

A DELAWARE VINEYARD.

As before stated, I solicited some contributions on grapes in answer to several inquiries on that subject. Not receiving any I have concluded to publish the following article read at the Minnesota meeting by C. W. Sampson:

In order to have a successful Delaware vineyard, you must, in the first place, have the right kind of soil and the right kind of location. I consider the location the most important in the raising of the Delaware grape. In this state you should locate your vineyard on or near a lake or other body of water. The reason for this is that the water in the lake will remain warm while the atmosphere is cold enough to freeze, and by locating the vineyard on the south or east of the lake the cold north wind will blow this warm vapor over your vineyard and protect it from the frost, both in late spring and early fall. The severe frosts we had this last spring did not injure my vines in the least.

I consider the best soil for the Delaware grape in this state to be a sandy loam, with a heavy clay sub-soil containing a considerable amount of lime. In preparing the ground for a vineyard, I would plow very deep and pulverize well. Then I would mark off the ground and plant the vines 8x8 feet, always running the rows crosswise of the hill to prevent washing. In setting the vines, I use a spade to make the holes, which are about one foot deep, one end slanting. I prefer good, strong one year vines, and I place them in a slanting position in the hole, so that the vine will easily lay to the ground. I train them in that way, and we have no difficulty in laying them down and covering with dirt in the fall. The first year I set a pole about six feet high, which I allow the vine to run up. I allow only one bud to grow. In the fall I cut back to three buds and cover well with dirt, and if the ground has been kept clean from weeds I put a small forkful of straw or hay over the roots to keep them from killing the first winter. This I consider very important.

The second year I put in my posts and at least one wire, which I train the vines along, allowing only one vine to grow.

In the fall I have from two to three feet of vine, and each year lengthen out the vine according as the vine has ripened its wood. The third year we should have a good strong vine eight feet long and capable of producing eight or ten pounds of grapes. I use three wires for a trellis, and tie the vine to the bottom wire, training the new shoots upright, about four inches apart. When the shoots have grown six inches above the top wire, I pinch the end off and keep doing so until August first, when I let them grow. I also pull out any laterals that may grow out as far up as the grapes grow. This is to prevent too much wood and to keep the clusters from being tangled. When the vines have reached maturity, I allow them to bear from ten to fifteen pounds of grapes, for which I find a ready market in our Twin Cities at five cents per pound. A good Delaware vineyard will clear a net profit of about \$100 per acre.

I find all the work connected with a vineyard very easy and pleasant, and think I would prefer raising grapes to small fruit. I consider spraying with the Bordeaux mixture very important to prevent mildew and keep the vines in a healthy condition. To destroy the leaf-hopper, I use fine airslaked lime, and I sprinkle it among the vines when the dew is on early in the morning. I find this the best remedy, and I have tried a good many.

D SCUSSION.

Mr. A. H. Brackett: What success did you have with the air-slaked lime in driving away the leaf-hoppers?

Mr. Sampson: I had the best success with it; it certainly drives them away. The dust seems to choke them and drive them away.

Pres. Underwood: Are there any other remarks to be made on this subject of grapes?

Mr. Wyman Elliot: Which is of the most value as between the Concord and Delaware in this climate so far as profit is concerned?

Mr. Sampson: In my experience, I found the Delaware the more profitable. The Delaware is not shipped to our market to any extent, while the Concord is shipped here by the car-

load from New York and Illinois and sells very cheap. A few years ago we could get very good prices, but now we can get very little more than eastern grapes are sold for.

Mr. C. Wedge: What do you get for Delawares?

Mr. Sampson: They average us about five cents per pound.

Mr. G. J. Kellogg: You get the price pretty low.

Mr. Sampson: Yes, I put it pretty low.

Secy. Latham: There is another reason why the Delaware is more profitable; it is not so much trouble to take care of them in the summer. They have a tendency of clinging to each other, and with a very little tying they cling to each other, while the Concords have to be tied every time. In pruning the vines there is almost the same difference. The Delaware can be pruned to spurs, and it is almost certain that the buds are fruit buds, while if the Concord were similarly pruned you would not get much fruit.

Mr. C. L. Smith: You do not have to haul so many grapes to market.

Mr. Cutts: Has anyone had much experience with the renewal system? A vine when it becomes old is very hard to lay down.

Mr. Sampson: I find it is a very good plan, where you can, to get a shoot right from the root. The second year you will find it will bear nearly as much as the old vine.

Mr. Cutts: The trouble seems to be that the old vines will not put out any shoots.

Mr. Smith: Girdle the old vines.

Secy. Latham: I have never had much trouble. Almost always you can get a cane pretty well back near the ground, near enough for all practical purposes. Renewing is very necessary if you have many vacant places on the old vine, and in renewing you can go back and cover all the vacant places. If I had a vine in bad shape and no shoots coming out from near the ground, I think I should try girdling it.

Mr. Smith: Just put a wire around it, that will answer the purpose.

Mr. Cutts: Mr. Sampson spoke about Delawares being planted eight feet apart each way. A good many recommend to plant them six feet each way.

Secy. Latham: There is a great deal of room wasted in a vineyard. My oldest vineyard is planted in rows six feet apart and the vines eight feet apart in the row. I never had any vineyard bear any more, and it continues to bear. The exhibit of Mr. Loudon, in the other room, is taken from that vineyard. The vines do not seem to be too near. The only difficulty is there is not earth enough to cover them. My latest experience is in planting them seven feet apart each way. A vine seven feet long is also easier to handle.

FROM OUR NEIGHBORS.

C. G. Patten, a former Wisconsin nurseryman and fruit grower, now of Charles City, Iowa, writes under date of July 15th, '96: Blight is the worst here I have ever known it; bad enough last year in nursery and orchard, but worse in this region than last. Nearly all varieties have suffered more or less. My Greening is about as exempt from ravages as is the Duchess.

Mr. P. V. Collins, of the Northwestern Agriculturist of Minneapolis, writes under date of August 6, '96: A. J. Philips, Editor and Manager of Wisconsin Horticulturist—Am much pleased with the cut of the cherry orchard of A. D. Barnes as it appeared in your July issue, and would like very much to secure it for use in our paper. Will give it a good position and publish description of same. The plate has been forwarded.

From the report of the veteran horticulturist of Minnesota, Mr. J. S. Harris, "at their annual meeting, I find the following items relative to Wisconsin fruits:

"At the Wisconsin State Fair there was a remarkably fine collection of Oldenberg seedlings, seven varieties, produced by Joseph Zettel, of Sturgeon Bay, Wis. So fine and valuable a collection from that one variety has never before been produced by one man. The prospect for raising an abundance of the finest apples here in the cold north is growing brighter,