

Hamlin (early), Joppa (mid-season) and Valencia (late) are the standard orange varieties recommended for planting in this region. The relative merits of these and many other varieties are discussed in Texas Agricultural Experiment Station Bulletin No. 601, "Citrus Varieties for the Lower Rio Grande Valley."

Ruby, also called Redblush, grapefruit is the outstanding novelty fruit, and most young plantings are of this variety. The present acreage of standard Marsh Seedless grapefruit should supply market demands for this type of fruit for many years in the future. However, there should be a fairly steady, long-time demand for Marsh grapefruit for processing.

#### Rootstocks

Standard sour orange has given good results as an understock for most varieties of citrus which are produced in this region. There is no reason for suggesting a change at this time, except for the possibility that a destructive disease which kills trees on sour orange stock may eventually invade this area. Tristeza disease has already destroyed most of the trees on sour orange stock in parts of Brazil, and there is the possibility that some imported disease of this kind might become a factor in the Lower Rio Grande Valley of Texas.

Cleopatra mandarin is the best adapted understock from the standpoint of production, but sour orange is somewhat more resistant to foot rot and to cotton root rot. Trees budded on mandarin rootstocks have proven highly resistant to Tristeza disease in Brazil. Other resistant understocks which could be used in this

region, if Tristeza becomes a factor, are rough lemon and Sampson tangelo. Sweet orange, grapefruit, trifoliate orange and trifoliate hybrids are not adapted to Valley conditions.

In addition to the material quoted above which should be of special interest to our readers, this circular also discusses such topics as site, soil, growing nursery trees, planting the trees, training and pruning, irrigation, fertilization, cover crops, insect and disease control, and harvesting, storing and marketing.

—W.P.J.



#### CHERRY CULTURE IN CALIFORNIA

By Guy L. Philip,

Calif. Ext. Circ. 46, 1947.

The following statement concerning the aims of this circular appears in the preface. "This circular is intended to serve as an introductory study for the beginner in cherry culture and as a ready reference for the established grower. A revision of the original 1930 edition, it describes the most up-to-date cultural methods and points out economic aspects of the business which significantly influence management. Cherry production is among the more hazardous agricultural enterprises in this state; but given favorable soil and location, good orchard practice and informed management, the risks

may be cut down and the profits made more sure."

After a brief introduction the factors of soils, climatic requirements and regions of production are discussed.

### Cherry Varieties in California

Most of the sweet cherries in the United States are grown in the Pacific Coast with California producing about one-third of the total for the region. Neither sour nor Duke cherries are grown commercially in California.

The leading varieties of sweet cherries grown in California are Chapman (Early Chapman), Black Tartarian, Bing, Napoleon, Republican (Black Oregon, Lewelling), and Lambert. Napoleon is the only variety used extensively for canning or processing. Napoleon is white fleshed whereas the other important varieties are dark-colored and are used mainly for fresh shipment, except for a small quantity which is processed.

Sour cherries are produced to a very limited extent and only for local trade. The most popular variety is Montmorency. Early Richmond and English Morello are planted in small numbers.

Brief descriptions of 11 varieties are included.

### Rootstocks

Growers are not at all agreed on the rootstock problem. The general opinion is that mahaleb tends to dwarf the tree. This may be or may not be a fault. In ideal situations, on mazzard root, the trees grow so large that the harvesting expense is excessive. On the other hand, if soil and moisture conditions are not

favorable the trees on mazzard show serious dieback. If the soil is heavy and tends to be wet, trees on mazzard and mahaleb will die outright in a very short time.

The mahaleb adapts the cherry to drought conditions much better than mazzard, but will not withstand prolonged saturation of the soil.

The Stockton Morello rootstock has been used extensively in the Stockton district to adapt cherries to heavy, wet soils. This dwarf stock shows a great overgrowth of the scion. The union seems to be strong and no breakage occurs. Cherries propagated on this root come into bearing much earlier than on either mazzard or mahaleb; and the trees tend to overbear.

Stockton Morello stock has not been successful on the sandier soils, nor in the drier areas. On favorable locations, where good growth is secured, it appears to surpass mazzard and mahaleb because of the smaller tree and consequent greater economy of harvesting.

### Pollination and Orchard Management

The importance of pollination of sweet cherries is stressed.

The various items of orchard management such as propagation, planning and planting, cultural operations, fertilization, and pruning are discussed. About 12 pages of this 52 page circular are given over to disease and insect control.

Harvesting and handling the crop along with several pages of information on costs of production complete this useful circular. — W.P.J.