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EXTERNAL PERFORMANCE OF COWS IN EXPERIMENTAL GROUPS

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ABSTRACT: This article provides information on the external characteristics and body composition indices of black and white cows bred on the farm "Siyob-Shavkat-Orzu".

Keywords: Exterior, index, livestock, Zarafshan oasis, black-and-white, selection, breed, herd.

INTRODUCTION

In order to strengthen the breeding base and create high-yielding dairy herds in recent years, cattle of different breeds have been imported from European countries with a developed cattle breeding network, and their biological properties have been widely studied. These cattle have a high genetic potential for productivity. But they can only achieve this if they are fed and cared for properly. Therefore, for the first time in the history of the Zarafshan oasis, we studied some biological characteristics of cattle imported from abroad and belonging to the local Kara-Ala breed.

Accelerated development of the livestock sector, the introduction of modern and innovative methods, increasing the volume and variety of products, as well as the continuous provision of the population with quality and affordable livestock products produced locally is an important task for livestock breeders and professionals. In the performance of these tasks, this dissertation will serve to some extent.

The purpose of the study. To study some biological features of imported and local black-and-white cattle.

Research methods. The experimental part of the study will be conducted in 2021-2023 at the farm "Siyob-Shavkat-Orzu" in Taylak district of Samarkand region. For the experiment, cows of the Kara-Ala breed (Group I) and the Uzbek breed of the Kara-Ala breed (Group II) imported from Poland were selected. The feeding and care conditions of the cows in the experimental groups were the same.

Research results. The study of the exterior of cows of different breeds is important in assessing the level of growth, development and body composition of cows of different breeds. We also took the body measurements of the cows in the experimental groups according to our research method and referred to the following table (Table 1).

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Table 1

External values of cows in the experimental groups, cm (n = 5)

Body size	Groups			
	I		II	
	X±Sx	Cv%	X±Sx	Cv %
Heavy rainfall	131,2±1,06	1,82	128,7±0,53	0,93
Height at withers	127,8±0,89	1,56	126,5±1,05	1,87
Chest depth	72,8±1,06	3,28	71,6±0,92	2,89
Chest width	47,4±0,92	4,36	46,1±0,74	3,62
Chest circumference	190,3±1,06	1,25	188,7±1,27	1,51
The length of the body slope	146,0±1,0	1,53	144,1±1,22	1,90
The width of the back ridges	48,9±1,09	5,03	47,6±0,51	3,42
Circle	19,3±0,53	6,2	19,1±0,42	4,97

The analysis of the data in the table shows that the black-and-white breed cows belonging to the Polish selection in group I, respectively, compared to their peers in group II: fat height 2.5 cm or 1.9%, tail height 1.3 cm or 1.0 percent, breast depth 1.2 cm or 1.6 percent, breast width 1.3 cm or 2.7 percent, breast circumference 1.6 cm or 0.84 percent, body slope length 1.9 cm or 1.3 per cent, posterior ridges width 1.3 cm or 2.65 per cent and hip circumference 0.2 cm or 1.0 per cent higher.

The study of the external characteristics of cows is important in determining the direction of their productivity.

Body composition indices are used to better understand the constitutional characteristics and level of development of cattle. We also studied body composition indices according to the method of our research. Information on these indicators is given in Table 2 below.

Table 2

Body composition indices of cows in experimental groups,% (n = 5)

Indices	Groups	
	I	II
Long-leggedness	44,5	44,3
Length or format	111,2	111,9
Breastfeeding	65,1	64,3
Chest	96,9	96,8
Density or compact	130,3	130,9

Growth	97,4	98,2
Osteoporosis	14,7	14,9

Analysis of the data in the table showed that the bodies of cows belonging to the Polish selection in experimental group I were slightly larger than their counterparts in group II and were directly related to milk yield. The crack index was also slightly higher in group I cows than in group II cows. This indicates that their breasts are well developed and that they have a dense body structure.

Conclusion. The measurements obtained and the calculated body composition indices showed that all the cows in both experimental groups had well-developed breasts and a balanced body composition. This indicates that they are dairy.

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