

The loin eye area of the slower gaining twin lambs was only slightly larger than that of the single lambs; however, single lambs yielded a slightly higher percent of trimmed wholesale cuts. The carcasses of the single lambs contained 0.8 percent more bone and 0.8 percent more lean than twin reared lambs. Dressing percentages were similar for the two groups with a slight advantage for twins. There was no difference in average carcass grade between the two groups.

From these data it would appear that rate of growth during early life in lambs results in relatively small differences in carcass composition with a slight advantage of more lean and less fat for the singles.

SUMMARY

Sixty crossbred milk fat wether lambs were used in this trial to study some relationships between growth factors and carcass composition. The lambs were out of Dorset X Western and Western ewes and sired by Dorset, Hampshire and Suffolk rams, and thus, afforded an opportunity for studying the influence of different growth rates on carcass composition.

The results indicate that the earlier maturing, slower gaining whiteface lambs produced fatter carcasses than the later maturing blackface lambs. The whiteface carcasses were fatter than blackface carcasses by an average of 3.4 percent. Blackface carcasses had 1 percent more bone and 2.4 percent more lean than whiteface carcasses. In addition, the whiteface lambs required a longer feeding period (by 23 days) to reach the slaughter weight of 100 pounds.

Differences in measures of carcass composition between twins and singles were not as great as between blackface and whiteface lambs. Twin reared lamb carcasses contained on the average, 1.6 percent more fat, 0.8 percent less lean and 0.8 percent less bone than singles.

Creep-Feeding Fall Calves

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The economic feasibility of creep-feeding fall calves has been the subject of a great deal of consideration in the past few years. A four-year study (Oklahoma. Agr. Exp. Sta. MP-55:72) of creep-feeding fall calves has shown that creep-fed calves gained more rapidly than non-creep-fed calves, but the increased weight gain did not off-set the cost of the creep-ration.

Results of a recent two-year study (Okla. Agr. Exp. Sta. MP-67) comparing a grain mixture and alfalfa hay fed in loose or pelleted forms for different lengths of time showed that feeding the grain mixture in loose form or alfalfa hay either long or pelleted until spring resulted in greater gains and more profit than when no creep-ration was fed.

It is believed by some that mixtures of grains and complex mixtures are no more effective as creep-rations than single grains. The study reported here was conducted to compare single grains and a simple grain mixture with a complex mixture as creep-rations for fall calves.

PROCEDURE

On December 20, 1962, one-hundred and twenty grade Hereford cows with calves were divided into six equal groups on the basis of sex of calf. The cows received 2½ pounds of pelleted cottonseed meal per head daily until April 15, 1963. In addition, a mineral mixture was provided free-choice to all lots.

Creep-feeding was started January 21, 1963, and continued until weaning on June 26, 1963. Treatments were as follows: Lot 1—no creep-feed; Lot 2—regular grain mixture composed of 55 percent steam rolled milo, 30 percent whole oats, 10 percent cottonseed meal and 5 percent cane molasses; Lot 3—steam rolled milo plus 5 percent cane molasses; Lot 4—steam rolled barley plus 5 percent cane molasses; Lot 5—steam rolled oats plus 5 percent cane molasses; Lot 6—a complex mixture containing 15 percent steam rolled yellow corn, 24 percent steam rolled milo, 15 percent steam rolled barley, 15 percent steam rolled oats, 5 percent wheat bran, 5 percent dehydrated alfalfa meal, 6 percent soybean meal, 6 percent cottonseed meal, 4 percent cane molasses, 4 percent animal fat, 0.5 percent trace mineral salt, 0.5 percent dicalcium phosphate plus one pound of Aurofac 40 and 4.54 million units of vitamin A per ton.

RESULTS

All creep-fed lots gained more rapidly than the control lot but the additional gain was small for all lots except the lot receiving the complex mixture (see table 1). The calves on the complex mixture ate more feed, gained more weight and were more efficient in converting feed to gain than calves fed the other creep-rations. Although the complex mixture cost more per ton, gains were produced more economically on it than the other rations.

Creep-feed consumption, rate of gain, and cost of additional gain were almost identical for the lots receiving rolled oats and the regular mixture. Although rolled barley appeared to be less palatable than the other rations, the cost of additional gain was less on barley than on the other single grains or the regular mixture, due apparently to more efficient feed conversion. Rate of gain was lowest and cost of additional gain was highest on the rolled milo ration.

Table 1. Crop-Feeding Fall Calves, 1963

Lot Number	1	2	3	4	5	6
Creep-Feed	None	Regular ² Mixture	Steam rolled ³ Milo	Steam rolled ² Barley	Steam rolled ² Oats	Complex ³ Mixture
Number of calves	20	20	18 ⁴	19 ⁴	18 ⁴	19 ⁴
Av. wt. per calf, lbs.						
Initial (1-21-63)	147	142	147	145	155	148
Final (6-26-63)	371	394	382	389	409	482
Total gain, lbs.						
(1-21-63 to 6-26-63)	224	252	235	244	254	334
Gain above control, lbs.	--	28	11	20	30	110
Creep-feed/calf, lbs.	--	341	302	205	342	384
Creep-feed cost (\$)						
Per ton	--	59.20	52.00	57.00	64.40	68.00
Per calf	--	10.09	7.85	5.84	11.01	13.05
Cost/cwt. additional gain (\$)	--	36.44	69.58	28.50	36.13	11.87
Value of total gain (\$) ⁵	67.20	75.60	70.50	73.20	76.20	100.20
Value of gain minus creep-feed cost (\$)	67.20	65.51	62.65	67.36	65.19	87.15

¹ The regular mixture contained 55 percent steam rolled milo, 30 percent whole oats, 10 percent cottonseed meal, 5 percent cane molasses.

² These rations also contained 5 percent cane molasses.

³ The complex mixture contained 15 percent steam rolled yellow corn, 24 percent steam rolled milo, 15 percent steam rolled barley, 15 percent steam rolled oats, 5 percent wheat bran, 5 percent dehydrated alfalfa meal, 6 percent soybean oil meal, 6 percent cottonseed meal, 4 percent cane molasses, 4 percent animal fat, 0.5 percent trace mineral salt, 0.5 percent dicalcium phosphate, 1 lb. per ton of Aurofac 40, and 4.54 million units of vitamin A per ton.

⁴ Calf death losses occurred in these lots.

⁵ Value based on a selling price of \$30 per cwt. of calves.

These data are the results of only one trial and more trials need to be conducted before any definite conclusions can be made. However, results of this trial suggest that although weaning weights can be improved, it is not profitable to feed steam rolled milo, steam rolled barley or steam rolled oats alone as creep-rations for fall calves. Furthermore, a regular mixture of grains and cottonseed meal was no more profitable than a creep-ration of steam rolled oats.

SUMMARY

A one-year study comparing steam rolled milo, steam rolled barley and steam rolled oats as single grains with a regular grain mixture and a complex creep-ration showed that only the complex mixture was profitable as a creep-ration for fall-born calves. The single grains and the regular grain mixture increased calf weaning weights from 11 to 30 pounds per calf while the complex ration increased weaning weights 110 pounds per calf. Calves fed the complex mixture ate more feed and made more efficient gains than calves fed the single grains or the regular mixture. The regular mixture of grains proved no more effective as a creep-ration than steam rolled oats.