

extensively. A number of hybrids such as citranges, tangelos, and citrangequats are also being used experimentally.

SOUR ORANGE

The sour orange (*Citrus aurantium* Linn.) was the first of the citrus family introduced into Florida. After it was brought here by the Spaniards it escaped from cultivation, and grew in great thickets in the hammocks. It is well adapted to the moist hammock soils and grows with such freedom as to lead many people to believe that it is a native of the state. It also grows well on moist flatwoods soils where the water table does not come too close to the surface. It is extremely resistant to root and crown diseases and particularly to foot rot, which is one of the factors that has led to its great success on moist soils where other species of citrus are severely attacked by this disease. The quality of fruit produced on the sour orange stock is excellent and, in the opinion of many growers, is better than that produced by any other stock. It has been demonstrated to be a superior rootstock for Parson Brown oranges in the northern portion of the citrus belt but is considered to be unsatisfactory for satsumas, kumquats, limequats, and limes.

The sour orange is very resistant to cold and, to some extent, conveys this characteristic to the scion, probably because it induces a more intense dormancy during the winter months. Nursery stock on sour orange has been observed to stand cold weather better than stock in adjoining rows on rough lemon.

The chief difficulty with this stock lies in its inability to make a tree at a satisfactory rate on the more sandy soils. This difficulty has led to the practical elimination of this rootstock on such soils, since the young trees on this stock may require several years to become sufficiently established to produce satisfactory crops. On this account many groves have been planted with trees on rough lemon rootstock on soils that were adapted to sour orange, resulting in the production of a crop sooner than would have been produced had sour orange rootstock been used. It is also less satisfactory in the nursery than the rough lemon, due to the fact that it does not make a tree as quickly or grow quite so vigorously.

ROUGH LEMON

The rough lemon (*Citrus limonia* Osbeck) is a vigorous grower, produces a tree very rapidly in the nursery, and brings