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Lambs Put OK On Silage

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IN LAMB feeding trials here at Iowa Station during the past winter, we had two main objectives in mind: (1) To find whether it would pay to feed lambs corn silage and alfalfa hay instead of hay and (2) whether one can and should push lambs up to a good feed of shelled corn and hold them at that level, or whether the amount of corn should be shifted from time to time in accordance with the appetite of the lambs to keep them on full feed.

The feeding tests of 100 days, gave these results:

1. The best margin over feed cost was obtained from the two lots of lambs which were given a full feed of corn silage in the morning and alfalfa hay at night, together with a full feed of shelled corn, 0.2 pound of soybean oilmeal per lamb daily, a simple mineral mixture and salt self-fed.

2. It paid this past winter to full-feed shelled corn rather than to limit the corn and hold the lambs at that level.

3. It was highly profitable to feed silage. The silage was charged to the lambs at $8 a ton, but it displaced enough other feed so that its actual feeding value was about $14 a ton.

4. All six lots of lambs showed a good margin over feed cost.

Those Fed Silage Gave Best Returns Over Feed Cost and Gained Fastest of 6 Lots

By C. C. CULBERTSON and FRED E. FERGUSON

This ranged from $1.95 to $3.55 per lamb for the 100-day feeding period.

Description of Lambs

White-faced Montana lambs were used. They weighed an average of 74 pounds each when the feeding started December 12. The lambs were divided into 6 lots of 50 lambs each. These were fed for 100 days, and at the end of the feeding period were sold and slaughtered in Des Moines.

The lambs cost an average of $13.57 per hundred in the feedlots at Ames. This included the freight, cost of feeding the lambs and handling from the date purchased up to the time the feeding began.

These lambs proved to be rather light corn eaters, inasmuch as the daily consumption of corn never exceeded 1.75 pounds. The two lots which were full-fed on corn and hay ate an average of 2.37 bushels each per lamb during the 100-day feeding period.

The silage used in these tests had approximately 15 percent of corn in it.

The two lots of lambs below were the highest in margin over feed cost of the six lots fed. Those at the left were full-fed shelled corn and silage, while those at the right were full-fed shelled corn and alfalfa hay. Those on silage made the most rapid gains, had the highest margin.

The Lambs on Silage

In this feeding experiment there were three series of two lots each. Lots 1 and 2 were fed corn silage in the morning—all they would eat after they had been given as much shelled corn as they would clean up in about 20 minutes. On top of the silage they were given 0.2 pound of soybean oilmeal per lamb daily. Then they were given a full feed of shelled corn again in the evening and what alfalfa hay they would eat. They also had a simple mineral mixture made up of 70 pounds finely ground limestone and 30 pounds special bone meal. This was fed over the silage at the rate of ¼ ounce daily per lamb. Block salt was kept before them all of the time.

On this ration, Lots 1 and 2 showed the largest margin over feed cost of any of the lots. They averaged $3.39 and $3.55 per lamb when sold. They were well finished and when the carcasses were graded after they had been slaughtered, each of the lots had 47 grade AA carcasses and 3 grade A. These two lots were very close in all respects—amount of gain, feed consumption, selling price and margin. They were appraised on foot at a difference of 10 cents a hundred; feed cost for 100 pounds of gain differed another 16 cents.

**Image:** A black and white photograph of a group of lambs in a pen, facing the camera.
It so happened that the lots appraised at the higher price also made their gains at the lowest cost.

Lambs on Hay—No Silage

Lots 3 and 4 were fed the same as Lots 1 and 2 except that they got no corn silage, but instead were fed hay twice a day, only half as much soybean oilmeal and none of the mineral mixture.

The returns from these lots over feed cost were next best to the lots on corn silage. The margins over feed cost for the two lots were $2.48 and $3.24 per lamb. The cost of feed for 100 pounds of gain differed only 17 cents, but the selling price was 60 cents higher for Lot 4 than for 3. When the lambs were slaughtered the carcass grades of the two lots were exactly the same—each had 46 lambs with AA grade and 4 with grade A.

Need to Watch Corn

In our Lots 5 and 6, fed the same as Lots 3 and 4 except for shelled corn, we were trying to see whether or not it would be good procedure to get the lambs on a good feed of corn—about what might be near full feed—and then hold them steadily at that same feed. We found, however, when we got the lambs up to 1½ pounds a day per lamb and tried to hold them there that the light eaters held back and were not cleaning up the corn. Then the heavier eaters gorged themselves on corn, and as a result we lost two lambs.

We then dropped these lots back to 1½ pounds a day and held them at that rate to the end of the feeding period. We were able to keep them on feed at that level, but these lots did not gain quite as fast as the silage lots and the other two lots on hay and a full feed of corn.

These two lots ate more hay than the others, but less corn. The cost of feed for 100 pounds of gain was slightly the highest and the margin over feed cost the lowest. The grade of the carcasses of lambs from these lots was not quite as good as the other four lots.

Price of Feed

The price of feed used for these lots of lambs was figured as follows: Shelled corn (14 percent moisture) $1 per bushel; silage $8 per ton; alfalfa hay $20 per ton; minerals $25 per ton; and salt $20 per ton.

The detailed results of the feeding trials are presented in the accompanying table.

On the whole, the feeding of lambs during the past year showed a fairly good margin over feed cost. These tests indicate that either the use of silage or alfalfa hay with a full feed of shelled corn will produce satisfactory gains and margin over feed cost with the prices of feed and of lambs the past winter.

Pigs Vary In Gains and Feed Requirements

You can breed pigs for more rapid gains and lower feed requirements per hundred of gain. During 1944 comparisons were made at the Iowa Agricultural Experiment Station of the rapidity of gains of 9 of the 12 lines of Poland Chinas being carried in the swine breeding program and from the single line of Danish Landrace.

Results of these comparisons showed the pigs varied in gains from 0.94 pound per pig daily to 1.46—some of the lines gaining nearly a half faster than others. This test was made by selecting four pigs from each sire progeny, the four being selected from one to four litters. Eleven of the groups were cross-line, that is, the sire and dam were from different inbred lines.

The amount of feed required to put on 100 pounds of gain varied in the Poland Chinas from 403 to 526 pounds. The average for the Poland Chinas was 452 pounds. For the Danish Landrace line the amount of feed required was 427 pounds and the daily gain 1.23 pounds per pig daily.