Influence on Milk Production and Milk Quality Indicators of Cows When Administering Feed Prepared with a Mixture of Kashkarbe and Grape Crops

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Abstract: Tadqiqotlar davomida qashqarbeda va boshoqli ekinlardan aralash holda tayyorlangan ozuqalar sogʻin sigirlar ratsionida qoʻllanilganda ulurning sut maxsuldorligiga va sut sifati koʻrsatkichlariga ijobiy tasir koʻrsatganligi aniqlandi. Ushbu ozuqalar qoʻllanilganda tajriba guruxidagi sigirlar tomonida ozuqalarni yeyiluvchanligi ortganida ham oʻz ifodasini topgan.

Introduction

In our country, the land areas used for growing fodder for livestock have been allocated, and most of the existing areas are saline to varying degrees, water is scarce, which requires effective use of these lands. In recent years, as a result of the warming of the weather on the whole planet, it has been abnormally hot and the ecological environment has deteriorated. As a result of this situation, the air temperature rises in the summer season and the demand for water increases. This, in turn, leads to a weakening of the feed base and has a negative effect on the productivity of livestock.

Proper and complete blood feeding of livestock affects their growth and development, as well as their milk yield and milk quality indicators. More than half of the expenses in the livestock industry is for feed. For this reason, it is an urgent problem to provide as much quality nutrition as possible, to moderate the ratio of protein and carbohydrates in the feed.

In the cows of the experimental group, the improvement of the nutritional balance of the dairy cows due to the feed prepared from kashgarbeda in different ways showed its result in productivity.

Studies were conducted for 110 days, including a 20-day adaptation period and a 90-day control period. During the first 20 days, alfalfa hay was removed from the diet of the cows in the experimental group and replaced with hay prepared by the type method, and used to accustom the cows to new feed and to learn to eat it.

At the first stage of research, dairy cows in the experimental group were fed hay made from kashgarbeda in different ways, and the effect on milk yield and milk quality parameters was studied (Table 1).

1 table Milk yield of cows in the experimental groups fed with mixed hay made from kashgarbeda during the first 90 days of the milking period

Indicators	Group (p=15)			
	I control		Experiment II	
	X+Sx	Cv, %	X+Sx	Cv, %
Amount of milk, kg	1562±26.25	7.59	1649.3±52***	22.25
Fat in milk, %	3.74±0.09	2.90	3.88±0.05**	2.20
Protein in milk, %	3.19±0.09	2.8	3.28±0.9**	3.39
Milk fat yield, kg	51.1±1.27	3.12	61.5±1**	3.13
Milk protein output, kg	49.0±1.38	3.55	52.4±2.1**	3.49
4% milk content	1429.8±22.8	5.05	1618.1±20.0*	5.37

Note: *R<0.05, **R<0.01, ***R<0.001

The control milking showed that during the 90-day milking period, the variation index of 1562±26.25 kg in the control group was 7.59%, and the variation index of 1649.3±52 kg in the experimental group was 22.25 %, the level of reliability was R<0.001. The fat content of milk was 3.74±0.09, in the experimental group it was 3.88±0.05. Milk protein was 3.19±0.09, and in the experimental group it was 3.28±0.9. Fat output in the control group of milk was 51.1±1.27 kg, and in the experimental group it was 61.5±1. The level of reliability is R<0.01, which indicates that the characteristics of these traits are good from generation to generation.

The diagram shows the amount of fat and protein in milk. LLC "Zamona Rano" LLC analyzed the chemical composition of the milk in order to study the effect of hay prepared from kashqarbeda in different ways on milk quality indicators of the experimental and control groups. The results of the obtained analysis (presented in Table 2)

Indicators of chemical composition of milk

Indicators	Groups	
	Control	Experience
Protein, %	3,26±30,04	3,34±30,05
Yes' %	3,70±0,33	3,72±0,31
Biologically active substances, %	5,25±30,84	5,22±30,79
Calcium, %	0,122±30,05	0,123±0,03
Phosphorus, %	0,097±30,004	0,098±30,03
How much, %	4,51±0,02	4,49±30,04
Fun, %	0,64±30,02	0,65±0,03
Alkalinity, TO	16,7±30,51	16,7±30,46
Density, A	29,5±30,36	29,4±0,40

The amount of protein in milk is one of the important indicators when evaluating the quality indicators of milk. According to our research, the average amount of protein in milk in the control group was 3.26%. indicators made up 3.34%. It can be seen from this that the amount of protein in the milk of the dairy cows in the experimental group, which was added to the mixed-method feed made from sorghum, was 0.08% higher than in the control group. The average amount of fat in the milk of dairy cows in the control group was 3.70%, and the average fat content in the milk of dairy cows in the experimental group was 3.72%. when the prepared hay was added to the diet, the fat content of milk increased by 0.02%. The average amount of calcium in the milk of the dairy cows in the control group was 0.122%, while the average amount of calcium in the milk of the dairy cows in the experimental group, which was added to the hay ration prepared with a mixture of sorghum, was 0.123%. that is, it was observed that it increased by 0.01%. It was observed that the amount of phosphorus in the milk of dairy cows in the control group was 0.097%, and the average phosphorus content in the milk of dairy cows in the experimental group, whose diet was supplemented with hay prepared from kashgarbed, was 0.098%, and it increased by 0.01%. The average amount of sugar in the milk of dairy cows in the control group was 4.51%, and the average amount of sugar in the milk of the experimental group of dairy cows whose diet was supplemented with sorghum hay was 4.49% and It was found that it decreased by 0.02%. No difference was found when the alkalinity and density of the milk of dairy cows in both groups were studied. In general, the quality indicators of milk obtained from dairy cows of both groups correspond to standard requirements. But from the conducted researches and the given data, we can see that when milk cows are fed hay mixed with kashkarbeda, the quality of milk is improved along with the increase in milk yield, when the amount of protein in its content is increased by 0.08%.

The productivity of the main components in milk was studied based on the analysis of milk composition based on the daily amount of milk milked from dairy cows in the experiment (Table 3).

Table 3 Daily productivity of the main components of milk, gr

Components	Groups	
	Control	Experience
Milk is protein	782,4	868,4
That's right	888,0	967,2
Sut a smile	1082,4	1167,4

From the data in the above table, it can be seen that when analyzing milk protein, milk fat and milk sugar, which are the main components of milk, the daily milk content of milk milked from dairy cows in the control group is 782.4 g, milk fat is 888 0 g and milk sugar was 1082.4 g. Milk protein content of milk milked from dairy cows in the experimental group was 868.4 g, milk fat was 967.2 g, and milk sugar was 1167.4 g. Accordingly, compared to the control group, milk protein increased by 86 g, milk fat by 79.2 g, and milk sugar by 85 g.

In the second stage of the research, dairy cows in the experimental group were fed synage prepared from kashgarbeda in different ways, and the effect on milk yield and milk quality indicators was studied (Table 3.2.4).

4 tables Milk yield of cows in the experimental groups fed with a mixture of kashgarbed hay during the first 90 days of the milking period

Indicators	Thunder (p=15)			
	I control		II tajriba	
	X+Sx	Cv, %	X+Sx	Cv, %
Sut quantity, kg	1567±26,25	7,59	1655,3±52	23,30
Fat in milk, %	3,787±0,1	2,1,1	4,82±0,07	2,45
Protein in milk, %	33323±0,1	3,2	4,36±0,9	3,49
Milk fat yield, kg	58,7±1,35	3,28	68,7±1	3,22
Milk protein output, kg	51,2±1,42	3,78	67,7±2,1	3,59
4% milk content	1434,9±29,8	5,25	1634,2±22,0	5,55

Note: *R<0.05, **R<0.01, ***R<0.001

The control milking showed that during the 90-day milking period, the variation index of 1567±26.25 kg in the control group was 7.59%, and the variation index of 1652.3±52 kg in the experimental group was 23.25 was %, the level of reliability was R<0.001. The fat content of milk was 3.77±0.09, in the experimental group it was 4.80±0.07. Milk protein was 3.23±0.09, and in the experimental group it was 3.35±0.9. The milk fat yield in the control group was 58.1±1.30 kg, and in the experimental group it was 66.7±1. The level of reliability is R<0.01, which indicates that the characteristics of these traits are good from generation to generation.

LLC "Zamona Rano" LLC analyzed the chemical composition of the milk in order to study the effect of the synage prepared from kashqarbeda in different ways on the milk quality parameters of the experimental and control group dairy cows. The results of the obtained analysis (presented in Table 5)

Table 5 Indicators of chemical composition of milk

Indicators	Groups	
	Control	Experience
Protein, %	3,27±30,04	3,35±30,05
Yes' %	3,70±0,33	3,72±0,31
Biologically active substances, %	5,26±30,84	5,23±30,79
Calcium, %	0,123±30,05	0,124±0,03
Phosphorus, %	0,098±30,004	0,099±30,03
How much, %	4,51±0,02	4,49±30,04
Fun, %	0,64±30,02	0,65±0,03
Alkalinity, TO	16,7±30,51	16,7±30,46
Density, A	29,5±30,36	29,4±0,40

The amount of protein in milk is one of the important indicators in evaluating the quality of milk. According to our research, the average amount of protein in milk in the control group was 3.27%, and the average amount of protein in milk in the experimental groups that were given hay prepared by the mixed method of kashgarbeda. indicators were 3.35%. It can be seen that the amount of protein in the milk of the dairy cows in the experimental group, which was added to the synage mixture prepared by the mixed method of kashgarbeda, was 0.08% higher than in the control group. The average fat content of the milk of the control dairy cows was 3.70% and the fat content of the experimental dairy cows was 3.72%. when the prepared synaj was added to the diet, the fat content of milk increased by 0.02%. The average amount of calcium in the milk of dairy cows in the control group was 0.123%, while the average amount of calcium in the milk of dairy cows in the experimental group, which was added to the synage ration prepared with a mixture of kashgarbeda, was 0.124%, i.e. 0.01 It was observed that it increased by %. It was observed that the amount of phosphorus in the milk of dairy cows in the control group was 0.098%, and the average phosphorus content in the milk of dairy cows in the experimental group, whose diet was supplemented with kashgarbeda silage, was 0.099% and increased by 0.01%. The average amount of sugar in the milk of dairy cows in the control group was 4.51%, and the average amount of sugar in the milk of the experimental group of dairy cows whose diet was supplemented with kashqarbeda was 4.49% and It was found that it decreased by 0.02%. No difference was found when the alkalinity and density of the milk of dairy cows in both groups were studied. In general, the quality indicators of milk obtained from dairy cows of both groups correspond to standard requirements. But we can see from the conducted researches and the given data that when milk cows are fed with a mixture of sorghum, the quality of milk is improved along with the increase in milk yield when the amount of protein in it is increased by 0.08%.

The productivity of the main components in milk was studied based on the analysis of milk composition based on the daily amount of milk milked from dairy cows in the experiment (Table 6).

Table 6 Daily productivity of the main components of milk, gr

Components	Groups	
	Control	Experience
Milk is protein	817,5	904,5
That's right	925,0	1004,4
Sut a smile	1127,5	1212,3

It can be seen from the data in the above table that when analyzing milk protein, milk fat and milk sugar, which are the main components of milk, milk protein content of daily milk milked from dairy cows in the control group is 817 g, milk fat is 925 g and milk sugar was 1315 gr. Milk protein content of milk milked from dairy cows in the experimental group was 904 g, milk fat was 1004 g, and milk sugar was 1412 g. Accordingly, in the experimental group compared to the control, it was observed that sugar content increased by 87 g, milk fat by 79 g, and milk sugar by 84.8 g.

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