



## GRAPE PRODUCTION IN SAN JOAQUIN COUNTY

2004

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The grape industry in San Joaquin County held on to second ranking in gross production for 2004, although returns improved slightly with a light crop. During the last 25 years grapes have ranked number one or two. The gross income from all grape production totaled \$ 188,814,000 in 2004 for 469,731 tons. This does not include winery and shipping sales. Fifty-one wineries are located in San Joaquin County and generate additional income to the reported grape sales. San Joaquin County ranks number five in grape acreage among California counties, with 98,800 total acres. The north half of the county is in crush district 11, while the area south of Highway 4 is in crush district 12.

Grape production in the county is now mostly delivered for wine processing. Tokay table grapes and related shipping operations are a very minor percentage. Currently there are less than 500 acres of Flame Tokays with a gross value in 2004 of \$436,100. The majority of these were used in sparkling wine, brandy production or as blend wine. Almost all of the Tokay acreage is situated within a seven-mile radius of Lodi.

The wine grape acreage, exclusive of Tokays, totals approximately 98,800 acres (40,000 ha). The leading variety is Zinfandel with approximately 19,987 acres (8,092 ha). Other varieties in order of acreage are: Chardonnay (14,125 acres), Cabernet Sauvignon (11,521 acres), Merlot (8,433 acres), Sauvignon blanc (2,307 acres), French Colombard (1,010 acres), Chenin blanc (893 acres), Petite Sirah (1,113 acres), Carignane (1,001 acres), Syrah (1,807 acres), and Pinot gris (1,872 acres). There are more than 35 other varieties of less than 1,000 acres each. The crush totaled 469,731 tons for all varieties in 2004. The average price for all wine varieties was \$412.94 per ton.

The Lodi area is considered a moderate climate region (high III to low IV), producing premium varietal and vineyard designated wines. This transitional area between the cooler coast and the Southern Central Valley is due to the moderating effects of Delta breezes in the afternoons. The Lodi area has been a delimited America Viticultural Area appellation (AVA) since 1986, which is increasingly recognized for the high quality of grapes and wines produced here. In 2001 a second appellation was approved in the south county; the River Junction AVA.

Grape growing began here after the introduction of vines from the California missions. Captain Charles Weber, the founder of Stockton, brought cuttings here in 1850. The local commercial industry expanded in the years after the Civil War following the lead of George West. Since that time, San Joaquin County and the Lodi area have been recognized as a viticultural region.

Through the first part of this century, as much as 25 percent of the total state acreage of grapes was located in the county. Fresh table grape production was a very dominant segment of the local industry until the introduction of newer seedless varieties in the mid-1970s. The region was known only as a dessert and bulk table wine producer until an appellation was granted in 1986. Varietal wine production is now prominent with approximately 40 percent of statewide Zinfandel acreage and 17 percent of all wine grape acreage.

Most of the Flame Tokay acreage is head trained, as are many of the older wine grape vineyards. Generally, new vineyards are on trellis and are cordon trained, the one exception being Zinfandel, which may be head trained for red wine production. Head training does prohibit the use of machine harvesting. Approximately half of the current vineyards are machine harvested. Head-trained Tokays yield an average 7-10 tons/acre (15-22 tons/ha) while Tokays on trellis average 10-12 tons/acre (22-27 tons/ha). Wine grapes average 6-8 tons/acre (13-19 tons/ha). Many Tokay vineyards are 80-100 years old. Average yield for all varieties was 5.57 tons per acre in 2004. This was down from previous years due to some spring hail and marketing demand for increased quality as related to lower crop loads.

Most old Tokay vineyards are on their own roots, while almost all of the other vineyards are on rootstock. This area has used mostly Freedom, some St. George, Dogridge, Salt Creek (Ramsey) and very little Harmony. Use of new rootstocks include: Kober 5BB, 1103 Paulsen, S04, 101-14 MGT, 3309 Couderc, Teleki 5C, 110 Richter, 420A, 140 Ruggeri, Schwarzmann, and the VR hybrid 039-16, which is resistant to the dagger nematode and fanleaf virus. Applied water systems are mostly drip irrigation, about 80% of all vineyards. The remaining 20% are mostly furrow irrigated with less than 1% sprinkler irrigated. The majority of vineyards use well water, but as much as 25% may use surface water, supplied from irrigation districts or direct river access.

<b>DISEASES</b>	<b>PESTS</b>
➤ Powdery mildew <i>U. necator</i>	➤ Mites (Willamette and Pacific)
➤ <i>Phomopsis Cane and Leaf Spot</i>	➤ Omnivorous Leaf Roller
➤ <i>Botrytis</i> Bunch Rot	➤ Nematodes <i>X. index</i> ; <i>M. incognita</i>
➤ Fanleaf Virus	➤ Phylloxera (1903)
➤ <i>Eutypa dieback E. lata</i>	➤ Leafhopper - Grape and Variegated, (1989)
➤ Oak Root <i>A. mellea</i>	➤ Thrips
➤ Leaf roll viruses	➤ Birds & Gophers
➤ Young Vine Decline/Esca	➤ Vine Mealy Bug (limited 2001)
➤ Downy mildew, <i>Plasmopora viticola</i> (1995)	