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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).

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## So far, so good: CDFA's nursery treatment pilot project for GWSS

### Project could reduce plant nursery costs through one-time treatment to kill GWSS on commercial stock

Five months into the state-managed Nursery Treatment Pilot Project to control glassy-winged sharpshooters (GWSS) in commercial nursery stock, supervisor Greg Morris is cautiously optimistic that its chemical-based protocol is succeeding.

"The program is still in its infancy stage, but we're very pleased with it," says Morris, program supervisor with the California Department of Food and Agriculture (CDFA). "There has been no successful emergence of GWSS nymphs out of egg masses on the nursery stock."

The pilot project, which began in June, uses a single chemical treatment when GWSS egg masses are found on nursery plant leaves. The chemical, either Tame® or Sevin®, is applied to plants bearing GWSS egg masses. The treatment is designed to kill GWSS nymphs when they later emerge. After the treatment, the plants are covered in mesh sleeves and shipped to their destinations, where they are held and monitored for a minimum of two weeks.

Three plant nurseries are participating in the pilot project under CDFA's supervision. Village Nursery in Orange County, Valley Crest Tree Company in Ventura County and Norman's Nursery in Los Angeles County each are shipping nursery stock to sister facilities in San Joaquin and Sacramento counties.

**Promising results.** As of the end of September, the program had overseen 53 shipments to the destination nurseries, with a total of 290 egg masses on board. Of the shipments, 33 had been released or cleared for shipping by Sept. 30, Morris



says. Those 33 shipments carried 189 of the 290 egg masses. After the treatment and isolation period, results on the 189 treated egg masses showed that 60 had been parasitized by wasps. On another 63, GWSS nymphs had perished on emergence. The remaining 66 egg masses were dead.

**Hope for nurseries.** "We're very excited about it," says Robert Crudup, president of Valley Crest Tree Co. "The pilot project is a breakthrough for us because it has the potential to reduce our costs by a tremendous amount."

Plant nurseries are engaged in the fight against GWSS under CDFA's "Contain the Spread" program. Nursery stock is considered a high-risk commodity for spreading GWSS. Nurseries incur large costs while visually inspecting plant material for the insect at both shipping and receiving sites. Visual GWSS inspections have cost the California plant nursery "millions of dollars" in inspection time and manpower, Crudup says.

Crudup is especially excited about the parasitizing that's been seen among the shipped GWSS egg masses. With parasitization, wasps lay their eggs in a GWSS egg mass. The developing wasps later kill the host egg.

"The parasitization, working alongside  
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*These sleeved Photinia plants are part of CDFA's pilot project to prevent the spread of GWSS in nursery plant shipments. (Photo: Orange County Agricultural Commissioner's Office)*



## **CDFA's nursery treatment pilot program for GWSS: So far, so good** *(continued from page 1)*

the chemical, gives us an added layer of protection," Crudup says.

Crudup would like to see the pilot program expanded to include more nurseries. "That would give us more data more quickly on a wider range of plants being shipped," says Crudup.

The program is slowing as GWSS enter their over-wintering phase. But Morris says the project will pick up in late January, when the sharpshooters resume their spring activities, which include egg-laying.

"We have every reason to believe the program will continue to look this good, but

we have just early preliminary data so far," says Morris. "We'll continue monitoring it to see if it needs changes or whether to expand it."

Morris emphasizes the program was built with many checks and balances "to alleviate concerns regarding the safety of plant material and procedures."

The pilot project is a "real world" demonstration of research conducted last year by Dr. Rick Redak of the University of California-Riverside.

—Catherine Merlo

### **How the nursery treatment pilot project works**

Participating nurseries are allowed to ship up to 10 egg masses per shipment for this pilot project only, says CDFA's Greg Morris. Under the program, the entire shipment gets a Tame® or Sevin® chemical treatment at the nursery where the shipment originates.

After the chemical treatment and re-entry intervals have been met, the plants bearing GWSS egg masses are tagged and sleeved with a fine mesh material, which is supplied by CDFA. In the case of Sevin, the reentry interval is 12 hours, says Morris. For Tame, it's 24 hours.

The plants—both GWSS-free and treated material—are loaded onto the shipment truck. As in regular shipments, paperwork documenting the delivery is faxed to the receiving site. But in the case of the nursery treatment pilot project, a verbal notification also is made at the same time between deputy agricultural commissioners at each end of the shipment.

"It's important for the receiving end to know when the shipment will arrive," says Morris. "That's why we wanted nurseries with sister facilities for this pilot project."

Each trailer is sealed with a metal band, numbered and recorded on the shipment's paperwork to ensure that the

load has not been tampered with. Then staff from the county agricultural commissioner's office comes out to check the shipment, issuing a "blue tag" or shipping permit and a certificate of quarantine compliance. Accompanying the shipment's paperwork is a regular customer invoice. No stops are allowed during transport.

Once the shipment arrives at its destination, the sleeved plants are moved off the truck to an isolation area away from the nursery's regular plant inventory. They are inspected to ensure the sleeves have remained in proper place. "They're also visually inspected to see that the egg masses are the same as indicated on the paperwork," Morris says.

The sleeved plants are held on site for a minimum of 14 days. They're monitored every day and field notes are kept on any GWSS development. "If egg masses still look fresh, we hold them longer," Morris says.

After the two-week isolation period, the leaves with the egg masses are removed from the plant and sent to the CDFA pest diagnostic lab to confirm treatment results. The sleeves are removed from the plants, which are released into the nursery's general inventory.

—Catherine Merlo

## **PD Research Symposium set for Dec. 5-7**

The 2005 Pierce's Disease Research Symposium will be held Dec. 5-7, 2005, at the Marriott San Diego Hotel and Marina in San Diego, Calif. For more information, contact Athar Tariq at (916) 322-2804 or [atariq@cdfa.ca.gov](mailto:atariq@cdfa.ca.gov).

## **GWSS Update archives**

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