DESCRIPTIONS OF CURRENTLY GROWN WALNUT VARIETIES FOR LAKE COUNTY

compiled from

The Walnut Germplasm Collection of the University of California, Davis Report #13, July 1994)

TRADITIONAL VARIETIES

Poe is a midseason to late leafing cultivar from Lake County, California. Poe was selected by Oscar Poe near Lakeport around 1900. It is terminal bearing, protogynous and low yielding. The nut is thick shelled and the kernel is small. One gourmet food writer described Poe as less astringent than other walnuts and tasting slightly like butterscotch. (*Poes are no longer being planted but older trees are still being maintained.*)

Franquette was brought to California from France in the 1870s by Felix Gillet. It is still widely planted in France and is one of the high quality "noix de Grenoble". The name Franquette has been applied to a number of selections made over the years by different growers but they all have certain traits in common. Franquette is a large, terminal bearing cultivar which is not fruitful on lateral buds. It is the standard for late leafing in California and often escapes blight and codling moth. It comes into production late and requires little pruning. The nut quality is usually good but yields are only fair. Forde has suggested that Franquette has a lower yield than Hartley, both terminal bearers, because Hartley branches more and therefore has more terminals. Franquette also produces one or two nuts per terminal while Hartley produces two or three. (Franquette is the best variety for colder locations due to its late bloom.)

Arthur Davey and Gene Serr brought about 12 selections of Franquette to the Wolfskill Experimental Orchard beginning in 1944 and evaluated them. They concluded that the original Franquette was superior. William Stuke and Gene Serr gathered about 17 selections of Franquette at the Stuke Nursery in Gridley about ten years later, including Lattin, Treat, Scharsch and others. Scharsch Franquette originated from a single tree of Joseph Scharsch near Ord Bend, Glenn County, California. It is also a good pollenizer for Hartley and bears catkins at a younger age than regular Franquette. As with other Franquettes, it leafs out three to four weeks later than Payne and the harvest is late. The nuts have a medium-thin shell, good seal, light colored kernels and good fill. Moyer Franquette was brought to California from Oregon by William Stuke. Its distinctive character is that it extends the duration of pollen shedding for eight to nine days beyond other Franquettes. Graves Franquette is a chance seedling selected by a grower in Merced County. It has a phenology similar to Scharsch Franquette, but the nuts produce a higher percentage of light-colored kernels.

Hartley originated in the orchard of John Hartley in Napa Valley, California; it may be a seedling of a Franquette x Mayette cross. This was one of the selections made by William Hunter, a nurseryman, who planted seeds in Hartley's orchard in 1892, selected the best in 1909 and later introduced the Hartley as a cultivar in 1925. It was exhibited as the Hartley nut at the World's Fair in 1915, and won a blue ribbon. According to Forde, John Fisk, the farm advisor in Napa County, called Gene Serr's attention to the Hartley. Serr brought scions of it to San Joaquin County in 1932. From there it spread up and down the Central Valley. In 1940, it was commercialized because it was particularly well suited to the in-shell market. Hartley is the standard for midseason phenology, which is about two weeks after Payne and a week or more

before Franquette. The Hartley nut is fairly large, broad based with a pointed tip. The shell is light in color and thin, with a good seal; the kernel is light colored but percent kernel is low. Hartley is susceptible to deep bark canker when stressed by a lack of water or poor soil. The problem with codling moth is minimal. Hartley is less susceptible to blight than Payne, since it leafs out two weeks later. Hartley is a consistent producer, even though it is only slightly fruitful on lateral buds. There are more Hartleys than any other cultivar in California, but in recent years the number of new Hartley plantings has declined. (Hartley trees succomb to the bacterial disease deep bark canker as they age. This disease is worse in irrigated orchards and has resulted in its decline as the variety of choice.)

NEW VARIETIES

Chandler (64-172) is from a cross made by Serr and Forde in 1963 between Pedro and 56-224. Chandler was patented and released by the University of California in 1979. Chandler is highly fruitful on laterals and quite vigorous, thus it needs pruning, particularly to avoid shoots with a narrow crotch angle. Growth starts mid-season, about the same time as Hartley. The nuts are oval, smooth, with some weakness in the shell so they may not be suitable for the in-shell market. However, Forde suggests that the shell may firm up as the trees get older and put less energy into wood. Nut seal is good and the kernel is particularly light colored, almost pearly. The nuts easily crack out in halves and some say that it stores better than other cultivars. Occasionally one finds some shrivel on the lobes of the kernel but this has not been an economically important flaw. Chandler yields well if pollenizers are present. It is now the most frequently planted walnut cultivar and Forde regards it as the most important cultivar coming from their breeding program. (Chandler currently enjoys a premium price in the marketplace.)

Howard (64-182) is a sibling of Chandler from the cross Pedro x 56-224. Howard was patented and released by the University of California in 1979. It is a laterally fruitful, mid-season cultivar with heavy bearing potential. It is not as vigorous as Chandler and must be pruned heavily. Some farm advisors recommend removing nuts for the first two bearing years to encourage growth. The nuts are not as light colored as Chandler, but they are larger and have a stronger shell. (Howard trees may be more closely spaced than Chandler in the orchard due to its smaller stature.)

76-80 is from a cross between Chandler and 61-25, made by Forde in 1975. 76-80 is midseason leafing, precocious and somewhat fruitful on lateral buds. The kernel weight is 53% of the nut weight. Its nuts have a very high percentage of light-colored kernels, similar to its parent Chandler. The nut may have a seal problem and the shell is weak. Yields are average to good. (76-80 may be a promising new variety for Lake County. It is currently only available by test agreement with UC.)

NOTE: Italicized statements are by Rachel Elkins, UC Farm Advisor in Lake County.