

Small Fruits.

By E. N., Drummondville Ont.

The directions given for preparing the ground, and for planting hedges, which appear in my article on honey locust hedges No. 2, are equally applicable to small fruits, and need not be repeated. A root crop with manure is the most suitable previous crop. Deep ploughing and clear culture are very important, and are economical in the long run. In some soils deep ploughing is impracticable or injurious, and such soils are not suited to small fruits. In annual crops it is often important to keep the best soil near the top, but small fruits are perennial and will be sure to find the best soil, however deeply it may be turned under. Previous to planting the ground should be well pulverized and levelled and smoothed by using a roller or preferably a planker. Sufficient time should be given to this part of the work, as time saved here is lost several times over in the planting and cultivation afterwards. After the ground is nicely smoothed it should be marked at a proper distance both ways by means of a hand marker. Even if cross cultivating is dispensed with—a plantation looks much better with rows running crossways. Strawberries are usually planted without crossmarks, but some good cultivators plant even these so as to allow of cultivation both ways.

When planting time arrives strike a furrow along the mark which indicates the place for each row of plants. For this purpose a narrow plough drawn by one horse is most suitable. Furrows should only be turned as the planting proceeds, which secures nice fresh soil for planting purposes. Strawberries, Raspberries, Currants, Gooseberries, Grapes and cuttings may be planted along the perpendicular side of the furrow, according to directions given for honey locust hedge plants. Plants too long to be planted this way are too large for economical use. Before planting Blackcap Raspberry tips, it is better to have some one pass along the rows and partially fill the furrow at each cross mark. At each of these points a plant is dropped and covered with two inches of earth, care being taken to preserve intact the young sprout, which can easily be seen. For planting strawberries more speedy methods are commonly practiced, but the furrow method is perhaps the best. Often the planting is done before the final filling up of the furrows, any of the finer manures may be scattered along beside the plants, and will thus be in a position to do the greatest possible amount of good. Common course manure should not generally be applied at the time of planting.

Salt may be applied to the best advantage as above indicated. White grubs and other worms are thereby turned from their evil ways.

WHAT BERRIES TO PLANT.

Orders for nursery stock of all kinds should be made up, and forwarded to nurserymen before spring opens. In selecting varieties, the novice may often make serious mistakes. It would be very easy to select a list of small fruits, which would in the end prove a loss as a whole, while a different selection might give large profits. The varieties which were extolled when berry culture was in its infancy are superseded now. The newer varieties which have not received a general test are also to be avoided when profit is aimed at. Among strawberries Wilson's Albany stands at the head of the list as a market berry. The Philadelphia occupies the same position among red raspberries. The Mammoth Cluster is the best blackcap raspberry so far.

Probably most of our cultivators would have made more money by planting these three kinds only. Although these varieties for productiveness

and adaptation to a variety of soils are found to be generally profitable; they are not equal to many others in some of their characteristics.

Nearly every grower will aim to have an assortment of varieties, from early till late, and some berries of better quality or appearance than those above named.

Seth Bayden, Peaks Emperor, Col. Cheeny, and many others give sweeter berries than Wilson's Albany.

Kentucky is later and better.

The New Dominion is a very late but not a very sweet berry. It is very large, and a handsome color, a beautiful scarlet.

The Philadelphia red raspberry is lacking in size and color; nor is it remarkable for firmness or good quality. It will thus be seen that there is room for new kinds, which shall be as hardy, and productive; while they exceed it in size, appearance, firmness and quality. There are a great many promising new varieties, but none of these have yet proved themselves more valuable than the Philadelphia, as a berry for the milliner.

The Clarke has been largely planted here. It is a good-sized, handsome berry, of very good quality. A firmer berry would be better for shipping. We do not often need to ship red raspberries, as home demand is very sharp.

The Francoonia does not succeed here. In the few isolated spots where it does succeed, it would pay to grow it as the berry is very large and firm, and sells to good advantage.

Ontario Fruit Growers' Association Winter Meeting.

At the winter meeting of this Association held at Hamilton on Feb. 6th a variety of subjects were discussed. We give only a brief outline of the information elicited.

The canker worm is a small measuring worm, which hatches early in the spring, and when they are regularly established proceed to denude the trees of their leaves. About June 15th they drop down and enter the ground. During the warm days of winter and spring following, the perfect female insect, which is wingless and of a drab color, crawls up the trunks of the trees (usually apple) and deposits her eggs, in patches, upon the slender twigs. This pest as far as we know has reached only a few localities in Ontario. Orchardists should, however, be on the alert as they may exist in small numbers for a year or two before their ravages attract attention.

Two classes of remedies are indicated.

1st. The application of poisons to the leaves by the use of a suitable apparatus. This is expensive and objectionable.

2nd. The application of a band to the body of the tree which shall prevent the upward progress of the wingless female parent.

The application of a band of cloth, with its outer surface covered with some material that will continue sticky at ordinary temperatures, and not be removed by showers is what we want in this case. Tar hardens too soon. Printers' ink is useful, but does not endure very long. Preparations of kerosene are likely to kill the patient, which, in this case is the tree. Castor oil and rosin melted together in proper proportions, which makes a very sticky material was suggested. No one present had tried it sufficiently to decide how it would act in mild winter weather. Leadon troughs filled with oil, and properly attended to, are effective and expensive.

The codling moth received some attention

Some new styles of bands were described. One kind consisted of waterproof paper, and an enclosed strip of what is ordinarily known as cotton flannel. This fastened about the tree, is said, to

make a more effective trap for these insects, than the bands heretofore used. The reader will remember, that the codling moth is the insect, which in one of its phases is well-known, as the apple worm.

The canals which it forms within the apple, often causes it to ripen prematurely.

The yellows in the peach tree, has invaded Ontario on the Niagara frontier. Plenty of it at Drummondville, and cases reported at Grimsby. This disease is generally first noticed in the premature ripening of the fruit, which is very highly colored, and remarkably bad eating.

Cure.—Cut out the affected limbs, or if necessary, the whole tree, and burn them.

Willow Culture.

The osier or basket willow, (*Salix viminalis*), is quite extensively used by basket factories in several sections of the country, but, strange to say, it is very little cultivated. The material worked up is brought from Europe; why one can hardly tell when he reflects that the willow succeeds as well in America as in any other part of the world, and that, all things considered, it would undoubtedly be one of our most profitable crops. In England and Scotland, where it is quite extensively grown, it yields an annual crop worth from one hundred to one hundred and fifty dollars to the acre, and calls for but a very small outlay for labour. In this country it would do much better owing to the fact that it would command better prices—the producer would get the price paid in England with a large portion of the transportation cost added on. Under favorable circumstances the crop will yield near two tons to the acre, and it is now worth, in New York, about \$150 per ton.

The osier willow now used in this country, most of which is imported from France and Germany, costs us near six millions of dollars annually. The demand seems to be constantly on the increase, and if the willow could be obtained conveniently there would, no doubt, be double the quantity worked up that is now worked. Under all these circumstances, who can explain why we do not cultivate willows? Instead of sending six millions of dollars abroad for the rough material we ought to-day to be supplying the whole world with baskets and basket stuffs. The crop is among the easiest grown, and the most profitable, as well as the most certain. We have thousands upon thousands of acres of land exactly suited to the growth of willows, (and suited to nothing else), that is now not worth a single cent to us. Like most other members of the willow family, the osier delights in a low, wet soil, and hence is the very thing for our swamp lands, and lands subject to overflow. There is scarcely a river in our country along which may not be found immense quantities of good lands that are not cultivated on account of the fact that the water rises over them two or three times in the course of a year. These overflows would not injure the willow, but on the other hand would do it good by keeping the lands up to a high stage of fertility. And yet we ship from across the ocean six millions of dollars' worth every year! No wonder Charles Dickens should give it as his opinion that we were "indeed an eccentric people!"

The osier willow grows as readily from cuttings as do any of our common wild willows. The plants are usually set in drill "rows" about four feet apart and about two feet asunder in the rows. Once fairly started and there is nothing more to do than to harvest the crop, the willows keeping all other growths choked out. In the course of the season the young sprouts run up to the height of from four to six feet. These are the crop. They must be cut off smooth to the ground. A plantation is said never to wear out—the older it gets the better the yield.

There is no question as to the advantages presented by this country for willow culture. The crop is grown to some extent in the New England States—it ought to be grown largely in every state. We ought to supply the world with willows at fifty dollars a ton and make more money by the operation than we make on either wheat, corn or cotton.

[We have often wondered why more wicker work is not in use in Canada, the numerous forms of wicker baskets in use in England is surprising. We understand there has been a good demand for all the osier willow that has been raised in Canada.]