

Ripe fruits that spoil quickly, such as cherries, have a higher respiration rate than those that do not spoil so quickly, such as grapes.

Ripe apples lose their color, texture, and flavor, and take on the qualities of half-baked apples, by being kept for a sufficient length of time in oxygen-free gases. This emphasizes the need of good aeration for apples.

Peaches become brownish and acquire a very bad flavor when oxygen is withheld from them.

"Ice-scald" seems to be injury due to insufficient oxygen, and to an accumulation of carbon dioxide within the paper wrappers in which peaches are so often shipped. With good ventilation in conjunction with good refrigeration, such injury may be greatly reduced. This applies to fruits in storage as well as to those in transit.

Good ventilation in conjunction with refrigeration is of prime importance for the successful storage of fruit.

In connection with their nineteenth convention, the International Apple Shippers' Association will hold their fourth annual apple show at Cleveland, Ohio, August 6th to 8th, 1913. The secretary is R. G. Phillips, 612, Mercantile Building, Rochester, N.Y. No entrance or other fees.

FARM BULLETIN.

A German Fertilizer for Apple Orchards.

(Amounts per acre for bearing trees.)

Nitrogen 30 lb (N)	Phosphoric Acid 50 lb (P2O5)	Potash.
		Carried in :
100 lb Nitrate and 150 lb Dried Blood	350 lb Acid Phos- phate or in 200 lb bone meal, or in 300 lb Basic slag.	50 to 100 lb Muriate or in 100 to 200 lb of low-grade sulphate.

This table means that a fertilizer carrying about 30 pounds of actual nitrogen, 50 pounds of actual phosphoric acid (P2O5) and 25 to 50 pounds of actual potash (K2O) should be applied on an acre of bearing trees. Where potash is not known to be lacking, the smaller amount may be used, or after a little testing it may even be omitted entirely. With the smaller amount of potash, the essentials of the present combination are carried in 500 pounds of a 6-10-5 fertilizer, or its equivalent. In the usual ready-mixed fertilizers, the nitrogen is likely to be carried in ammonium sulphate, with which some liming may be necessary if many applications are made, and especially if leguminous cover crops or permanent covers are desired. In special or in home-made mixtures, the various elements may be carried in any of the materials indicated in the table.

More Agricultural Offices Opened.

The Ontario Department of Agriculture adds several new district branches to its work every year. The Province is now nearly covered by these county officials, only a few being left to be opened up. This year Haldimand County gets a representative with an office in Cayuga. H. M. King, B.S.A., will be in charge. Oxford county is to be looked after by G. R. Green, B.S.A., who will have offices at Woodstock. Northumberland county is another one to get a representative, R. S. Beckett, B.S.A., being the man appointed. His office will be in Brighton. Renfrew will have a district branch in Renfrew, in charge of J. L. Tennant, B.S.A. Peel county will have the services of W. H. J. Tisdale, B.S.A., whose office will be located in Brampton. Besides those, four summer offices have been opened, R. M. McElroy going to Rainy River District, J. N. Ponton to Sudbury, C. McRae to Birks Falls, and P. Stewart to Dryden. This makes forty district branch offices all told.

Hay and Grain Short in York Co.

At this date, June 20th, all hoe crops have been sown, and are looking fair. The weather has been very dry and warm, and growth of all grain has been set back, the straw will be very short, and many farmers had to sow barley in with their fall wheat, which is heading out about two feet high.

Farmers who have silos have planted their corn and it came up very well, the warm dry weather suiting it.

Hay will be very short, and prices will be high in the fall. Farmers are plowing up their clover sod and sowing on buckwheat. Pastures are short, and late corn is being sown for green feed in the fall.

The scarcity of small pigs makes the prices of both young pigs and fat hogs remain high.

The orchards are well loaded with fruit, raspberries will be plentiful if enough rain comes, and strawberries are plentiful, but slow to ripen. A numbers of farmers are setting out young apple orchards, which is a very good practice.

York Co., Ont.,

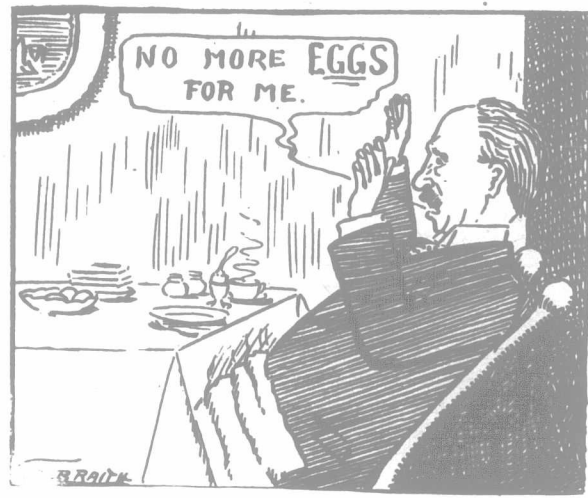
R.E.R.

Growth was Backward in May.

A bulletin of the Dominion Census and Statistics Office, issued June 13th, gives preliminary estimates of the areas sown to the principal grain crops and reports on their condition at the end of May, according to the returns received from crop-reporting correspondents throughout Canada. The reports show that the month of May proved cold and dry with frequent night frosts, and that these conditions, whilst favorable to seeding, retarded the growth of the crops sown and caused them to be unseasonably backward.

The total area under wheat in Canada is provisionally estimated at 9,816,300 acres, or 57,900 acres more than in 1912; the area in spring wheat being 8,990,500 acres, or 13,100 acres more. Oats occupy 9,608,500 acres compared with 9,216,900 acres in 1912, an increase of 391,600 acres; barley occupies 1,425,200 acres, an increase of 10,000 acres, and rye 126,500 acres, a decrease of 9,610 acres. For wheat, barley and oats taken together the increase represents 459,500 acres. The estimated acreage under hay and clover is 7,475,600 acres compared with 7,633,600 acres last year.

For the three Northwest Provinces of Manitoba, Saskatchewan and Alberta, the total wheat area is estimated at 9,013,800 acres, as compared with 8,961,800 acres, that of oats at 5,207,700 acres compared with 4,913,900 acres, and that of barley at 852,600 acres compared with 809,800 acres, these differences representing increases of 52,000 acres for wheat, 293,800 acres for oats, and 42,800 acres for barley, or 388,600 acres for the three crops.



A Stale Egg a Poor Advertisement.

South Perth Notes.

The season here at this writing (June 6th) is somewhat backward. North and east winds prevail with very little rain, consequently spring-sown crops are growing very slowly and grass is none too plentiful. The frost injured most of the early fruit buds, and the cold weather prevented the bees from flying far in fruit bloom. Consequently only those orchards in immediate vicinity of bees will be well pollenized, and set a full crop of fruit. Alfalfa was badly winter-killed, though other clovers escaped very well. This appears to be due to some lack in vitality of the plant, as it is not always traceable to poor drainage. I think this explains why it is not grown more extensively. There is something affecting the hatching of chickens this spring—a large number die in the shell. There is very little trading in horses, as few care to sell at the reduced prices. Cattle and hogs, however, hold up well, and eggs are always a good price. The cheese-factory season opened about May 1st, but the yield of milk has not been phenomenal so far, although cows were wintered well in most cases. An unusual number of washouts of tile and culverts have occurred since a year ago, requiring an extra amount for repairs.

Perth Co., Ont.

J. H. BURNS.

It is said that Oro township in Simcoe county, Ontario, has been particularly hard hit by the decrease in rural population. We were told the other day that this township fifteen years ago had a population of 4,500, but now can only muster 3,000.

Hay and Pastures Poor.

Editor "The Farmer's Advocate."

I am glad to see the stand you have taken, exposing some of the inner workings of our Banking System. There must be something to conceal, else they would not be afraid of a little light on the subject. I don't think Peter McArthur is through with them yet. His different articles are very interesting and cause people to think.

We have had a backward season so far, the seed had a good bed but the temperature became low with frosts at night, vegetation made slow progress. Very little rain has fallen for a month back. We had a thunder storm this morning, (June 16th) and a good deal of rain fell, which will do a great deal of good. Most of the root crops are sown, so this rain will soon bring the plant.

The hay crop is not very promising; the clover was badly winter-killed on many farms, and old meadows are short and thin; if hay be half an average crop it's all it will be. Mangels and corn are fair plants. Barley was damaged a little with the frosts. Pastures are not good. A few cattle soon consume a large field. J. G. Wellington Co., Ont.

Toronto's Winter Fair, Nov. 17-22.

At a meeting, held last week in one of the Committee Rooms of the Parliament Building, Toronto, Nov. 17th-22nd was fixed as the date of Toronto's new National Winter Fair. The meeting comprised representatives of the various provincial Horticultural Associations, the beekeepers and poultrymen. R. J. Fleming and Controller Foster, of the City Council, waited upon the meeting. The latter gave it to be understood that he had authority to put up sufficient money to ensure a good prize-list for live stock as well as horticultural products. Judging this year will probably be carried on in the Transportation Building on the Toronto fair ground, but agitation will be commenced for the erection of a judging arena with seating accommodation for 15,000 people.

Depth of Corn Roots.

C. P. Hartley, Physiologist in charge of corn investigations for the United States Department of Agriculture, says that when the soil is loose to a sufficient depth, corn roots penetrate in abundance to a depth of three or four feet. The proviso is well included. In this country we suspect it is uncommon for corn roots to attain such a depth. Many of the feeding rootlets spread out near the surface, and are liable to be seriously injured by deep cultivation after the corn is, say, six inches high.

The Third International Road Congress is being held in London in order to continue the studies begun in Paris in 1908, regarding the construction and maintenance of roads in view of modern methods of locomotion. The Congress, at which the Governments of the different States have been invited to be officially represented, opens on June 23rd and will last six days.

It is organized by the Permanent International Association of Road Congresses, formed in Paris in 1908, and by an organizing committee formed in the United Kingdom.

Among the delegates from Ontario in attendance at the Congress are W. A. McLean, Provincial Highways Engineer, representing the Province; Prof. A. W. Lang, from Toronto University; H. B. Bowman of Berlin, representing the Canadian Society of Civil Engineers; W. G. Trethewey representing the Ontario Motor League; A. W. Clark, representing the Ontario Good Roads Educational Association, and S. D. Robinson, of Hamilton.

The better-farming special train, now touring Ontario, is meeting with unqualified success, the attendance being unusually large for this time of year. Geo. A. Putnam, Superintendent of Farmers' Institutes, informed a member of "The Farmer's Advocate" staff a few days ago that 500 farmers, their wives, sons and daughters attended an afternoon meeting held in Shelburne, and Chatsworth also furnished a large crowd. Over 200 coming out in the evening following the very large crowd in the afternoon.

You will find enclosed money order for \$1.50, being renewal of my subscription to "The Farmer's Advocate." I wish to congratulate you on the just and firm stand you have taken for the revision of the Bank Act. I anticipate favorable results for the farmers, and sincerely trust that the old Advocate will be none the worse for it.

Nipissing District, Ont.

AUREL CLEMENT.