

An orchard should be plowed or disked to a depth of 6 to 9 inches. Plowing too deep near the trees may injure the roots. When feasible the direction of the plowing should be changed. Cultivation of some sort should follow plowing or disking. Irrigated ground should be stirred when it has sufficiently dried to work without packing. Cultivation generally begins in March or April and is continued intermittently to keep down weeds until about September. Growers are finding, however, that the frequency of cultivation can be reduced with satisfactory results and lessened costs; by not cultivating, the expense of re-making the furrows is saved. Any growth during the fall and winter is plowed under the following March or April. The trees are irrigated with sufficient frequency to keep the soil moist. Tillage in the larger orchards is more cheaply done by use of a tractor. Many farms, however, require one or two horses in addition to the tractor to do odd jobs.

*Intercrops.*—Many peach growers plant intercrops in the young orchard as a source of income. The possible danger of this practice in the young orchard is that the trees may be neglected or injured by too intensive interplanting, resulting from severe competition between the trees and the intercrop for moisture and soil nutrients. Among crops commonly grown are: berries, grapes, beans, lettuce, cabbage, onions, peppers, squashes, tomatoes, rhubarb or potatoes. It appears that cotton may be a good intercrop in the upper San Joaquin Valley. It is not difficult to grow these crops, but there may be difficulty in profitably marketing them. Furthermore, their care may conflict with the care of the peaches. Naturally, the crop should not injure the growth of the trees; should not interfere with the work of irrigating and cultivating the trees and of harvesting the peaches, and should not demand special ability in harvesting and marketing. Leguminous crops are to be preferred where they are profitable. Sufficient cultivated ground should be left between the intercrop and the tree rows. The amount of space devoted to intercrops should be gradually reduced so that the trees will have the entire area when in bearing.

*Cover Crops.*—The planting of some crop in the fall, to be turned under early in the spring, while green, is being increasingly practiced. This is to be recommended, where there is sufficient rainfall or irrigation water available in the fall, since the annual plowing under of a cover crop improves the tilth and helps to maintain the soil nitrogen supply.

Among the cover crops most often used there are three that lead: sour clover (*Melilotus indica*), common vetch (*Vicia sativa*), and Canada field peas (*Pisum arvense*). A good growth of weeds will