

## Growing Potatoes on a Commercial Basis

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**P**OTATO raising may be divided into five sections: Selection of fertilizer and seed, selection and preparation of the soil, time and method of planting, cultivation and spraying, time and method of harvesting. The latter point I covered in an article in *The Canadian Horticulturist* last fall.

While the potato can be grown with fair success on a large variety of soils, still the ideal potato soil is a deep, sandy or gravelly loam, with sufficient humus to ensure retention of the necessary supply of moisture. It is from such soils the best quality of potatoes are obtained. The least favorable soil is a heavy clay, wherein the air does not circulate freely. A good clover sod, turned down in the fall, affords a good start for potatoes. Any sod land is preferable to old tilled land.

### HARROW IN THE FALL

After ploughing sod land intended for potatoes in the fall, it should have a thorough harrowing. This aids in killing weeds and also aids in the decaying of the old sod. Land harrowed in the fall will be in condition to work in the spring, sooner than that which was not harrowed.

In the spring, as soon as the land is sufficiently dry to work, it should be thoroughly harrowed. This harrowing should be repeated every four or five days until planting time. In this way the land will get much warmer, and a large proportion of the weeds will be destroyed.

The harrowing should be done with a disk harrow, as any form of a drag harrow brings to the surface too much of the sod. This is undesirable, as it interferes very materially with planting and after-cultivation.

### WHEN TO PLANT

Planting time varies on different soils and in different seasons. Unless you are growing for the early market, it is not advisable to plant too early. The majority of our potato growers plant too early. If seed and soil have been properly handled, and the proper method of planting followed, the potatoes will be up in from six to eight days. There is, of course, danger of delaying too late.

In the Maritime Provinces probably the best time to plant is the last week in May or the first week in June. Of course, this varies in different seasons. In some seasons the planting may be done better during the first and second weeks in June. I have seen large crops harvested which were planted the first week in July, but this is probably too late, as in only an exceptional season would a good crop be obtained by such late planting.

Any person growing potatoes on a commercial basis should have a potato planter. This is a great labor-saving machine, as it sows fertilizer, drops seed, and covers all at once. There are several good makes of this machine. The Aspinwall is, I consider, among the best. Anyone growing potatoes on a commercial basis should not try to get on without one of these machines.

Great care should be exercised not to plant too deep. A good many potato growers make this mistake. Potatoes should be planted on top of the ground with only enough earth over them to retain moisture. Two or three inches is sufficient. Some growers advise deeper planting. Potatoes will yield better if planted shallow. When planted deep it is almost impossible to dig them with a digging machine.

The care with which cultivation and spraying are done goes a long way towards determining the size of the potato crop. You cannot reasonably expect a good crop if you do not thoroughly cultivate. You must spray to keep bugs and rust from destroying the leaves of the plants.

### USE THE WEEDER

As soon as the plants make their appearance through the ground, we go over them crosswise with a weeder, and scratch them down, very nearly level.

Two days later we go over them again with the horse hoe and cover them up. After three or four days more this should be repeated with an additional cultivation. This kills all weeds and also makes the young plants strong, stout, and stalky.

In another week we cultivate and horse hoe again, with the hoe spread a little at the top. This is repeated in another week or ten days. If the ground is not too dry or weedy or hard, we do not do any more cultivating, but if either of these conditions exist we repeat again. If land has been properly worked before planting, the fourth cultivation will not be necessary.

Last year we sprayed with Bordeaux mixture, with arsenate for poisoning, with extra good result. We sprayed three times, using the regular formula for bordeaux and two pounds of arsenate to forty gallons of spray. This controlled the bugs completely, and I did not notice the least bit of foliage injury from it. In my opinion arsenate is a long way ahead of paris green for destroying potato bugs. It is almost impossible to raise potatoes successfully without spraying for rust. Rust is almost as bad a scourge on potatoes as the bugs. Rust can be successfully controlled by the use of bordeaux mixture. In some seasons it will be necessary to spray six to ten times to control it, but even at ten times, it will pay you for your trouble.

## Celery for the Home Garden

George Baldwin, Toronto, Ont

Prepare your trench in the following manner: Mark off your ground six feet wide by the length required to take care of the quantity you intend planting. Dig this out to the depth of eight inches, throwing the earth equally on each side. Fill this eight inches up with good rotten manure and dig it in thoroughly and deeply. To insure its being thoroughly incorporated with the soil tramp all over it and then dig it up again. Then level and rake it over, after which mark off with a string, the three rows, which should be eighteen inches from each bank, and eighteen inches between the rows. The rows should run north and south. Next get your plants which should now be about eight inches long, that is, four inches of tops and four inches of roots; take the shears and clip off about one-half inch of foliage and one-half inch of roots, and then plant eight inches apart in the rows. Be sure when planting that you do not have the roots turning upwards. Dibble your holes big enough to allow the roots to go down in their natural position, and above all press the earth very firmly around the roots. Give a good supply of water and

shade for a day or two with boards or paper.

You can get the plants of the three varieties mentioned from seedsmen, but do not leave it too late in ordering. You had better order early than wait until the twenty-fourth of May.

### GROW SOME RADISHES

Along each side of your trench, you have a hill running the whole length probably a foot high. Level this off on top to about eight inches wide and sow radishes, which will mature long before you need the soil for earthing up purposes, in fact I get two crops of radishes off these hills.

### CULTIVATION

From this out (your rows being wide enough) run your hoe through one day, and water the next day. Take off the nozzle and hold the hose down close and give a liberal supply of water. Once a week give the rows a watering with liquid manure. By the end of July you will have some celery fit to pull. About the second week of July start the earthing up operations by drawing from the hills on either side and putting about four inches of earth around the stalks. D