

## **ANR 2012 NEW ADVISOR POSITION PROPOSAL/CENTRAL VALLEY REGION**

**Position Specialization:** Viticulture Advisor – Kern County (Permanent – Full Time)

**Position Description:** The focus of this position is table grapes. However, it also includes grapes for wine and raisins in Kern County. The minimum requirement for the position is a Master's degree in an agricultural science, such as plant science or horticulture, with an emphasis on viticulture. Additional course work or specialized training in entomology, plant pathology or soil science is preferred. Education, training or experience in viticulture is required. The candidate should be able to develop and integrate all aspects of grape production to promote sustainability, profitability, food safety, and environmental stewardship.

**Justification:** The viticulture industry in table grapes in California was \$1.3 billion dollars in revenue in 2011, 73% of that came from the area of Wheeler Ridge, in the southern part of Kern County, to about 10 miles north of Delano. According to the Table Grape Commission, Kern County shipped 73.7 million boxes of table grapes in 2011. That number will probably increase in the future considering the planted acreage that is not yet bearing. According to the 2010 Agricultural Crop Report submitted by the Agricultural Commissioner, the value of this crop was \$703 million dollars, the number one crop in Kern County. Raisins are another area of grape production in Kern County that should be considered for future research in the viticulture program. Kern County produces approximately fifteen thousand tons of raisins, on older Thompson Seedless vineyards, and newer trellised plantings. Overall wine grape production is on the rise. In the past, poor market conditions and lack of demand dropped the wine grape acreage down to less than 18,000 acres. Now, it has gradually increased to about 20,000 acres. Research will be needed on improved mechanization practices and cost reduction practices such as minimal pruning or hedging.

Industry, through the California Table Grape Commission, has identified these areas of need as critical for table grapes in the southern San Joaquin Valley: vine growth and development, table grape production, rootstock evaluation, vineyard management systems, automation and mechanization, crop/fruit development, integrated pest and disease management in table grape vineyards including soil pests, post harvest handling, cultural practices and their impact on fruit quality and yield, and minimizing the environmental effects of production and cultural practices. Additional expertise needs were identified as irrigation and soil science and secondarily in plant physiology.

**Extension:** The advisor will provide information to clientele through meetings, field days, newsletters, print media, KGOV (County government cable television), and phone calls. The individual will be expected to present at appropriate conferences and symposia. In addition, this advisor will be expected to work with other Kern County advisors to provide expertise to local clientele through office and phone consultations. The advisor will work with local agencies to provide outreach on critical issues associated with their responsibilities.

**Research:** Future viticulture research and education needs in Kern County will be driven by several forces, to include; the decreasing quality, reliability and increasing cost of water; decreasing availability and increasing cost of labor; consumer and industry emphasis on food safety and product quality; increasing environmental regulatory requirements for development of best management practices; the increasing need for early detection and control of invasive species through integrated pest management.

Specific projects may include:

- Cultural practices for both new and existing table grape cultivars, trellis design, rootstock evaluation, canopy and fruit management, vine physiology including light and carbohydrate issues, vine water relations, plant growth regulators and girdling, vine capacity and crop load determinations
- Postharvest handling of table grapes and quality evaluation (fumigation and phytosanitary treatments, storage procedures)
- Irrigation strategies that promote production and quality
- Sustainable production including integrated pest and disease management, floor management techniques, fertilization irrigation practices, organic farming techniques
- Nutrition, both macro and micro nutrients, cultivar and rootstock specific
- Evaluation of Glassy Winged Sharpshooter populations, Pierce's Disease infected vine removal, and the spread of Pierce's Disease in the General Beal area
- Continued evaluation of new rootstock selections to reduce the use of pre- and post plant fumigants

**ANR Continuum:** This advisor would be expected to interact with specialists, AES researchers and farm advisors. The Kern County Farm Bureau and the Table Grape Commission view this as a critical position. Kern County has the needs and resources to maximize the productivity of such an advisor for statewide as well as local benefit. As mentioned above, grapes are a top commodity in Kern County with a value exceeding \$0.7 billion. Kern has strong support from the local industry that will allow the new advisor to address high profile issues and concerns that are facing certain regulation in coming years and are pivotal to advancing profitability in the future. Progressive, large-scale Kern grape growers have the resources and interest to allow critical field work on these issues that would be cost prohibitive to growers in other parts of California. Results of past and present research done in Kern County has provided statewide benefit in areas of irrigation, integrated pest management, and rootstock varietal testing.

**Support (County):**

- Office space, administrative support, county vehicle
- A newly constructed laboratory with specialized equipment for the viticulture program
- A local staff of academic advisors with whom to collaborate
- Field equipment and support staff for field research
- County owned property under UCCE control for field experiments

**Industry Support**

- The Table Grape Commission is willing to fund either one-half of this position plus one-half of a position in Tulare-Kings County or a second viticulture/table grape position in Tulare-Kings County as a match to a UC funded position in Kern County
- Industry has also committed to providing research funding and ongoing participation in identifying program needs and facilitating and supporting research and extension activities

**Other Support**

- Cooperative growers (vineyard space, labor and crop)
- Collaboration in ANR funded research projects

**Location:** Grapes are consistently ranked as one of the top grossing agricultural products in Kern County. In terms of value, grapes were the number one commodity in Kern County with a value of \$703,961,000 according to the 2010 Kern County Crop Report. Grapes currently are found on 74,000 bearing and 1,643 non-bearing acres.