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EFFECT OF FOOD PREPARATION TECHNOLOGY IN HYDROPONICS METHOD ON ANIMAL ORGANISM

Tagayeva Luiza Khayriyevna

National University of Uzbekistan named after Mirzo Ulugbek, master

Abstract. 4 kg per head is added to the ration of dairy cows in the hydroponics experiment. Practice has shown that it increases feeding by animals, helps them digest the nutrients contained in the ration, which leads to an increase in productivity.The most immediate result of hydroponic green fodder feeding is increased milk yield, fat content and daily weight gain in cattle.

Keywords: growth, development,single feeding, ration, complete value feeding with hydroponic,

Enter. It is known that animal husbandry is one of the leading sectors of agriculture in our Republic, and it plays an important role in providing the population with food products. Taking this into account, the President of our Republic makes important decisions on the development of the livestock industry and its development on the basis of government programs will increase the number of livestock, increase the quality of their breed and productivity, and increase the volume of production from year to year. Currently, biotechnology is playing an increasingly important role in increasing the profitability of agriculture. Today, it is customary to use wheat, barley, corn grains and various additives as feed in many livestock farms of our country. In this case, the elements in the grain reserve are not efficiently used. Most of the unbalanced elements are not fully absorbed during the digestion process, and the amount of digestible proteins remains low.

Year by year, the number of livestock and poultry is increasing, but taking into account the limited land and water resources, providing them with food, saving land and water resources, conducting scientific researches is of urgent importance. For this reason, there is a great need for it in all categories of farms and households specializing in animal husbandry in regions with insufficient irrigated land and water scarcity, and it is an urgent issue today.

Material and methods. Research Institute of Livestock and Poultryfarm animals and hydroponic feed. Zootechnical, statistical and economic analysis methods were used in the research

Results and their analysis. The development of resource-efficient feeding technology from natural organic feeds grown by the hydroponics method is important in the development of animal husbandry. Green fodder is grown in aluminum or zinc-glazed trays 60 sm long, 40 sm wide, and 5 sm high. In the middle of the front part of the tray, a rubber nozzle is installed to remove the used solution. 4.2 kg of oats or barley, 4 kg of rye or wheat, 5 kg of corn, soybeans are planted in one square meter tray. The following solutions are used as a nutrient medium for the preparation of green food in the hydroponics method: 500 grams of potassium nitrate, 500 g of sulfur phosphate, 200 g of ammonium nitrate, 300 g of magnesium sulfate are added to 1 ton of water. To facilitate the work, these mixtures are dissolved in 2 liters of water and stored in glass jars, if necessary, it can be used by adding 2 liters of solution to 100 liters of water. 3-4 liters of mineral solution are sprayed on 1 square meter of plant 2 times a day, in the morning and in the evening. If hydroponically prepared grass feed is prepared, the digestibility coefficient reaches 95%, feed is saved, and livestock resistance to diseases increases.

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Analyzing the composition of feed rations prepared for feeding cows on the farm, seasonal feed rations were prepared in order to replace the missing vitamins, proteins, and carbohydrates in their composition.

Table 1

Feed ration for dairy cows

T/r	Food types	kg	Food unit, kg	Exchangeable energy MDJ	Dry matter, kg	Digestive protein, g	Ca, g	P, g	Carotin, mg
1	Wheat straw	3	0.66	14.3	2.53	15	84	2.4	12
2	Alfalfa hay	4	1.76	28.0	3.32	404	68	8.8	196
3	Raised Wheatgrass (Hydroponics)	4	1.32	7.4	2.93	152	18	2.8	176
4	Catching of intermediate crops	8	2.64	27.5	3.6	304	22.4	11.2	240
5	Mixed feed	3	3.0	36.6	25.8	33.0	1.5	15.6	20.4

During our private experiments, hydroponic feed was prepared from wheat grain and its effect on the animal organism was studied. During the experiment, cows were fed on the basis of the main mentioned in plan 3.1 of the dissertation, and in order to determine the level of influence of this feeding on the animal organism, their live weight and body dimensions were taken in order to determine the body indices. The obtained results were analyzed biometrically

Table 2

Indicators of body size and live weight of cows

t/r	**Indicators**		
		X±Sx	**cv%**
1	Live weight, kg	409.75±37.46	98.80
2	Height (sm)	127.44±2.91	7.72
3	Slant length of body (sm)	144.22±4.86	14.57
4	Chest circumference (sm)	165.22±3.72	11,15
5	Stump height (sm)	137.11±2.78	8.33
6	Chest depth (sm)	65.11±3.48	10.44

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7	Chest width (sm)	31.00±0.51	4.53
8	Seat bone (sm)	40.22±1.73	5.20
9	Leg circumference (sm)	16.44±0.58	1.73

The average live weight of dairy cows in the group was found to be 409.75. Yagirin's height was 127.44 sm higher than the average group. It was determined that the average body oblique length of cows is 144.22 sm, chest circumference is 165.22 sm, rump height is 137.11 sm, and chest depth is 65.11 sm.

It turned out that the average chest width in the group was 31.0 sm. The average ischial bone of the cows in the group was found to be 40.22 sm higher than the average group when measured using a circle, and the udder circumference was found to be 14.44 sm. Thisindicators show the effectiveness of the ration formulated using hydroponic feed. It was found that the milk yield and fat content of the cows in the control and experimental groups fed on the ration increased.

Cows' milk productivity and its quality indicators were monitored by milk sampling, milk fat, protein content, milk density, skimmed milk residue and milk dry matter content were measured experimentally. learned in the transfer.

Table 3

Milk yield of experimental cows

No	Months	Control group		Experimental group	
		kg per day.	1 month kg.	kg per day.	1 month kg.
1	January	9.5	285	9.8	294
2	February	9.5	285	9.8	294
3	March	9.7	291	10.2	306
4	April	9.7	291	10.5	315
5	May	9.8	284	10.6	318
6	June	9.8	288	10.6	318
7	July	9.0	270	10.0	300
8	August	9.0	270	10.33	310
9	September	8.67	260.1	11.23	336.9
	Total: (average)	9.40	280.5	10.34	312
	Difference, kg.	-	-	0.94	20.75

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The table shows that the average milk yield of cows in the control group was 287.8 kg per cow during the experimental period. was milked from. In the experimental group, 310.2 kg of milk was milked, and compared to the control group, on average, 280.5 kg, that is, 0.94 times more milk was milked. In July-September, the milk yield of cows in the control group during the experimental period is 860 kg per head of cow for 3 months (90 days). was milked from. In the experimental group, 942 kg of milk was milked, compared to the control group, an average of 82 kg. it was found that a lot of milk was milked.

Conclusions. The fastest result of feeding with hydroponic green fodder showed a positive result in cattle for 1.5-2 weeks and increased milk volume, fat content and weight gain. The period of productive use of cows increases and reproductive quality improves. 4 kg per head is added to the ration of dairy cows in the hydroponics experiment. Practice has shown that it increases feeding by animals, helps them digest the nutrients contained in the ration, which leads to an increase in productivity.The most immediate result of hydroponic green fodder feeding is increased milk yield, fat content and daily weight gain in cattle.

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