

close stacking in cases is necessary it is advisable to segregate each variety, so that their order of ripening can be checked and each used as condition demands. Laths placed between the tiers of cases parallel to the draught will improve the air-circulation and aid the dispersal of gases thrown off during the ripening process. Free circulation of air in the storage-room, which should be kept cool, is important, and excessive moisture is to be avoided.

#### Preparation of Land for Planting.

This work should be proceeded with as early as possible, in order to allow ample time for soil-aeration before the autumn rains commence. Ploughing in strips about 5 ft. wide and two furrows deep where the tree rows are to stand will be an advantage; the remainder of the land may be left for working in the usual routine if desired. Where the subsoil is retentive it is essential that the ploughing should follow the fall of the land, so as to remit the free drainage of excess water from the root area, and the work can be done more satisfactorily while the soil is comparatively dry than when wet. Early preparation is conducive to early planting, and as root-development commences prior to movement in the top it follows that the stimulation of the early root movement will hasten the establishment of the tree and ensure satisfactory growth during the first season.

#### Citrus Culture.

This period, while the crop is developing, is a good time for general overhaul of the trees, thinning out exhausted wood, cutting out suckers or water-shoots, and trimming the lower fringe to raise the foliage to about 18 in. above the ground. It may be necessary to remove banked-up soil from round the trunks to minimize the danger of collar-rot. The trunk should be exposed to the normal level, and the soil removed over an area sufficiently wide to avoid the possibility of forming a basin which would hold water and produce conditions inimical to the health of the tree. Citrus-trees are impatient of wet conditions, and any low areas from which surplus water does not drain rapidly should receive attention, either by laying a permanent drain or by opening furrows between rows and providing ready escape for the water.

If necessary, spraying for scale-control, using oil 1-60, should be completed before growth ceases. Oiling when the trees are dormant or in a sickly condition will result in defoliation. Oranges may require an arsenate-of-lead spray to control caterpillars. Citrus brown-rot infection may be expected to appear when the autumn rains commence, and bordeaux, 4-4-40, should not be neglected. The infection from this disease is upward from the ground, and many growers are content to spray only the lower 6 ft. or so of the tree, but the application must be thorough, and later applications after rains are advisable.

Cover-crop sowing should not be delayed, and any quick-growing leguminous crop which will make a good bulk of growth is to be preferred. A dressing of manure to stimulate growth should be applied at the time of sowing. If sheep or pig manure is obtainable a liberal application will be beneficial, but it should be applied in the vicinity of the outer fringe of the foliage and not heaped around the stem. Some discrimination is required in the use of cow-manure. In some localities it is not uncommon to find the soil reduced to an adhesive soggy mass, and the trees slowly dying through the too liberal use of fresh manure. All animal-manure should be well rotted before use.

—G. H. McIndoe, Orchard Instructor, Gisborne.