

**THE PROJECTION OF A FARM SPECIALIZED IN
FATTENING YOUNG ROMANIAN SPOTTED CATTLE WITH
AN ANNUAL DELIVERY OF 310 TONS OF MEAT**

**PROIECTAREA UNEI FERME DE ÎNGRĂȘARE A
TINERETULUI TAURIN DIN RASA BĂLȚATĂ
ROMÂNEASCĂ CU O CAPACITATE DE LIVRARE ANUALĂ
DE 310 TONE CARNE**

GHIRILĂ ANDREEA BIANCA*, PECE AURELIA*, MUREȘAN GH. *

**University of Agricultural Sciences and Veterinary Medicine, Faculty of Animal
Husbandry and Biotechnology, 3 – 5 Mănăștur Street, Cluj-Napoca, Romania*

The aim of this project is to expose the fattening technology in continuous growing system of young cattle from Romanian Spotted breed, having as purpose the obtainment of average weight young cattle. The quantity of meat that has to be delivered annually is 310 tons at an average weight of delivery in live of 510 kg/head with the fattening period of 460 days which means we will annually deliver 608 heads of young cattle without losing anyone in the four phases of fattening. For this purpose the capacity of fattening must be 815 heads with an index of annual occupation of 95% and of 75% on the total period of fattening. The surface necessary for the fodder production is 250 ha.

Key words: fattening, young cattle, meat

Introduction

The purpose of this project is to expose the fattening technology in continuous growing system of young cattle from Romanian Spotted breed, for the obtainment of average weight young cattle. The projection of this fattening technology requires the establishment of some parameters which are taking into account in the technological flux: the socio-economical conjuncture, the biological material used, the entrance age in the fattening of a calf, outlet age, the fattening period, the weight at the entrance and at the outlet, the number of heads at the entrance and at the exit, the accommodation capacity of the shelter and the regularity afflux.

The projected farm is situated in a hilly area, with a capacity of 815 heads and a total surface of the shelters is 2686.58 m².

Materials and Methods

The important elements of the fattening are: the biological material watched from the view point of origin, race, health conditions, transport and the taking over; maintenance technology – housing conditions and due surfaces, microclimate; sustenance technology, rations, necessary fodder and the surfaces necessary for being cultivated.

The biological material belongs to the Romanian Spotted breed, characterized with a pleasant surface.

Results and Discussions

Table 1

Technical and economical parameters of fattening

Specification	Unity	Phase I	Phase II	Phase III	Phase IV	Total
Entrance age	days	10	65	180	415	10
Outlet age	days	65	180	415	470	470
Fattening period	days	55	115	235	55	460
Entrance weight	kg	50	90.7	182.7	441.2	50
Outlet weight	kg	90.7	182.7	441.2	510	510
Average daily gain	kg	0.74	0.8	1.1	1.25	1
Total gain	kg	40.7	92	258.5	68.75	
Heads / phase	head	102	203	413	97	815
Lost	%	5	0	0	0	
Utilization weight	%	12	25	51	12	

The maintenance technology has to assure the best conditions for the unfolding of the sustenance technology, watering and the animals care. The maintenance during the first phase is having 55 days and is carried out in individual pens with a surface of 1.2 m², 30 days; after that the calves are going in the collective pens, with a surface of 15.75 m² a pen, and the surface for each animal is about 1.50 m². In the second phase the shelter capacity is having 203 heads with 20 pens and the surface for one head is 1.70 m². In the third phase the shelter capacity is having 413 heads, with 40 pens and the surface for one animal is about 1.98 m². In the fourth phase the shelter capacity is having 97 heads, with 10 pens and the surface for one animal is about 1.98 m².

The sustenance technology has some important elements such as weight at the entrance and at the outlet, total gain, and the phase's period. In the first phase the entrance weight is 50 kg, with an average daily gain of 740 g and at the end of

the phase will have 90.7 kg. In the second phase the entrance weight is 90.7 kg, with an average daily gain of 800 g and at the end of the phase will have 182.7kg. In the third phase the entrance weight is 182.7 kg, with an average daily gain of 1100 g and at the end of the phase will have 441.2 kg. In the fourth phase the entrance weight is 441.2 kg, with an average daily gain of 1250g and at the end of the phase will have 510 kg.

The feed necessary is having in view the feeding number for all four phases, the rations, and the structure of feeds for the four phases. The total surface necessary for the fodder production has 250 ha and was find out from the total fodder and the production of one hectare.

Table 2

The estimation of the necessary sum for the feed acquisition

Feed	Feed quantity (t)	Price for 1 kg feed	Total price (thousand RON)
Inlavit	24.028	2.5000	60.0500
Hill hay	141.62	0.0200	2.8324
Clover hay	520.4	0.0450	23.4180
Corn silage	3745.74	0.0550	206.0157
Corn grains	489.1	0.2700	132.0570
Barley	92.41	0.3000	27.7230
Sunflower meal	43.05	0.4200	18.0810
Soybean meal	19.44	0.8500	16.5240
Calcium carbonate	5.77	0.1300	0.7501
Dicalcium phosphate	11.82	0.1300	1.5366
Salt	13.65	0.1500	2.0475
Zoofort	5.77	0.9000	5.1930
Total			496.2283

The total outlays with the feed are 496.22 thousand RON.

The outlay with the feed represents 45% from the direct outlay, which means 1102.72 thousand RON. The indirect outlays are representing about 9% from the direct outlay, which are about 99.24 thousand RON. The total outlay is about 1201.97 thousand RON. The total quantity of produced meat is 310,000 kg. The acquisition price of a calf is 3 RON/kg that means that a calf which has 50 kg has a price of 150 RON. The outlay with the acquisition of the calves is $150 \times 102 \times 6.25 = 95.62$ thousand RON. The total outlay is 1297.60 thousand RON. The price of 1 kg meat is $1297.60 / 310,000 = 4.18$ RON. The sale price of meat is about 5 RON. The benefit for 1 kg of meat is $5 - 4.18 = 0.814$ RON. The total benefit is $0.814 \times 310,000 = 252.34$ thousand RON.

The benefit of the fattening is about 16%.

Conclusions

The fattening technology in continuous growing system of young cattle from Romanian Spotted breed whose purpose is the obtainment of average weight young cattle is an important project which has a 16% benefit.

The success of the fattening will be achieved only if the farmer will respect the steps that were fore mentioned.

It is also a process made with low costs and which is having a good benefit, with a good price of 1 kg meat.

Taking into account the delivery of the animals, it is very important to have a good sale market.

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