

A Good Word for the Milking Machine

"One of the difficult problems confronting the dairy farmer," said Mr. Geo. A. Smith, of the New York Experiment Station, in addressing a farmers' institute meeting, recently, "and which is becoming more difficult all the time is 'How is he to get his cows milked with the existing scarcity of labor?'"

"Last March," he continued, "we made arrangements with the Burrell Company, by which we secured one of its milking machines, and have used it steadily from that time, milking from 20 to 23 cows. Some people claim that they have not succeeded. Then, again, I know of a man who has used the machine for three years, milking 40 cows, and who has succeeded, and who is using it right along."

"Our experience with the machine is that it milks the cows as clean, if not cleaner, than the ordinary man milks by hand. The other part, the influence of the machine on the flow of milk for a year, is a difficult thing to tell. If a cow does not do so well, it is because she was not milked clean by the machine. If we get a good flow of milk from the cow, then we can say that the machine is doing good work."

COMPARATIVE FIGURES TELL THE STORY

"The following figures show what some of the cows did with and without the machine. The records are from 26 to 28 weeks. Conditions were not comparable within the past two seasons. We do not pasture our cows. In 1906 there was rain and plenty of green food. In 1907 there was drought and we had to feed hay in part of August and September. The following cows freshened both years in March and April and were apparently normal. The cow Dollie was not dry before calving.

	Prd.	Milk	Milk	Giving	P.C.
	nd.	1907	1906	Nov. 19	Per
Bath.....	4	3080	3672	18.1	7
Carry.....	4	3057	3696	8	7
Princess...	4	4196	3322	11.7	5
Fanny.....	6	4363	4422	4.5	4.8
Dollie.....	8	3819	4404	18.1	6

"To make a success of the machine, it is necessary that the man who runs it have a taste for machinery. He should be one who studies, knows and understands his cows. The teat cup should be of the right size. They are graduated from '3' to '6'. They must just support and not constrict the teat."

IT WILL GIVE SOME SANITARY MILK

These machines are provided with attachments so that the air entering the machine passes for the most part through cotton filters. By using properly-fitting teat cups and keeping the tubes entirely submerged in brine, without cotton filters, the milk averaged in 49 tests, 31,600 bacteria a c.c. When cotton filters were used, the average for 48 tests was 14,500 bacteria a c.c. Now, we can produce milk that will average only 3,000 bacteria to the c.c. Ordinary milk, where no special pains are taken to make it clean, will contain from 500,000 to 3,000,000 bacteria a c.c.

"In order to produce the most sanitary milk, it is necessary to wash the tubes and so forth, first with cold water, then with salt soda and hot water, and then with scalding hot water. Once a week the tubes and all parts of the machine are taken apart and washed thoroughly, thus we are able to make a minimum of bacteria in the milk. Ordinary milk and this in a barn where no special pains are taken such as sprinkling the floor, washing the sides and flanks of the cows and udder."

"The price of an outfit to milk 30 cows, including a two h.p. gasoline engine pump, three machines, parts, pulser, rubber tubes and four sets of teat cups, is about \$300. One

man can milk 20 cows in an hour with one machine. Some men can handle three machines, thereby milking 60 cows an hour. The tubes are durable if kept properly, always submerged in brine.

"If you consider the machine on the whole a success?" was asked.

"From our experience, it is a success," replied Mr. Smith. "For a man who has a large dairy, it a great boon."

Test Your Seeds

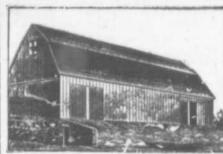
If you buy seed of the seed man, demand a guarantee from him of its quality; then test the seed yourself, and find out if he is telling you the truth. Reliable seedsmen will guarantee their seeds, and if they do not do so, don't buy. Also don't grumble at the price of guaranteed seed.

One of the simplest and best methods of testing the germinating power of seed, is to place a small piece of blotting paper or flannel cloth, moisture and fold together, after placing a counted number, say, 100, of the seed, on the folds. Put the blotter or cloth on a plate, and cover with another inverted plate, and place in a warm room. From 10 to 25 or 30 days should be allowed for the test, depending upon the kind of seed. The germinated seed should be counted and removed from day to day and at the end of the test the percentage of good seed may easily be computed. 80 seed may be tested in soil, but the germinations are likely to be from 10 to 15 per cent. lower than by the foregoing plan. The cloth or blotter plan is simple and can be carried on during the cold weather, and before the busy season opens.

As to the germinating power of good seed, it should not be lower than 75 or 80 per cent., for the leading grain crops. The United States Department of Agriculture places the standard of germination for clean seed, harvested and preserved under favorable conditions, and not over one year old, for number of vegetable and grains, as follows: Beans, 90 per cent.; beets, 143 plants from 100 seed balls; cabbage, 80 per cent.; carrots, 80; cauliflower, 90; celery, 90; corn, (fruit and sugar) 87; cucumbers, 87; lettuce, 85; musk melon, 87; onion 90; parsley, 70; parsnip, 70; peas, 93; pumpkin, 87; radish, 90; spinach, 84; squash, 87; tomatoes, 85; turnips, 90; and water melons, 87 per cent. These figures are based upon results secured in a sun testing apparatus, where the conditions of moisture and temperature could be controlled. Under ordinary methods the percentage obtained might not run as high, but it would run sufficiently high to give a good idea of the vitality of the seed.

Testing your seed is advisable, whether you buy your seed or grow it yourself. Unless the germinating power of the seed is known, it is impossible to tell how much seed to sow to the acre. If one is compelled, because of a bad crop, to fall back upon seed that is over a year old, the testing process is necessary.

Some recent French tests have shown that two year old seed gives less leafy plants, and more highly colored roots than fresh seed. With pumpkins, squashes, melons and cherries, when two or three years old, proved most satisfactory. In a general way, therefore, it may be stated that while fresh seed gives the best results, there are some exceptions, more particularly in the case of vegetables. Generally speaking, it may be stated that fresh seed should be used, when it is desired to produce a plant with a strong leaf growth, while for plants which it is desired should head or fruit well, like cabbage, melon, cucumber, etc., it is preferable to use two or three year old seed.



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