CORN SILAGE FOR BEEF PRODUCTION

The value of corn silage as a succulent feed for dairy cows is well known and its use for that purpose is widespread. Attention has now been directed to the possibilities of corn thus prepared for beef production, writes H. R. Smith in the Breeders' Gazette. The high price of corn which has prevailed during recent years has lead to a larger utilization of the cornstalk with less dependence upon the grain itself. Not only have a number of tests been made at various state experiment stations, in which silage has been made a part of the ration for beef cattle, but farmers thraout the country are fast putting it into use. They seem especially well pleased with it. In reviewing recent literature covering experiment station trials, one notices little if any contradiction of results. In practically every test the use of a good quality of silage has not only increased the gains, but has at the same time lessened the cost of production, and increased the profits from feeding. In many trials the cost of producing 100 pounds of beef by the use of silage is $1 less than with a ration which does not contain this feed.

These tests have dealt with the value of silage for winter feeding. The limited acreage of pasture in a corn and wheat state like Nebraska, and the fact that there the growth of grass is frequently curtailed by lack of rainfall, especially during late summer, led me to undertake an experiment to show the value of silage fed to cattle during the summer months. Forty-eight steer calves, each nine months old, averaging a little over 500 pounds in weight, were divided into six groups of eight each. Two groups were to furnish a comparison of a ration consisting of corn, alfalfa and corn stover (stalks) and a ration consisting of corn, alfalfa and corn silage. The remaining groups were fed with the idea of comparing the value of three so-called protein concentrates—bran, linseed meal and cottonseed meal, each fed in a ration with corn meal and corn silage to furnish the protein needed. The experiment made shows a comparison of these protein concentrates with a protein roughage like alfalfa.

Stover and Silage Compared

During the period, beginning March 25 and ending Aug. 15, 1911 (twenty weeks and three days), the calves fed on the ration of corn, alfalfa and stover, made an average daily gain of 1.52 pounds, while those fed on corn, alfalfa and silage gained 1.85 pounds. The stover calves consumed an average of 7.5 pounds of corn meal per day, whereas the silage calves were fed 6.1 pounds per day. The silage calves were given 1.4 pounds less per day because approximately that quantity of grain was present in the 15 pounds of silage. The test was therefore a comparison of the value of corn-stalks cured in the field and later shredded, with stalks converted into silage. The grain and alfalfa fed was the same in both groups.

With corn valued at that time at 45 cents per bushel, alfalfa at $8 per ton, corn silage at $3 per ton and shredded corn stover at $3 per ton, the cost of producing 100 pounds of gain on corn, alfalfa and stover was $5.42, whereas on the ration of corn, alfalfa and silage the cost of gain was but $4.66 per cwt. This cost of production on the two rations made the average profit on the stover steers $1.31 for the summer period, while the profit on the silage steers was $5.88 for the same period. This profit was made on a selling price of 50 cents per cwt. in advance of cost price in both groups. As all these calves were fed in the barn, with exercise lots adjoining, and received no grass whatever, the results are very favorable to the use of silage as a substitute for grass.

Alfalfa, of Course

The results of both fall and winter experiments, in which comparisons were made of the value of bran, linseed meal and cold-pressed cottonseed cake, each fed as a supplement to corn and silage, shows the bran to be worth $17.20 per ton and linseed meal $29.74 in comparison with cold pressed cottonseed cake which cost $25 per ton at the time. The gains made on the ration consisting of corn, alfalfa and silage (in comparison with the ration of corn, bran and silage) are such as to show that alfalfa had a feeding value but $1 per ton lower than bran. This confirms numerous other tests made by me during the past ten years while in Nebraska, namely, that beef can be produced in that state at the lowest cost and with the greatest profit on a combination of the corn plant and alfalfa hay, and these figures indicate that the stalk of the corn plant is more valuable when converted into silage.

Silage vs. Grain

Two other tests have recently been made by me to furnish data as to which is the most profitable, the feeding of a large quantity of silage and a small quantity of grain, or a medium quantity of each, or a ration consisting of a light feed of silage and a heavy feed of grain, alfalfa forming a part of each of the three rations. The results show that during the finishing process it is more profitable to use grain more liberally, and silage in a moderate quantity. When the cattle are young, however, the reverse is true. In feeding a second bunch of thirty-two calves from Jan. 25 to May 19, 1912 (sixteen weeks), the average weight of the calves being 380 pounds at the beginning, it was found that the group fed 16.6 pounds of silage and 6 pounds of alfalfa daily per calf made average daily gains of 1.36 pounds. With the ration consisting of 12 pounds of silage, 6 pounds of alfalfa and 3 pounds of corn meal, the average daily gain was 1.7 pounds. With 9 pounds of silage, 6 pounds of alfalfa and 6 pounds of corn, the average gain was 1.9 pounds and with 6 pounds of silage and 6 pounds of alfalfa and 9 pounds of corn meal, the average gain was 2.26 pounds. But, while with the larger use of corn meal and the more limited use of silage the daily gains were larger, the cost of producing these gain increased in proportion to the amount of grain fed. In the first group with the heavy feeding of silage, and with alfalfa but no grain, 100 pounds of gain cost but $4.10; where 3 pounds of grain was fed the cost was $5.44; where 6 pounds of grain was supplied the cost was $5.70, and where 9 pounds of grain was fed per day, limiting the silage to 6 pounds, the cost of 100 pounds of gain was $6.14. This would show great possibilities with alfalfa and silage fed liberally during the growing period and at the present price of beef the cost of gains can be kept sufficiently low to give large profits on the growing out of such cattle, finishing them off for beef at a later time, probably not later than the age of two and one-half years.

ED. NOTE.—The results of the above experiments as carried out in Nebraska would indicate that silage can be fed to very good advantage in the production of beef. Corn can be grown in practically every locality in the West. Progressive farmers in several localities have silos on their farms in operation. The Guide would be glad to receive and pay for, any experiences which anyone may have had in feeding silage to any kind of stock.

JEALOUS

A minister, spending a holiday in the north of Ireland, was out walking, and, feeling very thirsty, called at a farmhouse for a drink of milk, and while he was quecking his thirst a number of pigs got round about him. The minister noticed that the pigs were very strange in their manner, so he said:

"My good lady, why are the pigs so excited?"

The farmer's wife replied: "Sure, it's no wonder they are excited, sir; it's their own little bowl you are drinking out of!"

QUICK THINKING

Briggs: "Say, can you lend me five or ten——"

Braggs: "No——"

Briggs: "——minutes? I think I can show you how to make some money."

Braggs: "——trouble at all. You can have twenty if you want."