

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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- [www.co.kern.ca.us/kernag/](http://www.co.kern.ca.us/kernag/)
- [www.co.kern.ca.us/farm/luvisi.htm](http://www.co.kern.ca.us/farm/luvisi.htm)

## Riverside GWSS Biocontrol Facility expansion approved

*Pest suppression efforts remain vital weapon in CDFA's PD Control Program*

The GWSS Biological Control Facility in Riverside has received the funding go-ahead to expand its production greenhouses. Construction is underway and should be completed by August.

"The expansion will add 7,000 square feet to our greenhouse facilities," says David Morgan, an entomologist with the California Department of Food and Agriculture (CDFA) who heads the GWSS biocontrol programs in Riverside and Bakersfield. "We should be able to increase our production accordingly."

CDFA's biocontrol efforts are an integral part of the state's Pierce's Disease Control Program. The goals of suppressing GWSS through biological control are to reduce GWSS populations, minimize non-target effects of insect control and lessen the cost of producing crops threatened by GWSS.

The Riverside facility, also known as Mount Rubidoux Field Station, is responsible for rearing and disseminating GWSS natural enemies in Imperial, Los Angeles,

Riverside, San Bernardino, Orange and San Diego counties.

**Inside the greenhouses.** In their pest suppression efforts, Morgan and his team use the greenhouses to produce three life forms simultaneously:

1) Plants that support GWSS development and egg-laying activities. The plants can be used about four weeks after planting.

2) GWSS insects for egg production and research. Sharpshooters have a life cycle of about two months.

3) GWSS parasitoid wasps, which are natural enemies of sharpshooters. The wasps are specialized hunters of sharpshooter eggs. The wasps kill the eggs by laying their own eggs within each GWSS egg. The resulting wasp offspring later emerge to search for more GWSS eggs. "It takes about 14 days for the wasps to complete a generation," Morgan says.

"There will be a lot of extra work in gearing up for our expanded production in Riverside," says Morgan, "But we expect to

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— David Morgan,  
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## Seasonal update on GWSS treatments, trapping, bulk citrus movement

In the Kern Area-wide Management program, the area identified as the Highway 65 zone lies between Seventh Standard Road and the Kern-Tulare County line east of the Porterville-Famoso Road. This zone will be the last in Kern County to receive treatments in a coordinated approach in 2003.

The prolonged cool and wet weather has delayed the development of GWSS populations and allowed us to contact all growers in the zone for scheduling the treatments that are necessary this spring. Now that petal fall is over in the zone, we will be able to initiate the treatments immediately. Total acreage that is scheduled for treatment is approximately 32 percent of

the total citrus in the zone. This reduced number of acres that require treatment certainly reflects the vigilance of the growers in coming together to meet this pest of agriculture.

As we begin these treatments, it is extremely important for grape growers adjacent to citrus to enhance their survey for GWSS. Cultural practices in the groves and increased temperatures will result in GWSS becoming more active and moving to new food sources that are becoming available.

The enhanced detection for GWSS in grapes can be accomplished by the addition of "hopper tape" over the vines parallel to the citrus groves. This increased surface

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## Kern-Tulare GWSS Update

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be fully operational within two months after the construction is completed."

The CDFA Biological Control Facility in Bakersfield has the primary roles of GWSS biological control agent production, release and evaluation in Ventura and Kern counties. The facility, located on Oswell Street, includes about 3,500 square feet of greenhouse space. Two employees recently were added there to help increase production. A total of nine staff is employed at the Oswell facility.

"USDA-APHIS has been invaluable in setting up and helping run the facility," says Morgan.

**Biocontrol integral to IPM.** "We see biocontrol as an integral part of IPM rather than a stand-alone strategy," Morgan says.

"For instance, there are situations where other control strategies are impracticable: urban, organic and natural vegetation, to name a few," he says. "Rather than leaving these areas untreated, we can place these specialized parasites of GWSS in the area. The wasps have evolved extraordinary abilities to locate GWSS eggs from a distance, and while they do not attack adult

GWSS, they will reduce the next generation of GWSS."

Morgan adds, "We are constantly searching for new species of GWSS natural enemies for evaluation. Currently, we have several species from Argentina that are being evaluated for their efficacy and host specificity in California and Texas quarantines."

The unsettled weather of the past month has not prevented ongoing improvements in the production and release of GWSS biological control agents. In April, 92,000 wasps were released into seven Southern California counties: Kern, Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura. Specific release sites are based on the severity of GWSS infestation. The parasitic wasps are released into both urban and agricultural settings.

CDFA has now released more than 124,000 GWSS biological control agents into California this year, and more than half a million since the program's inception in 2000.

— Catherine Merlo

### Seasonal update on GWSS treatments, trapping, bulk citrus movement

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area of attractive sticky covered material has been demonstrated to be useful in detecting movement of GWSS from adjacent crops.

— Lloyd Wendel, USDA-APHIS

Most of the urban trappers have been hired by the counties and trained by CDFA/PDP in the Central and Northern California Districts. The total number of trained county biologists/trappers stands at 167.

Urban treatment has begun in Santa Clara, near San Jose, for GWSS finds that were discovered over the winter.

CDFA training of county agricultural commissioner staffs to inspect for GWSS at nurseries is beginning for the Central and Northern California Districts.

The GWSS-free Bulk Citrus Movement had a very good season, due to the new/modified Bulk Citrus Compliance Agreements.

For the three counties of Fresno, Tulare and Kern (numbers are through April):

- Yellow-tag (quarantined area) shipments totaled 63,502 from quarantine areas.
- Green-tag (non-quarantined area) shipments numbered 51,936 in GWSS-free areas.
- There were 26 GWSS rejections and eight paper rejections of incoming citrus loads.

— Sean Hardy, senior agricultural biologist-Central District, CDFA/PDP

### Find trapping maps online

For the weekly trapping data of the Tulare and Kern Pilot Programs, go to:

- [www.cdca.ca.gov/gwss/gwMaps/gwMgmtMaps.htm](http://www.cdca.ca.gov/gwss/gwMaps/gwMgmtMaps.htm)

### Kern Ag Department has new Web address

Please note a change of Web address for the Kern County Department of Agriculture and Measurement Standards. The Web site is:

- [www.co.kern.ca.us/kernag/](http://www.co.kern.ca.us/kernag/)

You can find information about Kern County's GWSS pilot project, including compliance agreements and previous issues of *GWSS Update*.