



**PRODUCTIVITY INDICATORS OF MOTHER ANCESTORS  
OF SWITZER BRED BULLS**

<sup>1</sup>**Khodjaev U.T.**

Is an independent researcher of  
Tashkent State Agrarian University,

<sup>2</sup>**Dosmukhamedova M.Kh**

Tashkent State

Agrarian University, PhD, professor.

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**ABSTRACT**

*Maqolada fermer xo'jaligida urchitilayotgan Shvis zotli buqalarning ajdodlarining mahsuldorligini o'rganish to'g'risidagi ma'lumotlar keltirilgan. Ularda buqalarni ona ajdodlari mahsuldorligi bo'yicha baholashga katta e'tibor qaratilgan.*

When evaluating the double-productive Swiss breed bulls by genotype, attention is paid to its milk and meat productivity characteristics. It is worth noting that the methods of selection and formation of sersut-type Swiss cattle are being implemented in the current modern breeding world. That's why the Swiss cattle, which are characteristic of the USA, Austria and Italy selection, are of special

attention and are widely used in the improvement of brown breeds. Swiss cattle of such productivity are widespread in European countries, including Germany. A lot of attention is paid to evaluating their bulls according to the productivity of their maternal ancestors. In this direction, we also analyzed and evaluated bulls imported from Germany according to maternal milk productivity (table 2).

**Milk yield indicators of mothers of Schwitz breed bulls**

Breeding bull		Milk production of mothers				
Nickname	ИHB №	Milk yield, kg	Fat content, %	Protein content, %	Milk fat, kg	Milk protein, kg
Improving leader bulls						
Pukar	453904	11851	3,81	3,52	451	417
Kimon	518083	11938	5,02	3,53	599	424
Antenna	682076	11997	3,98	3,61	477	433
Vaska	699617	13448	3,69	3,66	496	492
Doritos	205634	11324	4,12	3,63	467	411
X±S		12112±326,7	4,1±0,2	3,59±0,1	498±25,3	435±14,0



Cv, %		6,0	11,9	1,6	11,4	7,2
Improving bulls						
Brave	518172	12224	4,35	4,11	532	502
Jessimo	803578	13286	3,77	3,48	502	463
Octopus	518101	12224	4,35	4,11	532	502
Hobbo	518148	13449	4,31	3,73	582	503
X±S		12796±377,7	4,20±0,1	3,86±0,1	537±14,6	493±9,8
Cv, %		5,9	6,5	7,7	5,4	4,0

In the improving leader and improving bulls formed by the superiority of the genotype of their fathers, the bulls of the improving group in terms of milk yield of their mothers were superior. That is, the average milk yield of mothers of improving bulls is 12796 kg, fat content is 4.20%, protein content is 3.86%, milk fat is 537 kg, and milk protein is 493 kg, while the improvement leader bulls have 12112 kg 4.12%, 3, 3. 59%, equal to 493 kg and 435 kg.

This productive genetic potential of cows will definitely have a positive effect on the offspring of their sons - bulls. When comparing the breeds with the milk yield of their mothers, the Swiss bulls are not inferior to the other controlled breeds in the dairy direction, and some bulls even have an advantage. In particular, the mother of the bull named Khimon gave 11,938 kg of milk during the lactation period of 305 days, the fat content of which was 5.02%, the protein content was 3.53%, the milk fat exceeded 599.3 kg, and the milk protein exceeded 424.4 kg. A bull named Jesur is of particular importance in terms of its mother's milk, milk fat and

milk protein content. Although milk yield is 12224 kg, milk fat is equal to 532 kg and milk protein is equal to 562 kg. The mother of the bull named Hobbo was even higher and weighed 13449 kg, 582 and 503 kg, respectively. We studied imported Swiss bulls for their maternal milk production as well as that of their grandams. We analyzed the fertility index of maternal ancestors (table 7).

Evaluation according to this indicator is one of the selection achievements. Along with mother's productivity, grandmother's productivity increased, and its average indicator was analyzed. In this method, it is determined how much the productivity of maternal ancestors changes in generations. It indicates how effectively the ordered or individual sorting in the breeding category was carried out. An increase in the productivity of the next generation means a higher selection efficiency. Daughters of cows obtained as a result of this selection should be superior in terms of milk yield from their mothers and from their grandmothers.

Table 2

**Milk productivity index of maternal ancestors of Swiss breed bulls**

Breeding bull		Milk production of mothers				
Nickname	ИHB №	Milk yield, kg	Fat content, %	Protein content, %	Milk fat, kg	Milk protein, kg



Improving bulls						
Pukar	453904	11563	3,79	3,50	438	405
Kimon	518083	10653	4,69	3,59	500	382
Antenna	682076	10799	4,06	3,64	438	393
Vaska	699617	11681	3,85	3,67	450	429
Doritos	205634	11466	4,86	3,67	459	421
X±S		11232±215,5	4,25±0,2	3,6±0,1	457±10,7	406±7,8
C <sub>v</sub> , %		4,3	11,3	1,9	5,2	4,3
Improving bulls						
Brave	518172	11380	4,26	3,91	485	445
Jessimo	803578	12878	3,77	3,60	485	463
Octopus	518101	10921	4,42	3,71	483	405
Hobbo	518148	10921	4,42	3,71	483	405
X±S		11525±408,1	4,2±0,1	3,7±0,1	484±0,7	430±14,8
C <sub>v</sub> , %		7,1	6,4	3,1	0,3	6,9

The average milk yield of cows in the group of improving leader bulls in the milk productivity index of maternal ancestors is 11232 kg, fat content is 4.25%, protein content is 3.61%, milk fat is 463 kg, and milk protein is 406 kg, while in the group of improving bulls, these indicators are 11525 kg, respectively. 4.22%, 3.73%, equal to 484 kg and 430 kg. That is, the priority of maternal ancestors of improving bulls is observed.

These indicators are effective in the selection program. Maternal ancestors of controlled bulls are characterized by their high productivity. In particular, the quality indicators of milk are high, the fat content is 4.22-4.25 kg and the protein content is 3.61-3.73%.

Selection in the Schwitz breed was carried out at a high level. The milk yield of the newly obtained generations increased when using breeding bulls in individual selection. In the group of improving leader bulls, mothers (grandmothers) of mothers averaged 10030 kg of milk, milk fat of 406 kg, milk protein of 354 kg and paternal

mothers (grandmothers) of 10479 kg, milk fat of 448 kg, milk protein of 393 kg. that of their mothers was relatively high and was 12112 kg, 498 kg and 438 kg. This condition is observed in the maternal ancestors of a group of improving bulls. Mother's milk yield was 12832 kg, milk fat was 537 kg and milk protein was 484 kg, while grandmother's weight was 9453 kg and 11608 kg, 385 and 498 kg, 342 and 431 kg.

Maternal ancestors with superior maternal fertility are derived who also have the ability to pass on the genetic potential for fertility to their offspring. The average milk yield of cows in the group of improving leader bulls in the milk productivity index of maternal ancestors is 11232 kg, fat content is 4.25%, protein content is 3.61%, milk fat is 463 kg, and milk protein is 406 kg, while in the group of improving bulls, these indicators are 11525 kg, respectively. 4.22%, 3.73%, equal to 484 kg and 430 kg. That is, the priority of maternal ancestors of improving bulls is observed.



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