

Tomatoes under Glass

UNHEATED tomato glasshouses are planted according to district from August to early October. Soil preparation should be started in good time. Tomatoes rarely succeed if grown in the same soil for two years in succession, unless the soil is disinfected with substances such as formalin or chloropicrin (tear gas).

If the tomato house is very small, the soil can be taken out and renewed with good garden soil that has not recently grown potatoes or tomatoes. Soil on which grass has been growing is best. Alternatively, results are usually satisfactory if a heavy, well established green crop has been growing on it. Soil that has been down in grass or green crops for a year, or preferably two years in succession, is usually free from most of the diseases affecting tomatoes and in good physical condition; that is, drainage and aeration in it are good for that type of soil.

Disinfection Procedure with Formalin

Formalin is usually the most satisfactory substance for the home gardener to disinfect tomato glasshouse soil with. The common method is to have the soil in fine, friable condition—not wet, but not too dry—and to begin digging over at one end of the house, soaking along the line of digging after each successive spit or line of spits has been turned.

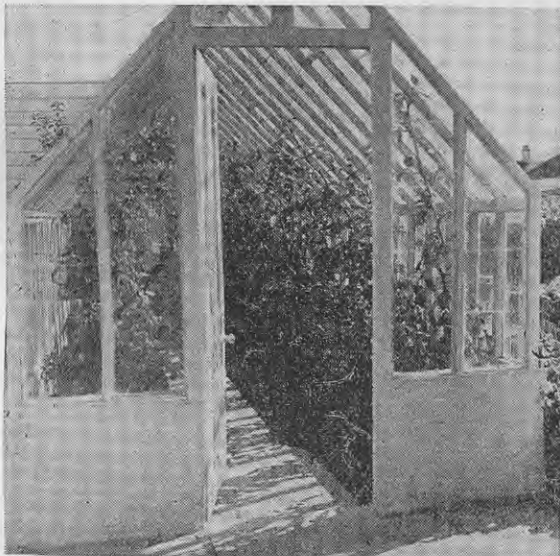
The formalin should be diluted at 1 gallon to 49 gallons of water and the 50 gallons of solution applied to each 10 to 15 square yards of ground surface according to the severity of diseases. For instance, where only minor root rots are troublesome or no disease has been noticeable the area covered could be about 15 square yards or perhaps a little more. Where serious disease, such as verticillium wilt, has occurred the measured amount of diluted formalin should be applied to 10 square yards or less.

Soil temperatures of 60 degrees F or higher are recommended, as temperatures must be high enough to make the formalin volatile and so disseminate it.

After the formalin has been applied the soil surface should be covered with wet sacks. It should then be left with the house closed for about 14 days, when the ventilators can be opened and the soil forked over to assist the dispersal of the fumes, which are toxic to plants.

Planting can begin as soon as all fumes have been dissipated from the soil and base fertilisers have been dug in. Dispersal of the fumes is likely to be delayed by low temperatures and wet, heavy soils and speeded by working of the soil and high soil temperatures.

Chloropicrin is not generally recommended for use by home gardeners, as a gas mask should be worn by anyone using it and an injector gun is advisable for satisfactory application.



A suitable type of small glasshouse for producing household supplies of early tomatoes.

Onions require a slowly available supply of nitrogen, and on most soils crops will benefit from a heavy dressing of well rotted stable or farmyard manure, preferably applied in autumn. If onions of good keeping quality are required, it is not advisable to apply in spring excessive quantities of organic manure which contains a considerable amount of nitrogen, as bulbs may be stimulated into excessive leaf growth and weeds are liable to be more troublesome.

Few home gardeners are likely to have much farmyard manure, but available compost should be applied with a complete fertiliser at about 3 to 6 oz a square yard. Because of the great variation in soils and their condition throughout New Zealand only local experience can indicate fertiliser requirements.

The seedbed should be worked down to a fine, firm tilth and seed sown thinly $\frac{1}{2}$ in. deep in rows 12 to 15 in. apart.

Good varieties include Ailsa Craig and Straw Spanish (both early) and Pukekohe Long Keeper (for storage).

Parsley

To make sure of a good supply of parsley it may be necessary to sow seed twice a year, in spring and again in autumn. Parsley is a biennial, that is, it goes to seed the second year.

Parsley needs a rich, moist, well drained soil, and fertiliser should be dug in before sowing as advised for other long-standing crops. Blood and bone at about 2 oz to 3 oz per square yard usually gives good results.

Seed can be sown in rows or broadcast on a small plot, but for best results plants should be spaced about a foot apart when large enough to handle. They make quite a good edging and do well in cool, moist soil in the open or semi-shade.

Potatoes

It is too early in most districts to plant main-crop potatoes, though an early planting can be made if the home gardener is prepared to keep the tops earthed up while frosts are likely to cause damage. It is not necessary to green and sprout tubers before planting, but earlier crops can usually be obtained from sprouted seed.

Government-certified seed should be used if possible. Few vegetables are subject to as many diseases as potatoes, and only the expert can recognise many diseases in the tubers. Tubers infected with virus diseases, such as leaf roll, mosaic, and crinkle, may appear healthy and of a desirable type, yet if it were not for the system of certification, these diseases would reduce the total yield of potatoes in