RESEARCH CONCERNING THE BODY WEIGHT OF HYBRID CHAROLLAIS X MERINOS DE TRANSILVANIA LAMBS AND YOUNG RAMS FROM DOUBLE LAMBING

CERCETĂRI PRIVIND MASA CORPORALĂ A MIELUTELOR ŞI BERBECUȚILOR HIBRIZI CHAROLLAIS X MERINOS DE TRANSILVANIA PROVENIȚI DIN FĂTĂRI DUBLE

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***Abstract**: The type of lambing (simple or double) is under satisfactory genetic control: twin lambs are born 16-30% lighter and achieve less weight gain until weaning when the difference between single or twin lambs is higher. Lambs viability after lambing depends less on genetic factors such as breed, individual, weight at lambing and, in a more considerable way, on the management of their breeding and on nutritional, infectious, and parasitic diseases.*

***Keywords**: body weight, young ewes, young rams, Charollais, Merinos de Transilvania, double lambing*

INTRODUCTION

The Charollais sheep has good features of skeleton and carcass (conformation, muscle system, balance) and a good growth and development potential; it also has remarkable maternal and zoo-economic features which made it the prototype of the modern sheep breed.

These sheep lamb viable produce with a high growth and development gain; the ewes are good mothers, they produce high quality milk, they are prolific, and easy to be driven. The Charollais breed has an

excellent growth potential that ranks it among the great French mutton breeds. Single lambs fed on grass with moderate concentrated supplements weigh, at the age of 70 days, between 29 and 30 kg, while twin lambs weigh between 25 and 26 kg each.

On all sheep farms, we need to take, after lambing, measures that lead to survival and to a large number of lambs until weaning, when they can be valorised. Suckling culls (deaths and necessity slaughter) up to 5% are acceptable. On sheep farms the percentage of culls until lambing is frequently much higher, resulting in comparable financial losses.

MATERIAL AND METHOD

The goal of the present paper we aim at presenting the evolution of the body weight of the hybrid Charollais x Merinos de Transilvania lambs lambed in May and fed until weaning (75 days of age) on sheep milk and moderate amounts of concentrates (100 g/day) aiming at assessing the dynamics of the body weight in suckling hybrid Charollais x Merinos de Transilvania lambs from double lambing.

RESULTS AND DISCUSSION

In this study we assessed the evolution of the body weight of Charollais x Merinos de Transilvania lambs.

Table 1 presents the body weight of hybrid Charollais x Merinos de Transilvania young ewes from **double lambing** at lambing, at 28 days, and at 75 days.

Table 1.

Body weight of hybrid Charollais x Merinos de Transilvania young ewes from double lambing

Nr.	Date of lambing	Sex	Body weight at lambing	Body weight at 28 days	Body weight at 75 days (at weaning)
			kg	kg	kg
1	May 8, 2010	F	2.7	6.8	22.1
		F	3.1	7.1	23

2	May 11, 2010	F	2.7	7	21
		F	2.8	7.1	21.5
3	May 13, 2010	F	2.9	7.5	22.7
		F	2.7	6.8	22
4	May 14, 2010	F	3.1	7.6	22.7
		F	2.4	-	-
5	May 16, 2010	F	3	7.2	22
		F	2.6	6.4	20
X			2.80	7.06	21.89
Sx			0.07	0.12	0.31
s			0.23	0.37	0.94
Cv			8.07	5.21	4.31

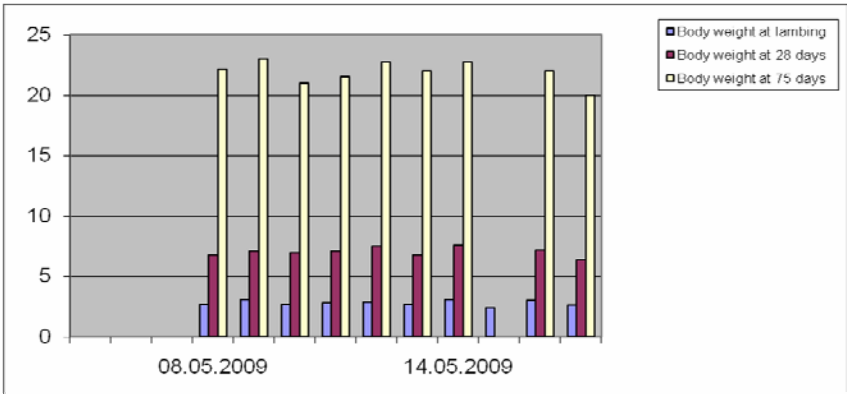


Figure 1. Body weight of hybrid Charollais x Merinos de Transilvania young ewes from double lambing

In hybrid Charollais x Merinos de Transilvania young ewes, body weight ranges between 2.4-3.1 kg with a mean of 2.8 kg.

At 28 days, the body weight of the young ewes reaches 7.06 kg with variations between 6.4 and 7.6 kg. Between 28 and 75 days, these young ewes have a better growth rate compared to the period 0-28 days and weigh, at 75 days, 21.8 kg.

Table 2 presents the body weight of hybrid Charollais x Merinos de Transilvania young rams from **double lambing** at lambing, at 28 days, and at 75 days.

Table 2.
Body weight of hybrid Charollais x Merinos de Transilvania young rams from double lambing

Nr.	Date of lambing	Sex	Body weight at lambing	Body weight at 28 days	Body weight at 75 days (at weaning)
			kg	kg	kg
1	May 8, 2010	M	2.9	7.1	22.1
		M	2.6	6.8	23.2
2	May 11, 2010	M	3.1	8	25.7
		M	2.4	-	-
3	May 13, 2010	M	3.1	7.6	24.6
		M	2.9	6.4	23.8
4	May 14, 2010	M	2.9	6.4	23.3
		M	2.5	6.2	21.8
5	May 16, 2010	M	2.4	-	-
		M	2.3	-	-
X			2.71	6.93	23.50
Sx			0.10	0.25	0.79
s			0.30	0.68	1.36
Cv			11,20	9.74	5.79

Male lambs from double lambing weight at lambing between 2.3 and 3.1 kg, with a mean of 2.71 kg, a value close to that of female lambs from double lambing (2.8 kg). At 28 days, male lambs from double lambing reach a body weight of 6.92 kg, with a variation between 6.2 and 7.6 kg. At this age too, the body weight in male lambs from double lambing is a little smaller than that of female lambs from double lambing.

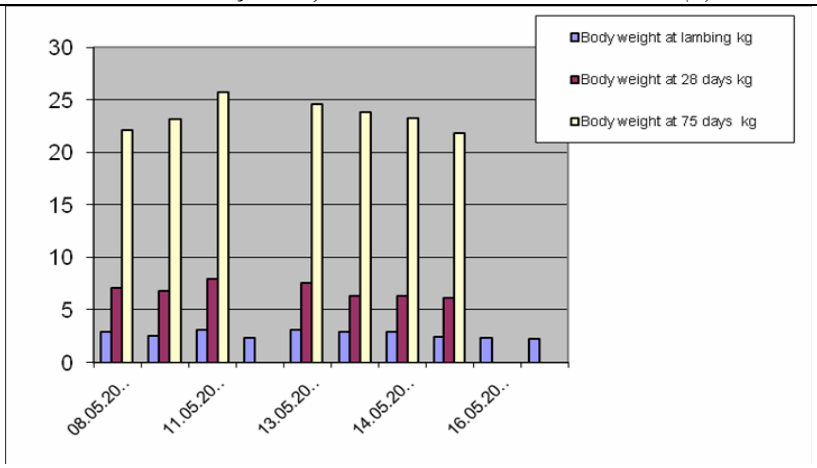


Figure 2. Body weight of hybrid Charollais x Merinos de Transilvania young rams from double lambing

Between 28 and 75 days, male lambs from double lambing have a higher growth rate than female lambs from double lambing and reach at weaning a mean body weight of 23.5 kg with individual limits between 21.8 and 25.7 kg. The variability of the body weight in male lambs from double lambing is a little higher at lambing (11.20%) than that of female lambs from double lambing, to decrease to 9.74% at 28 days and 5.79% at 75 days.

CONCLUSIONS

Hybrid Charollais x Merinos de Transilvania lambs lambed in October and fed on sheep milk, after grass, and 18% PB combined fodder *ad libitum* in the winter stable reached at weaning (70 days) higher body weights. Thus, hybrid lambs from simple lambing reached at weaning 29.24 kg, while lambs from double lambing reached 20.94 kg (twin females), 23.98 kg (twin female and male), and 24.57 (twin males).

The variability of body weight in twin young ewes is lower at lambing (8.07%) and then it decreases to 5.28% at 28 days and again to 4.31% at 75 days.

Body weight in lambs from double lambing is close (2.71 kg in twin males and 2.8 kg in twin females), which is an insignificant difference ($p > 0.05$).

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