

About a week before planting, the land should be worked down to a good tilth, that is, levelled and any large lumps broken up.

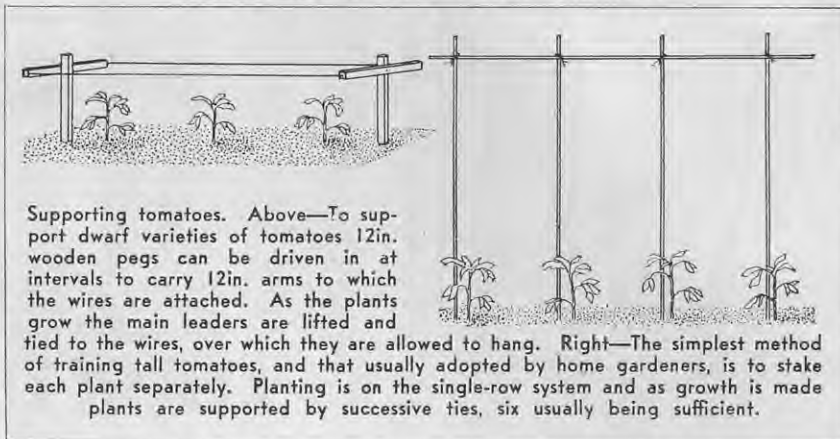
Liming

Lime plays an important part in the growing of most vegetable crops, and tomatoes, especially will not tolerate very acid soils. Most garden soils require annual dressings of carbonate of lime at $\frac{1}{2}$ lb. a square yard, and, if the garden has not received any for several years, this quantity should be doubled.

Fertilisers

Base dressing: Tomato plants respond well to liberal manuring. The type of soil, kind of crop previously grown in the land, and the climate all determine the composition and quantity of fertilisers to be used. A good general base dressing is $\frac{1}{2}$ lb. per plant of a mixture containing 10 lb. of blood and bone, 10 lb. of "super. compound", and 5 lb. of sulphate of potash. This mixture is best worked into the plant rows several days before planting to avoid any possible damage through burning of the plant roots by the fertiliser. Plants should never be set with their roots in direct contact with the fertiliser.

Side dressing: Additional quantities of fertilisers, especially of those classed as nitrogenous, are required later to swell the growing fruit. If this nitrogen was made available in the base dressing, most of it would be assimilated by the young plants and



Supporting tomatoes. Above—To support dwarf varieties of tomatoes 12 in. wooden pegs can be driven in at intervals to carry 12 in. arms to which the wires are attached. As the plants grow the main leaders are lifted and tied to the wires, over which they are allowed to hang. Right—The simplest method of training tall tomatoes, and that usually adopted by home gardeners, is to stake each plant separately. Planting is on the single-row system and as growth is made plants are supported by successive ties, six usually being sufficient.

this would lead to lush, soft growth, which predisposes plants to attacks by disease, and little nitrogen would be left for the later needs of the crop. A side dressing should be given at the fruiting stage. It should consist of equal parts of dried blood and "super. compound" or of a good proprietary mixture containing a high percentage of nitrogen. This dressing should be at the rate of 2 oz. per plant, sown along the plant rows. Care should be taken not to allow the fertiliser to touch the leaves or stems. The fertiliser should be lightly worked into the soil.

Planting

Tomatoes are frost tender and cannot be safely planted in the open until all danger of frost is past. Although they may be planted out in October in most northern districts, it will not be safe, except in a few favoured areas, to begin planting outside in southern districts until the middle of November.

After the final soil preparation plants should be set out along the manured bands. Dwarf varieties require more space than tall varieties and should be spaced 2 ft. 6 in. apart in rows 3 ft. apart. Tall varieties require spacings of 18 in. between plants and 3 ft. between rows. The soil should be firmed around the plant roots as they are set out, and if conditions are at all dry, some water should be given.

Supports

Although it is not usual to support dwarf varieties, they will produce better quality fruits if they are prevented from touching the soil (see diagram above).

For tall varieties wooden stakes 6 ft. long should be set in position before planting, as supports put in after planting are liable to damage the plant roots. Each plant should be set close to the stake and in the line of the stake row, as a plant in this position can be tied to the support easily later and it is less liable to be damaged during cultivation. Material that will not cut into the stem of the plant, such as binder twine, raffia, or flax, should be used for tying, and the loop of the tie should be sufficiently large to allow the stem to grow. Ties should be made at 10 in. to 12 in. intervals as the plant develops.

General Culture

Pruning is not generally necessary for dwarf varieties, but it is essential for the best development of tall

varieties. As the plants grow side shoots developing in the axils of the leaves should be removed by rubbing them out before they grow too large. If left to grow more than about 2 in. long, they are more difficult to remove without leaving large scars, and the unnecessary growth wastes the energy of the plant. Some growers always remove the lower leaves from plants when they have attained a height of several feet. This practice is not advised, except when leaves are dead or touching the soil. The leaves are the food-converting organs and the more healthy leaves a plant carries the greater is the amount of plant food it can assimilate. Foliage also shades the fruit against sunburn.

Shallow Cultivation

Fairly frequent cultivation is necessary to suppress weeds and to keep the surface of the soil loose to aerate it. As tomatoes are fairly shallow rooting and any damage to the roots, especially at the fruiting stage, reduces their growth and consequently their yield, all cultivation should be shallow.

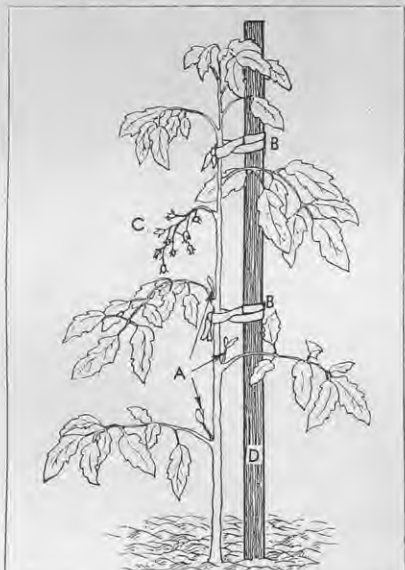
The plants should not be allowed to be checked through lack of moisture during long spells of dry weather. Water should be applied as periodical thorough soakings of the soil as required rather than as more frequent, light waterings. Small amounts of water that wet only the surface soil may do harm when conditions are very dry, as they encourage the plant roots to grow nearer the surface, where evaporation of moisture is rapid.

Harvesting

The fruit should be harvested directly it has coloured. Leaving fruit on the plant too long after it is ripe not only exposes it to damage by birds, but tends to retard further plant development. It should be washed or carefully wiped before use to remove spray residues. The harvesting period for dwarf varieties is about 8 to 10 weeks; tall varieties under favourable conditions will give a continuous supply of tomatoes for 16 weeks or more.

Diseases and Insect Pests

Unfortunately the tomato plant is susceptible to attack by many insect pests and diseases, and in the warmer, high-rainfall districts the fight against disease infection must be unceasing. So that growers may recognise the



Pruning, tying, and staking tomato plants. A—Points where side shoots from leaf axils are rubbed out before they grow more than about 2 in. long. These side shoots should be removed up to the seventh flower truss only. B—Soft twine or cloth strips used to hold main stem erect. A double wrap is first made around the stake to prevent the binding from slipping and a single loose wrapping is then passed round the stem and tied. Tying should be repeated every foot or so as the plant grows. C—Fruit spur. D—Stake $1\frac{1}{2}$ in. in diameter and 6 ft. long driven about 12 in. into the soil and about 2 in. from the stem.