

the tops together wigwam fashion and tie them; three seeds are set to each stake. (See the diagram on this page.) Recommended varieties are:—

Dwarf: Early: Pale Dunn and Prince. Main crop: Tender Green, Black Valentine, also the butter or wax varieties Sure Crop, Golden Wax, and Bountiful Wax. Late: Sydney Wonder (semi-dwarf). A main crop dwarf variety Boston Bountiful makes an excellent winter haricot when dried, but it is not suitable for cooking as a green bean.

Tall or climber: Fardenlosa and Market Wonder.

Perennial runner: Streamliner and Improved Scarlet Runner.

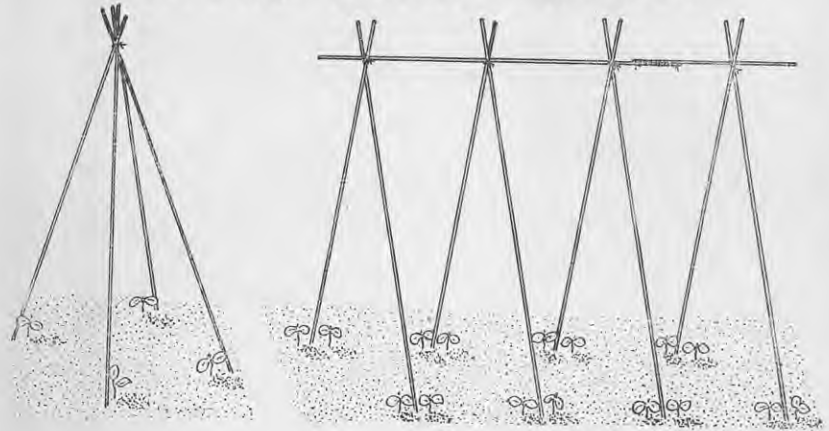
Lima Beans (*Phaseolus lunatus*)

The botanical differences between lima and common beans are not great, but the two types will not cross. Lima beans, which have a characteristic flavour, are shelled before cooking or are dried for winter use. They are grown like french beans, but, as they are more sensitive to cold, it is generally advisable to sow the seed a little later, even though the beans take longer to mature. There are climbing and dwarf varieties. A good tall variety is King of the Garden and satisfactory dwarf varieties are Burpees Bush, Baby Fordhook, and Baby Potato.

Edible Soya Beans (*Soya hispida*)

The soya bean has been grown in the Orient for 4000 years or more. The main nutritional value of the bean is its high protein and fat content, which is about 40 per cent. for protein and 20 per cent. for fat. The carbohydrate content is about 25 per cent. and the starch content is practically nil, which makes the bean of value to diabetics. The soya bean will grow well in nearly all types of soil, but it does best in loams containing a fair quantity of potash, lime, and phosphoric acid. Where they are grown for the first time the plants generally make poor growth unless the seed has first been inoculated. They require certain strains of bacteria not normally present in New Zealand soils, and if soya bean seed is planted in the same ground the following year, the plant

THE HOME GARDEN IN OCTOBER



Supporting climbing beans. Left—Four stakes 7ft. long set 2ft. apart each way to form a square and the tops drawn together wigwam fashion and tied. Right—Stakes placed at intervals to form a double row and tied to a pole along the top.

growth will show a marked improvement and once the crop has been grown no further attention to inoculation is necessary, providing soya beans are grown in the same ground at least every 3 years.

A method often used in inoculating the seed consists of moistening 1 bushel of seed with a solution of 3oz. of glue or sugar dissolved in a quart of water and then thoroughly mixing it with 2 quarts of finely sifted inoculated soil. Inoculated soil may be obtained from an area where soya beans have recently been grown. Inoculated seed should be sown as soon as possible after treatment and a dull day is best for planting, as strong sunlight may prove fatal to the bacteria. Usually rows planted 24 to 30in. apart give the best results on fertile soils, but for poorer soils 36in. spacings are advisable. The seed should be sown at a depth of 1½ to 2in. with a space of 4in. between seeds.

It has been estimated that there are more than 3000 distinct varieties of the soya bean. In selecting the varieties to grow consideration must be given to the maturity period, which ranges from 75 to 200 days. Early-maturing

varieties are better suited to localities with short growing seasons.

Varieties: For New Zealand conditions the most suitable varieties in order of maturity are Mandarin (100 days), Ito San (105 days), and Manchu (110 days).

Beetroot

Beetroot is grown in nearly all home gardens. It is not difficult to grow and is tolerant to both warm and cool conditions; under favourable conditions a 30ft. row will yield 50 to 60lb. of good-quality beets.

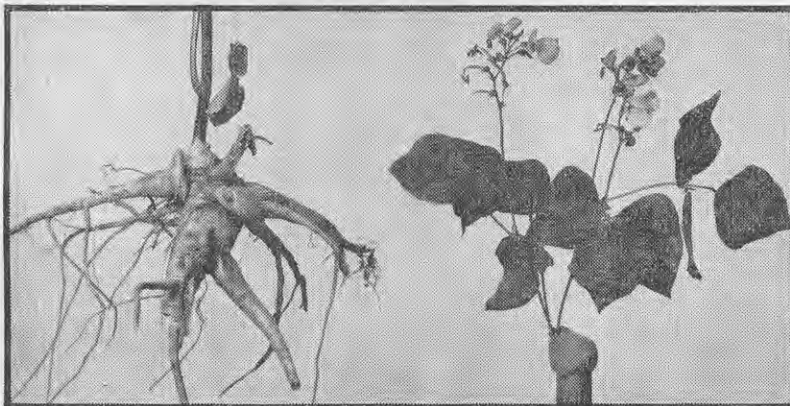
Beetroot can be grown in almost all types of soils and should, if possible, follow a leaf crop such as cabbage or lettuce. Where the ground has been previously heavily manured a dressing of superphosphate at the rate of ½lb. per square yard worked into the top 3in. of soil is all that is required. As beetroot is sensitive to soil acidity, lime is usually necessary on soils not recently dressed. On such soils a dressing of carbonate of lime, 4oz. a square yard, worked in some time before sowing is often satisfactory.

Seed should be sown thinly in rows 12in. apart and the seedlings thinned to 3in. apart in the rows. When thinning, care should be taken to "single" the plants, as generally two or more grow from the same seed vessel.

Recommended varieties are Derwent Globe, Obelisk, and Early Wonder.

Cabbage and Cauliflower

Cabbage and cauliflower plants can be set out 18 to 24in. apart in the rows with a 24 to 30in. spacing between the rows. The soil should be well prepared and enriched, preferably with well-rotted animal manure, to promote rapid growth to mature the plants before the weather becomes too hot. This applies especially to cauliflowers, which are seriously affected at maturity by very hot weather, which causes malformation of the curds. Where animal manure is not available a mixture composed of 2 parts of blood and bone, 1 part of sulphate of ammonia, and 1/8 part of sulphate of potash, all by weight, should be sown at the rate of ½lb. to each 6ft. along shallow furrows in which the plants



[Sparrow Industrial Pictures Ltd. photo.]
The scarlet runner bean is a perennial, and under favourable conditions develops thick fleshy roots which, if left in the ground, will shoot again the following spring. The flower (right) is scarlet.