

## **An Analysis of the Grape Juice Concentrate Industry: Linkages to the Central California Wine Industry**

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Table and raisin type grapes purchased for crush represent an important market for many California grape growers, particularly in the Central Valley. In 2009, more than 2.1 million tons of grapes grown in the Central California region, from Stanislaus County to Kern County, were crushed for wine and concentrate, around 51% of the statewide total. Of that total approximately 20% were raisin and table grape varieties. Many, if not most, were destined for the production of grape juice concentrate.

Grape juice concentrate has traditionally been used as a natural sweetener ingredient in many foods products. More recently, grape juice concentrate has found its way into the wine industry, primarily as a blender and sweetener for varietal and super-value wines. Concentrate is also used to produce a small category of high-intensity red and purple colorants known as "mega colors," or red and purple 8000 color. These products are used to enhance color and add body to wines. Accordingly there is a minor, but not unimportant, linkage between wine markets and the market for grape juice concentrate produced from raisin and table grapes.

According to the California Department of Agriculture annual crush report, an average of about 16% of the total state grape crush has gone to production of concentrate over the past 10 years. Growers whose raisin and table type grapes were purchased for crush experienced substantial variation in their product value over the same period. Between 1999 and 2002 the weighted average price for raisin and table type grapes for crush declined, from \$200 and \$187 per ton to \$76 and \$80 per ton, respectively. Prices rebounded somewhat in 2009 to \$224 and \$180 respectively, prices declined once again in 2009 to \$171 for raisin type grapes and \$143 per ton for table grapes.

The instability in crush prices for grapes traditionally used in concentrate production, combined with other factors such as increasing input costs, creates uncertainty regarding long-term sustainability for Central Valley grape growers dependent on this segment of the market. More stable prices at higher levels would help to induce the investments necessary to lower production costs and/or increase yields, making growing grapes to use in concentrate production a more viable business enterprise. However the future prosperity of the California concentrate industry requires maintaining a competitive price position relative to other domestic and international suppliers limiting the prices processors can pay for grapes in this market. Increased information regarding the various factors contributing to the current market environment will facilitate better strategic business planning for producers

The specific objectives of this research project was to provide a detailed profile of the California grapes for concentrate industry, including the dynamics of the domestic market, international competition from imported grape juice concentrate and domestic and international alternative fruit juice concentrates. The second was to provide a detailed economic budget analysis of grape for concentrate production systems and use that information in an analysis of the economic sustainability of grapes for concentrate enterprises. In each case the information is presented with a view toward linkages with the domestic and international wine industry.

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