Outdoor Tomatoes in the Home Garden

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THE cultivated edible tomato (Lycopersicum esculentum) is a native of South America, where it was grown as an ornamental as long as 400 years ago. It is a member of the family solanaceae, which includes a number of poisonous species. Tomatoes have been used commonly only since the end of the 19th century, and for many years were the subject of controversy. Their close relationship to inedible species, together with their distinctive and somewhat acid flavour, led many people to believe that tomatoes were poisonous. Since this prejudice has been overcome the popularity of the vegetable has increased steadily until it has become universally popular. Tomatoes are now one of the most widely used vegetables or fruits for canning, juice, sauces, soups, chutney, and even jam. Their properties are now considered beneficial to health, not injurious.

TOMATOES flourish, in a warm climate with plenty of sunshine. Cold, cloudy weather or prolonged periods of relatively low temperatures retard normal development and reduce fruiting. Adequate moisture throughout a frost-free growing period of 6 to 7 months is necessary for the production of high yields of good-quality fruit.

Tomatoes can be grown on a wide variety of soils, but the ideal soil is a deep loam overlying a well-drained subsoil. Light, sandy soils produce fruit a little earlier than heavier types, but tend to dry out quickly during dry spells.

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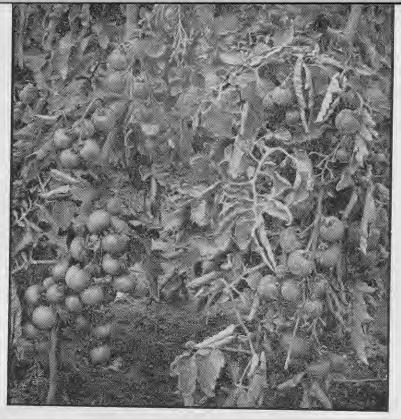
The risk of building up soil diseases peculiar to any one type of crop is greatly reduced by crop rotation, which also permits the best use to be made of available soil fertility, as different crops use different proportions of the various plant foods. In the home garden cropping is usually intensive, crops following one another closely. Related crops such as tomatoes and potatoes should not be planted in the same area too frequently, nor should they follow one another. Tomatoes should follow a crop of cabbages, cauliflowers, or a root crop such as carrots, parsnips, etc., for best results.

Varieties

There are many varieties of tomatoes of both tall and dwarf kinds. Tall varieties that produce smooth, round fruit are generally favoured for table use, but the main dwarf varieties, which can be produced more cheaply and come into production earlier than the tall varieties, are also popular.

Among the most popular tall varieties are Potentate, Carter's Sunrise, Moneymaker, Supreme, Stoners Prolific, and Abundance. Beefsteak can be recommended if very large fruit is desired. A good yellow-skinned variety is Golden Nugget.

Of the dwarf varieties Adelaide Dwarf, Early Chatham, and Stoners



A profitable crop.

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Dwarf Gem are the most popular. Adelaide Dwarf produces large, flattish, crinkled fruit and the other two have smaller, round, smooth fruit.

Vovelties

The fruits of many uncommon varieties are edible and have a flavour similar to that of better known varieties. Plum shaped (red or yellow skin), pear shaped (red or yellow skin), cherry (red or yellow skin), San Marzano (red skin and square-sided fruit), and peach, which resembles a peach in shape and skin colour, are examples of less commonly grown but interesting types. They vary in flavour and degree of acidity and are not considered equal to standard varieties for commercial purposes.

Seed

Good seed is essential if good plants are to be produced. Growers may save their own seed by selecting the best fruits from carefully chosen, vigorous plants carrying heavy, disease-free crops of typical shape. When the plants from which it is intended to save seed have been selected, fruit from the first two trusses may be harvested and used. The remaining fruit should be left to ripen fully on the plants for final selection of the choicest specimens.

Extraction of Seed

As several serious diseases of tomatoes are commonly carried with the seed, seed extraction should be done by the following method, which will eliminate infection:—

The fruit is weighed and the pulp squeezed into a wooden container. Commercial hydrochloric acid is added and stirred into the pulp with a length of wood, 1 fl. oz. of acid being allowed

for each 5lb. of fruit. Occasional stirrings are given during the next 3 hours. The seed may then be placed in a fine sieve or muslin bag, washed free of all pulp under running water, and set out to dry in the sun. Acid extraction is fast, and not only eliminates seed-borne diseases, but gives bright seed with high germination.

Seed Sowing

If it is desired to raise plants—most home gardeners prefer to buy them—seed should be sown about 7 to 8 weeks before it is intended to set the plants out in the garden.

Plants may be raised in a small cool frame (see the illustration on page 139 and the article "Construction and Use of Frames and Lights in the Home Garden", which appeared in last month's "Journal") or the seed can be sown in a shallow wooden box with several holes in the bottom for drainage and filled with a mixture of good soil. Too rich a soil is not advisable, but the soil should be sufficiently open in texture to induce rapid root growth and yet be sufficiently retentive of moisture to avoid rapid drying out. In general, any average topsoil, preferably from a pasture field or from one that has not grown tomatoes, is satisfactory. To every 5 parts of soil should be added 1 part of rotted stable manure or compost and a sprinkling of carbonate of lime and the whole mixed thoroughly.

To kill any harmful fungi which may be carried in the soil it is desirable to treat the box of soil with a 1:50 formalin solution applied at 5 pints per cubic foot of soil. After treatment soil should be covered with a sack saturated in the solution. Fortyeight hours later the box can be