but were used only in the operation of camel farms. However, dairy camel farms in the republics of Kazakhstan and Turkmenistan have now been improved.

Milk and dairy products account for 80-90% of the production needed to balance the growth of nomadic agriculture and are considered the main food product of the population. All animals are milked here: cows, mares, sheep, goats and camels, and camel milk is of great importance in camel breeding regions. Milking of all types of animals is carried out simultaneously with milking of young animals. Breastfeeding of young animals continues in modern camels.

Our experimental work revealed that dromedaries produce more milk than Bactrians, and Bactrians have more milk fat than dromedaries.

Table 1

Milk yield of 12-month lactating camels

№	Types of camels	n	Average amount of milk (in liters)	Change in milk yield (in liters)
1	Dromedary	10	2190	1400-3000
2	Bactrian	10	1095	700-1300

Analyzing the milk productivity of camels in the table, dromedaries gave 2190 liters of milk, Bactrians gave 1095 liters of milk over 12 months of lactation. In this regard, Bactrians are inferior to dromedaries in milk production.

The milk production of camels depends on their feeding and care. Proper organization of feeding on pastures and good feeding during tether feeding directly affects the productivity of camels and causes its increase. Camel milk contains a lot of fat, protein and sugar.

Table 2

Chemical composition of camel milk (%)

№	Types of camels	Fat	Protein	Sugar	Ash	Dry matter
1	Dromedary	4,45	3,50	4,20	0,70	13,41
2	Bactrian	5,60	3,72	5,13	0,71	14,89

According to the data presented in this table, the fat content of Bactrian milk is 5,60%, protein 3,72%, sugar 5,13%, ash 0,71%. in dromedaries, fat was 4,45%, protein – 3,50%, sugar – 4,20%, and ash – 0,70%.

Thanks to the amount of dry matter (fat, protein, sugar and minerals) Bactrians were able to show their strength.

Summary. Despite the fact that the climate of our republic and the northern Kyzylqum region, where our farm is located, is continental, the weather, land conditions, relief, desert region, as well as the flora of pasture plants in the northern Kyzylqum region are considered suitable for camel breeding.

The milk yield of camels depends on their type and breed. Dromedaries and Bactrians have different milk production. Dromedaries milked 2190 liters of milk on average in one lactation, while Bactrian camels milked 1095 liters of milk.

The chemical composition of milk from camels of different groups is different.

The amount of fat in milk is high in Bactrians 5,60%, protein 3,72%, sugar 5,13%, ash 0,71%, in dromedaries fat 4,45%, protein 3,50%, sugar 4,20%, and the amount of ash was 0,70%. In general, Bactrians had a high dry matter content.

List Of Used Literature.

1. Abdikalikova B.K. Optimization of feeding of Bactrian camels in the Northern zone of Kazakhstan. M., 2000. 156 p.
2. 2. Abuov S., Eshmuratova S. Camel farming is a profitable industry // Problems of agricultural development in the environmental conditions of the island: Materials of the Republican Scientific and Practical Conference. - Nukus, 2005. 3. Baymukanov A. et al. Selection of Kazakh Bactrian camels for meat-dairy and meat-wool productivity. // Current state and prospects for the development of zootechnical science and animal husbandry practice. Chimkent, 2007. – 194-197 p.
3. Eshmuratova S.T. (2010) Cultivation and processing of camel milk under different technological preservation conditions. Abstract - Tashkent 2010. p. 8-20.
4. Eshmuratova S. Ustyurt camel breeding // Problems of the development of desert-pasture animal husbandry: Proceedings of the international scientific and practical conference.-Samarkand: UzQChEITI, 2005.-B. 61.
5. Turganbaev R., Tleumuratov A. Camel pastures of Karakalpakstan and prospects for milk production. It was printed at the publishing house of "Miraziz Nukus" JSC. License #11-3059 of the Press and News Agency of the Republic of Uzbekistan. 2018 Vol.
6. Turganbaev R., Tleumuratov A. **Dairy productivity of single-humped camels in the republic of Karakalpakstan** Academica An International Multidisciplinary Research Journal ISSN: 2249-7137 Vol. 11, Issue 1, January 2021 Impact Factor: SJIF 2021 = 7.492 87-95 бет.

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7. Turganbaev R., Tleumuratov A. Dependence of milk yield of camels on age and constitution. Journal of technical science and innovation, 2020, No. 1, Vol. 1, pp. 15-18.