

rootstock is usually of a very excellent quality and particularly smooth. Such trees are usually quite precocious and bear while younger than similar trees on other stocks.

GRAPEFRUIT

Grapefruit (*Citrus paradisi* Macf.) was used as a rootstock to a considerable extent several years ago but is very little used at present. Its use was probably the result of observations as to the vigorous growth of seedling grapefruit trees. In many cases on lighter soils it has proved unsatisfactory as a stock. It is less cold-resistant than sour or sweet orange.

SWEET ORANGE

The early groves in this state were planted to seedling sweet oranges (*Citrus sinensis* Osbeck) and these groves have been among the most vigorous growers and producers. They are, however, subject to foot rot and as the groves have become older often there has been considerable difficulty in maintaining them in a healthy condition. A number of groves of budded trees have been planted in which this rootstock was used, and it is found to produce a very excellent tree that grows vigorously and produces a very fine quality of fruit. It is more cold resistant than rough lemon or grapefruit and less resistant than sour orange. It should never be used as a rootstock where the sour orange will grow satisfactorily, as the danger from foot rot is too great, and no advantages appear to be gained by using this rootstock in preference to sour orange.

MISCELLANEOUS ROOTSTOCKS

A number of other rootstocks have been tried to some extent but have not come into general use so far. The Cleopatra mandarin has been widely recommended and tried during the last few years and within a few years more it will be possible to gain a fairly good idea from the existing plantings of its desirability. It is a good grower, makes a good nursery tree, as to both union and growth, and seems to be well adapted to the lighter soils. It is hoped that it may prove to be better adapted to the production of tangerines on light soils than is rough lemon.

Commercial lemon is frequently found as the rootstock of occasional trees in groves presumably planted on rough lemon. The seed in these cases probably were mixed accidentally with the rough lemon seed, as it is not considered to be a desirable