



LIVE WEIGHT PERFORMANCE OF LAMBS FROM EWES FED A SINGLE-COMPONENT HYDROPONIC FEED

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Abstract:

The article describes the results of the study of the dynamics of live weight of lambs obtained from sheep fed with single-component hydroponic feeds and their superior characteristics compared to the control group.

Keywords: Hydroponic feed, live weight, ration, live weight dynamics, the energy of exchange.

ACTUALITY. Nowadays, improving the breed of animals and increasing their productivity is an important issue in ensuring food safety in the livestock sector, as well as in all areas of agriculture.

A positive solution to the mentioned problem depends on a number of factors. First of all, it is effective to take into account the genetic factor, because it is effective to use animal breeds specialized in this direction to increase certain productivity. The use of animals in other areas of productivity makes it difficult to achieve sufficient efficiency.

The effective use of sheep productive potential and the use of probiotics in improving the quality of offspring are highly effective. That the use of complementary foods, probiotics in the feeding of sheep has a positive effect on the milk productivity of the sheeps, and at the same time they provides an improvement in the growth indicators of their offspring [3, 4, 5]

Improving the conditions of feeding of animals, feeding them with a full-value balanced ration is important in increasing the efficiency of using the productivity opportunities of animals.

Based on the direction of research, the dynamics of live weight indicators of 8-month-old rams from "Jaidari" sheep were studied.

RESEARCH OBJECTIVE: The purpose of the research is to determine the effect of using one-component hydroponic feed (wheat grass) in additional feeding of sheep on their live weight.

RESEARCH METHOD: The research of this direction was carried out on "Jaydari" sheep at the farm "Yusuf imomtepayarlari" in Nurabad district of Samarkand region. In the research, control and experimental groups of sheep of this breed, as well as control (20 heads) and experimental (20 heads) groups of rams obtained from them were formed.

The rams of the control and experimental groups were fed according to the prescribed ration and the live weight dynamics of the rams from birth to 8 months of age was studied (N.A.Kravchenko, 1963).

Animals of the experimental group were additionally fed with wheat grass. The obtained data were processed statistically (N.A.Plochinsky, 1969).

Table 1.
Feeding ration of Strait sheep in the second period and 8-month-old rams

Indicators	Strait sheep		8-month-old rams	
	Control group	Experimental group	Control group	Experimental group
Composition of the ration:				
Field hay, kg	1,0	1,0	1,0	1,0
Various grass hay, kg	1,0	1,0	1,0	1,0
Wheat semolina, kg	0,45	-	0,3	-
Wheat grass, kg	-	3	-	2,0
Table salt, g	13	13	7	7
Ration composition:				
Exchange energy, Mdj	18,93	20,9	17,0	18,4

Dry substance, kg	2,07	2,14	1,9	2,0
Crude protein, g	255,6	281	232,7	250,0
Sa, g	12,8	18,2	12,7	16,3
P, g	7,1	10	6,4	8,4
Carotin, mg	29,5	76,0	28	59,0

In the table, the animals of the experimental group were supplemented with wheatgrass hydroponic feed at the rate of 0.45 and 0.3 kg per head. In this case, the energy of exchange of the daily intake of the animals of the experimental group was 20.9 megajoules (MkJ) in beef sheep, 18.4 megajoules (MkJ) in 8-month-old rams, crude protein was 281 and 250 grams, and the ration of the control group was which has high indicators.

RESEARCH RESULTS: Based on the direction of the research, the dynamics of live weight parameters of 8-month-old rams from "Jaidari" sheep were studied. The results from the studies are summarized in Table 2.

Table 2.
The dynamics of change of the live weight of lambs.

Groups	n	Live weight, kg							
		At birth		at the age of 5 months		at the age of 6 months		at the age of 8 months	
		X±Sx	Cv, %	X±Sx	Cv, %	X±Sx	Cv, %	X±Sx	Cv, %
Control	20	4,7±0,06	6,5	35,7±0,14	1,79	35,9±0,14	1,8	40,4±0,15	1,68
Experience	20	5,0±0,07	6,4	37,1±0,14	1,69	38,0±0,15	1,86	46,2±0,15	1,34
		X-P<0,05; x)-P<0,001							

From the data in the table, it is possible to see the high efficiency of using hydroponically prepared feeds in feeding sheep. It was found that rams fed with this supplement had significantly higher ($P < 0.05$; 0.001) live weight indices at all age periods, especially at 6 and 8 months of age, compared to rams in the control group (proportionally 2,1 and 5.8 kg).

It should be noted that as a result of the additional feeding of hydroponic feed during the second half of gestation, the mothers of experimental rams lost 0.3 kilograms at birth ($P < 0.05$) and 1.4 at 5 months of age compared to the control group. kg ($P < 0.001$) was observed to have higher live weight.

From the result, it can be seen that the doubling of carotene, which is considered the main component in the production of protein in soft grass, compared to the initial condition of the nutrients prepared by the hydroponic method, can be explained by the significant increase in its assimilation and nutritional value. This had a positive effect on the absolute and daily growth of live weight in experimental animals (Table 3).

Table 3.
Absolute and daily growth indicators of live weight of rams, n=20

Groups	From birth to 5 months			From 5 months to 6 months			From 6 months to 8 months		
	Growth indicators								
	Period duration, days	Absolute growth, kg	Daily growth, gr	Period duration, days	Absolute growth, kg	Daily growth, gr	Period duration, days	Absolute growth, kg	Daily growth, gr
Control	150	31,0	207,0	30	0,2	7,0	60	4,5	75,0
Experience	150	32,1	214,0	30	0,9	30,0	60	8,2	137,0

In the research works in this direction, it was found that the absolute and daily growth of the live weight of the offspring of the experimental group with additional feeding of hydroponic fodder with wheat grass was higher. In the period from birth to 5 months, these indicators are proportionately 31.0 and 32.0 kg and 207.0 and 214.0 grams, from 5 months to 6 months 2 and 9 kg and 7.0 and 30,0 grams, 4.5 and 8.2 kg and 75.0 and 137.0 grams from 6 months to 8 months.

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