

## UTILIZATION OF RAPESEED MEAL IN NUTRITION OF SUCKLING LAMBS

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INTRODUCTION

Recent experiments on possibilities of using rapeseed meal of traditional varieties in feeding of young sheep confirmed that because of high levels of anti-nutritional substances such possibilities do not exist.

Results of studies in which soybean meal in concentrates for calves was substituted by rapeseed meals of "00" varieties confirmed that such a substitution is quite possible (Wheeler et al. 1977, Fisher 1980).

The objective of this experiment was to determine the effect of complete or partial substitution of soybean meal in rations for suckling lambs by "00" rapeseed meal on rearing results.

MATERIALS AND METHODS

Two experiments were carried out. The first experiment was conducted on 24 ewes of Polish Merino breed, together with lambs from their birth to about 100 days of life which were divided into 2 groups. The first group was fed commercial concentrate with soybean meal, while the second group received concentrate in which soybean meal was completely substituted by rapeseed meal.

The second experiment was carried out on 16 ewes of the same breed and age with their lambs from birth to their 89 th day of life which were divided into 2 groups. Animals from the first group were fed concentrate with soybean meal, while animals from group II received concentrate which contained 18 % rapeseed meal and 10 % soybean meal.

RESULTS

In experiment 1, there were marked differences in daily gains of lambs (group I - 223 g, group II - 176 g).

In experiment 2, daily weight gains of lambs in both groups were almost identical (234 and 238 g, respectively).

Table 1. Average daily body gains of lambs

Experiment 1.

Groups	Initial body weight (kg)	Final body weight (kg)	Average daily gain	
			g	in % of I group
I	4.2	21.6	225 <sup>±</sup> 17a	100
II	4.4	16.9	176 <sup>±</sup> 15b	78

Experiment 2

I	4.3	20.3	234 <sup>±</sup> 23	100
II	4.5	21.2	238 <sup>±</sup> 19	102

## DISCUSSION

It is evident from the results of our experiments that complete substitution of soybean meal in concentrates for suckling lambs is not advisable since it reduces the rate of live weight gains.

The above results differ from those obtained on suckling lambs (Isobel et al. 1937) and calves (Wheeler et al. 1979), where complete substitution of soybean meal by rapeseed meal did not influence animal live weight gains.

## CONCLUSION

It seems advisable to formulate concentrate in such a way as to leave in its composition about 8-10 % soybean meal and add 18-20 % rape seed meal.

## REFERENCES

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