REPORT OF THE SUBTROPICAL FRUIT VARIETIES COMMITTEE

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The major efforts of the committee during the past year have been devoted to field trips in parts of San Diego, Santa Barbara, and Los Angeles Counties to observe the behavior of varieties and new plantings of the several subtropical fruits other than citrus or avocado.

On December 2, 1954, the committee visited the Los Angeles County and State Arboretum at Arcadia. Under the guidance of George Spaulding, the superintendent, and Dr. Russel Siebert, the director, a tour was made of the 110-acre arboretum to examine the new facilities under construction and to observe the general plan of this great project. Excellent propagation facilities in the form of glasshouses, lath house and holding yards are completed or partially constructed. Considerable control of environment by means of air conditioning, mechanical shades, and humidifiers are provided in this equipment. The invaluable and complete labeling system for each plant was explained. The data included for each specimen on indestructible labels gives the year of introduction, the method, whether by seed, cutting or potted plant, the genus and species, family and county of native habitat, and the introduction number. The collections are set up according to areas of origin such as the Australian group, the South American and South African groups. Presently there are approximately 5,000 species assembled or planted. This arboretum will be, indeed, one of the horticultural attractions of southern California and should be of great interest to all lovers of plants throughout the United States and especially those interested in subtropical plants.

An old landmark in the history of the avocado industry in California is the old Spinks estate above Glendora. Here the once prominent Spinks avocado reached its acme of popularity. A series of economic reverses and a fire within the estate together with the potential subdivision of this large property has resulted in almost complete neglect of the trees. There remain, however, some indications of a once beautiful and extensive collection of subtropical fruiting plants, such as a large macadamia tree of the integrifolia type. This tree is now about 20 feet high. Two fine mangoes of unknown variety, a litchi tree about 8 feet high, and a fine specimen of longan, *Euphorbia longana*, with many but small fruit are still thriving near the old home site. Most of the once outstanding avocado orchards lie in the ruin of neglect.

Among the foothills above Glendora are many small canyons and hillsides which, as the result of their exposure and protection from the hills, provide microclimates suitable for a great number of the more unusual subtropical fruit plants and vines. Such is the situation on the ranch operated by Mr. T. E. Kennard. Here among the native oaks on the floor of the canyon and along the hillsides are found papaya, mountain papaya, mango, cherimoya, white sapote, macadamia, rose apple *(Eugenia jambos),* and many

varieties of citrus and avocado. While much of these plantings are relatively young, this collection will be watched with considerable interest. One of the largest collections of Surinam cherries (*Eugenia uniflora*) seedlings has been set out. Papayas from several sources, including *Carica candamarcensis*, the mountain papaya, and *C. monoica, the* Peruvian cooking papaya, also are being tested out-of-doors. A fine collection of macadamia varieties will also be planted.

On October 14, 1954, the committee visited several nurseries and orchards in San Diego County in the Vista, Carlsbad and Rancho Santa Fe area. Among the newer additions to our horticultural materials are found at the nursery of Mr. T. N. Westree at Carlsbad. For many years Mr. Westree has been associated with the development of the macadamia nut as a potential tree crop in California and has devoted much time and financial effort toward the improvement of this crop as a possible commercial venture in southern California. He has growing at present 24 varieties of imported or local selections. Propagation of the macadamia is by side grafting in the nursery row or in some cases by rooted cuttings. Mr. Westree has about 300 seedlings of Surinam cherry, one of which he has selected for propagation.

While the white sapote has not achieved much popularity as a commercial fruit, nevertheless occasional growers have found some profit in small, well grown orchards. Such is the Brown orchard at Vista, which recently sent to Los Angeles a shipment of 500 pounds of fruit which sold for 20 cents per pound. The two dozen trees in this orchard are beautiful specimens of the variety identified as Wilson.

Another fruit of less popularity is the feijoa. About 60 very fine specimens of this beautiful plant were observed on the Guy Smith place, Vista. These plants bear very heavy crops of large oval or in some cases round fruit. The latter, borne on apparently grafted trees, are believed to be of the variety Superba. Also on the Smith property are some fine specimens of the Rex cattley *Psidium cattleianum* and its yellow-fruited relative, *var. lucidum.* Some large fruited *Carissa grandiflora* also add to the horticultural attraction of this property.

The Mehner Passionfruit Plantation just south of Vista is always of interest to horticulturists. This planting is possibly the beginning of another rather extensive exploitation of this fruit, the former, planting of which existed nearby in the early thirties. Mr. Fred Mehner now has four acres planted to the *Passiflora edulis* vines. One additional acre has just been set out. The 1954 crop from 450 vines was 7,000 pounds. While a summer and a winter crop are developed, fruit of the latter is larger and of better appearance compared with that produced in the summer. The well kept vines are planted in north-southwise trellis rows at 12-foot distances. Most of the fruit is sold to a tropical juice products plant in Fullerton. Some fruit is sold fresh through the Farmer's Market, Los Angeles.

One of the direct results of interest in the macadamia in southern California has been the establishment of small acreages by growers on a trial basis. An example of this is found on the Lush place, Rancho Santa Fe. There were transplanted from Carlsbad 112 seedlings 3 to 5 years old. These were mostly seedlings of the well-known Hall tree in Santa Ana. They were grown at Westree's nursery at Carlsbad and transplanted in 1953 to their present site. The soil here is quite shallow and rather of heavy texture, but is apparently virgin to other tree crops. The trees have been planted on slight mounds built up of imported soils. The trees are in excellent condition and appear to be readily adapted to this environment.

It is one of the functions of the Subtropical Fruit Varieties Commit tee to seek, study and register new varieties of subtropical fruits other than citrus or avocado which are adapted to the various areas of southern California. The committee renews its invitation for persons to consult with its members as a group or individually concerning varietal problems in the several subtropical fruits. It especially will appreciate information about new fruits, new plantings or new outlets for fruits. The committee may be reached through its members, the chairman, or the secretary of the California Avocado Society. Registration lists of new varieties are published periodically, the last one of which appeared in the California Avocado Society Yearbook 1953-54.