

THE CANADIAN HORTICULTURIST.

inate new varieties. This work is very interesting and might be taken up by our young people.

Care should be taken to gather seed balls from the best varieties. Wash out the seeds in the same way that tomato seeds are washed and dried. Plant in box in window, hotbed, or greenhouse early in spring and transplant in berry box or flower pots before the plants begin to spindle up, and transplant in open ground soon as danger of frost is over, giving same care as for field crop.

Seedlings the first year will be of different sizes, shapes and colors and perhaps quite different in type from the parent stock. Select only the fittest the second and third seasons, and in this way we may originate new varieties equal if not superior to any in cultivation.

Our first seedling was the Rot Proof (which has not proved to be free from rot in all sections but at home has never shown any development of the putrid rot caused by the late blight), which yielded in 1897 at Agassiz, B. C., 454.40 bushels, and an average at all the stations of 308.11; at home it yielded 309.15 as compared with 265.30 White Star, and 206 bushels of Beauty of Hebron per acre.

The yield and shape is quite satisfactory, but the dark red skin is against its appearance in the market.

A number of seedlings are being tested.

The Peerless, R. N. Y., Empire State, Vick's Perfection, Great Divide and others have been tried for market and give good yields, but customers will not buy them if they can get potatoes of better quality.

The Hebron, Elephant, Potatuck, Early Northern, Freeman and Pearl of Savoy are of good quality, but will soon need replacing with new blood.

Spraying.—Our outfit consists of a spramotor No. 2 with eight feet of hose connecting the pump to the centre of a nine feet piece of gas pipe with four nozzles arranged in it three feet apart, with which we can spray four rows of potatoes fast as a horse will walk.

The barrel, pump and all are mounted on a cart made of two rake wheels 6 feet apart. When the horse is walking between two rows, the wheels are running between the next two on either side.

Two men with this rig will mix and apply a 50 gallon barrel of Bordeaux or Paris Green solution in 45 minutes, if the water is not more than 40 rods from the field to be sprayed.

At ten cents an hour the expense of applying a barrel is 15 cents.

One 50 gallon barrel is sufficient to spray an acre of potatoes once except that the vines are very heavy.

Four ounces of Paris green to the barrel of water is sufficient to destroy the young Colorado beetles; if they get nearly full fledged double this amount will be required—

Costing from 19 to 23 cents per barrel, including material and time of spraying.

For Bordeaux we use 6 pounds Copper Sulphate, 4 pounds fresh lime, costing 47 cents per barrel applied.

The Flea beetles are very troublesome some seasons, doing considerable damage to the young plants, enfeebling their growth and making them an easy prey to disease. Neither Paris green nor Bordeaux kills this pest but the latter seems to be very offensive to them and they hunt new feeding grounds.

Conclusions.—The early and late blights can be prevented by a timely use of Bordeaux mixture.

Every acre of potatoes we sprayed during 1896 and 7 gave us enough pro-