

Blueberry Culture in Massachusetts

Blueberry culture is a new industry in Massachusetts, and it is creating considerable interest among many of the fruit-growers. The nearby city markets and the climate are well suited to the needs of the grower. The soil requirements are favorable in many places throughout the State, and the land used is usually unsuited to other forms of agriculture.

Blueberries require an acid soil. They will not do well on a neutral or alkaline soil, such as is the type needed for ordinary field or garden crops. Therefore the prospective grower should take considerable care in selecting his location. It is time and money well spent to obtain a suitable field, and unless it is known to be of the right type of soil, it is very unwise to try to raise blueberries on waste or idle land.

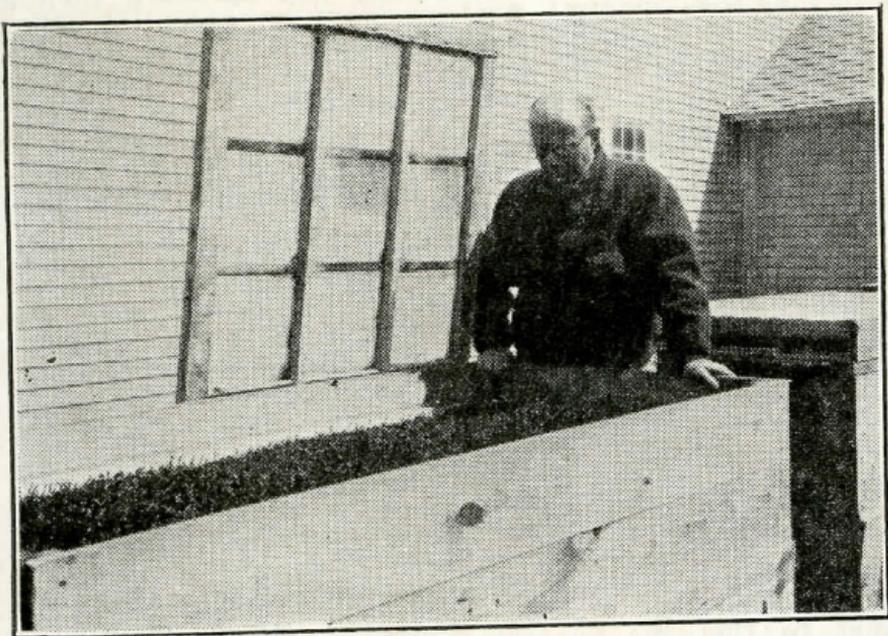
Blueberries seem to grow in soils of a wide

Rural

New Yorker

Aug. 15, 1931

variation, but there are two types of soil which can be recommended with reasonable assurance of being suited for successful blueberry culture. There is the soil adapted for cranberry growing. This land has a top of peat mixed with coarse sand, and a sandy subsoil underlaid with hardpan, usually several feet below the surface. There is the higher land which grows pine and hard woods. The top soil contains several inches of peat, and where there is a constant water supply this type of soil is very favorable for blueberries. If wild blueberries



Blueberry Cuttings Just Started to Root

are growing well on a soil, it is a good indication that the improved blueberries will likewise grow well on that soil.

The preparation of the soil for blueberries is very similar to that of other bush fruits. The land should be plowed and disked thoroughly before planting. Early Spring is the best time to set out the plants, and the grower will find it worth while to plow the land the previous Fall. For the first two or three years the plants should be under cultivation. It is the custom to set the plants in rows eight feet apart and the plants four feet apart in the rows. This method allows cross cultivation for a couple of years, and the hand work is greatly reduced.

Growers in the cranberry section find frequent cultivation the best practice in maintaining their blueberry plantations, but many of the growers around the middle and western part of the State find mulching more advantageous. There are several kinds of mulch which have proved satisfactory. Leaves and shavings are probably used in most cases. This mulch should be three or four inches thick, so as to conserve moisture and suppress the foreign growth.

The New Jersey Station carried on a fertilizer experiment on blueberries and found that nitrate of soda alone applied at the rate of 250 lbs. per acre failed materially to increase the yield, but when a very liberal supply of acid phosphate and potash was added the yield was practically doubled. It is very evident that blueberries require a carefully mixed fertilizer, and probably one of the best formulas we have at the present time is a mixture composed of 125 lbs. of nitrate of soda, 200 lbs. of tankage, 400 lbs. of rock phosphate and 75 lbs. of sulphate of potash. Fertilizer should be applied the second year after planting, giving each plant a small handful and increasing the application as the plants get older. Plants under a good mulch system will not require as much fertilizing as plants under cultivation, but blueberries must be kept growing vigorously in order to maintain large-sized berries, and therefore the grower will have to apply his fertilizer according to the vigor of the plants.

Another very important operation required in

and therefore the grower will have to apply his fertilizer according to the vigor of the plants.

Another very important operation required in growing blueberries is pruning, and if this work is neglected one cannot expect to meet the demand for quality and uniformity in the fruit he is producing for market, especially when the plants get older. In order to prune intelligently one must understand the bearing habits of the blueberry. Fruit is borne on wood of the previous season's growth. The best fruit is borne on vigorous and matured shoots which appear from the base of the plant, or as strong laterals from older wood. If the older wood and weak shoots are thinned out each year a good supply of vigorous new shoots will be available year after year.

One must also note the number of fruit buds present on the new shoots he has left for fruiting. It is very common to find an over-abundant supply of fruit buds on the ends of the shoots. Therefore these shoots should be cut back until only five or six buds remain, but if the shoots are very vigorous more buds may be left. The best time to prune is just before the sap starts to flow, while the plants are still dormant.

Like all other fruits the blueberry is subject to

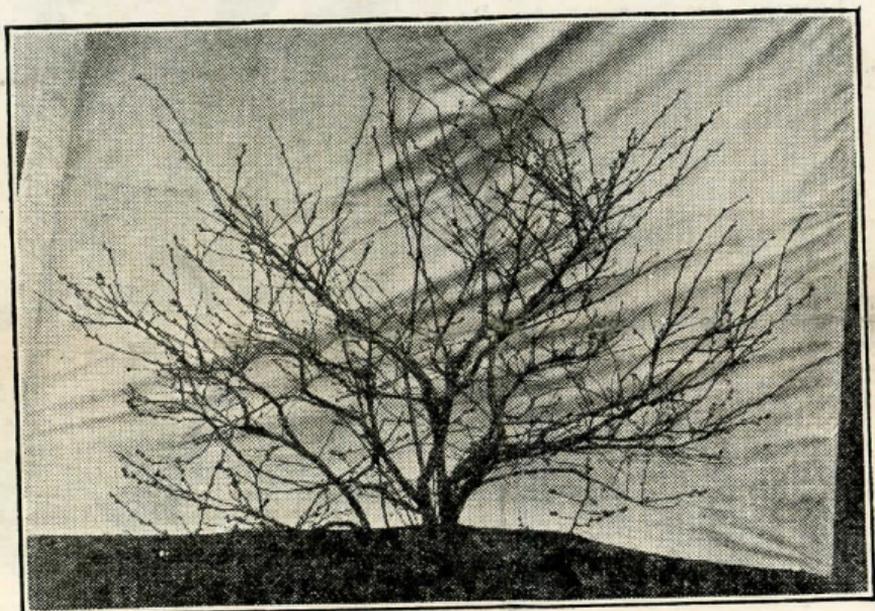
various pests. Plants grown in the cranberry section seem to be affected the worst, as several of the pests attacking the cranberry also attack the blueberry. There is the cranberry fruit-worm and the grubs of the cranberry weevil, which sometimes do serious injury to the blueberries, but as yet no control method has been worked out for these pests. The caterpillars of the gypsy moth are apt to give considerable trouble, but are easily checked by spraying with arsenate of lead at the rate of 3 lbs. to 100 gallons of water. Cane blight can also be checked by cutting out the affected canes and burning them. Clean cultivation and regular pruning will aid considerably in controlling many of these diseases.

There is no question but what the blueberry industry has been greatly held back because of the difficulty in obtaining plants and the high cost of the plants. Blueberries are usually propagated from cuttings. Although some growers have had a reasonable amount of success in propagating their own plants, it seems unwise for one to try to propagate his own plants unless he is willing to invest considerable time and money to gain the necessary experience.

Cuttings are usually made during the dormant season of the plant from the mature wood of the previous season's growth. Each cutting should be three or four inches in length with several leaf buds. Large suckers with few leaf buds and twigs with fruit buds should not be used. Considerable care must be taken in not allowing the cuttings to dry out at any time.

The cutting bed is made of the ordinary cold-frame type, several feet wide and about eight feet long as shown in accompanying picture. The soil inside the bed is pulverized peat. It should not be so compact as to hold a great quantity of water nor should it be loose enough to allow drying out. The cuttings are usually placed one inch apart in rows

cuttings are usually placed one inch apart in rows



Blueberry Bush Seven Years Old, Before Pruning

about two inches apart and watered frequently enough to retain a very moist atmosphere. The beds need plenty of light, but shades should be put on through the middle of the day. This necessitates putting the shades on about eight o'clock in the morning and taking them off about five o'clock in the afternoon. The cuttings send out a short shoot soon after they are set out and then root growth starts. The rooted cuttings are taken out of the frames in the Fall or Spring and set out in nursery rows for a year before being set permanently. J. S. Bailey has several thousand rooted cuttings growing at the Massachusetts Experiment Station at the present time.

The best varieties on the market at the present time are Cabot, Rubel and Pioneer. Cabot is an early variety, ripening from the first to the middle of July. Pioneer ripens about two weeks later and Rubel ripens several days after Pioneer. All these varieties have excellent flavor, good size, and are good shippers. There are many other varieties which look promising and are recommended for trial. Two or more varieties should be set out together, as blueberries require cross-pollination.

The writer believes that blueberry culture is a very promising industry, not only in Massachusetts but throughout most of New England. Blueberries in Northern New England would probably suffer from Winter injury, but one should gain experience with a few plants before making too great an investment.

WALTER L. CUTLER.

Massachusetts State College.

Massachusetts State College.

A Bit of Woodshed Gossip

"Did you see that piece in THE R. N.-Y. by the man from Idaho who told about my great-great-grandfather, the clamshell?" I overheard the hoe ask the potato hook as I stepped out into the woodshed for the morning kindling the other evening.

"Yeah," replied the potato hook, "I always thought that there was a little of the clam blood in you; think that you have about reached the limit in your line and that you will never be improved upon."

"Huh! I might expect that from a one-idea'd tool whose single-track mind never carries it beyond a few weeks' work in the potato field in the Fall," said the hoe a little testily.

"There's where you are wrong, neighbor," came back the potato hook. "To be sure I am a specialist"—whereupon I noted a little swelling pride in the somewhat raspy voice—"but our boss is finding out that I can do a better job than you in other things than digging potatoes, lately."

"I have noticed this Summer that, after the Spring planting was over, you haven't had much to do; seem to be taking it kinda easy up here on your nail."

"You're getting quite a heavy coat of tan over your freckles, too."

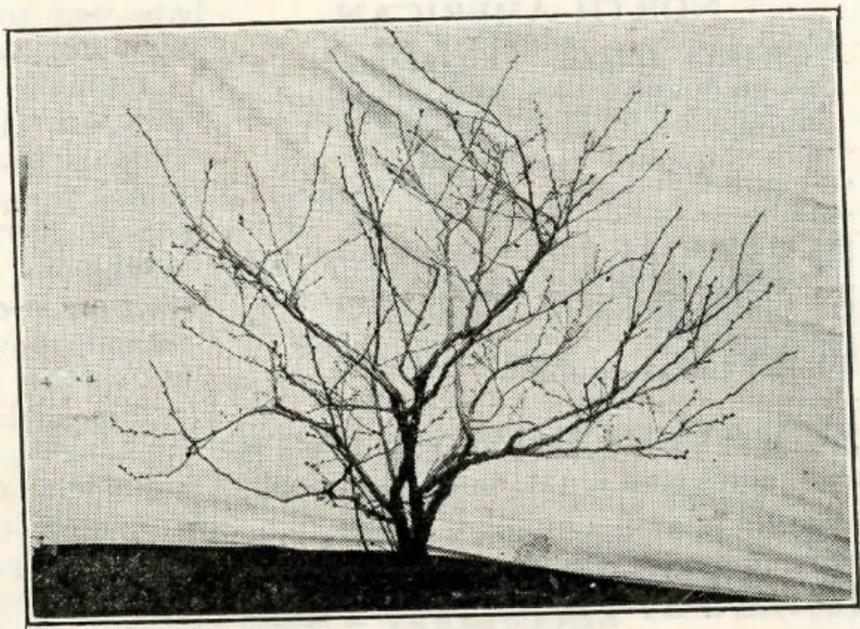
"I've seen you wriggle around and try to attract the boss's attention several times when he came out for an hour's work in the garden before breakfast, but, if he took hold of your handle by mistake, he usually let go and took me down instead."

"You can move more dirt around than I can, I'll admit; so can a shovel, but the boss doesn't seem to care to make holes for the sake of filling them up again this Summer. It's pretty dry and about all that he tries to do is to keep the weeds down and the dirt fine and loose to a depth of several inches."

"Of course you can stir up the ground, but what a fuss you make doing it; bang! you go on every stone and every day or two the boss takes a file out of his overall pocket and tries to save his muscles at the expense of your teeth. Now, me! I don't try to elbow the scythe away from the grindstone in the morning or send the boss out to the shop to look for a file; I am always sharp."

"Sharp," sneered the hoe, "your grandfather was a dibble." Not noticing the interruption, the potato hook continued. "My four round fingers dig into the hard ground so easily that even the super-boss uses me in her flower beds. I don't lift the heavy earth; I simply break through the forming crusts, stir up the dirt so that the moisture coming up from beneath finds its pathway blocked and remains to nourish the roots. I leave the surface level and well fined and the crumbled dirt slips through between my fingers so readily that the boss says he would rather work in the garden than eat, though I haven't noticed his missing any meals lately."

"Oh yes! I know about the weeds; you would think that they would slip through between my fingers and get away. Well, they don't. When the boss comes to a big red-root or a clump of quack, he lifts me up, whacks me down, gives a prying motion to my fingers buried by the side of the weed and loosens up the dirt all about its roots. Then, with a gently coaxing motion, he lifts the weed, bunch of quack or whatever else he is after right out of the ground and lays it between the rows where I can rake it up later. Maybe you can shave off a baby weed better than I can, but I get the big moisture drinkers every time. And their roots come with them; they aren't cut off, to grow again after the first shower. You lost your job of digging potatoes to me long ago and, when more people find out what I can do in the garden before 'tater diggin' begins,



Same Bush Pruned

you are going to have more time to yourself than you have now. I am more than a digger; I am a cultivator, a weed-lifter and a labor-saver whose value few now appreciate.

“Now, now, neighbor, don't get peevd. I know all about your ancient lineage and the honorable way in which you have fought for the betterment of mankind through the years of increasing need for food. I don't want to rob you of any glory; you will remain an emblem of industry, a badge of thrift, but I want you to note that your one idea'd