

Horticulture.

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Cultivation of Cranberries.

(To the Editor of the CANADA FARMER.)

SIR:—I saw in your paper of last month an article on cranberries. I have a piece of ground I think suitable for them, being six or eight acres of beaver meadow, with a spring creek running through it. I tried in various quarters to obtain information about them, but have received no answers to my inquiries. You would confer a great favor on me, and no doubt on many of your other subscribers, by giving an article telling where the plants can be got, the best kind, and the proper mode of culture.—F. H.

There is no reason why cranberries should not be successfully cultivated among us. They grow wild in many places; in truth, there are many acres now lying wholly neglected—covered with rushes, coarse grasses, stunted bushes, and these often intermingled with vines of the cranberry—which are well suited to its cultivation, and which, by a proper expenditure of labor and capital, might be made to yield a handsome revenue.

Cranberry plantations have been found to yield an average crop of one hundred bushels to the acre, taking one year with another, though it is no uncommon thing to gather two hundred and three hundred bushels to the acre. At present the fruit brings high prices in all the cities of this Continent, selling readily at from eight to ten dollars per barrel. Should it happen that the supply exceeds the American demand, the fruit could be put up in barrels and shipped with perfect safety across the Atlantic.

The cranberry is one of our most hardy fruit-bearing vines, very prolific, and requiring but little care after being once fully established. It will remain without renewal on the same ground, and continue to bear abundantly for an indefinite length of time. The fruit is much esteemed, always finding a ready sale, when properly handled, it will keep fresh for a twelvemonth, and bear transportation without injury.

In selecting a location for a cranberry plantation it is very important to avoid those places where the water is stagnant. Such soil is sodden and cold, and the roots will rot in it. If it cannot be so drained that the water will be at least one foot below the surface of the soil, it is unfit for cranberry culture. Yet we have no confidence in an upland plantation. The cranberry is a semi-aquatic plant, requiring a constant supply of water; hence it is necessary to select a place where it can be abundantly furnished.

It is also very desirable in our climate that the beds should be well sheltered from cold, raw winds; and if they can have a southern exposure, so much the better. It will also be of great advantage to secure, if possible, a piece of ground that can be overflowed at pleasure, having in reserve a sufficient body of water at a higher elevation that can be used for this purpose. Such a body of water may be often secured by erecting two dams, one above the cranberry beds, the other below. By means of the upper dam a body of water may be kept always at hand, which can be let on to the cranberry plants at pleasure; and by means of the lower dam, with properly arranged gates, the water can be kept on the beds at any desired level. Having these appliances, the plants can be protected from late spring frosts that would kill the blossoms, or from very early autumn frosts that would injure the fruit before it is fully ripe.

During the winter the water should be kept so deep that it will not be frozen through to the ground, and thus protect the plants from too great a degree of cold. During the summer the water should be drawn off to about one foot below the surface of the

beds, thus enabling the roots to find moisture all through the summer, while yet the soil above is not filled with stagnant water. The water also should not be too cold. Some locations that are in many respects favorable to the growth of this plant are rendered unsuitable by reason of springs of very cold water which furnish the chief source of supply. This difficulty may sometimes be remedied by cutting a ditch along the border, and draining off the cold, icy spring water, or gathering it into a reservoir, where it will be warmed by the sun and air before it reaches the plantation.

The soil must not be too rich. The vines may grow in rich alluvial soils, but they will not bear fruit. Clay and marl are wholly unsuitable, and heavy soils in general are not adapted to the growth of this plant. Air, water and pure sand supply it with food, and where these can be had in suitable combination it will thrive best. Cranberry cultivators say that the best soil is *beach sand*. This is the soil of the celebrated Cape Cod cranberry plantations, either naturally or supplied artificially. The sand is light and porous, admitting air and moisture freely to the roots of the vines, while weeds and grasses which would choke them, cannot grow in it. Where beach sand cannot be had, any clean sand—the more free from all mixture of vegetable matter the better—may be used. Some have found pure gravel—the cleanest is the best—to be a good substitute for sand. Next to beach sand is *peat*, and this is almost always present in wet grounds. The peat requires some preparation before it is fitted for cranberry culture. The top turf requires to be taken off to a depth sufficient to remove all roots of grass and weeds, and the bare surface left exposed to the action of the frost and weather for a whole year. This treatment will make it light and porous, preventing that caking and cracking which is sure death to the cranberry. Where the soil is not naturally in the sand or peat, and the location seems otherwise to be well suited to the cultivation of the cranberry, it may be possible to supply pure sand, or, as the next best, pure gravel. After taking the turf off from the beds to a depth that will remove all the roots of grass and weeds, the bare surface may be covered with sand to the depth of four or five inches, or with gravel to about half that depth.

Overflowing the beds can be very easily effected, if the arrangements in the way of dams already suggested have been provided. About the end of October is the proper time to let on sufficient water to overflow the plantation to such a depth that the water will not be frozen through to the ground at any time during the winter. The water should be allowed to remain until such time in the spring, usually in May, as the weather becomes mild and vegetation commences, when it should be drawn off just to the tops of the vines. This will give the plants the benefit of the increased warmth of the weather, yet at the same time protect them from frosts. The water can be allowed to remain at this point until the season has become so far advanced that the danger from frosts is passed, and then it should be drawn off entirely. The necessity for this arises from the extreme sensitiveness of the blossoms—and the same is true of the unripe fruit—to frosts. If it be possible to have a reservoir of water retained by a dam above the beds with which to flood the plantation at will, the water may be drawn off earlier in the spring, and a longer season be thereby secured than would be safe without such an arrangement; for if a frosty night threatened after the water had been drawn off, the plants could be again covered with water from the reservoir, and thus kept safe from the frost. Again in autumn the unripe fruit could be protected from premature frosts, and sometimes the entire crop preserved by letting on the water whenever frost was apprehended at night, and afterwards drawing it off in the morning. In this way also the plants may sometimes be preserved from the ravages

of insects. They are liable to attacks from two kinds of worms: one of these destroys the vines, the other the fruit. By submerging the vines for a few days as soon as they begin to appear, they will be drowned out and the plantation preserved.

Planting the cranberry can be best done in the latter part of May or the beginning of June. The roots are placed in the soil, the vines spread out and covered so as to leave only the tips of the branches out; when set in this way, each branch will form a plant. The closer they can be set the sooner they will cover the ground. The cranberry will also grow from cuttings. Some planters run the vines through a straw-cutter set to cut them in length of about two inches, and then sow these pieces broadcast over the ground. These are then well harrowed in, when many of them soon root, spring up and speedily cover the ground. Others plant in drills, but the method pursued is of little consequence if the ground has been so thoroughly prepared before planting that there will be but few weeds to contend against. If the ground is likely to be full of weeds and grasses, it will be necessary to plant the vines in such a way that they may be thoroughly weeded out, for the cranberry plants are not able during the first years to choke them, but, on the other hand, are in great danger of being choked by them.

The cultivation is confined chiefly to the three years immediately after planting, and consists in keeping all grass and weeds from getting a foothold. The best method of doing this is not by hoeing, but by pulling up the grass and weeds with the hand, loosening the ground in necessary with a digging fork, so that the roots of the weeds may be wholly drawn out. After the third summer the vines should have so fully covered the ground as to choke out all grass and weeds, and require but little attention.

In selecting plants to set care must be taken to procure fruitful plants, for there are plants which are very fine-looking and vigorous but which yield little or no fruit. In gathering plants from our marshes some attention must be paid to this matter by noting during the previous autumn those which were fruitful, or labor and time will be both lost and great disappointment follow. There are many varieties of the cranberry, the difference being chiefly in the size and shape of the berry. Those that are usually cultivated have received the names of Cherry, Bugle and Bell cranberries, from the peculiar form of the fruit, but the flavor is much the same in all.

Shade Trees—Apples for Shipping—Pears for Marketing.

(To the Editor of the CANADA FARMER.)

SIR:—Will you or some of your numerous readers be kind enough to give me some information about trees. 1. Is there any law to protect shade or other trees when planted on our road-sides. 2. What is the proper distance apart for standard apple trees. 3. What six varieties of winter apples are the best for packing. 4. What six kinds of pears are best for fall marketing. 5. What four sorts of winter pears are best for packing and shipping. 6. What kind of a hedge would you recommend as a farm hedge.—I am, &c. YOUNG SUBSCRIBER.

[1. SHADE TREES.—There is no law applicable to the whole Province for protecting shade-trees when planted on the road-sides, but each township council is empowered to enact by-laws for the protection of such trees. Some township councils have enacted such by-laws. Our correspondent can ascertain from the township clerk whether any such by-law exists in his own township.

2. DISTANCE BETWEEN APPLE TREES IN AN ORCHARD.—The usual distance is thirty-three feet apart each way. In very rich soils, where the trees will attain a very large size, they should be set forty feet apart each way. In the more northern parts of the Province observing cultivators think that something is gained in the way of mutual protection by setting the trees closer together and training them