

## **New walnut varieties released by UC Davis**

By Joe Grant, Farm Advisor, San Joaquin County

The University of California Walnut Breeding Program recently released three new walnut varieties: 'Sexton', 'Gillet' and 'Forde'. Nursery availability of these new varieties is limited for 2007 plantings, but more will be available in 2008 and beyond. These varieties all have large light-colored kernels and high kernel yields. They have mid-season leafing dates (5-7 days earlier than 'Chandler'). All harvest earlier than 'Chandler'. To date, all three varieties have had low blight incidence in test plantings.

These new varieties hold promise for the future. If you plan to plant new acreage in

2008 or there after, you may wish to inquire of your nursery representative about trying them for yourself. We will have to wait many years to know for certain whether these varieties will live up to the potential they have shown in the breeding program's test plantings. Until we learn more, they should be considered promising but experimental. Several small replicated commercial plantings have been established in walnut districts to better evaluate their performance in commercial orchards. One of these is in the Linden area; so local growers will have as early an opportunity as anyone to see how they perform.

The following descriptive information and observations on the new varieties were compiled by Dr. Gale McGranahan and Chuck Leslie of the Walnut Breeding Program at UC Davis.

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**Sexton** came from a cross between 'Chandler' and UC selection 85-8 (a Chinese introduction, used for yield, size and precocity) made in 1990. It has shown high yields on young trees and a harvest date around a week before 'Chandler'. 'Sexton' leafs out a week before 'Chandler'. It is 100% fruitful on laterals with abundant male and female flowers. Like most commercial varieties, 'Sexton' begins shedding pollen before pistillate bloom starts but its pollen shedding overlaps much of its own pistillate bloom. Potential pollenizers are 'Howard', 'Tulare' and 'Chandler'. The nuts are relatively smooth and round with good seals and good strength. The kernels are light colored, easy to remove from the shell and at 8-9 grams make up more than 50% of the nut weight. 'Sexton' trees tend to have many necked buds, a densely branching canopy, and weeping growth habit. As such it will require careful training and pruning of young trees to prevent overbearing and establish good tree structure. It may be suitable for hedgerows where tree structure is less critical, heavy early yields is an objective, and limited tree size is an advantage. A second flowering can occur and may result in a few small nuts. Early and limited observations suggest that 'Sexton' may be difficult to graft.

**Gillet** originated from a cross made in 1995 between UC76-80 (for nut quality) and 'Chico'. It has high yields on young trees and a harvest date 10-20 days before 'Chandler'. 'Gillet' leafs out a week or more before 'Chandler'. Like 'Chico' and 'Forde', pistillate bloom begins before pollen shedding starts. It is 100% laterally fruitful and has had low blight incidence in test plantings. Potential pollenizers are 'Vina' and 'Sexton'. The nuts are somewhat more oblong than 'Sexton' with good seal and strength. Kernels are easy to remove, light-colored and, at 8.2 grams, make up over 50% of the nut weight. 'Gillet' is the most vigorous of the three new varieties.

**Forde** originated from a 1995 cross between UC61-25 (yield and size) and 'Chico' (for yield). 'Forde' has high yields on young trees and a harvest date that averages 5 days before 'Chandler'. 'Forde' leafs out about 5 days before 'Chandler' and is 100% laterally fruitful. Potential pollenizers are 'Vina' and 'Sexton'. The nuts are oval to round and medium textured with good seal and shell strength. The large kernels (9 gram) are light and extra light and make up about 54% of the total nut weight. The tree vigor of 'Forde' is intermediate between 'Sexton' and 'Gillet'.