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THE IMPORTANCE OF HYDROPONICAL GROWING BARLEY GRAIN IN FEEDING PREGNANT SHEEP

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ABSTRACT

In order to study the live weight of lambs obtained from hydroponically grown barley grass in the 2nd stage of pregnancy of local sheep, experiments were conducted on the farm "Yusuf Imomtepa yerlari" in Nurabad district of Samarkand region. It is necessary to organize a full-fledged feeding of sheep. The last 2 months of the breeding season for local sheep are January-February. In winter, pasture yields are low, in the second period of sheep breeding, metabolism is 15-20%, energy requirements are 30-40%, and the demand for vitamins and Ca, P is doubled. One kg of barley grain is grown for 5-7 days and yields an average of 6-8 kg of green grass. Hydroponics is characterized by high digestibility of foods rich in carbohydrates and vitamins.

KEYWORDS: *Pasture, Yield, Weather, Product, Wool, Meat, Weight, Milk Yield, Udder.*

INTRODUCTION

In order to meet the needs of the population of the republic in mutton, it is necessary to increase the number of local and Hisor sheep breeds and to establish farms. It is also a matter of time to increase the productivity of pastures and increase the number of high-nutrient plants in sheep feeding, and to use new technologies in sheep fattening. Presidential Decree No. PQ-120 of February 8, 2022 "On measures to further develop animal husbandry and strengthen the fodder base" was adopted. Decree of the President of the Republic of Uzbekistan dated 28.01.2022 No. PF 60 on the new Development Strategy of Uzbekistan for 2022-2026. Section 3 of the decree sets out a number of tasks to strengthen the fodder base for Goal 32.

Considering that sheep are mainly grazed on pastures, feeding them with additional nutrients satisfies their need for nutrients. The main purpose of feeding in the 1-3 months of pregnancy is to ensure that their obesity is moderate to high, as well as the growth and development of the fetus. If the obesity is below average, 0.2-0.3 nutrient units are added to the norm.

Scientists of the Republic M.A.Oripov, N.T.Urmonov (2021) said: "In addition to expanding the area of fodder crops, increasing crop yields, increasing pasture productivity, popularization of hydroponic fodder production will ensure high efficiency in strengthening the fodder base."

Sh.S.Djuraev, N.Yu.Sharibaev, M.Ismanov, B.Makhmudov, F.Khudayberdiev, R.Sharibayev said (2020): "Herbs grown by hydroponics are rich in vitamins, micro and macro elements. It is a nutritious food and can provide 75% of protein and vitamins for all animals. 85-90% of nutrients are well digested. Foods grown in the hydroponics method can be called "dietary food".

Given the rapid growth of the fetus in the last 2 months of pregnancy, it is necessary to organize a full-fledged feeding of sheep. The last 2 months of the breeding season for local sheep are January-February. In winter, pasture yields are low, in the second period of sheep breeding, metabolism is 15-20%, energy requirements are 30-40%, and the demand for vitamins and Ca, P is doubled. One kg of barley grain is grown for 5-7 days and yields an average of 6-8 kg of green grass. Hydroponics is characterized by high digestibility of foods rich in carbohydrates and vitamins.

The scientific novelty of the experiment. In our scientific experiment, the aim was to study and analyze the live weight of lambs obtained at the 2nd stage of pregnancy by feeding local breeds of sheep with hydroponically grown barley grass.

Object of the experiment. The experiment was conducted on the farm "Yusuf Imomtepa yerlari" in Nurabad district.

Purpose and methods of the experiment. To solve this problem, in our research, we aimed to feed on hydroponically grown barley grass. After grazing, the sheep were fed 1.5 kg of hydroponics per day to the experimental sheep and 200 g of barley groats to the control group.

Figure 1. Barley grass (Vegetation period 6 days)

The results of the study. Twenty of the local pregnant ewes in the herd were isolated. In terms of age and live weight, 10 of them were divided into two groups by analogy. The first group was defined as the control group, the second group as the experimental group.

For 60 days, the 2nd stage of pregnancy of local pedigree sheep was studied.

Figure 2. The process of growing barley grass

Figure 3. The process of preparing barley grass for feeding.

TABLE 1. THE NUTRIENT CONTENT OF THE FEED IN THE RATION OF THE EXPERIMENTAL SHEEP.

(N= 20)

№	Feed type	Composition in 1 kg of dry matter Al.Energy (MDj)	The composition of 1 kg of dry matter is crude protein (gr)	Control group		Experimental group		During the experiment	
				The daily amount of nutrients per head (kg)	Total nutrients consumed in 60 days (kg)	The daily amount of nutrients per head (kg)	Total nutrients consumed in 60 days (kg)	Al.Energy(MDj)	Crude protein (gr)
1	Barley porridge	13,1	132,9	0,200	120	-	-	1336,2	13555,8
2	Barley grass	12,0	206,87	-	-	1,5	900	2268	39098,43

According to the table, during the experiment, sheep in the control group were given 0.200 kg of barley grain per head as a supplement, a total of 10 sheep were fed 120 kg of additional barley grain per 60 days, total exchange energy (MDJ) was 1336.2, crude protein was 13555.8 g.

Sheep in the experimental group were given 1.5 kg of barley grass as additional feed per day, a total of 10 sheep were supplemented with 900 kg of barley grass per 60 days, total metabolic energy (MDJ) 2268 crude protein 39098 , 6 gr.In our analysis, the sheep in the experimental group consumed 931.8 metabolic energy (MDJ) and 25,542 g of crude protein.

Figure 4. Experimental sheep

TABLE 2. AVERAGE LIVE WEIGHT OF LAMBS, KG

№	**Groups**	**n**	Live weight, kg M±m	б	Cv%
1	Control group	10	4,60 ± 0,1	0.33	7.2
2	Experimental group	10	5.012 ± 0,06	0.19	3.83
P<0,01					

According to the table, the live weight of lambs in the experimental group at birth was 0.412 kg higher than in the control group.

CONCLUSIONS

The results of the experiments showed that in order to meet the nutrient requirements of pregnant sheep for the last two months, feeding with barley grass grown by hydroponics is more nutritious than barley groats.

Feeding the ewes with barley grass grown by hydroponics satisfies the digestion rate of the green mass and the need for vitamins and trace elements.

The live weight of lambs born to the experimental group was higher than the live weight of lambs born to the control group.

The short growing season (7-8 days), the availability of production in the desired climate, season and location, the possibility of growing green mass only by wetting the grain without processing, provide sheep with green fodder in the winter. At the same time, sheep farming increases the economic efficiency of farms.

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