

HISTORY OF CITRUS IN ARIZONA

“Although little attention has been paid to oranges, yet orange trees loaded down with excellent fruit in the gardens of Phoenix show that climate and soil are well adapted to their culture” reported Territorial Governor Trible in October 1885.

By R. H. Hilgeman

Soon thereafter, in 1887, the first commercial orange grove in the Salt River Valley was planted by W. J. Murphy¹ near Camelback Mountain below the Arizona Canal. By 1888, other growers and development companies had started and 22,000 trees were planted. Grapefruit growing began in 1894, with the planting of 20 acres on the Clayson ranch on McDowell Road.

By 1900, when possibly 800 to 1,000 acres of citrus had been planted, marketing problems developed. It is reported that fruit was fed to hogs and some trees were abandoned or died for lack of water during the drought years of 1899 to 1903.

640 Acres by 1907

In 1907, J. Elliot Coit, horticulturist at The University of Arizona, visited all groves and found 641 acres, planted chiefly to Washington Navel oranges with an estimated yield of 110 cars.

Possibly 600 acres survived the 12° to 16° F. temperatures of the 1913 freeze. Thereafter, planting gradually increased until 1925. Then large yearly increases brought the total to 20,022 acres in 1934 of which about 64 percent were grapefruit. A decrease in fruit prices stopped further planting. Some groves were pulled out and subdivided, so that about 18,000 acres remained in 1949. Since then many old groves have been subdivided for homesites, but new plantings near the perimeter of the valley have been made, so that 14,786 acres were present in 1962. About 56 percent were oranges and only 28 per-

cent were grapefruit. New acreage has consisted chiefly of oranges and tangerines.

First Yuma Planting in '92

Citrus growing at Yuma started with the planting of 20 acres on the mesa, just south of the city by H. W. Blaisdell, in 1892. Little further planting was done until the Reclamation Service completed the canals and pumps to supply water to the area. Between 1920 and 1932, about 1,300 acres were planted with 81 percent to grapefruit. New plantings of oranges and lemons brought the total to 1,954 acres in 1949.

The reclamation of additional land on the mesa and in the Wellton area after World War II provided opportunities for new groves. By 1962 the acreage had increased to 17,600, with about 6,000 acres of lemons and 9,000 acres of Valencia oranges. Extensive planting of Valencias continues at present.

Marked changes in the varieties of fruit planted have occurred over the years. Early plantings were chiefly Navel oranges and between 1920 to 1932 grapefruit predominated. Lemons were emphasized between 1950 and 1957, and since then Valencia orange and tangerine type fruit. These changes generally have reflected the income from each variety during the planting period.

In the early years fruit was marketed chiefly through private packing houses. In 1919, the Arizona Fruit and Storage Company was formed through the efforts of I. De R. Miller, its first manager, George H. Libby and others. By 1924, it had become the Arizona Citrus Growers, a cooperative, and they were celebrating the completion of a packing house in Phoenix, with F. W. Avery as president. This organization continues to serve the industry with enlarged facilities on West Camelback Road.

In recent years several large growers have built their own packing houses near their groves. Since 1952 harvesting of fruit has been changing from picking in field boxes to trailers and pallet boxes.

With Trees Come Pests

Early importations of citrus trees from Florida and California were infested with insect pests. To prevent further introduction of such trees, the Arizona Horticulture Commission was created by the Territorial Legislature in 1909, with Foster Rockwell its first chairman and Dr. A. W. Morrill the State Entomologist. In 1933 maturity standards and frost tolerance limitations for fruit shipped outside the state were added to the fruit and vegetable standardization laws under the control of J. M. Foote, supervisor. Marketing problems became acute in the late '30's, which resulted in establishment of federal and state marketing programs still in effect.

Citrus research started at the newly established USDA Testing and Demonstration Gardens at Sacaton with the planting in February, 1908, of 10 new citrange varieties, developed by Dr. W. T. Swingle. Arizona Agricultural Experiment Station citrus research started in 1920 with the planting of five acres of grapefruit on the Yuma Mesa Experiment Farm. This program was soon enlarged to include variety tests, fertilizer and irrigation experiments. In recent years research has included pathological investigations and rootstock trials.

Wide Area of Research

Research in the Salt River Valley began in 1930 when research personnel were stationed in the valley and cooperative grower tests of fertilizers, irrigation, grapefruit maturity and frost protection were undertaken. In 1943 the Citrus Branch Station at Tempe was given to The University of Arizona by the growers, and long term fertilizer, irrigation, frost protection, rootstock and variety tests were initiated.

Severe freezes in '13, '37, '49, '50, '62 and '63 have caused extensive fruit losses, but large well cared for trees were not seriously damaged. Yields of oranges and grapefruit have been higher than average in the year following the freeze.

The citrus industry in Arizona has alternated between rapid increases in acreage during periods of high prices for fruit followed by loss of acreage when prices were low. The last 20 years have been marked by increasing acreage. How much longer will it continue?

Dr. "Bob" Hilgeman, horticulturist and superintendent of the U of A Citrus Branch Experiment Station in the Salt River Valley, is an authority on the industry in this state and recognized as such by men in the industry.

¹A definite record of this planting has not been established. It is generally accepted that W. J. Murphy made the first planting of about 15 acres. Circumstantial evidence indicates it was planted in 1887.