

THE SEEDBED

The site of the seedbed should be on good soil that is well drained and capable of producing first-class growth of the seedlings. It should be provided with irrigation, preferably of the overhead type, and some nurserymen prefer to cover it with a lath shade, though the latter is not necessary and the majority of seedbeds are planted in the open. The lath shade has a tendency to increase the amount of seedling diseases and makes the seedbed difficult to handle from this standpoint.

A small amount of fertilizer is used in making up the seedbed. This fertilizer should have a high percentage of nitrogen, preferably from organic materials. The fertilizer should be added several weeks before the seed are planted and should be worked thoroughly into the soil.

Where only a small seedbed is desired, the seeds are planted in rows wide enough for hand cultivation, but where a large number of seedlings is being raised the rows are laid out wide enough for horse cultivation. The seeds are planted thickly in the row and are covered with two to three inches of soil. Sour orange, sweet orange, grapefruit, and rough lemon seeds are planted after the danger of frost is over, as very young seedlings are killed when frozen to the ground. *Poncirus trifoliata* seedlings are not completely killed by being frozen off, but sprout up from below ground; consequently the seed can be planted whenever they are ready.

After the seedlings have come up it is necessary to cultivate sufficiently to keep down the weeds and to water enough to keep the plants growing well but not so much as to cause damping-off fungi to attack the seedlings. During the growing season two or three applications of fertilizer having a high nitrogen content should be made. Before the seedlings are removed from the seedbed, cultivation and fertilization should be stopped to allow the seedlings to harden up.

The number of days required for germination of citrus seeds will depend upon the soil temperature and moisture and the condition of the seed when planted. Experiments with fresh seed have shown an optimum soil temperature for germination around 90°F. Near the optimum temperature fresh seeds will sometimes germinate in two weeks but when the soil temperature is below 90°F. a longer time is required for germination. In this connection attention should be called to the fact that