## December 14, 2005 University of California, Davis Department of Plant Sciences

Tulare Giant Sweet Plum Description (U.S. Plant Pat. No. 12,224)

The Tulare Giant is a new plum cultivar developed from the University of California Dried Plum/Prune Cultivar Improvement Program that is best suited to the fresh market. It has a large size and very sweet fresh plum taste. It is harvested in the first week of July in normal years.



Tulare Giant Sweet Plum

The new cultivar is the result of a controlled cross made in 1987 between the European plum cultivar Empress and the cultivar Primacotes. The original UC selection and testing number is "3-6E-13." The new cultivar was initially selected in 1999 from a seedling block at UC Kearney Agricultural Center, Parlier. Initial propagation of the Tulare Giant was accomplished at Kearney in 1993. Grower plantings have been under evaluation in both the Sacramento and San Joaquin Valleys. The Tulare Giant cultivar was patented and released in 2000.

The tree of the new cultivar is vigorous and highly productive. Unlike many other plum cultivars, the Tulare Giant will develop many flowers and set fruit from buds on one year old wood as well as on older spurs. Substantial tree pruning and fruit thinning is necessary for the fruit to develop adequate sugar for fresh shipment. The tree is not self-fertile. The Tulare Giant needs a pollinizer. The UC recommended pollinizer is the new cultivar Muir Beauty (UCD # D6N-72). Both cultivars have an earlier bloom time, about 7-10 days earlier, than the industry standard, Improved French. If Muir Beauty is not available as a pollinizer. The Tulare Giant has been propagated on Myrobalan 29C and Marianna 2624 plum rootstock with good success. Propagations on peach root have resulted in substantial overgrowth at the graft union. Although no trees of this combination have broken off, the Tulare Giant top is reduced in vigor with less cropping and some sun burning of limbs. Tulare Giant propagated on Citation rootstock is even more severely dwarfed, producing substantially unhealthy trees. Due to the

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substantial amount of incompatibility demonstrated by both stocks, the use of peach or Citation as a rootstock for the Tulare Giant cultivar is not recommended.

The Tulare Giant fruit is large in size, substantially larger than Improved French. The fresh fruit averages between 45-70 grams a piece. The new cultivar is oval in shape and dark purple in color under a greyish colored and waxy epidermal bloom. Date of maturity for the Tulare Giant in a normal year is in early to mid-July, several weeks earlier than the Improved French. Soluble solids ranged from 17 to 19 degrees Brix.

The new cultivar could be used for drying but the pit is quite large and only semi-free from the flesh. Because of the large fruit size, drying time exceeds twenty hours and the fruit can bleed, slab and stick to the drying trays. Quality of the dried flesh is good, soluble solids can reach 20 degrees Brix at drying maturity. Because of the above drying characteristics, however, utilization of the Tulare Giant as a dried product is not recommended.



Tulare Giant fruit and foliage