Kern-Tulare

GWSS Update



A project of the Glassy-winged Sharpshooter Task Force of Kern and Tulare Counties. Participants: Agricultural Commissioner Offices of Kern and Tulare Counties, California Department of Food and Agriculture, University of California-Cooperative Extension, U.S. Department of Agriculture (APHIS and ARS Divisions).

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Pierce's Disease Symposium set for Dec. 5-7

The California Department of Food and Agriculture has organized a research symposium Dec. 5–7 to hear progress reports on more than 50 projects aimed at finding a cure for Pierce's Disease and control methods of the glassy-winged sharpshooter.

The symposium will be held at the Coronado Island Marriott Resort in San Diego. Information is available at www.cdfa.ca.gov/phpps/pdcp. Click on "Research symposium."

No GWSS Update next week

GWSS Update will not be published next week, Nov. 24, in observance of the Thanksgiving holiday.

More lessons learned from General Beale Pilot Project: Elevation and control timing are key to GWSS

Lessons learned from the General Beale Road Pilot Project include:

- 1) An elevation range of 500–1,200 feet is the warm area conducive to over- wintering of GWSS. This elevation differential follows the circumference of the central valley mountains.
 - 370 foot elevation = 140 hours at/or below 32°F
 - 449 foot elevation = 181 hours at/or below 32°F
 - 497 foot elevation = 37 hours at/or below 32°f
 - 902 foot elevation= 10 hours at/or below 32°F
- 2) Timing for control of GWSS is an important consideration of effectiveness of a management program.

In the General Beale Road Pilot Project, a February knockdown and a spring application of a systemic insecticide resulted in season-long low population levels of GWSS. This is in contrast to the Bena Road area, which had minimum pesticide applications until mid-June when population levels were very high. While the Bena Road area received treatment in late July 2001 and again in late October 2001, control was not as effective as the February/March program in the pilot project.

— Don Luvisi

GWSS numbers in Bena Road area drop with colder weather and recent treatments

The GWSS population in the Bena Road area has shown an overall decrease due to a combination of colder temperatures and recent chemical treatments.

This past week, however, CDFA trappers noticed a slight increase in the GWSS population in Bena Road. Observations were taken from adult trap counts in both the traps surrounding the grape and citrus crops and the traps hung every tenth mile in the eucalyptus and beefwood windbreaks trees. A change in humidity and precipitation could be a possible reason for the increase of GWSS. CDFA staff will continue to monitor any further increase and other possible variables.

— CDFA

Monitoring activities will continue in General Beale, Bena Road areas

Although GWSS numbers are low in the General Beale Road and Bena Road areas, both will be monitored on a monthly basis.

USDA field sampling crews will continue to sample each 40-acre parcel using visual and beat net sampling methods for GWSS. They'll also sample for secondary pest problems.

Even though we have not seen evidence or had reports of significant secondary pest problems, field crews will remain vigilant in their surveys.

— USDA

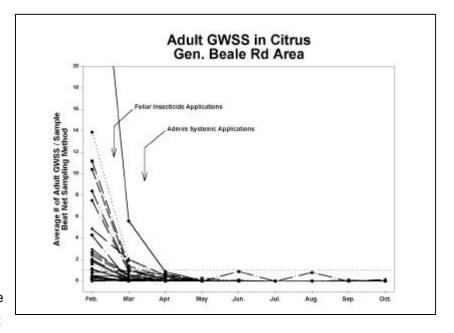
GWSS numbers at lowest level in recent years in General Beale Road area

The graph below shows the average number of GWSS adults collected per sample unit in each citrus grove within the General Beale Road area.

GWSS numbers are very low in each of the citrus groves, most below detectable levels using both visual and beat net sampling methods. Twelve groves remain above zero populations, with 11 showing average adult numbers slightly above 0.01, and one grove averaging 0.1 adults per sample unit (tree).

The graph also shows the timing of the only two applications made for GWSS adults: one foliar insecticide application and one systemic application of imidacloprid. These treatments were applied to maximize their effect.

The foliar application greatly reduced initial population densities and minimized the potential for spread of adult populations out of groves. The short-term effect of the foliar insecticide caused significant



population reductions, even when more environmentally soft insecticides were used.

The systemic application of imidacloprid was used to provide long-term control of the less mobile nymphal stages.

This layered, or two-step, approach appears to have been very effective. GWSS populations are at the lowest they have been in recent years in the General Beale Road area.

- USDA scientists

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