

Garden and Orchard.

The Grape-vine Flea Beetle.

J. D. Sharman, of this City, and others, have had serious damage done to their grape-vines by this insect. The grape-vine flea beetle, which has become a great pest in Canadian vineyards, is one of the most formidable enemies that the grape growers of the country have had to contend with. These beetles leave their winter quarters in April, and attack and destroy the young leaf-buds as soon as they appear; later they feed upon the leaves, which have escaped their earlier ravages, and deposit their eggs upon them. The larvæ also feed upon the leaves, and when they appear in great numbers sometimes strip the leaves of their foliage. After a month of active life the larvæ bury themselves beneath the surface of the ground, where they change to pupæ of a dirty yellow color. The adult beetles in the course of a few weeks again feed upon the leaves during the autumn, and later seek their winter quarters beneath the bark and splinters on the vines and the stakes which support them, as well as under any rubbish in the vineyard. Mr. Comstock, Entomologist of the U. S. Department of Agriculture, has tried the following experiment, as reported in the Scientific American, which worked in a most satisfactory manner:—Take two pieces of common cotton sheeting, each being two yards long and half as wide; fasten sticks across the ends of each piece to keep the cloth open, and then drench with kerosene. Give the sheets thus prepared to two persons, each having hold of the rods at opposite ends of the sheets. Then let these persons pass one sheet on either side of the vine, being careful to unite the cloth around the base of the vine; then let a person give the stake to which the vine is attached a sharp blow with a heavy stick. Such a blow will in nearly every case jar the beetles into the sheets, where the kerosene kills them almost instantly. In connection with the above, the remedies which have been often recommended should be used if necessary. They are as follows: First, all rubbish should be removed from the vineyard, and the stakes and trellises which support the vines be well cleaned of bark and splinters, so as to afford the beetles little chance for wintering in the vineyard. Second, if the larvæ appear in great numbers, lime should be sifted over the vines.

Remedy for Insect Pests.

Quassia water is, according to a correspondent of Nature, a protection to peach trees against insect blight. The first year the trees bore well and the new wood was elbow length or more. I next tried quassia in the vineyard. Instead of lime-washing the walls to get rid of the green fly, one watering with quassia dismissed them in a day. My head gardener, who had previously much experience in nursery grounds, wondered that he had never heard of it before. He now uses it in all cases as a protection from flies and blight. The dilution goes a long way: one pound of chips of quassia wood boiled and reboiled in other water until he has eight gallons of the extract for his garden engine. He finds it inadvisable to use it stronger for some plants. This boiling makes the quassia adhesive, and being principally applied to the under leaf, because most blight settles there, it is not readily washed off by rain. Quassia is used in medicine as a powerful tonic, and the chips are sold by chemists at from sixpence to a shilling a pound. The tree is indigenous to the West Indies and to South America.

And now as to gnats and mosquitoes. A young friend of mine, severely bitten by mosquitoes and unwilling to be seen so disfigured, sent for quassia chips and had boiling water poured upon them. At night, after washing, she dipped her hands into the quassia water and left it on to dry on her face. This was a perfect protection, and continued to be so whenever applied.

At the approach of winter, when flies and gnats get into houses and sometimes bite venomously, a grandchild of mine, eighteen months old, was thus attacked. I gave the nurse some of my weak solution of quassia to be left to dry on his face, and he was not bitten again. It is innocuous to children, and it may be a protection also against bed insects, which I have not had the opportunity of trying. When the solution of quassia is strong it is well known to be an active fly poison, and is mixed with sugar to attract flies, but this is not strong enough to kill at once. —[Scientific American.]

How to Euchre the Borers.

Ten years or more ago I tried the use of paper bands and gas tar, in various forms, on my peach trees, and when carefully applied it was effective in excluding borers, but for the past seven or eight years I have practiced a much more excellent way, and I know other fruit growers who have done the same, and would not think of going back to the old methods. It is simply using carbolic acid, which is the essence or spirit of gas tar, and is easily made to combine with water by adding soap, while the tar itself will not combine, and is far less safe and cleanly in its application. My rule for preventing borers is to get a pint of crude carbolic acid, costing 25 cents—and is sufficient for 20 gallons of the wash. Take a tight barrel and put in four or five gallons of soft soap, with as much hot water to thin it, then stir in the pint of carbolic acid, and let it stand over night, or longer to combine. Now add twelve gallons of rain-water and stir well; then apply to the base of the tree with a short broom or old paint brush, taking pains to wet inside of all crevices. This will prevent both peach and apple borers. It should be applied the latter part of June or early in July, in this climate, when the moth and beetles usually appear. The odor is so pungent and lasting that no eggs will be deposited where it has been applied, and the effect will continue till after the insects have done flying. If the crude acid cannot be obtained, one-third of the pure will answer, but it is more expensive. —[Cor. Fruit Recorder.]

Insectivorous Birds.

No person, be he ever so sordid, but is in some way sensible to the charms of nature, and among the charms of country life the presence of birds, and the delights derived from their cheerful song, are among the most popular. Hardly any one would care to be without them, and yet the damage they sometimes do is so provoking that it is no wonder at times people grow out of patience with them. It is very hard in these cases to discuss the bird question properly, and thus we read in various "transactions" of the most contradictory opinions in regard to the value of birds. In some quarters people are praying for birds, and petition the legislatures for laws to protect and encourage them; on the other hand these people are regarded as mere sentimentalists, and "fire and brimstone" is voted as the true deserts of what the other regard as feathered pets.

The truth about birds lies midway between these two extremes. That they live for many months in the year on insects is clear of birds as a general thing. There are perhaps a few which live wholly on seeds and fruits, but none of these are among the birds which give our agriculturists and fruit growers so much trouble. If it were not for the myriads of insects which these birds destroy in that time, it would be perfectly useless to try to raise grain or fruits at all. Now, when we look at these facts the kind-hearted are very apt to decide that the poor things are entitled to some of the fruits which, without them, we could not have at all. But the trouble is that in many cases they take all the crop, and under these circumstances one is not apt to care much whether they eat insects for nine months or not.

In this conflict of facts the wise man is he who ignores none, but adapts things to circumstances. We must have birds, and they should be encouraged, and to have fruits we must guard them from birds who will take more than their share. Agricultural writers tell us that in Europe, where the birds are infinitely more numerous than they are here, they suffer very little from insects. The birds keep the noxious insects pretty well down, but when the grain-fields are sown, or the fruit about to ripen, boys are hired, who with clappers walk about the fields and keep the birds away. By thus spending a trifle for a few weeks they have no difficulty in having full crops in spite of the great number of feathered tribes. Our true policy must be a similar one, to encourage the birds and protect the crops. There is no other rational ground to take. —[German Town Telegraph.]

It is said that the best way to manage sickly plants is to turn them out of the pots, shake or wash off all the soil from the roots, and if any are decayed cut them off; also prune the stem and branches severely, and pot again in fresh soil. Set them away in a shady place, after giving water sufficient to settle the soil, adding a little from time to time as returning health and growth appear.

Pear Blight.

I notice that you say that whitewash is the best thing you know of to keep off the fire blight from pear trees. That probably would do if you could reach every small twig; but unless you do that it would be entirely useless, for the blight is caused by a large, black fly, that feeds on the trees about the last of June. It would be too long for this letter to tell you how I discovered the true cause. I have been cultivating the pear for 15 years, and I have tried every remedy that I could hear of or think of, but to no use, until I noticed some three years ago an article published in some agricultural paper that the blight was almost unknown on the Pacific and Atlantic sea coast, and it was supposed that the salt spray was the cause of the exemption. So, when I read that (I had already found the time when you wrote "look for the fly.") I went to the store and got a half bushel of the coarse common salt fish are packed in; I sowed it around my trees as far as the limbs extended, so thick that it looked as if a severe hail storm had just taken place. I used the salt about the 20th of June, and it required several weeks for it all to evaporate, and in the morning, after a heavy dew, all of the leaves and limbs would taste quite salty.

Since that I have had no blight, while in the next lot adjoining, and just across the street, they have plenty of it. Others that have tried my remedy have no difficulty with the blight. If I am correct, you see your whitewash would not do much good; but I think the carbolic acid would probably be as good as the salt, if the trees were thoroughly impregnated with the acid. —[E. P. L., in Fruit Recorder.]

Salt for Trees and Vegetables.

I will give you a sketch of my experience with the use of salt in the garden and orchard. Young fruit trees can be made to grow and do well in places where old trees have died, by sowing a pint of salt on the earth where they are to stand. After trees are set I continue to sow a pint of salt around each tree every year.

In 1877 I had a garden forty feet square. It was necessary to water it nearly every day, and still the plants and flowers were very inferior in all respects. In 1878 I put half a barrel of brine and half a bushel of salt on the ground, and then turned it under. The consequence was that the plants were of extraordinary large size and the flowers of great beauty. It was not necessary to water the garden, which was greatly admired by all who saw it. The flowers were so large that they appeared to be of different varieties from those grown on land that was not salted.

I had some potatoes growing from seed that wilted down as soon as the weather became very hot. I applied salt to the surface of the soil till it was white. The vines took a vigorous start, grew to the length of three feet, blossomed and produced tubers from the size of hens' eggs to that of goose eggs. My soil is chiefly sand, but I believe that salt is highly beneficial to clay. —Ex.

BLACK CURRANTS.—Is there a variety that does not bear fruit? In the last February number of the ADVOCATE our contributor "Hortus" wrote of a worthless variety of black currant that blossoms freely, yet bears no fruit. The accuracy of this assertion has been denied. Mr. Arnold, of Paris, says there is no variety of currant that does not bear fruit. On the contrary, Mr. J. L. Jarvis assures us that there does exist a variety which is not a fruit-bearer. He planted black currant bushes four years ago, and, though there was no failure in their growth, they have borne no fruit. When we take into consideration that currants commence bearing fruit at about two years of age, this testimony we must take as conclusive. They may certainly have existed, though Mr. Arnold has not met with them. Mr. Jarvis describes the unfruitful variety as a very rapid grower and throwing out a long string of blossoms, as "Hortus" had described them in his article.

THE BLACK KNOT ON PLUM TREES.—The N. Y. Sun says: The black warts or knots on plum trees are caused by a fungus, and they should be cut away as soon as discovered, and the trees stimulated to make a vigorous growth. A quart or two of salt scattered over the surface of the ground about each tree will be beneficial, and aid in checking the disease. This we know from our own experience to be the remedy. Cut off and burn the infected branches, and you will save your trees and fruit.