Comparison of Alfalfa and Crested Wheat Grass Hay for Fattening Lambs

By
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Two hundred Montana lambs were divided into three lots, weighed and marked individually and started on feed December 10, 1945. They were fed as follows:

Lot I	Lot II	Lot III
Grain Mixture Alfalfa Hay	Grain Mixture, 90% Soybean Meal, 10% Crested Wheat-Grass Hay	Grain Mixture Crested Wheat-Grass Hay

Salt and bonemeal were kept before all lambs. One lamb in Lot II did not do well and was removed February 4. Feed consumption was estimated on the basis of the weight of this lamb and the feed records were corrected accordingly.

The grain mixture consisted of equal parts by weight of shelled corn, barley, and oats. The grain and crested wheat grass hay were produced on the station, the alfalfa was grown on the Lewis and Clark irrigation area and the soybean meal was purchased from a local feed dealer.

The results are summarized in Table I.

Table 1—Summary of Feed and Weight Records. December 10, 1945 - March 18, 1946

	Lot I Grain and Alfalfa Hay	Lot II Grain, Soybean Meal, & Crested Wheat-Grass Hay	Lot III Grain and Crested Wheat-Grass Hay
Number of Lambs	68 lbs.	64 lbs.	67 lbs.
Average Initial Weight	62.0 lbs.	62.1 lbs.	64.7 lbs.
Average Final Weight	87.8 lbs.	85.6 lbs.	84.5 lbs.
Average Gain	25.8 lbs.	23.5 lbs.	19.8 lbs.
Feed Consumed per 100 lbs.			
Gain—Grain	396.3 lbs.	383.6 lbs.	465.5 lbs.
Soybean Meal		42.6 lbs.	.....
Alfalfa Hay	788.3 lbs.	.....	.....
Crested Wheat Grass Hay		830.5 lbs.	945.2 lbs.
Cost of Feed per 100 lb. Gain	$13.83	$14.17	$15.20

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The prices used in figuring costs were as follows: barley, $1.08 a bushel; corn, $1.26 a bushel; oats, 72c a bushel; soybean meal, $65.00 a ton; alfalfa hay, $15.00 a ton; and crested wheat grass hay, $10.00 a ton.

The lambs that received alfalfa hay made more rapid gains than those in either of the other lots and consumed less feed to produce one hundred pounds gain. The lambs which received crested wheat grass hay with soybean meal to increase the protein gained nearly as much as those on alfalfa hay. Lambs on grain and crested wheat grass hay without protein supplement made the least gains.

These results emphasize two important points in feeding lambs:

1. Alfalfa hay provides the protein required to supplement grain for lambs.
2. Grass hay, even of good quality, does not supply sufficient protein to adequately supplement grain; therefore, a protein supplement increases the rate and economy of gains.

Hybrid Corn Acreage in North Dakota

By
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Nearly half of the total acreage planted to corn in North Dakota in 1946 was planted with hybrid seed, according to a release from the Office of the Agricultural Statistician, B.A.E., U.S.D.A., dated July 15, 1946. Of the estimated 1,206,000 acres of corn planted in 1946, some 579,000 acres, or 48 percent, were in hybrids. The percentage of hybrid corn acreage in the southeastern part of the state runs up to 80 percent, in the northeast up to 50 percent, with percentages of from 15 to 20 percent in other parts of the state. The U. S. figure for hybrid corn acreage was estimated at 67.5 percent in 1946. The Experiment Station's program of developing suitable hybrids has helped bring up North Dakota's hybrid corn acreage rapidly through its own breeding operations and its constant testing program in cooperation with the commercial producers of hybrid seed corn.

North Dakota's advance into hybrid corn has been speeded up at a rapid rate—note the figures:

Year	Percentage of total acreage planted with hybrid seed
1938	0.4
1939	1.6
1940	3.8
1941	7.5
1942	11.8
1943	16.7
1944	24.9
1945	31.9
1946	48.0