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Study of the External and Internal Characteristics of Holstein Cows of Different Selections Depending on the Type of Constitution

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Abstract: In this article, selection and mating of Holstein cows of different selections, characterized by thin-dense and strong constitution type, according to their live weight and body indices, and the fact that the milk breed is of special importance in improving the breeding and productivity characteristics of the breed. given.

Keywords: Holstein, exterior, body size index, legginess, bony, Constitution, selection, slimness-dense, strong, breed.

Introduction

An important breed of dairy cattle in our republic is the Holstein. The breed is not only widespread in our republic, but is also used on other continents of the world. Cattle, characteristic of this breed, demonstrates the highest dairy and meat productivity, and is also an improved breed for local cattle breeds. In a herd of Holstein cows, selection and mating work on the live weight and indices of their body is of particular importance, in improving the breed and productive characteristics of the breed, belonging to the dairy type. In recent years, in order to develop animal husbandry based on scientific achievements and best practices, much attention has been paid to breeding work, strengthening the feed base and improving the technology of production and processing.

Material and methods. Our scientific research on the study of the exterior and physique indices of Holstein cows of different selections was carried out in a specialized livestock farm “Siyab Shavkat Orzu” of the Tailak district of the Samarkand region. 3 groups were selected for the experiment: N= 10 heads of Dutch breeding (types of thin-dense, solid Constitution) were selected in group I, German breeding (types of thin-dense, solid Constitution) in group II, Danish breeding (types of thin-dense, solid Constitution) in group III. The appearance of cows in the experiment was evaluated by eye, and the dimensions were obtained by body parts.

The results obtained and their analysis. In the course of studying the growth of cows in experimental groups, it was found that cows typical of Dutch breeding grew faster than their peers in another experimental group.

When assessing the level of growth, development and physique of cows of various genetic origin, the determination of their external characteristics is becoming increasingly important. That's why we took the main body sizes of cows in the experimental group and referred to Tables 1; 2.

Analysis of the data in Table 1 showed that the body size indicators of Holstein cows of the thin –dense Constitutional type of Dutch breeding were higher than those of Holstein cows of German and Danish breeding. At the same time, preference was given to Dutch-bred cows, while

their peers evaluated cows from the II, III, IV, V, VI experimental groups according to the height of the arch of the foot, respectively: 9.8 cm or 6.66 percent, 16.1 cm, or 10.94 percent, 15.6 cm or 10.6 percent, 18.5 cm or 12.57 percent, 18.9 see or 12.84 percent; to a chest depth of 1.0 cm or 1.4 percent, 1.2 cm. or 1.66 percent, 2.2 cm or 3.05 percent, 2.3 cm or 3.2 percent, 3.4 cm or 4.7 percent; breast

Table 1

II-the size of Holstein cows during lactation with different body structure, cm

Body Dimensions	Guruhlar											
	I				II				III			
	thin-dense		solid		thin-dense		solid		thin-dense		solid	
	X±Sx	C v,%	X±Sx	C v,%	X±Sx	C v,%	X±Sx	C v,%	X±Sx	C v,%	X±Sx	C v,%
Bending height	147,2±1,61	3,3	137,4± 1,6	3,49	131,1± 1,42	3,26	131,6± 1,45	3,31	128,7± 1,55	3,61	128,3± 1,44	3,72
Chest depth	72,1± 1,23	5,12	71,1± 1,16	5,53	70,9± 1,17	4,97	69,9± 1,29	4,9	69,8± 1,12	4,82	68,7± 1,1	4,77
Chest width	51,7± 1,28	7,45	50,1± 1,33	7,99	49,1± 1,23	7,53	48,8± 1,23	7,57	47,6± 1,2	7,59	46,9± 1,17	7,49
Chest girth	220,5± 2,58	3,51	205,6± 2,63	3,84	200,8± 2,61	3,9	202,6± 2,41	3,57	198,1± 2,58	3,91	198,3± 2,3	3,48
Oblique body length	183,1± 1,67	2,73	181,8± 1,61	2,65	180,6± 1,69	2,81	180,2± 1,55	2,59	163,5± 1,53	2,8	162,4± 1,45	2,68
Buttock height	156,1± 1,85	3,55	154,9± 1,86	3,61	153,8± 1,75	3,42	153,2± 1,8	3,53	152,9± 1,76	3,45	151,6± 1,65	3,26
Width of the posterior tubercles	55,6± 1,18	6,38	55,1± 1,17	6,55	54,3± 1,22	6,38	53,1± 1,16	6,76	49,6± 1,53	9,28	48,8± 1,37	8,41
Stem girth	22,1± 0,29	3,93	21,7± 0,39	6,21	21,5± 0,39	5,5	21,4±0,44	5,45	18,9± 0,25	3,97	19,2± 0,35	5,42

1.6 cm wide. or 3.1 percent, 2.6 cm or 5.03 percent, 2.9 cm or 5.6 percent, 4.1 cm or 7.9 percent, 4.8 cm or 9.3 percent; 14.9 cm in chest circumference. or 6.7 percent, 19.7 cm. or 8.9 percent, 17.9 cm. or 8.1 percent, 22.4 cm. or 10.1 percent, 22.2 cm. or 10.07 percent; 1.3 cm in length according to the slope of the body. or 0.71 percent, 2.5 cm or 1.36 percent, 2.9 cm or 1.6 percent, 19.6 cm or 10.7 percent, 20.7 cm or 11.3 percent; 1.2 cm in buttock height. or 0.8 percent, 2.3 cm or 1.5 percent, 2.9 cm or 1.8 percent, 3.2 cm or 2.05 percent 4.5 cm or 2.9 percent; the posterior tubercles have a width of 0.5 cm or 0.9 percent, 1.3 cm or 2.3 percent, 2.5 cm or 4.5 percent, 6.0 cm or 10.8 percent, 6.8 cm or 12.2 percent; 0.4 cm along the circumference of the stem. or 1.81 percent, 0.6 cm or 2.7 percent, 0.7 or 3.2 percent, 3.2 cm or 14.5 percent, 2.9 cm or 13.1 percent behind.

That there is a direct positive correlation between the body size of cows and milk productivity [1; 2-6-b.], [2; pp. 7-9.], [3;379-C. scientists such as] have identified in their research and noted that these indicators play an important role in creating productive herds of dairy cattle.

In our study, we have given in Table 2 the calculation of body composition indices based on body size.

Analysis of the data in Table 2 showed that the II experimental group on the index of legginess and milk production in Holstein cows belonging to different selections had priority over

the I, III, IV, V, VI groups of their peers. While in terms of elongation index, experimental group III had priority over the rest of the groups, in terms of hip joint, as well as in terms of density, group VI had priority over the rest of groups I, II, III, IV, V. Group IV showed higher results in bone structure than their peers.

Table 2

Indices of the body structure of cows in the experimental group, %

Indices of body structure	**Guruhlar** (n=10)					
	I		**II**		**III**	
	thin-dense	**solid**	**thin-dense**	**solid**	**thin-dense**	**solid**
	II-Laktatsiya					
Weevils	51,02	49,1	45,9	45,97	45,76	46,4
Lengthening or format	124,4	132,3	137,7	136,9	127,04	126,6
Breastfeeding	71,7	71,67	69,2	68,6	68,2	68,27
Pelvis-chest	92,9	94,3	89,1	89,9	95,9	96,1
Density or compactness	120,4	113,1	111,2	112,4	121,2	122,1
Bone	15,01	15,6	16,4	16,5	14,7	14,9

Conclusion. The analysis of the results showed that, regardless of the genotype of cows, Holstein cows with a type of thin-dense and strong constitution belonging to different breeding had well-developed breast indicators and a proportional physique, and in the direction of productivity belonged to the dairy type. At the same time, cows of Dutch breeding had priority over cows of other experimental groups. The indicators of the exterior showed that the level of development of the body of cows indicates the importance of studying the indicators of the exterior when assessing the direction of productivity of cows.

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