
Oregon Agricultural College Experiment Station

Eastern Oregon Branch Station

Silage for Fattening Lambs

By
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CORVALLIS, OREGON

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SUMMARY

Alfalfa hay and barley constitute a very satisfactory ration for fattening lambs.

Silage added to a ration of alfalfa hay and barley does not increase the gains materially, but may be used in connection with fattening lambs, provided it can be produced economically.

In terms of amounts of feed replaced per 100 pounds gain where alfalfa hay is valued at \$8.00 and barley at \$25.00 per ton, peas-and-bald-barley silage has a value of \$5.05 and sunflower silage \$3.96 per ton for fattening lambs.

Lambs fattened on alfalfa hay and barley, with and without silage, made very satisfactory gains and there was no apparent difference in the final condition of the finished lambs.



Fig. 1. Lambs after being fed 71 days on barley, alfalfa hay, and sunflower silage.

Silage for Fattening Lambs

PEAS-AND-BALD-BARLEY SILAGE

In the winter of 1918-19 a test was made to determine the value of peas-and-bald-barley silage for fattening lambs. One lot of 86 lambs was fed on one pound whole barley a day and all the alfalfa they would eat, while another lot of 86 lambs was given one pound of peas-and-bald-barley silage per day in addition to one pound of whole barley and all the alfalfa hay they would eat. The results are shown in Table I.



Fig. 2. Lambs that have had peas-and-bald-barley silage in addition to their ration of alfalfa hay and barley.

TABLE I. RESULTS OF FEEDING PEAS-AND-BALD-BARLEY SILAGE TO FATTENING LAMBS

| | Lot 1 Alfalfa and barley | Lot 2 Alfalfa, silage and barley |
|---------------------------|--------------------------------|--|
| Weight at beginning | 92.3 | 91.98 |
| Weight at close | 111.7 | 112.8 |
| Total gain | 19.4 | 20.8 |
| Daily gain | .29 | .31 |
| Alfalfa offered | 2.40 | 2.17 |
| Alfalfa refused | .34 | .38 |
| Alfalfa consumed | 2.06 | 1.79 |
| Barley | 1.00 | 1.00 |
| Silage | | 1.00 |

On the basis of the feed required to produce one hundred pounds of gain, one ton of the peas-and-bald-barley silage replaced 140 pounds of grain and 824 pounds of hay. On this basis the ton of silage would be worth \$5.05.

It will be noted that the lot receiving silage made a daily gain of .31 pounds. While the silage lot made slightly the larger gain, yet the gains made by both lots were entirely satisfactory and the lambs put on a good finish. There was no noticeable difference in the finish of the two lots.

SUNFLOWER SILAGE

In the winter of 1920-21 a test was made to determine the value of sunflower silage for fattening lambs. One lot of 104 lambs was fed on a ration of one pound of whole barley and all the alfalfa they would eat, and a second lot was fed one pound sunflower silage in addition to the one pound of barley and all the hay they would eat. The results are shown in Table II.

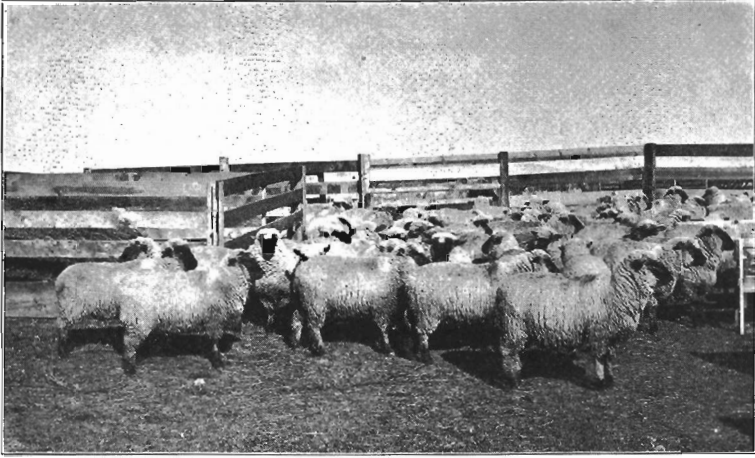


Fig. 3. A choice lot of finished lambs.

TABLE II. RESULTS OF FEEDING SUNFLOWER SILAGE IN FATTENING LAMBS

| | Lot 1 Alfalfa and barley | Lot 2 Alfalfa, silage and barley |
|---------------------------|--------------------------------|--|
| Weight at beginning | 75.6 | 75.6 |
| Weight at close | 93.7 | 94.5 |
| Total gain | 18.1 | 18.9 |
| Daily gain | .25 | .26 |
| Alfalfa offered | 2.62 | 2.37 |
| Alfalfa refused | .33 | .35 |
| Alfalfa consumed | 2.29 | 2.02 |
| Barley | 1.00 | 1.00 |
| Silage | | 1.00 |

On the basis of feed required per hundred pounds gain, one ton of silage replaces 80 pounds of barley and 740 pounds of alfalfa. With hay valued at \$8.00 and barley at \$25.00 per ton sunflower silage in this case would have a value of \$3.96 per ton. It will be noted that the daily gain without silage was .25 and with silage .26 pounds. These gains were very satisfactory in both cases and both lots took on a good finish. There was not enough difference in the gains to make any noticeable difference in the finish of the lambs.

DISCUSSION

These tests indicate that either sunflower silage or peas-and-barley silage make a good addition to barley and alfalfa for fattening lambs and that the advisability of using the silage depends entirely upon its cost as compared with alfalfa and barley. It has been demonstrated not only in these tests but in previous tests described in Station Bulletin 175, that in fattening sheep one pound of barley and all the alfalfa they will eat will produce good gains and a high finish. The addition of silage, therefore, is a matter of economy rather than of additional gains or finish. Where silage can be easily and cheaply grown it will cheapen the ration, but if conditions are unfavorable to growing silage its use will make the ration more expensive.



Fig. 4. A car of Experiment Station lambs at the Portland Stock Yards.

We have made no comparisons between peas-and-barley silage and corn silage for lambs, but our tests with cattle indicate that peas-and-barley silage compares very favorably with good corn silage. We consider corn silage the standard silage wherever it can be grown. In sections where this crop cannot be grown successfully, however, peas-and-barley, sunflowers, or sweet clover can usually be grown to good advantage.

It is interesting to note, by way of comparison, that in seven trials with corn silage in the corn belt as compiled by Henry and Morrison the silage did not materially increase the gains made, but that one ton of silage replaced 160 pounds of grain and 800 pounds of hay. Valuing the hay at \$8.00 and the grain at \$25.00 the silage would have a value of \$5.52 a ton. While these tests were conducted under conditions quite different from those at the Union station, the results in general check quite closely. It is probable that the silage made from well-matured corn was somewhat better than that fed at the Union experiment station and the hay not as good, which would tend to give the corn belt silage the higher value.