

planting in the bed, which is just before the first flowers open, ten weeks being about an average time from the date of seeding. The best temperature for tomatoes is about 75° F. in daytime, though it may run to 85° F., but if it continues high the plants will be too soft and liable to disense, hence it should be kept as near 75° F. as possible. When the plants are young the temperature should be lower than during the fruiting season—from 60° F. to 65° F. in the daytime being high enough. At night the temperature should not run above 65° F., nor below 60° F. during the fruiting season.

Tomatoes may be either grown on benches in the greenhouse or on the ground. If grown on benches they should have ample soil so that there is no danger of the roots becoming dry, and there should also be good drainage. Good drainage is also very necessary when the plants are in beds on the ground. There should be from six to eight inches of good, rich loamy soil, such soil as they would do well in outside. Soil from rotted sod is good. Two crops may be grown on the same soil, but for the second it is desirable to dig in some well-rotted manure. It has been found that 24 x 18 inches apart is a satisfactory distance to plant in narrow beds, but in wide beds it is desirable to have a two and a half foot space lengthwise between every four rows to let in light and afford a better circulation of air. Another plan would be to have the plants 24 inches apart east and west and 18 inches apart north and south. The soil should be kept constantly moist, but care should be taken not to water too much, as the growth will be too rank and fruit not set well. The surface soil should be loosened from time to time. Provision must be made for staking the plants. A horizontal wire is necessary six or seven feet above each row of plants, and there are several methods by which the plants are trained up to it. The most permanent method is to have a piece of stiff, No. 10, wire for each plant. This is stuck into the soil beside each plant and fastened to the horizontal wire above, then as the plant grows it is tied to the wire with raffia. Another plan is to have a lath serve the purpose of the wire; and another is to have a low, horizontal wire as well as the one above and use heavy cord or binder twine to support the plant, tying the plant to the cord with raffia. All side shoots are pinched out as they appear, the plant being trained to one stem. Two stems have not proved as satisfactory as one. When they have grown to the upper wire the tips are pinched off and kept off. When the plants bloom, it is important to have the air of the greenhouse as dry as possible so that the pollen will be readily distributed, and good ventilation is desirable to keep the air dry. On dark days, particularly, the greenhouse is likely to be too damp unless well ventilated. Usually a good setting of fruit can be obtained of the autumn or early winter crop by tapping or slightly shaking the plants daily about mid-day, thus causing the pollen to be scattered and make it more certain of reaching all parts of the stigma, ensuring both a better setting and more perfect fruit, as, if only part of the stigma receives pollen, the fruit will be one-sided or irregular. For the crop which blooms in winter, artificial pollination is desirable, the pollen being dusted from one flower to another. A camel's hair brush to dust on the pollen which has been previously collected on a watch glass, or on a rabbit's tail tied to a stick, with which the flowers are brushed, are good instruments for this purpose. A fair yield per plant under glass in Canada is 3 to 5 pounds, although the yield may be considerably lower if the fruit sets badly, or it may be somewhat higher. Tomatoes grown in twelve-inch pots in the greenhouse give good results. The soil and drainage should, however, be good. Grown in this way the pots can be moved before the crop is quite over, making the space available for something else.

*Ripening Green Tomatoes.*—Where frost comes before many tomatoes are ripe, although a large number may be full grown as is the case in some parts of Canada, if the full grown green tomatoes are picked before being frozen and each specimen wrapped in paper and stored in closed boxes in a moderately warm room, they will be found, from tests made at the Experimental Farm of various methods, to ripen well and better than when they are exposed to the sun in trying to ripen them. Even if put into closed boxes without wrapping they ripen well.