



GUIDELINES FOR THE STUDY OF FEEDING CHARACTERISTICS OF COWS IN THE EXPERIMENT

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Annotation: The article provides information on the milk yield of Simmental cows in order to study the productivity indicators of cattle, among them, to carry out breeding work in the Simmental breed in the milk-meat direction and to produce high-quality milk products.

Key words: breed, Simmental, quality, selection, productivity, animal husbandry, climate, milk, meat, conditions, feeding.

Introduction: In the harsh continental climate of the Republic of Karakalpakstan, the demand for meat and dairy products is very high, therefore, it is necessary to increase the number of livestock, to increase the production of livestock products, to grow dairy products from them, to fundamentally improve the quality of livestock breeding, the need to widely use breeding achievements and use new methods is one of the current issues.

Also, in order to increase the productivity of cattle, first of all, it is significant paying special attention to improving their breed, studying foreign experiences and introducing them to our Republic, especially creating modern livestock complexes in the regions and bringing high-yielding cattle suitable for the climatic conditions of our Republic from foreign countries.

Cattle breeding is the main part of the demand for milk and meat in our country. At the expense of this industry, the demand of people is satisfied. In the period of transition to the market economy, it is appropriate and necessary to widely use black-and-white, Holstein, red-desert, red Estonian and Simmental breeds of cattle, which are planned in our Republic, to further increase and improve livestock products.



In the years 2006-2022, pedigree cattle were brought to our republic from countries such as Holland, Switzerland, France, Hungary, Germany, Austria, Belarus, China, Slovakia, Czech Republic, Ukraine, Poland, Estonia, many products were grown and offspring are being obtained from them.

After fully studying the feeding, rearing, storage and behavior of bred cattle brought from other ecological climatic conditions, it is possible to adapt them to the conditions of our republic, obtain products at the level of demand, breed them and use them effectively to improve the productivity of local cattle.

Material and methods. The experimental part of the research is to study the productivity indicators of cattle in the conditions of the farm of “Panaev Farms” LLC, Karaozek district of the Republic of Karakalpakstan in 2020-2022, and to study the milk yield of Simmental cows for the production of quality milk products.

Main part: the feeding factor, its level, full value, quality of feeds are leading in the development of the genetic potential of the productivity of agricultural animals, including cattle, in the improvement of their breeding, productivity, multigenerational characteristics, in the creation of high-yielding herds. This can be evidenced by the fact that all the created breeds of agricultural animals were created under the conditions of good quality nutrition.

Expected results. In the conditions of our republic, depending on the weather changes and the economic structure, concentrated silage, silage-alfalfa and silage-haylage fodder are used for dairy cows. It takes into account the preparation of live fodder and the re-mechanization of cows. Taking into account the number of animals on the farm, an industrial plan is drawn up to provide them with fodder throughout the year. The plan takes into account the annual consumption of fodder for one cattle, its product.

Table 1

The annual consumption of fodder for one cattle

Fodder	Concentrated silage fodder			Silage, tuber fodder		
Alfalfa grass	5,0	6,4	4,2	4,2	4,0	4,0
Yellow grass	2,0	-	2,0	-	2,0	2,0
Haylage	6,5	8,0	6,5	6,6	-	-



Silage	25,0	30,0	55,0	70,0	60,0	70,0
Tuber fodder	12,5	15,0	12,6	12,5	15,5	20,0
Concentrate	13,0	16,0	7,5	8,5	8,5	10,0
Green grass	60	69	72	77	72	77,0
Unit of fodder in the ration	35,3	41,7	35,3	42,0	35,2	42,0
Annual milk, kg	3000	4000	3000	4000	3000	4000

The concentrated type of cattle feeding can be used only if the milk of cows on farms exceeds 4-5 thousand kilograms. In these conditions, the amount of annual fodder: alfalfa and silage-20, silage-30, tuber fodder-5, green grass in the pasture-28, concentrate fodder-38 percent. If we increase the amount of concentrate in the feeding ration of a dairy cow, then the process of metabolism in the body and its fat production will decrease.

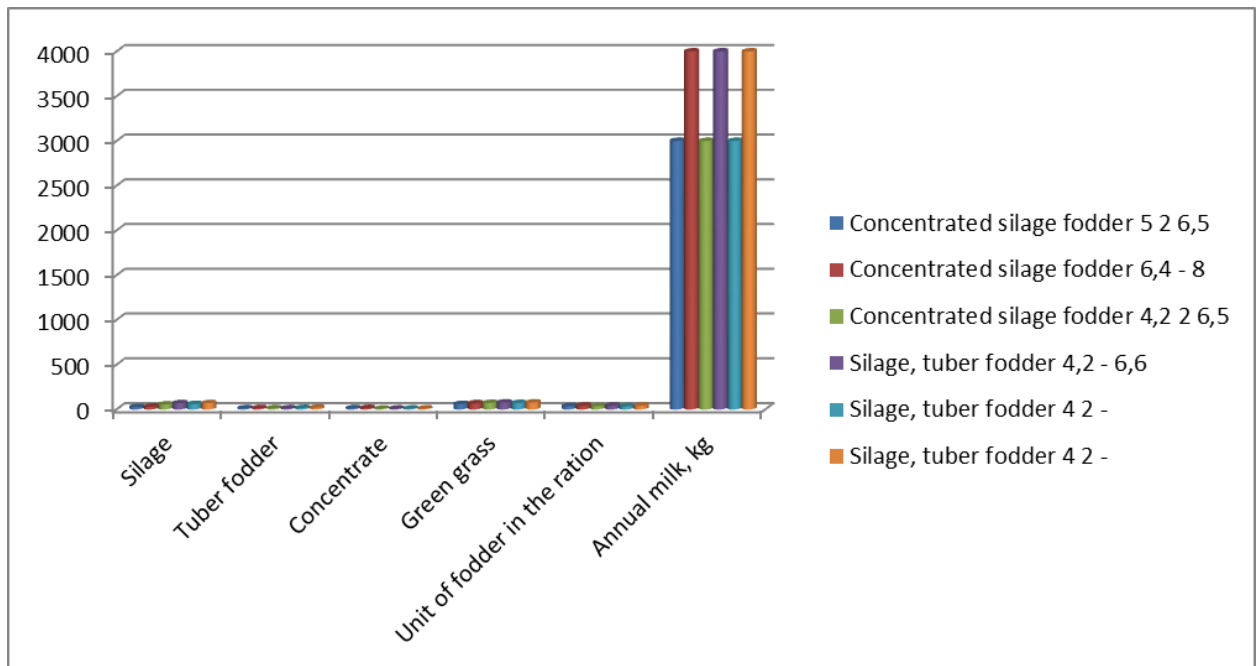


Diagram-1

Cows become fat and reduce their milk production. Balancing the feeding ration according to the main elements of fodder plays a decisive role in this.

The main type of feed includes industrial waste. Cattle take this feed with gusto. Especially if dairy cows eat such fodder, their milk yield will increase immediately. It is



recommended to give a cow 20 kg of beets every day in 10-15 kg bars. If we feed the remains of industrial fodder to the cattle, it increases the amount of phosphorus and calcium in the body. Therefore, it is very necessary for bone growth.

The silage type of feeding is used more for dairy cows. Silage accounts for 45-50% of the fodder given to cattle in winter. That is, on average, 30-35 kg of corn silage should be given to a cow every day. When feeding silage to cattle, the quality of its preparation and the appetite of the cattle are taken into account. It is made from perennial and grain leguminous annual crops, sunflower and corn. The cost of silage for the national economy is low, and more nutrients are obtained from the cultivated area.

Cattle feeding norm. Cattle feeding on a scientific basis is considered to fully meet the requirements for dry matter, absorbable protein, mineral matter and vitamins. For example, depending on the milk of a dairy cow, the amount of dry matter in the fodder ration is as follows.

Table 2

Daily milk, kg	Dry matter, kg	
	For a cow in a day	For 1 q weight
5	14,4	2,5
10	16,6	2,8
25	21,6	3,6
a weaned cow	8,10	2,0

The energy value of dry matter in the forage ration should be equal to 0.7-0.8 nutritional units per kilogram. 1-1.1 feed units are used for each kg of milk collected from cows that give 20-25 liters of milk every day. So, with the increase of milk, the nutritional unit of fodder in the ration given to the cow also increases.

If the amount of sugary protein in the diet is insufficient, the metabolism of the cow's body will be disturbed, and the milk will decrease. Therefore, it is better to increase the sugar-protein balance by 1:1. 45-50 mg of carotene is used for one nutritional unit of the diet. 4-5 g of calcium, 4-6 g of phosphorus and 2-5 g of table salt are absorbed per 1 kg of weight.



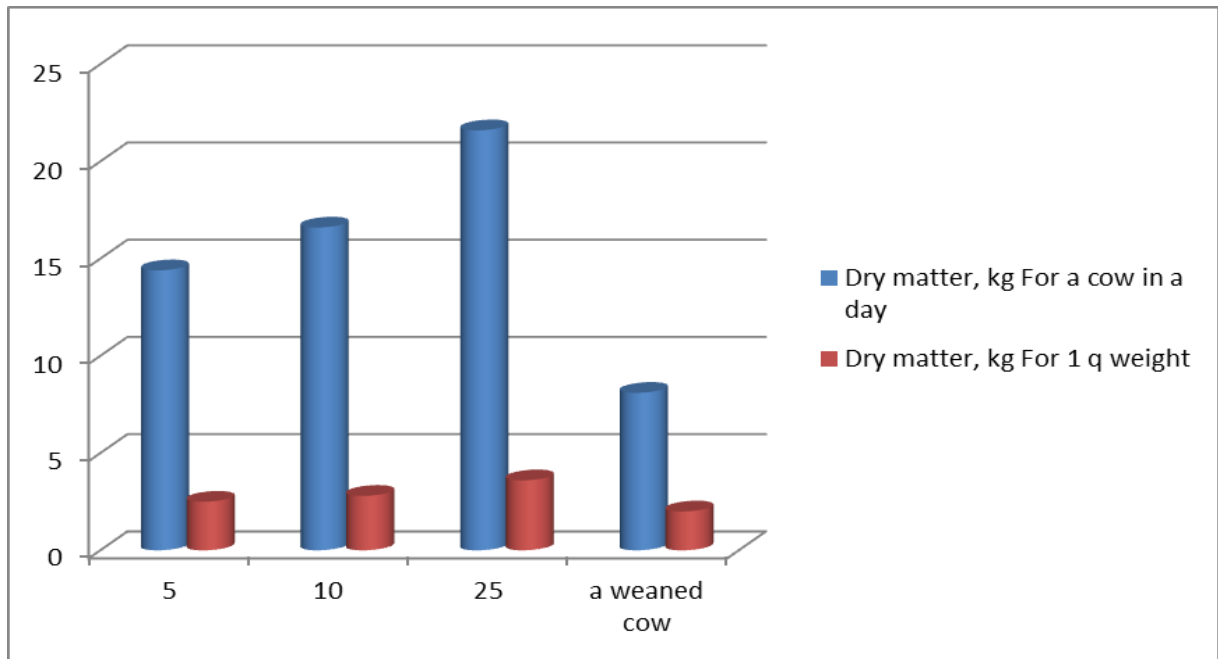


Diagram-2

In the summer months, when using fodder from the pasture, the composition of the fodder ration of the dairy cow lacks minerals. Also, when the concentrated type of feeding is used more for cattle, their organism will not have enough mineral substances. This leads to the absorption of organic substances in the body and a decrease in the fat content of milk. If the composition of the fodder lacks protein, the fodder unit will be spent more per cow.

If there is a lack of vitamins in the fodder diet, cows are more likely to get sick. In particular, the milk of dairy cows decreases, and the fat content of the milk decreases. The amount of daily ration of dairy cows.

Table 3

Ration for milking cows

Fodder	Amount, kg	Feed unit, kg	Digestible protein, gr	Calcium, gr	Phosphorus, gr	Carotene, mg
Alfalfa grass	3,0	1,5	33,3	35,5	8,7	150
Yellow grass	2,0	0,90	58,0	8,2	5,2	20,0
Silage	20	4,0	580	96	42,0	300
Eatable pumpkin	3,0	1,5	185	81,9	18,9	45



Concentrate food	4,5	4,5	350	3,5	2,5	-
Salt, gr	40	-	-	-	-	-
Total		12,4	1206,3	225,1	77,3	515,0

The nutritional level of the ration of dairy cows is equal to 12.4 nutritional units. This is the main task of comparative analysis of the ration and review of indicators of compensation of milk productivity.

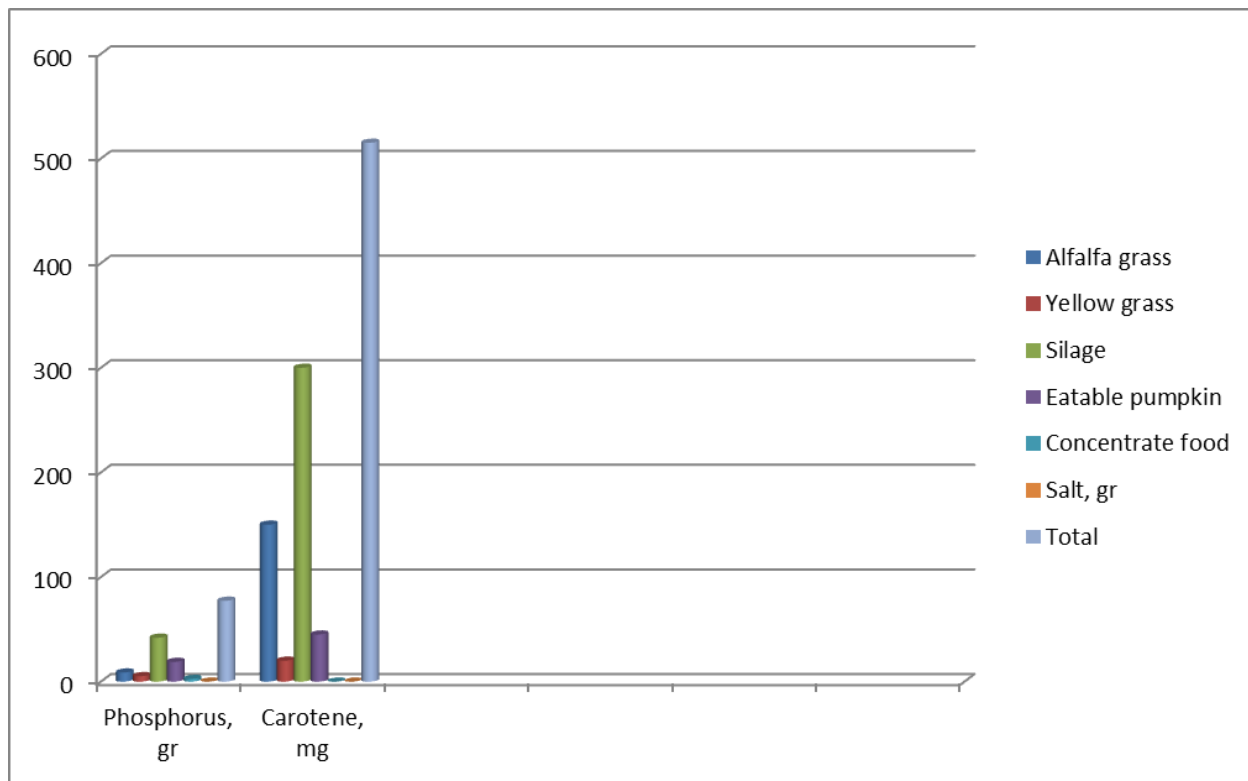


Diagram-3

The next task is to preserve, feed, breed cattle brought to our republic from abroad, and get products and offspring from them.

Conclusion: The rapidly changing weather in our republic has an adverse effect on the organism of imported cows and makes it difficult to obtain products from them, because a sudden change in living conditions is difficult for animals, because of this, their beneficial properties for the economy, productivity decreases. In order to prevent these situations, it is necessary to adapt the bred cattle imported from abroad to the climatic conditions of our



republic, taking into account the biological characteristics of cows, to adapt them to new ecological conditions, to preserve the genetic potential of cows, to create the necessary conditions for feeding, keeping, looking after and feeding them. In this case, it is advisable to organize feeding on the basis of balanced rations.

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