

**Treatment of Grapes to Avoid Rot.**

In grape culture all sorts of soils and exposures are not equally good, in spite of the fact that the grape will fruit almost everywhere. 1. Strong clay soil is worth little; 2. Marshy or low-lying land is worth still less; 3. Loamy soils yield well, but not giving a sweet grape, are worth little more for wine making purposes; 4. Exposures toward the north, northeast, northwest and west, should be considered out of the question; 5. Even the best of drainage is not as good as a soil naturally propitious, and should also be avoided. The land and exposures above indicated should never be taken if others can be had, as the result cannot fail to be bad in respect to quality and quantity of crop, the rot of the grape, and the production of a wine of little value.

Vineyards should be planted in the following positions in the order named: 1. Looking toward the south; 2. Toward the southeast; 3. Toward the east (but southwest as little as possible); 4. The ground should be level, if dry, and not retentive of moisture. To make a first class wine the soil must be dry, either stony or sandy, and as deep as possible.

But how to plant well is the question. To use the plow is more or less bad—always bad. I say take the spade. I am told it is impossible—too long and hard a task, ridiculous! This is because the process has not been taught or tried. When one knows how to use the spade, it is very simple and not hard—much more rapid and less costly than could be thought. An acre dug to a depth of 20 to 24 inches costs little relatively; the vines find ample support in a soil thus worked, and the grapes will not rot.

This, however, is not our only way of fighting the grape rot. The soil should be thoroughly worked in spring with a spade, followed by four or five hoeings in the summer, whether there are weeds or not, in order to keep the ground constantly stirred, and a path should be made in each row to work from, so as never to step on the soil itself. All cultivation and other manipulations should be done in fine weather and when the land is dry. Keep the ground worked always as deep as possible with the hoe; it will thus remain cool, the vines will grow wonderfully, and the fruit or the wine will be of first quality.

**Canker Worm.**

In those localities where canker worms were plenty last year, they will in all probability reappear this year, and as the cost of destroying them is trifling and the season to do it at hand, a few words of advice may be of use. Wrap the trunks of all apple and elm trees two feet from the ground with a band of tarred paper or felting, tied tightly with a tarred line. As soon as the ground begins to thaw six inches down go over the bands daily with a tar bucket and brush, so as to keep a fresh surface of sticky tar exposed.

The surface quickly glazes over in dry, windy weather and needs daily renewal. The female grubs, which lay the eggs from which the canker worm hatches, are wingless, and get stuck in the tar as they crawl up the trunk of the tree. The males have wings, but can do no harm of themselves. Sometimes considerable numbers go up the trees in November just before heavy frosts set in and during continued thaws in Winter, but the great bulk go in early Spring. The tarred band should be removed after the season is over, about April 15 or 20, and any drippings of tar removed from the bark, which would otherwise be injured thereby.

The patent oil gutters are a more expensive arrangement, adopted to those gentlemen who have few trees, little time to spend and plenty of money; they only need attention about once a week to prove effectual, instead of every day. If the tar for smearing the trees is mixed with one-fourth paraffine lubricating oil, it will not dry so quickly.

Norway Spruce used as a hedge makes a very dense and close protection for nurseries, and will turn cattle. It seems especially adapted to break the force of the wind. The *Bulletin* says that "in hardness and growth the Austrian pine stands first, the Scotch pine second, and the Norway spruce third." We have never found any harder than the Canadian balsam and the American cedar.

**Basket Willow.**

A correspondent of the *Massachusetts Ploughman* writes to that paper thus:—

To grow willow for profit you must grow them on good land; any land that will grow good grass (if not too high) will do. Many people will tell you how meadow-land that if it no good for anything else will do for willow. If you have meadow-land and want to plant willow on it, cover it with from four to six inches of gravel and then you may get a crop; without gravel they will not do well on meadow-land.

Willow, like any other crop, must be taken care of if you want to make it profitable, and you must get the right kind of plants and plant them as follows: Rows eighteen inches apart and twelve inches apart in the rows; keep them clean for the first two or three years, and after that time you will not have much trouble with them. If you can put them on manure it will pay you. Plant them as soon in the spring as you can plow the land.

Now we come to the harvesting of them. They should be cut in March or April, if you have a pit to put them in; if not, cut as soon in the spring as the bark is loose. About the first of May is the time to take off the bark; this must be done in two or three weeks or you will lose them. This is an important time of the year to willow-growers. Sometimes you can sell the crop as it stands (green); if so, it is worth from \$60 to \$100 per acre.

**Railway Timber Planting.**

What are our Canadian railway companies doing in the way of planting? The United States railways are enhancing the value of their property by planting along the lines. The B. & N. Railway in Nebraska has 186 acres planted—460,000 trees, and other railways in like proportion. This is done in the West not only as a means of inducing emigration by demonstrating the feasibility of timber-growing in a few years, but also as a protection from drifting snows along their tracks. On railway timber planting the *Nebraska Farmer* says:—

One of the great mistakes, as heretofore stated by us, is with the plantings for wind-breaks. The trees are usually planted in straight lines, often only a single row, seldom more than two or three, and almost always too near the track. The trees should be planted at such a distance that the drift, in lodging to leeward, will fall short of the track. They should also be planted rather open than close, and be of sufficient breadth that the drifts may lodge within them, or partially so. In fact, the breadth of the planting should correspond to the average depth of the snow-fall and the nature of the drifts to be contended against. Of course in certain localities nothing less than a forest would suffice, yet these are only isolated instances, as where tracks have to be walled in to prevent snowslides. It is to be hoped that a new impetus will be given to tree-planting for protection this and succeeding summers, especially by railway companies.

**The Grapevine Flea-Beetle.**

A correspondent at Pass Christian, Miss., complains bitterly of the work of the steel-blue beetle (*Haltica chalybea*) on his grapevines, and wishes to know what can be done to prevent its injuries.

The insects may be found very early in the season, before the buds expand. At such times they may be captured with a net and their numbers greatly decreased. The larvæ may be destroyed by buhach powder (Pyrethrum), or even by hellebore water. The latter may be applied by a syringe or sprinkler, and the strength of the solution need not exceed one pound of white powdered hellebore to 20 or 25 gallons of water. A great deal, however, can be done by gathering the leaves upon which the larvæ may be noticed at first to feed, as they are gregarious. Of course, burning all weeds, trees and rubbish about the vineyard in the winter time will tend to destroy the hibernating beetle.

It is with this as with so many other insects—it must be taken in time. The grape-grower should be on the alert for the first beetles, and also for the first larvæ, and not wait till they are upon him in full force, by which time it is almost always a fruitless task to endeavor to destroy them.—[Tribune.

**Remedy for Apples and Peach Borers.**

Wash the base of the trees annually during the last week in June with carbolic soap suds, made as follows: For a ten-quart pail of the liquid, take two quarts of soft-soap, thin it with two quarts of hot water, then stir in two ounces or four tablespoonfuls of crude carbolic acid. This costs only about twenty-five cents per pint at drug stores. If none but refined can be had, one third less will suffice. Now fill up with two gallons of cold water, and mix thoroughly. Apply with an old paint brush or a short broom, taking pains to wet the bark all around, and inside cracks or crevices for about a foot in height, and quite down to the surface of the ground. Of course if there is any grass or weeds in the way, they should first be removed. Any active man or boy, after a little practice, will apply the wash properly to 500 trees in a day. The odor of the carbolic acid is so pungent and lasting, that the moths or beetles will not deposit eggs where it has been applied, and if any eggs have been laid, they are destroyed by the touch of the liquid. Even if heavy rains occur the effect will continue for a month or two, until the season of egg depositing is over.

For the Western flat-headed apple tree borer the wash needs to be applied on the side of the trunk and large branches of the tree, wherever there is a spot of dead-looking bark, from sun-scald or other injury. These are the most common on the southwest side, especially where the trees slope to the East, as is usual in Western orchards.

**The Quince.**

Why it is that this fruit is not more generally grown seems unaccountable. It is scarcely known here by fruit growers, yet when offered for sale it commands very high prices. This season some quinces offered for sale in the market of London, Ont., were bought wholesale at \$2 per bushel. In fruit as in other garden and farm products a variety is desirable and profitable.

A writer in an American paper says:—"No American authors that we are acquainted with have taken special pains to promote the cultivation of the quince; although the best of preserves, syrups and jellies, and it imparts its fine flavor to other fruits, and is fine for pies, pastry and sauces. The quince is a dwarfish tree. It generally grows to the height of 8 or 10 feet, with crooked limbs and branches. The fruit is large, rather austere in its raw state, with a peculiar fragrance different from all other fruits. The quince tree, loaded with fine fruit, is quite ornamental. Were it possible for the most splendid fruits of our country to vie in appearance with the golden apples of the Hesperides, the quince, in suitable soil and under proper management, might successfully rival those fabled fruits. The tree with its large pink and white blossoms is highly ornamental in spring, and in fall the fruit, independent of its good qualities, presents a vision of golden apples in effect far surpassing all other fruits of the garden.

**Soot in the Garden.**

Those who have soot, either of wood or bituminous coal, should carefully save it for use in the garden. It is valuable for the ammonia it contains, and also for its power of re-absorbing ammonia. It is simply charcoal (carbon) in an extremely divided state, but, from the creosote it contains, is useful in destroying insects, and is at the same time valuable as a fertilizer for all garden crops. It must not be mixed with lime or its ammonia will be dissipated, but if the soil is dry and hungry a little salt may be used with it. Soot steeped in water, and allowed to stand and settle for a day or two, is also a most excellent fertilizer for house-plants, possessing precisely the same qualities that the paring of horses' hoofs do.

For flowers out of doors it is especially valuable, since it may be easily applied, and tends to increase the vividness of bloom; mixed with salt, it is an excellent fertilizer for asparagus, onions, cabbage, etc., in connection with compost, in the proportion of one quart of salt to six quarts of soot. For two bushels of compost this quantity makes a heavy dressing for each square rod, to be worked in next the surface of the soil.—[Prairie Farmer.