

quite different from the bright or reddish yellow given to the butter by aniline colors.

4. Some vegetable colors give a flavor to the butter when large quantities are used.

5. Improvement in strength and flavor of some brands of vegetable colors have been noticed since the experiments began.

6. Butter colored with vegetable coloring was uniform in depth of color after holding at 5° below zero in cold storage. The aniline colors were no better in this respect than the vegetable.

7. Butter can be satisfactorily colored with a vegetable color.

H. H. D.

FEATURES OF THE COW-TESTING RECORDS.

One of the best averages, if not the best, of any association is that at Culloden, Ont., for the 30 days ending August 6th, when 371 cows yielded 821 lbs. milk, 3.4 test, 28.0 lbs. fat. Some excellent herd averages may be remarked: 22 cows in one herd averaged 1,001 lbs. milk, 33.2 lbs. fat; 28 cows in another herd averaged 949 lbs. milk, 30.8 lbs. fat; and in another, 18 cows averaged 939 lbs. milk, 32.8 lbs. fat. Two large herds are included in the report of this association; one of 60 cows, averaging 25.7 lbs. fat, and the other of 70 cows, averaging 28.5 lbs. fat. Evidently the men owning large herds find it pays them well to weigh and test each individual cow. This should be a strong argument when the farmers with small herds feel inclined to discontinue "for lack of time." There is no more important matter to-day that is deserving the attention of the small and the average dairy farmers than this testing of individual cows. Only when the system is in general use can the present low averages of several districts be materially improved. General herd averages are very delusive and may be misleading; the individual with the low production must be weeded out, and her yield can quickest be detected through the work of the cow-testing associations. In the Culloden association are several individual yields of over 1,100 lbs. milk in 30 days.

Chilliwick, B.C., August 5th.—270 cows average 685 lbs. milk, 3.6 test, 25.5 lbs. fat. The highest individual yield of 1,280 lbs. of milk is in striking contrast to that of the lowest, of 60 lbs.

In the association at New Glasgow, P.E.I., one herd of seven cows has an average yield of 897 lbs. milk, 3.4 test, and 31.3 lbs. fat. In the Brockville, Ont., association the highest herd average fat yield, during the same 30-day period, ending July 30, was 30.7 lbs. Although, however, the general average yield of these two associations shows Brockville to be two and a half pounds of fat more per cow, yet the above comparison of two herds indicates clearly the possibilities of successful dairying on "The Island," and the distinct advantages of the cow-testing associations in making such comparisons available between one section, with usually a late spring, and another old-established dairy section. There is great encouragement herein for dairy farmers in the Maritime Provinces.

Some of the recent records of the associations organized by the Branch of the Dairy and Cold-storage Commissioner, Ottawa, are as follows: Ormstown, Que., 154 cows, average 869 lbs. milk, 3.3 test, 29.2 lbs. fat. There are several good individual yields of over 1,300 lbs. milk.

The owner of the cow in the Central Smith Association that gave 1,930 lbs. milk in June writes us as follows: "This cow is bred of the strain of Calamity Jane on her father's side. I understand that he was one of her calves, but on the other side she is bred of a grade cow. I fed her grain up to the first of June, but after that I did not. When she got up to 71 lbs. a day I thought I would try and crowd her with some bran and shorts mixed, but she would not eat it. She is just eight years old, and milked as well last year as this. I like to feed half oat chop and half bran. This cow eats three gallons of bran a day, and the same of the oat chop, with hay once a day and straw twice. I think that it would be no trouble to make this cow give a lot more milk yet, if someone had her that would tend to her better. She is giving now 56 lbs. of milk. I find it very important to add to her feed about a dessertspoonful of salt with her chop twice a day. For eight cows in June my cheque was \$85.00, after the cost of making cheese was taken out."

Central Smith, 3rd September.—147 cows, averaged 706 lbs. milk, 3.3 test, 23.1 lbs. fat. The highest yield is 1,590 lbs. milk, testing 3.2, given by an eight-year-old Holstein. Her record for the four months, ending this date, is 6,750 lbs. milk and 197.1 lbs. fat.

In other cases reported, yields fell as low as 550 lbs. average for the herd.

C. F. W.

Ottawa.

Every true breeder must study his cattle. In one sense every animal is a variation even though it belongs to a breed. Nature is all the time at work to create variation. The wise breeder strives to have her differentiate in the direction of improvement; of an increase of the powers, functions and traits that are desirable to him. For instance, in dairy cattle we want to see a constant growth in the capacity of profitable milk-giving. We want every heifer to be a little better cow than her mother, every bull a little better conveyor of dairy qualities than his father.

Keeping milk records is keeping track of one's business, and the time taken in doing so is too insignificant to be taken into account.

A. COOPER.

Manitoba.

GARDEN & ORCHARD.

RESULTS OF CULTIVATING ORCHARDS.

The drouth has brought out the relative merits of sod and clean culture. It is quite a common remark with crop correspondents reporting to the Fruit Division that the fruit upon the well-cultivated orchards is much better than the fruit upon orchards in sod.

One of the Dominion Fruit Inspectors, who was asked to procure some extra fine samples, reports that he had difficulty in finding fruit of the very high class required anywhere, but said it was useless to look for this high-class fruit in any but cultivated orchards. No doubt, had the season been wet, there would not have been this marked distinction between cultivated and sod orchards.

A. McNEILL,
Chief Fruit Division.

ONTARIO VEGETABLE CROPS IMPROVED.

The vegetable crop outlook in Ontario, as reported by the crop correspondents of the Ontario Vegetable-growers' Association, is much better than it was last month. Most of the crops look fairly well, as the situation has been greatly improved by rains. The crop with most gardeners will yield more than was anticipated, as good growth is being made. Since the rains started, the growth has been steady and sure. Prices in general have been good.

The reports indicate that the cabbage crop will be good. The same may be said of cauliflowers, except in the districts around Toronto and Kingston. Celery promises to yield a good crop of excellent quality. Tomatoes turned out a little better than was expected, but the crop on the whole has been very light; prices have been high.



Golden Fox of Dentonia 72103.

One-year-old Jersey bull. First in class and junior champion, Canadian National Exhibition, Toronto, 1907. Owned and exhibited by Thompson Porter, Carleton West, Ontario. Sire Arthur's Golden Fox 61429.

The onion crop will not be up to much; in some sections it will be fair, but in others the reports are discouraging. In the district around Scotland, where large quantities are usually grown, there will be only about two-thirds of a crop, and it of fair quality. There has been an excellent crop of melons. Squash and cucumbers are scarce. Sweet corn is less than half a crop. Late beans are fair to plentiful. Table roots, such as carrots, beets, parsnips, and turnips, are good in all localities, except that the parsnip crop around Ottawa will be short, and the turnips are a failure in the Kingston district. There has been some improvement in the potato outlook, but on the whole, the crop will be only fair.

ONTARIO HORTICULTURAL EXHIBITION.

According to official intimations the Ontario Horticultural Exhibition (Fruit, Flower and Honey Show), held annually in Toronto, Ont., will be housed this year once more in Massey Hall. It had been contemplated to hold it in St. Lawrence Market Hall, where the Ontario Horse-breeders' Exhibition and the Canadian Horse Show were held last winter and spring, but owing to the expense of fitting the place up the directors concluded to give up the idea and hold the show once more in Massey Hall. Attempt will be made this year to add some striking novel features, together with high-class band music. Copies of the prize list may be secured on application to the Secretary, H. B. Cowan, Toronto, Ont.

POULTRY.

WRAPPING EGGS IN PAPER.

In reading the article on preserving eggs for winter I see that mention is made of wrapping in paper. I wish to say that I have used that method for six years with excellent results. I keep them in a very cold place in the winter, and last year I hadn't a single bad egg. The eggs are not fertile.

King's Co., N. B.

CHICKEN FATTENING AND SALE.

- Which of the following prices for chickens is the best: 8 cts. alive; 10 cents plucked, head on and undrawn; 12 cts. plucked and drawn, heads off?
- At what age should chickens be put in crates to fatten? Are the feathers supposed to be fully developed when chickens are ready for market?
- What makes chickens in crates pull each others' feathers out and eat them?
- Is it a good plan to feed beef scraps to laying hens in hoppers?
- How many pounds of beef scraps, and how many pounds of oyster shells would forty hens require during the winter?
- Is a small clover cutter for poultry a profitable investment for a farmer?
- Which is handier to use and more economical, meat, meal or beef scraps?
- Is a power windmill set on barn with steel rod going down to basement a source of danger from lightning?

Lanark Co., Ont.

1. Eight cents live weight is equal to about 10c.

plucked and 14¢ drawn, so if the price of the feathers does not pay for the work of killing and dressing, the live weight is the best price. A very good table of equivalent prices for selling poultry may be found on page 24 of Profitable Poultry Farming, Bulletin No. 7, and may be had on application to Live-stock Branch, Dept. of Agriculture, Ottawa.

2. Depending on the market. From three to five months they will not always be full feathered.

3. Usually too heating foods; sometimes lack of animal food. Give green food and milk.

4. Yes, if scraps are good.

5. Cannot say; so much depends on other feed given. Put beef and grit in a hopper where they can help themselves.

6. No. If you have nicely-cured clover, throw a forkful of it in occasionally for litter.

7. The beef scraps. When fed in a hopper, there is not so much waste.

F. C. ELFORD.

8. Experience has not shown it to be a source of danger.

APIARY.

BEEKEEPING IN THE WEST.

Out in the Canadian West, the Moose Mountain District has, since its settlement in the early eighties, been regarded as an ideal mixed-farming country, noted for its production of cattle and wheat. It now appears that beekeeping can be made a financial success in that favored locality, notwithstanding that the mercury sometimes reaches 40 below. Cooper Bros., a few miles north of Carlyle, Sask., have been in the business ten years, and last year harvested two tons of honey.

When the young men homesteaded in the Moose Mountain country, they took the advice of a lady and tried bees. The first winter's experience was not very encouraging, for the bees died, and the honey froze.

However, another colony was purchased, and increased with the years until to-day the Messrs. Cooper have sixty-eight colonies, which, in the summer, are located near their house, and are practically surrounded by bluffs, thus being sheltered from the winds. In the winter, the hives are stored in the cellar. The food supplied the colonies to tide them through until the blossoms come, is mostly old honey which may have