

EXTERIOR OF COWS WITH DIFFERENT BODY STRUCTURES

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<https://doi.org/10.5281/zenodo.7079129>

Annotation. In the research, the main body dimensions representing the level of development of the body parts of the Simmental breed cows in III and higher lactations were shown in cows with high milk productivity. and showed that it belongs to the milk season.

Key words. Breed, scot, simmental, moloko, jyr, belka, molochnyy sahar, myaso, korova, jivaya massa.

Relevance of the topic. Cattle breeding is one of the main sectors in world animal husbandry and occupies the first place in terms of production volume of livestock products. The main part of livestock products produced in all categories of farms in our republic is accounted for by the cattle industry, which is considered important in meeting the population's demand for livestock products. One of the unique features of the Simmental breed is that it differs from other cattle breeds in the world due to the fact that it has milk, milk-meat, meat-milk and meat production types. At the same time, among other breeds, it takes the leading places in the world in terms of milk yield and quick maturity of cows, and meat yield, as well as in terms of the distribution area of the breed. In recent years, the level of import of Simmental cattle from abroad to farms in our republic is very high, the reason for this is that this breed has a high demand for milk and meat products. [1,2,3,4].

The purpose of the study. The purpose of the work is to improve the milk yield, exterior indicators and other important economic useful signs of Simmental cows depending on the types of body structure and constitutional types.

Place and method of research. Scientific research was conducted in 2020-2022 in a herd of Simmental cows at the "Hamro Tokhta" breeding farm in Romitan district of Bukhara region.

For the experiment, 3 groups of 10 Simmental cows of III and higher lactations were selected, taking into account the signs of similarity in origin, breed, age, live weight, milk production of mothers, selection of fathers.

The origin of the cows in the experimental groups and the productivity of their parents were determined from the primary zootechnical documents of the farm.

Feeding of cows in all groups was organized taking into account their live weight, milk yield and physiological condition, and the conditions of their care were the same.

Research results. There is a connection between the shape of the external structure of agricultural animals and their body structure and productivity. Cows have different directions of productivity according to their body structure. Exterior is the form of the external structure of animals, which is inextricably linked with biological resistance and useful economic characteristics, i.e. with milk productivity. When evaluating the exterior, the requirements for each body part of cows are taken into account in terms of productivity directions, and therefore, the study of exterior indicators is considered important in evaluating their productivity directions. Table 1 shows the body sizes of the cows in the experimental groups.

Analysis of the data in Table 1 shows that the main body dimensions representing the level of development of body parts of cows were shown in cows with high milk productivity.

For example, compared to the height of cows in groups II and III, the height of cows in group I is 1.9 cm ($R \leq 0.05$) and 3.5 cm ($R \leq 0.01$), respectively. 2.0 cm ($R \leq 0.05$) and 3.5 cm ($R \leq 0.01$), chest width 0.8 cm ($R \leq 0.05$) and 1.3 cm ($R \leq 0.01$), chest depth 4.9 cm ($R \leq 0.01$) and 3.9 cm ($R \leq 0.05$), oblique body length 8.6 ($R \leq 0.001$) and 9.6 cm ($R \leq 0.001$), the posterior femur width was 2.3 cm ($R \leq 0.01$) and 2.1 cm ($R \leq 0.01$) higher. At the same time, the breast circumference of cows of group III is 0.4 cm ($R \leq 0.05$) and 2.1 cm 1.6 cm ($R \leq 0.01$) compared to cows of groups I and II, and the depth of breast II was 1.0 cm ($R \leq 0.05$) higher than that of cows in groups. These data indicate that the cows of the III groups have a well-developed chest and width.

1-table

Body sizes of cows in experimental groups, cm

Body dimensions	Groups					
	I		II		III	
	X±Sx	Cv, %	X±Sx	Cv, %	X±Sx	Cv, %
Yagrin height	139,2 ±	4,66	137,3 ± 1,21*	2,7	135,7 ± 1,19**	2,7

	2,05			9		8
The height of Sagri	142,5 ± 1,56	3,46	140,5 ± 1,28*	2,89	139,0 ± 1,31**	2,99
Chest width	51,7 ± 1,91	11,69	50,9 ± 1,64*	10,19	50,4 ± 1,51*	9,50
Chest depth	68,7 ± 2,25	9,87	67,3 ± 0,87**	4,10	68,3 ± 1,19*	5,51
The oblique length of the body	167,2 ± 2,75	5,08	162,6 ± 2,69***	5,23	161,6 ± 2,69***	5,26
Chest circumference	202,8 ± 2,11	3,29	201,6 ± 1,82*	2,86	203,2 ± 1,34*	2,09
Back femur width	52,3 ± 0,52	3,16	51,0 ± 0,45**	2,77	50,2 ± 0,57**	3,58
Leg circumference	20,7 ± 0,42	6,46	20,4 ± 0,27	4,13	20,7 ± 0,15	2,33

*R≤0,05, **R≤0,01, ***R≤0,001

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In assessing the proportional development of the body of cows and belonging to different types of body structure, it is important to evaluate the indicators of the body indices calculated on the basis of the body dimensions. Table 2 shows the body indices of the cows in the experimental groups.

2-table

Body indices of cows in experimental groups, %

Indexes	Groups		
	I	II	III
Long-leggedness	50,6	50,9	49,6
Stretchability	120,1	118,4	119,0
Pelvis-chest	98,8	99,8	100,4
Chestiness	75,3	75,6	73,8
Density	121,3	123,9	125,7
Growth	102,4	102,3	102,4
Bony	14,9	14,8	15,2

As can be seen from the table, the index of long legs of cows of group III is slightly lower than that of cows of groups I and II, which indicates that the body of cows of meat-milk type of group III is slightly larger. At the same time, the extensibility index of cows of group I was 120.1%, and it was 1.7% and 1.1% of cows of group II and III, which means that dairy cows have an extensible body. It was found that the pelvic-chest index of cows of group III was slightly higher than that of cows of groups I and II, which indicates that the chest of Esau is well developed, and the high density index also confirms that they have a dense body. . It can be specially noted that the breast size index of cows of group I and II was higher than that of cows of group III by 1.5% and 1.8%, and this indicates that the body structure of cows of this group is typical of the respiratory type.

The given information shows that the cows of the I and II groups also have a proportional body structure, milk and milk-meat ratio. These data confirm our conclusions (B.M.Ashirov. Increasing the productivity of cows with the genotype of the Red Desert and Angler breeds depending on the constitutional types and paratypic factors. Doc. Diss. 2016. p. 68-72). The author came to the conclusion that the breeding of high-yielding cows of milk production will expand the possibilities of milk production in the future, and their use in dairy herds is also effective.

Summary. Our research showed that the main body dimensions, which represent the level of development of the body parts of cows, were shown in cows with high milk productivity. Cows in the experimental groups had well-developed udder indicators and proportional body structure, and showed that they belonged to the dairy breed.

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