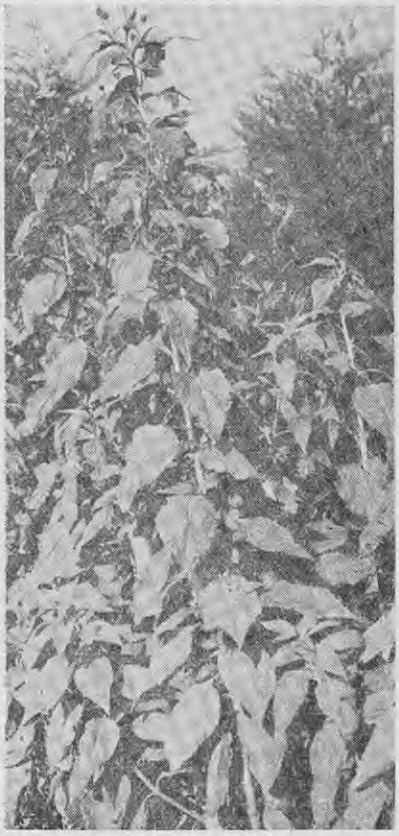
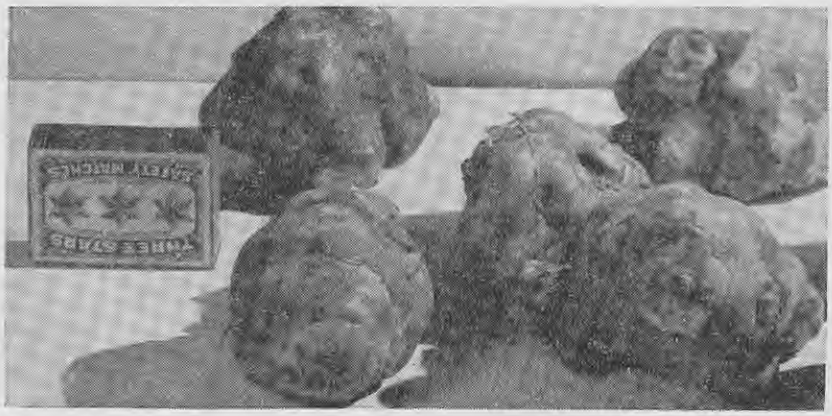
New Zealand by perhaps a half or two-thirds. Virus diseases are transmitted mainly by aphids (green fly), the lower incidence of which in the South Island is the main reason for the growing of most of the certified seed there.





Jerusalem artichokes are easy to grow. Their top growth (left) provides good shelter for other vegetables and the tubers (below) have a distinctive flavour. Tubers, either cut or whole, can be planted this month in the same way as potatoes. A permanent artichoke bed can be established simply by leaving surplus tubers in the ground from year to year.

[Green and Hahn photos

Apart from the purchase of certified seed, the important points in potato growing are choice of variety suited to the soil and district and the purpose for which the variety is grown (that is, early, second early, main, or late crop), soil condition, and cultivation.

Soil can be maintained in good condition by the addition of humus or humus-forming materials, by the judicious application of fertiliser, by suitable rotation of crops, and by drainage where necessary.

Soil and Fertilisers

The soil for potatoes preferably should be deeply and thoroughly cultivated, as thorough preparation of the soil not only ensures a good seedbed but helps to maintain satisfactory moisture content, aeration, and temperature. Soils that have been trenched should be given time to settle before planting.

Heavy dressings of organic manure just before planting are not advisable, as they may induce conditions which favour the development of scab. A heavy dressing applied the previous year, so that it is thoroughly decomposed, or a green crop dug in some time before planting, will usually help to give satisfactory results, as also will the addition of such material as grass clippings.

Soils which have been heavily limed or heavily dressed with the ashes of the garden bonfire should not be used. The potato is tolerant of acid conditions, and in soils infected with common potato scab the organism will be suppressed if the soil is fairly acid to strongly acid. Lime increases the alkalinity of the soil.

The fertiliser required for potatoes depends greatly on the amount of organic matter previously incorporated in the soil, but generally Department of Agriculture trials in New Zealand have shown that a mixture (by weight) of 1 part of sulphate of ammonia and, according to soil type, 3 to 5 parts of superphosphate applied to about 1½ to 2 oz per yard of row will give good results.

The addition of muriate of potash or sulphate of potash, preferably the latter, at about ⅓ oz to a yard of row will give improved results on many soils and is advised for most home garden soils. Instead of superphosphate and sulphate of ammonia equal parts of superphosphate and blood and bone can be used.

Planting

The simplest way to plant is usually to open a trench about 4 to 5 in. deep and to dust the fertiliser along it. Home garden rows are usually 2 ft apart and tubers can be placed from 9 to 14 in. or 16 in. apart in the rows. The wider spacings are favoured for main-crop or very large growing varieties.

If tubers are large, that is, 4 oz or more, they can be cut into two or more sets if desired. Each should be chunky and have at least two eyes and a minimum of cut surface.

Cut surfaces should not be allowed to dry out, but should heal or callus over promptly. The pieces should be planted immediately they are cut in a soil that is neither too wet nor too dry.

If soil conditions are not favourable, tubers can be cut and left with the cut surfaces in contact, though they should be broken apart from time to time. Alternatively they can be kept at a temperature of 60 to 70 degrees F and a very high humidity for about seven to 10 days. However, to prevent excessive sprouting temperature and humidity should be lowered as soon as healing is complete. Hygiene is also very important in handling cut tubers, as the tubers are liable to attack by soft-rotting organisms until the cut surfaces heal.

Though for early crops Epicure and Arran Banner are most commonly planted, numerous other varieties listed in good seedsmen's catalogues are suited to different districts. For example, Jersey Bennes is favoured in Otago.

Silver Beet (Swiss Chard) and Spinach Beet

Silver beet or Swiss chard and spinach beet do well in rich, well drained, and well cultivated soils. Seed should be sown, preferably where the crop is to mature, though seedlings can be transplanted. Rows should be 15 in. apart and the plants about 8 in. apart in the rows.

Good varieties of silver beet include Lucullus and Dark Green Broad Ribbed and of spinach beet, Perpetual Spinach Beet.