May 2, 2003

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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A successful role model: Kern's GWSS Pilot Project

Kern County's General Beale Road Pilot Project may well be the premier model for successful management of the glassy-winged sharpshooter (GWSS).

Two years ago, the 13,000-acre area southeast of Bakersfield was considered a hot spot for GWSS infestation. Today, it's hard to find the pest on the project's sticky traps.

"The scarcity of GWSS today in the pilot program area has been very encouraging," says Matt Ciomperlik, an entomologist with USDA-APHIS-PPQ and a key researcher in the pilot project.

Effective beginning. The large-scale cooperative pilot study, carried out by federal, state and county agencies as well as local growers, was launched to test various area-wide management strategies for controlling GWSS.

It began in February 2001 with a focus on insecticidal control of the pest. Foliar knockdown insecticide treatments were made in citrus groves to reduce populations of over-wintering GWSS adults. These were followed by an application of a systemic insecticide to control remaining GWSS adults and emerging nymphs.

This approach proved so effective, no additional treatments were needed in 2002, and it appears none will be needed this spring. The two applications cost around $200 per acre, Ciomperlik points out, and the agricultural community has benefited by reduced populations of GWSS to non-detectable levels and a reduced threat of vectoring Pierce's Disease.

The pilot project encompasses a dozen commodities, including citrus, grapes, cherries and other stone fruit. About 30 growers farm in the area.

"Growers in the pilot project have been able to freely move their commodities across county and state lines, and export them GWSS-free," Ciomperlik says.

Biological control study. With its success to date, the pilot project has begun to investigate the use of biological control agents as a long-term sustainable strategy for managing GWSS.

Researchers launched a new effort in March to test the efficiency of four different parasitoid species in parasitizing GWSS eggs in the pilot project. The species include *Gonatocerus ashmeadi* (Texas), *G. triguttatus* (Texas), *G. morrilli* (Texas), and *G. fasciatus* (Louisiana), all egg parasitoids.

These natural enemies of GWSS were distributed throughout citrus groves on the leaves of 3-inch *Euonymous* plants, using a release rate of one parasitoid per tree.

March offered an ideal window of opportunity to introduce the parasitoids to the area, since field studies of GWSS biology during 2001 and 2002 indicate GWSS adults begin laying eggs during that time.

"One of our challenges has been the cooler temperatures this spring," Ciomperlik says. "This seems to have extended our field trials over a longer period of time."

Ciomperlik and his colleague, Isabelle Lauziere, had expected the trial to last about four weeks, but cool, rainy weather conditions have affected the development of the parasitoids. Even so, results of the study will be available later this year.

Although pleased with the pilot project's success so far, Ciomperlik is quick to add, "We still have quite a bit to learn."

"The scarcity of GWSS today in the pilot program area has been very encouraging."

—Matt Ciomperlik, USDA's APHIS-PPQ

CDFA's PD/GWSS Board to meet May 6

CDFA's Pierce's Disease/Glassy-winged Sharpshooter Board will meet Tuesday, May 6 in Sacramento.

The meeting starts at 1 p.m. in Room A-477 of CDFA's offices at 1220 N Street.

For more information, visit: http://www.cdfa.ca.gov/phpps/pdcp/gwTFMeet. htm.