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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 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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Coachella Valley keeps PD levels down, remains vigilant

Quick response and cooperation by the Coachella Valley's citrus and grape industries have put the area "ahead of the Pierce's Disease epidemic," says viticulture farm advisor Carmen Gispert.

Discovery of 13 PD-infected vines in two contiguous vineyards on the Valley's southeast side in July 2002 raised new concerns and accelerated the area's efforts to control the glassy-winged sharpshooter.

"It was very hard to find the infected plants," says Gispert. "We needed to look at thousands to find only 13 infected. But the growers were very positive and active, and the vines were quickly removed."

Since then, a coalition of scientists, growers, government agencies and industry groups have united in the battle against GWSS and PD, with a focus on monitoring and treating vineyards and citrus groves in the Coachella Valley.

"We've had great cooperation," Gispert says. "Growers are keeping their workers vigilant to be the eyes for us for GWSS and suspicious symptoms that might indicate PD."

In fact, Gispert has organized a workshop, set for May 14 in Indio, to train vineyard workers to recognize PD symptoms.

The Coachella Valley is home to 99,000 acres of diversified farmland. Top crops are citrus, with 12,000 acres, and table grapes, with almost 10,400 acres.

April and May will be particularly busy for Gispert and her crew. "We believe this is the time that's most suitable for detecting PD," she says. "Later, it becomes more difficult because the summer heat gives many plants a burned-leaf appearance and makes vineyards throughout the valley look like they have PD."

Looking for GWSS. As part of an area-wide GWSS trapping program, Gispert and Thomas Perring of UC-Riverside's Department of Entomology began studying GWSS population numbers and distribution in the Coachella Valley in May 2001. Yellow sticky traps were uniformly placed at one-mile distances. Results showed very low levels of GWSS near urban landscapes or in grapes. Traps adjacent to citrus, however, revealed significantly higher levels of GWSS.

"Those findings directed us to focus on citrus and develop a program to reduce GWSS there," she says.

The search for PD. Gispert and Perring also were charged to determine the incidence of PD in the Coachella Valley. A PD outbreak in the mid-1980s had been attributed to another sharpshooter. Aware that pest fed mostly on grasses, growers had kept their vineyards clean and removed any diseased vines. The disease appeared to have faded away, but concerns remained that it could survive the desert climate and could reemerge with the increased vector pressure of GWSS.

In 2001, Gispert and her team selected 25 sites among Coachella Valley vineyards and orchards to check for signs of PD every other week. They inspected 35,000 plants in 2002 alone. Some 300 suspicious plants were analyzed; 13 vines tested positive and were removed. The fields were treated with Admire®.

Gispert's overall efforts were helped by a $30,000 donation from Coachella Valley grape growers in April 2001 to help start the program. "If we hadn't received those funds, we would have missed a whole summer of research," she says. "They were absolutely key to get us where we are because federal funds did not come in until late that year."

Area-wide vector suppression program. Spurred by concerns of GWSS' ability to spread the bacterium that causes PD, the CDFA Pierce's Disease Control Program and the Riverside County Agricultural Commissioner's office launched an area-wide vector suppression program in 2003.

By 2002, it was clear that GWSS numbers were on the rise in the Coachella Valley. "In 2001, we trapped an average of one GWSS per week," Gispert says. "In 2002, we found three GWSS per week. In some areas,

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—Carmen Gispert, Coachella Valley viticulture advisor

How to recognize PD symptoms

Coachella Valley viticulture farm advisor Carmen Gispert provides these tips:

In spring, look for:
- Delayed bud break and growth of canes
- Basal leaves with mottling or interveinal chlorosis

In summer, look for:
- Leaves with progressive marginal discoloration mixed with green areas
- Leaf scorching
- Petioles attached to the cane after leaf fall
- Irregular bark maturity
- Clusters with delayed development and shriveling

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we never found any GWSS; in others, we occasionally could find more than 100 in a trap."

The population increase helped the Coachella Valley receive $1.5 million in federal funds this year to help fight GWSS and PD.

"We had finally established communication between the citrus and grape industries," says Gispert. "Citrus growers agreed to start a program of treating their orchards before the funds were actually secured. We got great cooperation."

Gispert is cooperating with Dr. Nick Toscano of UC Riverside's Department of Entomology to determine the levels of insecticide that will provide protection to grapevines from GWSS.

Like the rest of the industry, Gispert is hopeful that the treatments will curb the population of GWSS, helping stop the spread of PD and protecting the Coachella Valley's table grape crop, valued at more than $108 million a year.

"This has been a great opportunity of joining efforts among many institutions to combat this problem," she says.

Gispert can be reached at cgispert@ucdavis.edu.

— Catherine Merlo

Tulare County sets traps in quarantined area

The ¼-mile trapping grid is up and running in the quarantined area of Tulare County south of Lindsay. The maps detailing where trap finds are being made are now available at http://www.cdfa.ca.gov/phpps/pdcp/gwMaps/gwmaps.htm. This site gives you access to both the Kern and Tulare County projects.

So far, the highest numbers of GWSS are in the citrus adjacent to the northern urban edge of Porterville and between Ducor and the County Line. These are the same areas where significant numbers of GWSS were observed last fall.

Now that the traps are placed throughout the quarantine area, and the mapping problems have been worked through, we are moving on to expand the trapping grid to the west and north. We hope to be able to trap all of the citrus and citrus/grape interfaces south of Highway 137 with our present staff. We soon hope to employ an additional four people to complete the ¼-mile trapping grid to the Fresno County line.

Of course, we also have our urban and high-risk traps in the field. So far, no new GWSS populations have been detected. We will be watching the urban areas carefully around packing houses and other bulk fruit receivers.

— Dennis Haines, Tulare County Agricultural Commissioner's Office

April 25 signals 75% petal fall in Kern County; lifts restrictions on certain pesticides

Today marks the date establishing 75 percent petal fall on the north side of citrus trees for all citrus groves south of Seventh Standard Road in Kern County.

Kern County Agricultural Commissioner Ted Davis made the announcement Monday.

The announcement signals to the bee industry that the use of pesticides that are highly toxic to honeybees may be used on or after April 27, 2003, without notification to the beekeeper.

The petal fall announcement lifts restrictions of application to citrus groves of materials highly toxic to honey bees. This allows citrus growers to apply necessary pesticides to protect their crop from insect pests.

"As a reminder to citrus growers on compliance regulations, Carbaryl (Sevin) and Azinphos-Methyl (Guthion) cannot be applied to citrus until there has been complete petal fall in the citrus grove," Davis said. "All citrus growers, pest control operators and beekeepers also are reminded they must comply with the regulations covering bee protection."

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.

Speakers will include CDFA Secretary Bill Lyons, Jr.; Dana Merrill, chair of the PD/GWSS Board, and Bob Wynn, statewide coordinator for CDFA's Pierce's Disease Program.

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