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Title: **DAIRY PRODUCTIVITY OF SIMMENTAL BREED COWS IMPORTED FROM AUSTRIA AND GERMANY IN KARAKALPAKSTAN**

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DAIRY PRODUCTIVITY OF SIMMENTAL BREED COWS IMPORTED FROM AUSTRIA AND GERMANY IN KARAKALPAKSTAN

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Abstract. The article provides information on dairy productivity of Simmental breed cows imported from Austria and Germany in a day and at the period of lactation, fat and protein indicators of milk.

Keywords. Austrian Simmental breed, German Simmental breed, daily milk, lactation, dairy productivity, fat, protein indicators.

Introduction. In recent years, there has been a growing emphasis on the development of cattle productivity.

At the present time, changing into the use of industrial technology in the dairy industry is fastening and in the first place the demand for high-productive cattle, which are adapted to such technologies, is growing.

Breeds with such productive properties show high milk productiveness, adaptability to modern industrial storage and feeding technologies in all territories.

In our situation, it is of practical importance to increase the number of productive livestock on farms, increase the productivity of dairy cattle, make full use of their genetic potential.

The actuality of the theme. In the sharp continental climate of the Republic of Karakalpakstan, the demand for meat and dairy products is very high, so increasing the number of livestock, dramatically increasing the production of animal husbandry products, increasing the supply of dairy products, improving the breeding quality of livestock, widely using achievements of breeding and selection, and the necessity of using new ways are the actual problems of today.

Also, in order to increase the productivity of cattle, first of all, with special emphasis on the improvement of their breed, it is important to study and introduce foreign experience in the country, especially in the

regions, create modern farms and import high productive cattle, which are adaptable to climate conditions of our republic, from foreign countries.

The main part of the demand for milk and meat in our country is cattle breeding. At the expense of this point the needs of the people are satisfied. In the period of transition to a market economy, in using and improving the production of livestock products it is expedient to use the most popular breeds of the Republic: Kara-Ala, Golishtino-Friesian, Red Desert, Red Estonian and Simmental and it is important to breed them, improve productivity of their breeding, use their genetic potential effectively.

In 2006-2020, pedigree cattle was brought to our country from the Netherlands, Switzerland, France, Hungary, Germany, Austria, Belarus, China, Slovakia, the Czech Republic, Ukraine, Poland, Estonia and produced many kinds of goods from them and the breeding is developing.

After studying the feeding, care, storage and behavior of pedigree cattle, which was brought from another ecological climate, they can be adapted to the conditions of the republic, receive demanded products, breed and use them effectively in improving productivity of local cattle.

Scientific-research work. Productivity of cattle in the conditions of the farm LLC "Panamilk" of Karaozek district of the Republic of Karakalpakstan, including dairy cows of

Simmental breed of dairy cattle imported from Austria and Germany.

Adaptation of imported Simmental breeds of cattle to local climatic conditions, methods of feeding and care, as well as milk productivity were studied.

The results obtained. In assessing the milk productivity of cows, it is important to determine the amount of fat produced during lactation per 100 kg of live weight. This shows that the cows are very active in fat production.

The fat content of milk is one of the most important indicators for assessing the milk yield of cows. The amount of protein in milk is an indicator of the quality of milk, which determines the biological value of milk.

In practice, the milk productivity of Simmental breed cows in this farm was studied and the following results were obtained. The daily milk productivity of the experimental cows is given in Table 1-2.

Table 1
Milk productivity of Simmental breed cows imported from Austria

№	nickname	Age, month	breed	Daily milk productivity, kg	Mother cow's productiveness indicators		
					Amount of milk in the highest lactation, kg	In the structure of milk, %	
						fat	protein
1	HILLI	12,08,2018	Simmental	18	7024	4,14	3,41
2	LETTI	15,07,2018	Simmental	18	7239	4,41	3,24
3	SIMONE	14,07,2018	Simmental	19	7653	4,09	3,19
4	GERSTE	25,08,2018	Simmental	20	8322	4,49	3,39
5	BIRGITT	10,09,2018	Simmental	21	9032	3,83	3,44
6	IROSA	03,08,2018	Simmental	15	6671	4,04	3,41
7	BEATE	13,08,2018	Simmental	19	7363	3,91	3,5
8	SONJA	10,10,2018	Simmental	20	7904	4,54	3,38
9	BIOMIN	21,09,2018	Simmental	22	9432	3,69	3,41
10	OLGA	14,07,2018	Simmental	20	7389	3,96	3,35

Table 2

Milk productivity of Simmental breed cows imported from Germany

№	nickname	Age, month	breed	Daily milk productivity, kg	Mother cow's productiveness indicators		
					Amount of milk in the highest lactation, kg	In the structure of milk, %	
						fat	protein
1	DELFI	01,05,2018	Simmental	24	9933	4,18	3,11
2	BIENE	14,09,2018	Simmental	22	8461	3,62	3,49
3	NELLY	13,10,2017	Simmental	19	7269	4,68	3,77
4	GOLDI	16,04,2018	Simmental	18	7175	3,98	3,57
5	MALTA	24,01,2018	Simmental	23	9765	4,74	3,57
6	PANAMA	22,04,2018	Simmental	22	9336	4,77	3,2
7	WOBBI	08,07,2018	Simmental	23	9498	3,93	3,23
8	OMEGA	16,08,2018	Simmental	20	9084	3,96	3,43
9	DIESL	17,06,2018	Simmental	18	6969	4,33	3,6
10	SAMA	15,01,2018	Simmental	21	9111	4,47	3,37

As can be seen from the data in the table, the milk productivity of mothers of Simmental breed cows imported from both Austria and Germany is characterized by a high level of milk productivity. Milk productivity of mothers of cows imported from Austria was 7803 kg in the highest lactation, the amount of fat was 4.11%, the amount of protein was 3.37%, while the milk productivity of cows imported from Germany was 8660 kg in the highest lactation, the amount of fat was 4.271%, the amount of protein was 3.43%.

The productivity of cows largely depends on their breed, feeding rate and both breeding and storage conditions. The cows, which were tied up under the same conditions, differed from each other in terms of productivity. This is due to the individual characteristics of the cows. The milk productivity of the first and second calving cows is lower than that of the middle-aged cows. Along with the development of the organism, the milk productivity of cows also increases. During this period, external

environmental conditions affect the development of both milk production and genetic potential.

The adaptation of imported Simmental breed cows to the new natural climatic conditions corresponds to their 1st lactation period.

Table 3
Milk productivity of imported Simmental breed cows

Simmental breed	1 st lactation		
	Milk productivity, kg	Amount of fat, %	Amount of protein, %
Cows imported from Austria	5856	3,9	3,15
Cows imported from Germany	6405	4,1	3,23

According to the data in the table, cows imported from Germany produced more milk than cows imported from Austria. German Simmental cows produced 549 kg (11%) more milk in the first lactation than Austrian Simmental cows. This can be explained by the fact that the imported cows in the groups are adapted to the new external environment.

In the compared groups, there was no significant difference in the amount of fat in the milk and in terms of protein. In group 1, the amount of fat was 3.9%; while the amount of protein was 3.15%, the amount of fat in group 2 was 4.1%; the protein indicator was 3.23%.

In the sharply continental (very hot in summer, very cold in winter) climate of the republic, cattle can have opportunities of productivity according to adaptability to this condition. This can be seen in imported pedigree cows.

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