

Kern/Tulare

GWSS Update



A project of the Glassy-winged Sharpshooter Task Force of Kern and Tulare Counties. Participants: Agricultural Commissioner's 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).

GWSS biological control program moves into improved facilities near Arvin

In February 2004, the CDFA moved its GWSS biological control production activities from the outskirts of Bakersfield to the outskirts of Arvin.

The new facility was selected due to its size, quality and security. The Arvin Field Station is more than twice the size of the old facility. The site is well designed, and it has been well maintained since its construction. It is located within the General Beale Project Area, so surroundings are under active GWSS control.

Escape of insects from the facility into the surrounding area, as well as contamination of rearing facilities by field insects, is minimized by: 1) screening of all air transfer systems; 2) multiple entry systems that exceed isolation requirements of quarantine facilities; 3) treatment of all facility vegetation with systemic insecticides; and 4) constant monitoring of the facility and environs. The site's geographic isolation should also minimize opportunistic vandalism.

The Arvin Field Station will produce GWSS biological control agents for release in the San Joaquin Valley and the coastal counties north of Los Angeles. The intended future purchase of the facility will ensure a permanent and close presence of the California Department of Food and Agriculture (CDFA) in one of the nation's most important areas for agricultural production.

CDFA-USDA partnership. The close partnership between the CDFA and the U.S. Department of Agriculture (USDA) continues at this facility. The biological control production crew includes two full-time CDFA staff, two full-time USDA-APHIS staff, and five seasonal staff who are maintained by both agencies. In addition, the CDFA GWSS survey team is housed at the facility. Dr. David Morgan (CDFA-PDP), who is also in charge of the Mount Rubidoux Biological Control Facility in Riverside, oversees the Arvin Field Station.

Bio control background. Biological control of GWSS began in 2000 at UC Riverside, with scientists there producing the GWSS biocontrol agent, *Gonatocerus triguttatus*, and releasing it into Riverside, Ventura and Kern counties.

In 2001, CDFA dedicated two facilities to the production of GWSS biological control agents, one in Riverside and the other in Bakersfield. In that year, releases of biocontrol agents exceeded 100,000, and releases have doubled each successive year, with more than 400,000 being released in 2003. The program will shortly be releasing its 1 millionth agent.

The GWSS biological control agents are released into a wide range of areas in an attempt to control GWSS in environments where other control strategies may not be feasible. Release sites include urban, natural and organic locations. Sites close to threatened commodities (grapevines, nurseries and almonds) are given high priority. GWSS biological control remains a component of IPM rather than a stand-alone control strategy.

In addition to producing biocontrol agents for release, the biocontrol staff also provides expert advice and training on rearing GWSS and its natural enemies, as well as host plants, GWSS specimens and natural enemies for research. GWSS are produced in closed colonies, so they are essentially free of unwanted contaminants, including the bacterium *Xylella fastidiosa*, the causative agent of Pierce's disease. Consequently, the insects are invaluable for studies in the areas of genetics, molecular biology and epidemiology. GWSS from the facility are also used for pesticide trials.

Looking ahead. In the coming year, renovation of the biocontrol facilities in Riverside and Arvin should be completed and production of biocontrol agents maximized.

(continued on page 2)

Contact:

Don Luvisi
Project coordinator
(661) 868-6226
dluvisi@bak.rr.com

Web sites:

- www.co.kern.ca.us/kernag/
- http://cekern.ucdavis.edu/Custom_Program444/

“In 2001, releases of biocontrol agents exceeded 100,000, and releases have doubled each successive year, with more than 400,000 being released in 2003. The program will shortly be releasing its 1 millionth agent.”

— David Morgan,
California
Department of Food
and Agriculture



Kern-Tulare **GWSS Update**

GWSS biological control program moves into improved facilities near Arvin

(continued from page 1)

Releases from these facilities will continue to be made into the 50,000 square miles that GWSS currently infests in California. We also anticipate producing and releasing two new species of biological control agents collected from grape-producing regions of South America.

As part of the ongoing biological control of GWSS, the Pierce's Disease Program is constantly looking for good release sites.

Good sites are infested with GWSS and not treated with insecticides. Potential release sites can be reported to:

David J W Morgan, CDFA
Mount Rubidoux Field Station
4500 Glenwood Drive
Riverside CA 92501
dmorgan@cdfa.ca.gov
Tel: (909) 328-2642
Fax: (909) 321-1867

GWSS discovered — again — in Butte County

The California Department of Food and Agriculture has confirmed the discovery of two adult male glassy-winged sharpshooters (GWSS) trapped in Chico, Butte County April 8, 2004.

The GWSS were located within the area that was previously infested and eradicated in 2003. An extensive visual survey was conducted April 14 by staff from the Butte County Agricultural Commissioner's office, the Pierce's Disease Control Program and members of the California Conservation Corps.

One egg mass, confirmed as fresh and viable, was found within the same area during this survey. The hosts for both the GWSS and the egg mass were Redbud plants.

On April 26, 2004, the Butte County Agricultural Commissioner's Office authorized and supervised treatments to 10 commercial properties and approximately 15 acres of the Highway 99 right-of-way landscape to squash the reappearance of GWSS. Delimitation trapping is underway in the surrounding area.

“We also anticipate producing and releasing two new species of biological control agents collected from grape-producing regions of South America.”

— David Morgan,
California
Department of Food
and Agriculture