

Study Of Cows Of The Golshtin Breed By Comparing Generally Known Indicators During The Second Lactation

Mirsaidova Zukhra Shukhrat daughter 1, Khujamov Zhurabek Nayimovich.2,

Samarkand State University of Veterinary Medicine, livestock and biotechnology

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Abstract: This article examines and compares the milk production of Holstein cows from Dutch, German, and Danish selection based on their constitution. The study focuses on milk yield, milk fat, milk protein yield, and 4% milk yield per 100 kg of live weight. Data was provided.

Keywords: Cattle Breeding, golshtin, milk productivity, Dutch, German, Danish, breed, selection, lactation, dairy coefficient, protein, fat..



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Introduction

Significance of the subject matter. To promote the growth of cattle breeding in recent years, there has been a strong focus on utilizing scientific advancements and sophisticated expertise. This includes prioritizing breeding efforts, enhancing the availability of animal feed, and refining manufacturing and processing techniques for livestock products. It is crucial to enhance the cattle breed, enhance and preserve the genetic diversity. In the following years, farms imported improved breeding cattle of various breeds such as golshtin, Schwyz, Aberdeen angust, Kazakh Swan, and flegfix simmental from Germany, the Netherlands, Denmark, Austria, Kazakhstan, and Poland. In recent years, cattle of the Golden breed with distinct black-ola and red-ola tones, which possess unique positive traits not seen in other cattle breeds worldwide, have been imported from foreign countries to different regions of our country.

Methods

We conducted scientific research analyzing milk productivity, dairy coefficient, 4% milk, milk fat, and milk protein output during lactation II of cows from the Golden breed of various selection on a specialized cattle breeding farm called "Siyab Shavkat dream". For the experiment, three groups were formed. Group I consisted of individuals with a Dutch selection, characterized by thin-dense and robust constitution types. Group II consisted of individuals with a German selection, also characterized by thin-dense and robust constitution types. Group III consisted of individuals with a Danish selection, again characterized by thin-dense and robust constitution types. Each group had a total of 10 individuals selected from each constitution type.

Results and Discussion

The study of animal constitution is based on their physical and internal organization. The table data clearly demonstrates the differences in certain characteristics among cows of the intergroup

golshtin breed, namely in terms of their thin-dense and strong constitution, as observed throughout the experiment. The extent of these differences is as follows:

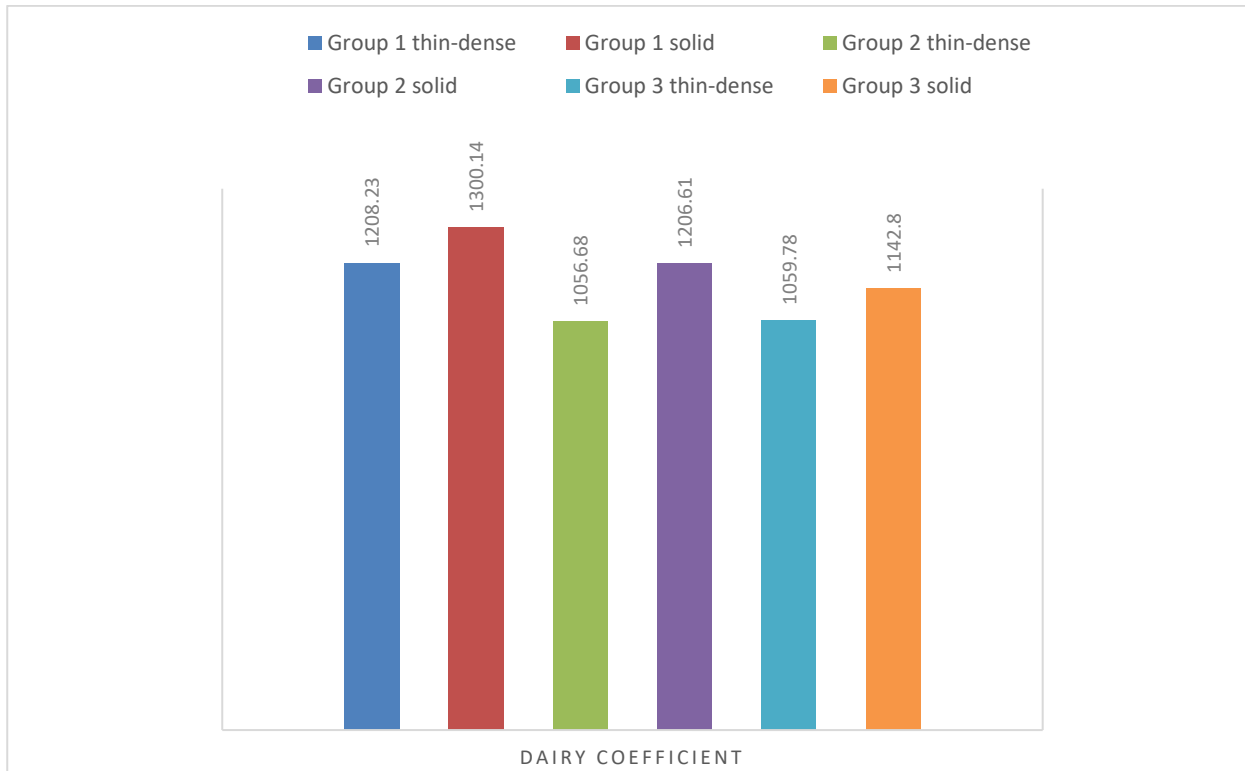
In our experimental group I, the lactation milk content of golshtin breed cows was 1281.1 kg, which is 14.7% more than the cows in our Group II. Additionally, it was 1505 kg or 17.3% higher than the cows in Group III. In the composition of Group I Dutch selection cows, 884.6 kg, or 9.32%, exceeded the weight of Group II golshtin breed sgirls, while 1594.3 kg, or 16.8%, exceeded the weight of Group III cows. Group I cows had a live weight that was 17.2 kg, or 2.4% greater, than Group II cows. Additionally, Group I cows weighed 40 kg, or 5.5% more, than cows in Experimental Group III. The cows of Group I, which belong to the strong constitution-type golshtin breed, had a weight of 16.9 kg, which is 2.3% more than the weight of the cows in Group II. Additionally, the cows in Group I weighed 39 kg, which is 5.3% higher than the weight of the experimental cows in Group III. Regarding the milk content of 4%, Group I had a weight of 1031.76 kg, which was 12.5% greater than Group II. Group III had a weight of 1835.08 kg, which was 22.2% greater. In terms of the strong constitution type, Group I had a weight advantage of 1057.2 kg or 10.9% over Group II, while Group III had a weight advantage of 1811.7 kg or 18.6%.

Cows of different selection II-the amount of milk in lactation, the coefficient of milk yield, milk fat and milk protein output.(n=10).

Specification	Groups					
	I-group		II-group		III-group	
	thin-	Solid	thin-	Solid	thin-	Solid
	dense		dense		dense	
	X±Sx	X± Sx	X± Sx	X± Sx	X± Sx	X± Sx
Live weight, kg	719,5±8,9	730,4±1	702,3±1	713,5±1	679,2±12,	691,4±1
		1,3	2,3	0,9	3	0,5
The amount of milk in lactation, kg	8692,4±1	9485,5±	7411,3±	8600,9±	7187,4±1	7891,2±
	66,8	201,5	151,1	191,6	45,7	155,3
Fatness of milk, %	3,95±0,04	4,05±0,0	3,93±0,0	4,03±0,0	3,97±0,04	4,01±0,
	3	47	58	53	9	05
Protein in milk, %	3,23±0,02	3,29±0,0	3,17±0,0	3,2±0.02	3,13±0,02	3,2±0,0
	5	24	24	8	5	27
4% milk, kg	8627,2±1	9556,6±	7333,2±	8639,6±	7155,0±1	7903±8
	75,8	208,2	181,3	128,3	47,5	3,03
Dairy coefficient	1208,1±1	1298,7±	1055,3±	1205,5±	1058,2±2	1141,3±
	8,9	28,2	22,3	27,4	2,3	25,2
Milk fat, kg	343,4±7,7	384,1±9,	291,3±8,	346,6±1	285,3±6,2	316,4±6
		04	5	0,9		,4
Milk protein output, kg	280,8±6,0	312,1±6,	234,9±4,	275,2±5,	224,9±4,9	252,5±5
	6	2	4	5		,7

On the other hand, the milk yield ratio of Group I was 151.63, which is 12.5% higher than Group II and 148.45, which is 12.3% higher than Group III. The strong constitution type of our same groups was 93.2 or 7.2% greater than Group II compared to Group III, with a difference of 156.4 or 12.1%. Relative to this, when comparing milk fat production and milk protein output, Group I cows had 51.9 kg and 58.2 kg, whereas their counterparts had 45.97 kg and 55.84 kg, respectively. This

means that Group I cows had a 15.1% and 16.4% higher milk fat output and a 16.95% and 19.9% higher milk protein output than their counterparts. In this diagram, the Group I cows with a solid constitution were mostly represented by weights of 37.15 and 67.75 kg, or percentages of 36.89 and 59.35 kg, respectively. These values were higher compared to their counterparts, which had weights of 9.7 and 17.6% and percentages of 11.8 and 19.0%, respectively.



Conclusion

Therefore, incorporating robust constitution-type cows of the golshatin breed with various selection criteria into dairy herds is more efficient than using cows with a delicate-dense constitution. This is because golshatin cows with a robust constitution have the ability to produce a calf annually and maintain high milk productivity throughout lactation. When evaluating the productivity of Golshatin cows, it is crucial to examine several key indicators, including milk yield, milk efficiency of 4%, milk fat content, milk protein output, and the dairy coefficient, which is calculated per 100 kg of weight.

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