

Tests—A Western Opinion

EXTOR Farm and Dairy: The discussions in Farm and Dairy and some other publications on the relative merits of the official short-line test and the semi-official or R.O.P. test has been rather interesting, and I believe is rather important to Holstein breeders.

The official seven-day test was certainly done a great deal in advance of the Holstein breed. It is a test system that has been widely used, and any system of testing cannot but be of great advantage. It has some defects. It does not indicate how persistent a milker a cow is. In fact it may be an advantage in making a big seven-day record to have a cow that will dry off early and easy. The greatest objection I see to these tests, even 30-day ones, is that they are no indication of the fat percentage of the cow's normal milk.

Late, if any, improvement has been made in the average quality of Holstein milk, and it is largely because there has been so little information about the normal fat content of the milk of the various families of the breed. There is nothing that would do so much to make the Holstein cow unapproachable as the foremost dairy breed as to have the average fat percentage of Holstein milk raised even a half of one per cent. This should be a quite possible attainment without losing any of her great milk production. If the normal fat production of various families were ascertained by a lot of yearly tests a big step would have been taken towards improvement in this direction. At the present time some of the most popular strains of Holsteins, many of whose members have made big official butter records, are really, as far as yearly records show, low testing strains, and their general use may be really a backward step in breeding.

The Yearly Test.

The main objections raised to the yearly test are that it is expensive, that it hurts the cow, and that it is not accurate.

As to the expense, the tester in R.O.P. tests is paid by the Department of Agriculture, and as most people are keeping cows for the milk that they give, it is surely no great

expense to keep a record of the production. The main object should be not to brook records, so much as to have records of the production of a lot of cows. There are lots of Holstein cows that will show good records if they are given a chance without any expensive additions to the ordinary feed and care. The good R.O.P. records have not all or mainly been made by rich men but mostly by farmers, and are pretty generally scattered. No doubt a lot of expense can be made trying to put a big record on a poor cow, but a good record can make a good R.O.P. record without the expense being prohibitive.

As to it harming a cow to do R.O.P. tests it seems to me a libel on the breed to make the claim that they cannot stand anything but a short test without danger of harming them. Personally my experience has been that it is a great developer of cows to make them produce as much as can probably be done. Has there not been lots of harm done by excessive biting and feeding for seven-day records? No doubt a cow can be hurt even by overfeeding or wrong handling, but the blame should be put where it belongs—an ill-advised feeding, not on testing. The great records made in R.O.P. tests surely are conclusive answer to this objection. The greatest long distance producer, Tilly Alcaraz, goes on year after year making huge records, and also at nine years of age has six calves.

Accuracy of R.O.P.

It has been suggested that the R.O.P. is not accurate. Supt. Gardner, of the A.R., has stated that in the cases where comparisons with official work were possible the results were approximately the same. There has been only one case, I believe, where a cow on official test was also in the R.O.P.—the cow, Lady Pinjig Canary Jewel. The R.O.P. estimate of the butter fat was almost identical with the official figures for the year.

Any changes in the R.O.P. rules that will induce more breeders to test will be a good thing. Personally I think they are very satisfactory now. A man can milk only twice daily for nine or ten months, or he can milk four times for the year, or even, if he wants a test without breeding, still it is over, it is possible. All these circumstances are recorded in the

R.O.P. reports, and one can, knowing these things, make comparisons. No one would expect a cow that was milked twice a day and calved in 11 months to equal one that was milked four times and calved in 18 months, but knowing these things we can estimate the relative value of the records and the cows.

Tests are made to locate the good cows. Both the men doing official short-line tests and those conducting semi-official testing, if they are not trying to put big records on poor cows, are doing service to the breed and good commendation. Those deserving commendation are the ones not testing at all.

I believe it is harder to put a good R.O.P. record on a poor cow than to put a big R.O.M. record on her. With the assistance of the Department of Agriculture gives us should have a great many more semi-official records made.—B. H. Thomson, Boharm, Sask.

APICULTURE

Treatment For American Foul Brood.

AMERICAN foul brood is now pretty well distributed over the south-western portion of Ontario. Unlike European foul brood, this disease may be present in some colonies of an apiary for several seasons before it is finally spread throughout all the colonies. It has this feature, however, in which it is worse than European, that no known race of bees is immune to this disease.

The disease may be known by the characteristic glue-like odor, by the brown scales in the lower side of the cells, and in the case of larvae which have not reached this stage by the rupture of the putrifying mass. The cappings of any diseased larva which may be capped will be found to be darker than normal and to be somewhat sunken. Usually these cappings will also be found to be perforated.

Its Worst Feature.

The worst feature of the disease is that as the bees are unable to remove the dried scales from old cells on account of their glue-like nature, honey

is stored in these cells, becomes inoculated with the disease, and so serves as a carrier for the bacterium to other larvae. On this account also, honey from a diseased apiary is a dangerous source of infection for other apiaries. This is especially noticed in bee yards in the vicinity of cities, where the bees have a chance to clean out old honey receptacles.

The treatment for this disease must be given when a good honey flow is being harvested. Colonies should first be strengthened by uniting two, three, or four together. The principle underlying the treatment is that all diseased brood, comb, and honey is taken away from the diseased colony and destroyed. Thus the only time when treatment should be attempted is when there is plenty of honey coming in to supply new food and materials from which new comb may be built to replace that which has been removed. It is not enough to take bees from their old comb and put them on new drawn combs, for they will carry a certain amount of honey in their honey sacks and will store this in the new combs. The principle adopted in treating this disease is that no comb be given the bees—only a little strip of foundation to show the bees where to build their combs. By this means the bees are forced to use up the diseased honey which they may have in their honey sacks in the building of comb.

Treatment.

In treating the bees, the old hive is removed from the stand and placed a little to the rear. A new hive is placed on the stand, with new frames in which are placed starters of about one-quarter on an inch foundation. The bees are brushed into this off the old combs rather than shaken, for it has been found that the diseased honey is liable to drop into the hive and cause infection. Precautions must be taken to prevent the bees from swarming out of this hive. A good plan is to place at the bottom of the hive a queen excluder, to prevent the queen from deserting the hive.

On the third evening after the operation, the bees should be examined in their new home. All the combs which they may have built should be removed and melted down into wax, for fear they may contain any spores of the disease. Full sheets of foundation are then given, and the treatment is complete.—S. R. N. H.

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