

Marketing of Dairy Products

A Cooperative Experiment that is Succeeding

THE Richmond Farmers' Cooperative Association, of Richmond, Vermont, is an excellent illustration of what dairy farmers can accomplish when they get together cooperatively and decide to have something to say about the marketing of their own products. Previous to the formation of this cooperative association, farmers were selling their milk individually to the Borden Condensed Milk Company at a price fixed by that company. If these farmers had formed an organization and sent a committee to Boston or New York to try to induce another buyer to come into the territory, that buyer would probably have reasoned that the Richmond district was already occupied by one of the strongest concerns in the United States, and that he would be going to a considerable risk in erecting a shipping plant at a cost of \$10,000 or so, and in the end, perhaps, receive a small amount of milk. The Richmond farmers realized this and decided to erect a plant of their own. Stock to the amount of \$10,000 was sold to 50 farmers at a par value of \$25 per share, one share being issued for each five cows. The company was incorporated under the cooperative laws of Vermont, which enabled one person to hold not more than 10 per cent of the capital stock and limits dividends to six per cent. The plant is equipped to ship milk or cream and make butter or cheese.

The Richmond farmers are now in an excellent position to invite competition in the marketing of their produce. They know just how much milk they will have each month in the year. The milk dealer does not have to erect a plant of his own and he can bid for the supply of milk without the additional risk of investing his capital. His bid accordingly goes to the highest bidder. Buyers are also asked to bid on the butter and fancy cheese which is turned out in the plant.

The plant has not been running long enough to talk at length of its success. Already 40 different buyers from several distant cities have made offers for the output of the plant. Sales are made to the highest bidders wherever they may be located and highest prices are received. A new interest in dairying has been held of the community, and an addition is now being built to the creamery, so that the anticipated business of next summer may be taken care of. Contrast this with the situation that prevailed previously to the formation of this cooperative venture. No buyer had a monopoly of the whole territory! The Richmond farmers are well satisfied with their cooperative venture.

O.P.V. Ensilage for the North

The Mainstay of the Livestock Industry

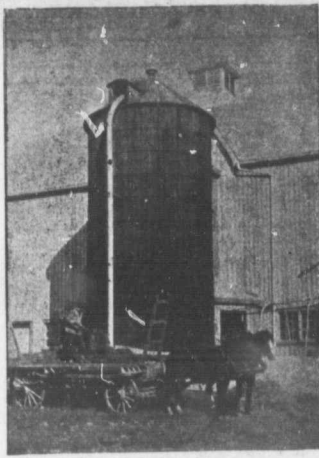
By C. E. McDowell.

AT this time it is likely that nearly all the various materials grown for the silo have been cut up and put in the silo for winter feeding. From reports, I would judge that the silos, as a rule, are filled to overflowing. This is especially true in the case where corn was grown for ensilage. However, cases where corn was grown for ensilage, we must keep in mind that corn is used to a very much greater extent for this purpose than any other fodder crop.

When passing through the western prairie provinces, the clay belt of Northern Ontario, and the corn sections of old Ontario, the thought of what the people in those districts could use for ensilage where the climate is not suitable for successful production, constantly came to my mind. These sections of the corn districts have a very different story to relate to those of the milder corn-growing sections. If they are compelled to depend entirely upon the production of corn to furnish succulent and abundant feed for their live stock in winter, I am afraid that the live stock industry is bound to build up slowly. They are under a tremendous disadvantage compared to their neighbors living in sections where corn can be grown. Surely there is some way of overcoming this disadvantage.

There are many good substitutes for corn. Some give fair results, some poor. They have been tried in all our districts. Corn has been tried everywhere from our southern boundaries to the far north. We know it is a failure in the colder districts. As I rode along and observed the attempts at growing corn where corn never was intended to be grown, I thought of what a boon some good substitute would be to this district.

To my mind there is only one good substitute so far known. That is a mixture of oats, peas and vetch. I observed this mixture growing two years in succession in a northern district of New Ontario. Moreover, these two seasons were very unfavorable for the production of corn. If this mixture can be grown successfully as far north as Cochrane, surely it can be grown almost anywhere. These experiments under actual field conditions and on a large scale, have convinced me that a mixture of



Filling the Silo at Monteth. This 100-ton silo is being filled with O. P. V. mixture. It is the fourth time the silo at the Monteth Experimental Station, New Ontario, has been filled with O. P. V. ensilage, and results of past years show that this mixture will be the mainstay of the live stock industry in the north.

oats, peas and vetch is an excellent substitute for the cold sections where corn cannot be grown successfully. Moreover, I am not so sure but that in many cases, it would give better results than corn, even in the countries where corn is grown.

It is true that corn makes excellent silage and where handled well gives heavy yields. I do not want to give the impression that I am running down corn and boosting O. P. V. mixture. What I do want to impart is an idea of the value of this mixture for northern sections. I have seen corn growing in the Winnipeg district. True, some fields were very good, but also, more were not. On the best, the grain on the cob was very much inferior. I have also observed ensilage corn growing in the northern districts of old Ontario and found that excepting on an odd field, it was poor. I feel quite safe in saying that had the same fields been sown to O. P. V., the results would have warranted the venture. The quality of silage would have been better and the quantity would have far exceeded the other.

Every producer of corn knows that it takes a good condition if a heavy yield is expected. It is hard to handle at harvest time. This is not so much the case with O. P. V. There is no after cultivation or hoeing. The land does not need to be any richer, or better cultivated than the land for corn. As stated before, the land for O. P. V. need not be any richer or better worked than for corn. At Monteth each year the land is plowed in the fall. One year it was manured in the fall, the manure being spread in the spring and worked in. Spring cultivation consisted of disking and harrowing the land until it was in good tilth, and seeded in the ordinary manner with the grain drill.

In 1917 this crop was not sown until June 6, while the year previous it was sown about May 10th. Last spring it was about May 20th. The difference in the time of seeding, however, did not seem to affect the quality or yield to any extent.

In 1917 the farm management endeavored to select strong growing oats and peas, suitable to the climate. One-half of the field was seeded with O. A. No. 72 oats, the other half seeded with Abundant peas of Prince Albert peas and common vetch were used

over the entire field. The mixture that was used was made up of two and one-half bushels of oats, three-quarters of a bushel of peas and one-half bushel of common vetch. These grains were mixed together and sown with the grain drill at the rate of three and one-half bushels per acre. The season was bad, but the grain germinated very well and produced a fairly even stand.

The crop was cut when the oats were in the firm dough stage. At that time the peas and vetch were in a fair state of maturity. It was cut with the grain binder and tied into small sheaves. The ready way into the silo the sheaves were picked off the ground, loaded on to the wagons and taken to the silo. Special care was taken to cut it fine and get it well tramped into the silo. The previous year some difficulty was experienced in getting the crop directly to the fact that the silo was a rough stave silo, and very open at all the joints. Last winter this trouble was not experienced as the ensilage went into a good silo.

I cannot say that cattle like O. P. V. silage any better than they do corn, but I can say that they like it as well. The advantage in feeding value compared with corn is in favor of the O. P. V. mixture. According to analysis, O. P. V. contains a little more dry matter than corn, while the food elements balance each other fairly closely. The yield of green matter for the past three years at Monteth, averaged about 10 tons per acre. How many growers of corn, even in the corn sections, get much more than 10 tons per acre? It is true that many get 15 to 20 tons, but in getting it the grower has the extra work of summer cultivation, which is considerable. I am convinced that the O. P. V. mixture is the cheapest ensilage feed to be grown in the districts where good rank, well-eared corn cannot be grown. It will do much to solve the problem of the stock raisers of the north.

Tuberculin Test and Milk Yield

Does Testing Reduce the Flow

J. J. Hooper, Kentucky Experiment Station.

A GREAT many dairymen would test their cows for their own information if for no other reason than if they were certain it would not materially reduce the milk flow. Some believe it very detrimental. There need be no hesitancy, because experience shows that when the cows are tested under natural conditions the milk flow is not materially affected. When the cow is taken away from her mates, put into a hot, badly ventilated stable and tested, she does not give much milk, but this is due to the treatment and not the test.

To determine if the tuberculin test really reduces the milk flow, we tabulated the milk produced by ten cows before and after the test was made on the Kentucky Experiment Station here last February. The accompanying table shows the results. The ten cows were giving on an average 21.45 lbs. of milk daily (for three days preceding and succeeding the tuberculin test), and on the two days of test they averaged 20.93 lbs. There was an appreciable decrease of 2.24 per cent on the two days that they were tested. No one need have any fear of unfortunate effects from the test.

	February, 19th	10th	11th	12th	13th	14th	15th	16th
Baronette's Countess.....	21.6	21.4	24.1	24.1	24.1	26.3	24.6	23.4
Countess Barbara.....	12.7	13.5	14.1	11.1	11.4	11.4	12.4	12.4
Baronette's Countess.....	12.7	13.5	14.1	11.1	11.4	11.4	12.4	12.4
Aggie Belle Holstein.....	20.6	19.7	20.6	20.6	20.6	20.6	20.6	20.6
Aggie Belle Holstein.....	20.6	19.7	20.6	20.6	20.6	20.6	20.6	20.6
Aggie Belle Holstein.....	20.6	19.7	20.6	20.6	20.6	20.6	20.6	20.6
Aggie Belle Holstein.....	20.6	19.7	20.6	20.6	20.6	20.6	20.6	20.6
Aggie Belle Holstein.....	20.6	19.7	20.6	20.6	20.6	20.6	20.6	20.6
Aggie Belle Holstein.....	20.6	19.7	20.6	20.6	20.6	20.6	20.6	20.6
Aggie Belle Holstein.....	20.6	19.7	20.6	20.6	20.6	20.6	20.6	20.6
Aggie Belle Holstein.....	20.6	19.7	20.6	20.6	20.6	20.6	20.6	20.6

Total lbs. milk..... 220.6 210.5 221.0 210.8 208.9 207.7 210.9
Average lbs. per cow..... 22.06 21.05 22.10 21.08 20.88 20.77 21.09

The test began at noon on February 13, the tuberculin was injected at 8 p.m. and on February 14 the temperatures were taken until 4 p.m.

The average daily milk production for three days preceding and two days succeeding the tuberculin test was 21.45 lbs., and on the two days of the test 20.93 lbs.

Decrease, 47 lbs. or 2.24 per cent.

It is better to have the heavy flow of milk in winter, when prices are higher and help more plentiful. Cows in November and December get on grass just when there is a tendency to a falling-off in the milk flow. The change to fresh pasture stimulates the secretion of milk and is like a new freshening. Autumn calving is better for the cow and the calf. They receive better care and are not so exposed to extremes of weather. It must be remembered that a cow must not be neglected when dry. That is the building-up period, and she should get plenty of good food and be in a vigorous condition at freshening time.—The Dairy.

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