

Progress report for CDFA contract number 08-197.

Title: The Economics of Pierce's Disease in California

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Reporting period: November 2009 through February 2010

There are three objectives for this study:

- 1) Estimate the costs and benefits to wine grape, table grape and raisin growers, consumers and taxpayers from changes in the costs of grape production due to the establishment of the GWSS. The changes in production costs will be based on current best practices and will include chemical treatments, removal of infested vines, quarantine restrictions and public control programs.
- 2) Estimate the costs and benefits of public policies to manage and contain the GWSS. The public control policies include public programs to treat the GWSS in citrus to prevent its spread into grape vineyards in the spring, and the associated containment program. An additional public policy to contain the spread of GWSS and, thus, the transmission of PD, is a state quarantine on the movement of nursery, citrus and other host crops out of infested regions.
- 3) Estimate the optimal check-off rate for the grape industries that benefit from the treatment of the GWSS on overwintering crops. The rate will take into account the costs and benefits to the grape growers in both infested areas and areas that benefit from the containment of the GWSS within infested areas, and the costs and benefits to growers of overwintering crops.

Two major activities were completed during this time period. The first was the development of on-line surveys for citrus growers, grape growers, and nursery operators in GWSS infested areas in Southern California. These surveys ask about current control for the GWSS and other changes in pest management undertaken as a result of GWSS control. These surveys were developed based on interviews with growers, UC Cooperative Extension agents, and USDA program representatives in Kern County. The surveys are currently being pre-tested. The results will be used to provide the current treatment data that are needed to complete objectives 1 and 2.

The second activity that was undertaken was to begin the programming of the market model to complete objective 3. The model is being parameterized with data on grape and citrus production in California and the rest of the U.S. The rest of the U.S. is included to allow the model to estimate the total market effects to production and prices due to changes in GWSS and PD management as a result of the establishment of the GWSS in California. Placeholder data is currently being used for the cost changes and will be updated once the results of the surveys are

available.

The results of this study will be useful to development more efficient public policies to manage the glassy-winged sharpshooter and Pierce's disease in California.