

## Reviews and Abstracts

### BREEDING and IMPROVEMENT OF PEACH VARIETIES IN NEW JERSEY

By M. A. Blake and L. J. Edgerton, 1946  
New Jersey Agr. Expt. Sta. Bul. 726

Since 1914, the New Jersey Station has been breeding peaches to provide growers with new modern varieties. In the 30-odd years that this work has been in progress, 31 varieties of peaches and one nectarine have been developed, named, and introduced into commercial orchards.

#### Peach Industry in New Jersey

The first commercial peach region in America developed around Philadelphia and New York and included parts of New Jersey, Delaware, Maryland, and Pennsylvania. In 1877 the New Jersey State Horticultural Society approved the following list of peaches for planting:

Crawford Late	Oldmixon
Crawford Early	Stump
Early York	Smock
Mountain Rose	Late Rareripec
Honest John	Keyport White

These were all American selected varieties of the European type and preceded the introduction of the Chinese Cling type variety into New Jersey orchards.

By the beginning of the 20th century, certain varieties of the Chinese Cling type, including Greensboro, Waddell, Carmen, Lola, Connetts, Belle and Elberta, had made their appearance in the South and were being planted in the North. The San Jose scale destroyed

most of the older bearing peach orchards in New Jersey from about 1902 to 1905. When growers replanted their orchards they used the Chinese Cling types to a large extent.

Peaches were scarce and high in price, so the early ripening varieties were freely planted. Of the later varieties Belle replaced Champion and Oldmixon, and Elberta replaced Reeve's Favorite and Late Crawford.

The Chinese Cling types were not nearly so sensitive to the influence of seasonal temperatures, light and soil conditions as were the American selected varieties of the European type, and were therefore more dependable producers. Elberta is an outstanding example. No commercial variety of any tree fruit in America has demonstrated the wide commercial adaptability of Elberta.

#### New Varieties Needed

Certain of the edible qualities of the old famous New Jersey peaches were sacrificed to some extent when the Chinese Cling type varieties were planted. New varieties were needed which combined the superior dessert quality of the earlier sorts with the dependable growth and production of the Chinese Cling types.

The source of new varieties previous to about 1900 was largely chance seedlings. Such a haphazard method was obviously much too uncertain and slow to meet the needs of the industry and the changing market and consumer demands.

Peach breeding work was started at the New Jersey Station in 1910 and has continued to the present time. From the start the aim was to use plant characters and not varieties as the units for planning crosses.

#### Varieties Named and Introduced

From 1914 through 1926 a total of 6,188 seedling peach and nectarine trees were obtained from known crosses and planted in the orchard. Of this total, 31 peaches and one nectarine were selected and after being subjected to state-wide tests, were from time to time named and introduced.

As a result of the crosses made in 1914, the following varieties were later named and introduced: Ambergen, Cumberland, Delicious, Eclipse, Meteor, and Radiance. The crosses of 1915 contributed Pioneer and Primrose. The work of 1916 resulted in Buttercup, Goldfinch, Marigold, Oriole, Massasoit, Rosebud and Sunbeam.

Golden Jubilee was obtained from a pit produced in 1921 by a tree which originated from a cross of Elberta and Greensboro.

A number of recently named varieties were obtained from the crosses made in 1923, 1925, and 1926. In most cases J. H. Hale was the female parent. These varieties include Raritan Rose, Trijogen, Newday, Fireglow, Golden Globe, Sunhigh, Goldeneast, Redrose, Midway, Pacemaker, Summercrest, White Hale, Afterglow and Laterose.

Descriptions of the varieties which

have been named are included in this bulletin. This material gives fruit and tree characteristics as well as information on the regions and conditions under which the variety can be profitably produced. Space for the present review does not permit this information to be included. A copy of the bulletin may be obtained by writing to the New Jersey Agricultural Experiment Station, New Brunswick, New Jersey.—W.P.J.



#### VARIETY NOTES ON SOME TREE FRUITS GROWN IN PRAIRIE ORCHARDS

By W. R. Leslie, 1946

Canada Dept. of Agr. Farmers Bul. 135. 28 p.

This bulletin describes 70 apples, 44 crabapples, 11 pears, 17 apricots, 79 plums and hybrids, 8 sand cherries, and 12 sour cherries. The descriptions are short and include information on tree growth, fruit characteristics, and ripening season. The material would be of greater value to the fruit grower if the varieties were assembled into groups or lists which would indicate their relative value for commercial planting or other uses.—W.P.J.