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# GROWTH AND DEVELOPMENT OF BULLS BORN FROM KOREAN SELECTION BULL SEMENS IN THE CONDITIONS OF UZBEKISTAN

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**Annotatsion:** The article describes the indicators of feeding, growth and development of bull calves up to 6 months of age, born from highly productive Holstein bulls from South Korea.

**Key words:** Artificial insemination, productivity, growth and development, conformation, feeding, feed consumption.

**Аннотация:** В статье описаны показатели кормления, роста и развития бычков до 6-месячного возраста, рожденных от высокопродуктивных быков голштинской породы из Южной Кореи.

**Ключевые слова:** Искусственное осеменение, продуктивность, рост и развитие, экстерьер, кормление, потребление кормов.

Cattle breeding is the leading branch of animal husbandry, and the main part of the produced meat and milk corresponds to its share. Using the world's most advanced selection methods of breeding cows together with cattle feeding and care improving breeding and productivity is one of the important tasks facing the livestock industry of our republic.

Currently, South Korea ranks 4th among the countries with the highest milk productivity, and in this country, in the 1980s, the milk yield of each dairy cow during lactation was 4957 kg on average. thanks to the achievements of research in this field, the milk yield of each head of cow has reached an average of 10,500 kg.

Breeding and feeding are the most important factors in increasing cattle productivity. Animal husbandry and poultry research for this purposescientists of the institute are conducting research on increasing the breed and productivity of cattle in cooperation with South Korea's KOPIA center in Uzbekistan. For example, the frozen seeds of the top-10 Holstein bulls from South Korea were brought to our republic, and Holstein cows and carcasses were artificially inseminated in advanced farms of Syrdarya, Tashkent, Andijan and Fergana regions. generations are being taken.





Figure 1. Bulls born from high-yielding Holstein bulls of Korean selection

In order to study the adaptation, growth and development of bulls born from bulls belonging to Korean selection to the conditions of Uzbekistan, as well as the characteristics of their care, in the experimental farm of the Research Institute of Livestock and Poultry breeding from bulls belonging to Korean selection was carried out. 10 bulls are being cared for. In the care

# THE MULTIDISCIPLINARY JOURNAL OF SCIENCE AND TECHNOLOGY

## **VOLUME-4, ISSUE-6**

of bulls, in cooperation with Korean scientists, they are fed on the basis of scientifically-approached feeding technology. In particular, the daily feed consumption of bulls at different monthly ages is presented in Table 1 below.

Table 1

Daily feed consumption of bulls at different months of age

Monthly age	Milk, kg	Concentrated	Rough feed,	Dromiy a	Table salt, g
		feeds, kg	kg	Premix, g	Table Sait, g
1	6	0.2	0.25	14	10
2	6	0.5	0.4	18	20
3	4	1.0	0.8	30	30
4	2	2.5	1.0	50	50
5	-	4	2.5	75	70
6	-	5	4.0	100	80

A.P.Kalashnikov data and the NUTRIOPT program were used to determine the feed requirements of bulls.

Table 2 **Growth dynamics of experimental bulls (n=10)** 

Indicators	At birth		at the age of 3 months		at the age of 6 months	
indicators	X±Sx	Cv, %	X±Sx	Cv, %	X±Sx	Cv, %
Rainfall height,	67.4±1.34	5.6	96.6±0.89	2.94	121.5±2.47	6.45
cm	07.4±1.54	3.0	70.0±0.67	2.74	121.3-2.7	0.43
Chest						
circumference,	$65.02\pm2.3$	4.28	105.6±1.43	4.3	148.0±5.36	10.6
cm						
Slant length of	56.7±1.85	2.35	92.6±1.47	5.02	123.4±3.84	9.84
the body, cm	30.7±1.83	2.33	)2.0±1. <del>4</del> 7	3.02	123.4±3.64	7.0 <del>1</del>
Live weight, kg	41.08±2.25	3.48	115.25±1.13	3.76	202.6±6.3	11.9

The data of Table 2 shows that the average absolute growth rate from birth to 3 months was 74.17 kg and daily growth was 820 g. The figures were 87.35 kg and 970 g respectively in the next three months. It can be seen that the live weight gain of the bulls was higher in the post-weaning period. Breast circumference, which is one of the important indicators for evaluating the growth of bulls, was 1.6 times higher at the age of 3 months than at birth, and 2.3 times higher at the age of 6 months.

Taking into account that Holstein cattle are biologically sensitive to hot climate conditions and hot summer weather in our country, air ventilators and water sprinklers to regulate humidity were installed in the barn in order to maintain the microclimate indicators at a normal level.

At the end of the research, the breeding and productivity indicators of the bulls born from the bulls belonging to the Korean selection are evaluated, and the highest rated bulls are selected and kept for breeding. Currently, the growth and development of female calves born from Korean bulls are monitored by specialists of the institute. When the seeds were brought from Korea, catalogs were also brought that indicated the quality of the seeds and the efficiency indicators in the selection. Compared to their mothers, the milk yield of mature female cattle is up to 936 kg,

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## **VOLUME-4, ISSUE-6**

the fat content of milk is up to 44 kg, and the protein content is up to 24 kg. In the future, it is planned to create high-yielding herds from the offspring of Korean breeding bulls.

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