

Vegetables, Small Fruits, and Flowers.

Contributed by the Horticultural Division.

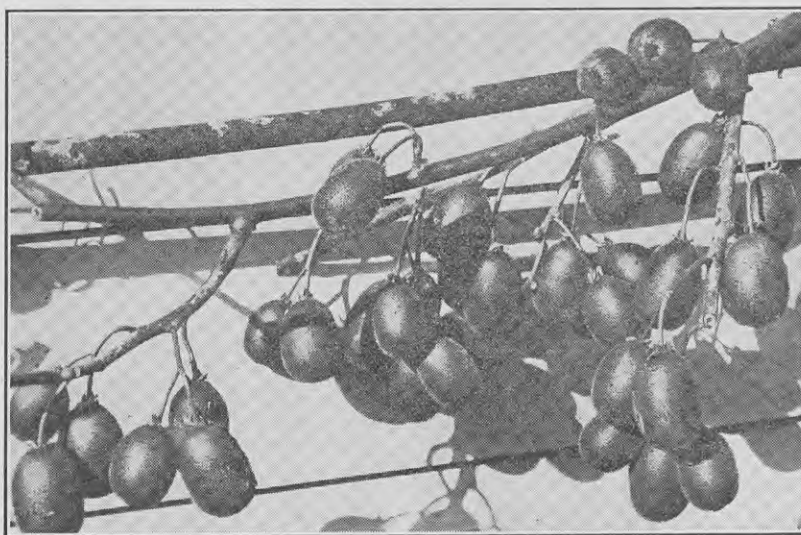
Tomato Crops under Glass.

WHERE the annual tomato crop is grown each season on the same land for some years it is not surprising that difficulties often arise. Many of them are due to cultural problems which may occur anywhere, but the more serious are due to the strong establishment of diseases and pests which find this crop a favourite host. They are dealt with economically and effectively only by maintaining a high standard of cleanliness and observing a strict method of sanitation not only inside the houses, but outside in the vicinity—in the toolshed, and, in fact, about the whole premises. It is only when this is done that one may expect satisfactory results from chemical remedies. No grower is successful over a long period unless he carries out these principles rigorously.

In some of the warmer districts the crop in the unheated glasshouse is planted towards the end of July, but more often planting out under such conditions is done towards the end of August, and usually that is soon enough. The cultivation of the land and the fertilizers applied are usually satisfactory, but the maintenance of a supply of humus and the application of sufficient water are very commonly neglected. The diseases in the crop resulting in the past from the excessive use of stable manure led to the present fairly common state of a shortage of humus. The soil readily becomes dry and dusty, and lacks that active bacterial action which is recognized as a characteristic of fertility.

Watering Necessary.

In a light soil with an open subsoil considerable amounts of organic matter are required to maintain that condition. With a higher water-table and a heavier soil humus is consumed less rapidly. As land under glass does not receive the advantage of winter rains it is important to supply that deficiency by wetting soil and subsoil thoroughly three or four



An abundant crop of fruit on the Chinese gooseberry (*Actinidia chinensis*) ready for harvesting towards the end of May. It is a handsome, vigorous, and deciduous climber on good land in a medium to warm place.

weeks before planting takes place. More than one application may be necessary to do this properly, but it is important that it should be done and the land allowed to warm up to a temperature of about 55 degrees F. before planting is commenced. Little watering will then be required during the difficult springtime period, and steady growth is less likely to be impeded.

Raising Seedling Plants.

Tomato seed for planting out under glass towards the end of August should be sown now; another sowing for planting outside towards the end of October should be made in August. It is unsatisfactory to hold over surplus plants from the first sowing for outside planting at the date mentioned, as the plants will be stale and stunted, and cropping retarded as a result. The main requirements to obtain good plants are a satisfactory compost, sufficient heat, and close attention to ventilation, although

ample light should by no means be forgotten after germination has taken place.

Where the compost is sterilized, turning and mixing is usually quite well done before filling the boxes. In other cases this necessary preparation is often neglected. By turning a heap of compost as soon as seedling weeds germinate the weeds are destroyed, and successive crops of the same kind are dealt with in a similar manner. The ingredients, too, are well mixed. Fungi and insects are also destroyed by these operations, and the chemical condition of the compost is improved.

Suitable Temperature.

A suitable temperature for raising these seedlings is 60 degrees F., with a limit either way of 55 degrees and 65 degrees F. They are raised in a propagating-house heated by means of hot water or electric cable, on a hotbed of composted stable manure in a glasshouse, or, later, outside in a warm sheltered position, or the frame