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**Izlaganje sa znanstvenog skupa**  
**Conference paper**

**INTENSIVE FATTENING IN HOUSING CONDITIONS OF  
YOUNG SHEEP MERINO TYPE**

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**Summary**

The intensive fattening in housing conditions of Merino young sheep implies monthly food rations containing approximately 100/110 g RDP/ 1 NMU. Under these conditions the animals can reach almost 48 kg from the initial 28 in about 93 days, so the total growth increase is of 20 kg, accepted by the aliment costs.

The second lot which was administrated a mixture of concentrated fodder with an intermediary content of digestive albumin also has the presented average indices.

Key words: young sheep; fattening; housing conditions; concentrates mixes; ad libitum.

*Introduction*

As a natural consequence of people's preference for mutton, especially lean, soft, succulent, with fine muscular fibres, today, all over the world it is a tendency to change the entire conception and sheep breeding for mutton production.

Owing to the fact that in Oltenia the grazing fields are insufficient for the young sheep, we decided more useful to make our experiment in Banu Maracine Resort, Craiova. We experienced the possibility of intensive lamb breeding in housing conditions. In fact, we examined the general behavior of the biologic material and the influence the protean level has on weight increase as well as the sacrifice indices.

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### Material and methods

Thus, in 2005 we had an experiment on 27 young Merino rams, grouped into 3 lots of 9 rams, depending on their weight, body development and age. The average age at the beginning of the experiment was of 120-123 days and the fattening lasted for 93 days with two periods of 31 and 62 days. All the three lots received in the former period a protean level of 400 g/ram/day and in the latter 700g/ram/day.

The concentrated fodder used for the protean levels were corn, sunflower grit, powder milk, dry yeast, mixture, in different proportions.

Each lot received, besides the concentrated fodder, withered alfalfa, both the consumed quantities and the rests were registered.

The nutritive content of the fodder consumed by each lot in both periods is shown in Table 1.

Table 1. - THE AVERAGE CONSUMPTION OF UNM AND RDP (per ram)

Lot	Period I				Period II				I + II			
	Concentrate fodder		Withered alfalfa		Concentrate fodder		Withered alfalfa		Concentrate fodder		Withered alfalfa	
	NMU*	RDP	NMU	RDP	NMU	RDP	NMU	RDP	NMU	RDP	NMU	RDP
	g		g	g	g	g	g	g	g	g	g	g
I	18.6	1672	12.2	1834	49.9	3559	34.2	5136	68.5	5186	46.4	6970
II	17.8	1984	12.0	1810	49.0	4427	33.9	5083	66.8	6411	45.9	6893
III	18.0	2387	12.2	1829	48.6	5295	34.3	5150	66.6	7682	46.5	6979

\*NMU nutritive meat units

### Results and discussions

We can notice that during the same period the quantity of alfalfa consumed by the young rams of the 3 lots reflected by NMU and RDP was the same. The protein quantities in the concentrated fodder consumed by the 3 lots varied between 10-26% comparatively with those of alfalfa during the entire experimental period of 93 days.

The revaluation level the food expressed by the weight increase is shown in Table 2.

The final weight of 45,9 kg-48,2 kg in comparison with the age shows that the fattening was within normal parameters of the young sheep intensively fattened.

Table 2. - LIVE WEIGHT AND AVERAGE DAILY INCREASE (lots/periods)

Lot	Age (days)		Exploiting duration (days)	Live weight in kg at:			Average daily increase		
	Initial	Final		$X \pm s_x$		$X \pm s_x$		Total experiment duration	
				the beginning	the ending		Period		
				I	II	I	II		
I	123	93	216	28.1 ± 1.1	35.0 ± 1.2	45.9 ± 1.7	218 ± 9	175 ± 11	190 ± 8
II	123	93	216	28.5 ± 1.4	35.4 ± 1.4	46.3 ± 1.4	222 ± 16	175 ± 6	191 ± 8
III	120	93	223	27.5 ± 0.3	36.0 ± 1.0	48.2 ± 1.2	272 ± 14	197 ± 10	222 ± 9

In the latter period, when the protein content of the mixtures was lower in comparison to the rams' weight, the average daily increase was lower than in the former.

Examining the differences of the average daily increases in weight during the experiment we note that they are statistically assured, generally, only between Lot I and lot III. Thus, the most efficient quantity of RDP/NMU is assured in the concentrated fodder mixture administrated to Lot II, hence of 110 g in the first period and of 90 g in the second one.

Regarding the NMU increase/1 kg consumption, the results (presented in Table 3) show that NMU increase was higher at the first lot in comparison with the other two. An opposite aspect is represented by the RDP consumed to get the increase, which grows from 687 g in the former period to 708 g in the latter.

Table 3. - NMU<sup>(1)</sup> AND RDP<sup>(2)</sup> CONSUMPTION PER 1 KG WEIGHT INCREASE FOR MERINO TYPE

Lot	Period I				Period II				I + II					
	Conc. food		Alfalfa		Conc. food		Alfalfa		Conc. food		Alfalfa		Total	
	1	2	1	2	1	2	1	2	1	2	1	2	1	2
I	2.73	239	1.79	270	4.58	326	3.14	474	3.87	293	2.62	394	6.49	687
II	2.58	287	1.74	262	4.49	407	3.11	466	3.75	360	2.58	387	6.33	747
III	2.12	281	1.44	215	3.98	434	2.81	422	3.22	371	2.25	337	5.47	708

### Conclusions

1. The young rams behaved well, had appetite, vividness and a normal health state.
2. The average daily increases of the 3 lots allow reaching a weight of 45-48 kg at the age of approximately 7 months.

3. The fodder consumption per 1 kg of weight increase was lower at Lot II than Lot III by almost 6% and by 0, 9% than Lot I.

4. The optimum concentrated mixture which has to be used in intensive fattening should contain approximately 100-110 g PBD per 1 UNC in the former period and 80-90 g PBD in the latter.

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