

sceded by some variety less tough, and less loxy in flavour. Delaware still stands pre-eminently at the head of the list for a table or wine grape, though it requires rich land and high culture. Diana is an excellent wine grape, and an excellent grape to keep, but is uneven and often late in ripening, though it has done remarkably well this year, and will do well, with a warm exposure and light dry soil. Ontario has nothing to recommend it but its size. Allen's Hybrid I consider the best and hardiest of the white grapes I have seen, though it is tender for Canada and subject to mildew. The Creveling is a grape of the Hartford Prolific style, though a much better grape in many respects. It is as early, hardy, and possesses a great deal better flavour, and clings well to the bunch—berry large. The only objection to it seems to be the clusters are loose and not very well filled; but cultivators think this is owing to a deficiency in the blossom, and can be remedied by growing it in close proximity to the Concord or some other compact variety. Mr J. C. Kilborn, of Beamsville, has fruited it for several years, and took the first prize with it at the Provincial Exhibition a year ago last Fall, as the best open-air grape, and thinks it, as he expresses it, "One of the Grapes" for Canada. Ions has been fruited by several parties in the Niagara District, but does not come up to the expectations of cultivators nor the recommendations of Dr. Grant—particularly in time of ripening. The following is J. C. Kilborn's description of it as grown by him: "Short jointed, hardy wood, rather a delicate grower, commences to ripen early, but like the Diana, lingers a long time before becoming fully ripe, has a very long loose bunch—good sized berries; thin skin and tender flesh, when fully ripe; is excellent for table or wine, being very much like a well-ripened Catawba." Mr Taylor, of St. Catharines, describes it as ripe about the middle of September, small in bunch and berry; color—light red; bunch, loose—similar to Creveling; flavor, good. (The difference in the size of Mr. Taylor's is doubtless owing to his very dry soil.) Mr. Kilborn says of the Israella: "Last year I reported as my first year of fruiting it, and they drop from the bunches. This year they do not drop, and are a good early grape, of fair flavor, compact bunch, hardy and productive." Mr Taylor says Israella ripens before Iona Bunches, small and compact; color, black; flavor, good.

Rogers' Hybrids have, many of them, been fruited this year, and some of them are truly valuable grapes. Mr. Kilborn has fruited twelve varieties of them, and says he has fruited forty varieties of grapes; but if he was confined to six varieties, three of them should be Rogers'. He further says—He has tasted several other of Rogers' besides those he has fruited—grown by Mr. Gaden, of St. Catharines—and on the whole he thinks a selection of five or six varieties selected from them could hardly be equalled by the hundreds of varieties now before the public. He thinks his are wrongly numbered; but that which he got for No 9 exceeds all the rest. He describes it as a bright copper colour, large bunch, tolerably compact, large berry, with a rich spicy flavor, sweet and delicious, resembling some of the best foreign grapes, a much better table grape than the Delaware, a rampant grower, healthy and hardy. Mr. James Taylor, of St. Catharines, has ripened Nos. 3, 4, 15, 19, 30, 33, and 41, and says—"I find them all very fine grapes; all ripen well, berries very large, flavor good. A very remarkable class of grapes." The Adirondac has not come under my observation, though I believe our worthy Secretary has fruited it, and I presume can give us his opinion in regard to it. There are numerous other varieties that have been fruited in our section; but I do not consider them of any real value, unless it be to mix with other varieties for wine.

The Leaf-hopper, or Thrip (*Erythronera vilis*) has injured the foliage of the vine very much in some vineyards, thus preventing the maturing of the fruit; but there has been very little mildew on grapes as far as I know. I know of no other insect or disease that has proved injurious.

PEARS have borne well, but the fruit has been inferior in size and quality, owing, no doubt, in a great measure to the drouth. Some varieties have been affected with a sort of a fungus growth or black spots and cracking. The Flemish Beauty seems to have suffered most, though other varieties were affected more or less. Tyson, Bartlett, Swan's Orange, White Doyenne, Sickle, Stevens' Genesee and Belle Lucrative, have done the best I think on standards, and Louise Bonno de Jersey, Duchesse de Angouleme and Buffum on dwarf trees. I have noticed but very little fire blight, which has heretofore been the great hindrance to pear culture in many places.

APPLES, which are fast becoming a staple product of the Niagara District, have been but a medium crop this year, and badly injured by worms. The

caterpillar was not so bad in most sections as the year before, but the small worms which burrow in the fruit (*Carpocapsa Pomonella* or larva of the Codling moth) were much worse than I ever saw them before—some trees having more than half of the fruit more or less eaten by them. Most varieties succeed well under the mountain range, but those that are considered the most profitable for market are the Early Harvest, Sweet Bough, Red Astrachan, Gravenstein, Black Detroit, Twenty Oz., Fameuse, Fall Pippin, Rhode Island Greening, Baldwin, Northern Spy, Spitzenberg, and the Russets. The Golden and Roxbury are considered the best of the Russets, though we have a Russet called by some the Red Russet, which I consider equal, if not superior, in every respect to either of them, with the exception of its keeping qualities—it only keeps about with the Rhode Island Greening. I have never seen it in any other locality, and have never been able to get a name for it here amongst nurserymen, or in the States. I have exhibited it several times before at our meetings. I have been shown several seedlings that were very good, but not any better than many varieties we have, and I think it useless to multiply varieties unless we can improve on the old. In concluding my report, I would express my thanks to the gentlemen who have assisted me in making notes and observations, though they may not all be here, particularly Mr. J. C. Kilborn, of Beamsville, Mr. Jas. Taylor, St. Catharines, Mr. A. Morse, of Smithville, Mr. Johnson Pettit, of Grimsby; and I would say my own observations have been wholly confined to the country below the mountain, and as our worthy member Mr. Morse has kindly made me a report of the next District, I will give you it in his own words.

REPORT OF MR. A. MORSE.

The past season has been rather unfavourable to the growth of fruit, in consequence of the unprecedented drouth, there having fallen but about two inches of rain in three months, and but little afterwards until the close of the season; yet most fruits have a richer and better flavour this year than they had in 1866, which was a cloudy, wet season, while 1867 was dry, with a clear sunny sky, favourable to the maturing of fruit.

The year 1867 has afforded a good and favourable opportunity of ascertaining what soils, situations, aspects, and cultivation, are best adapted to the many varieties of fruit, and perhaps never did good cultivation present a more successful contrast to carelessness and negligence; as well formed and cultivated orchards have produced more or less fruit, while the neglected ones have been nearly or quite barren.

Orchards on northern and western slopes of land have withstood the severe drouth better than those that were of a south or south-eastern slope.

SOILS.—Deep loamy soils have proved the most favourable to fruit trees (especially in 1867), neither sandy nor clay soils giving as good yields of fruit, or as fine a growth of trees as the loams. Old orchards retain their vigour much longer on sandy loam than on other soils. I would make an exception of black loams, and low river bottom lands, as well as clay, as being more or less unfavourable to fruit trees.

APPLES.—The Fall Jenetting, Colvert, Dutch Mignonne, Gravenstein, Baldwin, Russets, Spy, Rhode Island Greening, Fameuse, Wagner, Spitzenberg, Twenty Ounce, Black Detroit, King of Tompkin's County, and some of the Pippins, including most of the early varieties, have succeeded well, while the Rambo, Yellow Bellefleur, and Tallman Sweeting have been quite inferior.

PEARS.—The pear crop, for the small number of trees, has been good both in quantity and quality, yet not equal in size of fruit with former years. It has proved almost invariably good on Limestone soils; Bartlett, Doyenne, and Glout Morceau have done well.

CHERRIES.—Cherries have not been a full crop, but the quality good. The Elton, Tartariane, Mayduke, Black Eagle, Napoleon, Bigarreau, and Coe's Transparent, have done well on mellow soils.

PLUMS.—The plum crop has been poor; the Curculio and Black Knot have proved unusually fatal for the year; a few gardens have yielded fruit, some of the trees of the common Blue Plum, so neglected that even the Curculio could not find them, have borne good crops. Those were on hard clay soils.

CURRENTS.—That pest the Currant-worm has nearly destroyed this fruit. I am nearly the only person in this section of the country that is successful in raising the currant. A knowledge of the difficulty and close attention alone can secure success.

GRAPES.—are not much grown, but where grown (notwithstanding early frosts) ripened well, and were of fair size and quality.

I should also remark that the apple-worm has been somewhat troublesome, especially in neglected and badly managed orchards.

I might make a farther remark as to the cultivation of orchards, especially old ones, as a case in point.

In the spring of 1866 I took much pains in bringing my old orchard into a better condition. Two of my neighbours, having old orchards, thought my "time and labour all lost on such old trees." The result is so far satisfactory, that in 1867 my neighbours' orchards were almost destitute of fruit, while mine was giving me a luxuriant crop—repaying me for my outlay more than four-fold the first year.

MR. D. W. BEADLE'S REPORT ON FRUIT AT ST. CATHARINES.

The strawberry crop opened with more than usual promise, the plants came through the winter in fine condition, bloomed abundantly and set fruit well. The dry weather unfortunately set in so early that the smaller vines on the trusses did not fill well, and the season of fruit was considerably shortened.

Of varieties grown the Wilson still heads the list for quantity of fruit, is most extensively planted for market, and esteemed by market gardeners as the most profitable variety.

The Triomphe de Gand has not sustained the great reputation given it by Dr. Knox, of Pittsburgh, the quantity of fruit falling so far below the Wilson as more than to counterbalance any enhanced price to be obtained for it in our markets.

The Golden Seeded is so very like the Triomphe that it is not worth possessing as a distinct variety. The plants are not very vigorous, and winter kill very badly.

The early French is not so very early after all, is very soft and unfit for transportation, and gives no promise of being valuable for market purposes.

The Filmore is a large, dark-red berry, interior white, and tolerably productive. It may be that on some soils and in some localities this variety will be valuable, but it does not seem to possess any qualities that will give it a preference for market over the Wilson.

Mead's Seedling is a good berry, of good size, long neck, light red colour, white inside, fine flavour, moderately productive. As a variety in a collection it will deserve a place, but of no value to the market gardener.

Monitor—the berries are imperfect, not high flavour, dry, of no very particular value.

Brooklyn Scarlet, is productive, late, not very large, flesh white, may be valuable in some localities. Agriculturist, bears some large berries, but is not likely to be valuable for market.

Jucunda has not been fruited long enough to speak decidedly. The fruit seems to be showy, and the plants bear well.

The Raspberries also suffered from the drouth, but there was a very good crop notwithstanding.

The Pilate proves to be a large, dark red berry, of good flavour and a good bearer.

Imperial is very like Pilate, and from the experience of one season does not show any marked difference from Pilate.

Sonchetti, is white, soft-tender plant and not high flavoured fruit.

Philadelphia.—From an experience of four years this variety has proved to be quite hardy, having stood the winters well. It is a most abundant bearer, medium size, good flavour, berry tolerably firm.

Naomi, is much like Franconia in form, size and colour of fruit; flavour good. It is said to be hardy, but I have not had it long enough to test that point.

Mr. Arnold has kindly sent me a couple of his seedling raspberries, of which I hope to be able to speak hereafter.

The crop of pears was not large, but the sample of fruit was fair, medium size and of good quality.

Kirtland is very fair, good size, bright cinnamon russet, but it rots badly at the core unless it is gathered early. The flavour seems to be quite variable.

Beurre d'Anjou seems to be a promising late variety, of good size and quality.

Brandywine, is a good summer pear, medium size, fine quality.

The crop of grapes was somewhat lessened by the dry weather, but the quality never was better.

Adirondac ripened fully by the 10th of September, quality very good, free from pulp, hanging perfectly to the bunch.

Israella ripens after Adirondac, very compact bunch, pleasant flavour.

Iona, hardly as early (this year) as the Delaware, bunches rather loose, flavour good.

Rogers' 15, ripens about with the Concord, is very pleasant flavour, good size, not much pulp.

Rogers' 3, ripens just before the Delaware, and seems likely to be a desirable variety.

Arnold's Hybrids.—I saw these in fruit on Mr. Arnold's grounds, and believe them to be very promising hardy sorts, that will endure the changes of our climate and ripen their fruit well, particularly Nos. 2 and 16.

Apples.—Crop not large, but quality of flavour very fine.

No new varieties fruited with me that I am prepared to say anything about.