

about 4 months. Where temperature, moisture, drainage, and plant foods are suitable, quick maturing varieties of cabbage should reach usable size in less than 3 months. Quick-maturing varieties of cauliflower usually require a little longer, even in favourable conditions, but both vegetables respond to rich soils, ample moisture with good drainage, and moderate to fairly high temperatures.

Continuity of supply can be assured in most gardens by regular successional sowing of varieties having similar maturity periods or with cauliflowers by sowing different varieties which have maturity periods varying from about 3½ to about 7 months.

Popular varieties of cabbages include Golden Acre (early), Copenhagen Market Slowbolt (slightly later), and Green Acre.

Varieties of cauliflower include Walcheren, All Seasons (All The Year Round), Early London, Phenomenal 4 months, Phenomenal 5 months, and Phenomenal 6 months.

Potatoes

Because they are a staple article of diet, potatoes are the most generally planted of vegetable crops in New Zealand. They are grown in practically every home garden; even where space is at a premium it is usually profitable to grow at least one row of early potatoes.

Many home gardeners who have the space have tried growing a considerable area and have been discouraged by their comparative lack of success and as a result now plant potatoes in a perfunctory way. The potato crop is, however, so important that the selection of varieties and planting and cultivation deserve a good deal of attention.

One of the most important points in growing potatoes is the use of Government-certified seed. Few vegetables are subject to as many diseases as the potato and many of the diseases do not show in the tubers. Tubers infected with virus diseases such as leaf roll, mosaic, and crinkle may appear healthy and of a desirable type, yet if it were not for the seed certification scheme, these diseases would reduce the total yield of potatoes in New Zealand by half or perhaps two-thirds. Virus diseases are transmitted mainly by aphids (greenfly), the lower incidence of which in the South Island is the main reason for the growing of most of the certified seed there.

Apart from the purchase of certified seed the important points in potato growing are choice of variety, soil condition, and cultivation. Though the home gardener can usually make his soil more fertile by such means as drainage, rotation of crops, the addition of humus or humus-forming



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Main-crop potatoes are planted in most districts in October, though where late frosts are to be expected planting is best deferred until late in the month unless the emerging shoots are to be given protection.

materials, and the judicious application of fertilisers, he cannot change his soil type, and though he may be able to provide shelter, he cannot change the aspect of his garden. Thus, if his garden soil is a heavy clay loam and has a southerly aspect, he may be able to mitigate its worst features, but can rarely do more.

He should therefore select varieties most suited to his conditions. If he has space, he should try several of the most suitable varieties for 2 or 3 years; a 1-year trial is rarely of much value, as conditions may be exceptional.

Soil and Lime

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

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

Soils which have recently been heavily limed should not be used. The potato is tolerant of acid conditions, and in soils infected with potato scab

the growth of the organism will be suppressed if the soil is medium to strongly acid. Apart from soil acidity the development of potato scab is influenced by both soil temperature and moisture. Its development is usually favoured by soil slightly drier than desirable.

Fertiliser

The fertiliser required for potatoes depends largely on the amount of organic material previously incorporated in the soil, but in general it has been found in Department of Agriculture trials that on the lighter and medium soils that are in fairly good condition a mixture of 3 parts of superphosphate and 1 of sulphate of ammonia applied at about 1½ oz. a yard of row is satisfactory. On rich alluvial soils the dressing should be 5 parts of superphosphate to 1 part of sulphate of ammonia applied at about 1½ to 2 oz. a yard of row.

On many home garden soils sulphate of potash will give improved results if added in the proportion of 1 part to either of the mixtures given. As an alternative to 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 trenches about 4 in. deep and 2 ft. apart and to dust the fertiliser along them. Tubers can be set 10 to 16 in. apart in these rows. Early crops which are to be lifted as new potatoes can usually be planted closer.