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Glassy-Winged Sharpshooters Found in Stanislaus and El Dorado Counties

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New GWSS finds in non-infested areas serve as a reminder of the Pierce's Disease Control Program's critical role in rapid detection and containment.

EL DORADO COUNTY

Two adult GWSS were found in October 2024 in El Dorado Hills. Since then, visual surveying and trapping have found 15 more GWSS adults and two emerged egg masses on residential properties. Inspectors are determining the extent of the infestation and are creating a response plan with PDCP. To aid in eliminating the infestation, PDCP has released over 400 biocontrol agents at 14 sites in the area.

STANISLAUS COUNTY

One adult GWSS was found in August 2024 in Turlock. Visual surveying and trapping have since found 62 more GWSS adults, three nymphs, one viable egg mass, and 11 emerged egg masses in the area. The county continues to assess the full scope of the infestation.

The PDCP has initiated a Proclamation of an Emergency Program for this new infestation, with treatments planned through November 2026. The PDCP held a community meeting in October to discuss the response plan and will notify property residents before starting any



Adult glassy-winged sharpshooters, which can spread Pierce's disease to grapevines

treatments. Biocontrol is also being used to eradicate this infestation and PDCP has released 1,890 biocontrol agents at nine sites in the area.

SOLANO COUNTY

Finds have decreased annually since GWSS was first detected in October 2021, but additional finds this summer underscore the need for continued work to eradicate the pest. The county will remain vigilant for additional GWSS finds with a higher level of trapping and plans to gradually scale back treatments over the next few years as detections allow.

Over the last three years, inspectors have found 148 adult GWSS and 618 egg scars/masses in the 3,500-acre quarantine area. Staff have inspected over 12,300 traps and 2,600 properties, conducted over 2,700 property treatments (soil injection or foliar spray), and released over 15,800 biocontrol wasps at 170 locations.

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Grower Survey: How Can We Better Meet Your Needs?



We want to hear directly from winegrape growers about the impact of pests and diseases, so we can better meet your needs. Take the survey online at <u>research.net/r/CAgrapegrowers</u> or scan the QR code to share your perspectives by Friday, Jan. 3, 2025.

For 25 years, the Pierce's Disease Control Program has helped protect vineyards through its statewide survey and detection programs, rapid response efforts, outreach and research on nine winegrape pests and diseases. The survey findings will provide a data-driven foundation for more informed decision-making and strategic planning for the PDCP and your grower-led PD/GWSS Board.

Can the Spotted Lanternfly Spread Pierce's Disease?

That's a question on the minds of many winegrape growers facing down the relentless march of the invasive spotted lanternfly (SLF) across the United States.

New research suggests that the SLF can spread Pierce's disease (PD), though to what degree is not yet known. Preliminary data showed SLF prefers to feed on healthy grapevines but can spread PD after feeding on PD-infected vines. Read more at <u>bit.ly/4dxo2Rh</u>.

The Pierce's Disease/Glassy-Winged Sharpshooter Board is investing in more research on this topic, with a project looking at the potential for SLF to spread grapevine red blotch disease and PD. The team is studying the combined effects of PD and SLF on grapevines under varying irrigation regimes and water stress conditions to offer growers better management recommendations.

SLF CONTINUES TO SPREAD

Infestations of SLF have now been confirmed in 17 states along the East Coast and into the Midwest and Southeast, with new infestations in Illinois, Indiana, Tennessee, Michigan and North Carolina. SLF has also been spotted in Iowa, Vermont, and New Hampshire. See where SLF is in the U.S. at <u>bit.ly/SLF-map</u>.

Infested areas have shifted from eradication to management to prevent further spread and mitigate damage. Researchers are working to find better ways to reduce or keep existing populations in check. Biological control would be ideal, but currently, pesticides and physical traps are the only proven management methods.

PROTECTING CALIFORNIA FROM SLF

California could be a prime environment for the destructive SLF, with the state's mild climate and the

pest's preference for the tree of heaven and grapevines. While the insects have been found dead during air cargo inspections and egg masses have been stopped at border stations, annual statewide surveys of high-risk areas haven't uncovered any SLF infestations in California.

The CDFA also protects the state from SLF with a statewide exterior quarantine, research and outreach. See what the pest looks like in its various life stages at <u>https://www.cdfa.ca.gov/pdcp/slf</u>.

The Board is also preparing growers by investing in a research and outreach project on the potential impact of SLF and the effectiveness of control strategies. The team's findings highlight the economic risks of a SLF invasion and the importance of coordinated control efforts among growers to mitigate its impact. They are now working to share findings and recommendations with the industry to set the stage for immediate and impactful management actions should SLF arrive in California.



RESEARCH FRONT CALIFORNIA **PD/GWSS BOARD** *Partnership for Winegrape Pest Solutions*



A grapevine showing Pierce's disease symptoms. Photo credit: A. Eskalen

Advancing Biopesticides for Management of Pierce's Disease

Project leader: Akif Eskalen, University of California, Davis

This is an update on field testing natural biological products to control Pierce's disease. The research group is testing one biocontrol from onion roots, two biocontrol species from grapevine wood and a mixture of each biocontrol with a bacteriophage. Field trial results from 2022 showed that all but one of the treatments reduced disease symptoms, and 2023 results showed that all the treatments reduced disease symptoms. This year's field trial showed reduced efficacy compared to previous years, which may be due to an early and hot summer since these bacteria don't grow well in high temperatures. More field trials are planned to see how these products perform on different cultivars around the state.

Foundations to Develop New Grape Cultivars Resistant to Grapevine Fanleaf Decline

Project leader: Luis Diaz-Garcia, University of California, Davis

In the first year of this project, the team set out to validate previous findings from France, which suggested that Riesling 49 is resistant to fanleaf virus. They planted Riesling 49 in two virus-infected locations and will monitor for symptoms in the coming months. They also started a greenhouse trial using nematodes extracted from these infected sites. The trial will test Riesling 49, other Riesling clones and various rootstocks to determine the nature of the fanleaf resistance. The team also sampled Riesling vineyards throughout California and, so far, have not detected any signs of the virus. However, they plan to continue testing in new locations during the next season.



The team extracting and isolating nematodes for greenhouse trials. Photo credit: L. Diaz-Garcia



A threecornered alfalfa hopper on a grapevine. Photo credit: M. Cooper

Ecology of Grapevine Red Blotch Virus Disease

Project leader: Rodrigo Almeida, University of California, Berkeley

This project will fill in knowledge gaps about the dynamics of the spread of grapevine red blotch virus (GRBV) across Napa Valley. The team is using mapping data from 25 vineyards spanning three seasons to examine patterns of spread at the local, neighborhood and regional levels. Results may provide insights into how strongly threecornered alfalfa hopper, a vector of GRBV and prior disease contribute to new cases to gauge the importance of vector control and vine roguing for disease management.

The CDFA PD/GWSS Board partners with other organizations to leverage funding for research and outreach projects. Funding partners include the American Vineyard Foundation, the Consolidated Central Valley Table Grape Pest and Disease Control District, the USDA Agricultural Research Service, and other organizations.

PD/GWSS Referendum Grower Vote Set for Spring 2025

The Pierce's Disease Control Program and Pierce's Disease and Glassy-Winged Sharpshooter Board have been extended for another five years with Governor Newsom signing AB 1861 in August. The extension is subject to the approval of winegrape growers through a referendum to be conducted in spring 2025. The last PD/GWSS referendum passed with 78% approval.

The programs are vital to protecting California's vineyards through research on nine designated pests and diseases and statewide inspection and control measures for PD and GWSS.

"This legislation is a critical extension of the research, innovation, and mitigation and prevention efforts essential to safeguarding the health and vitality of our winegrapes against known threats," said Robert P. Koch, president and CEO of Wine Institute. "California wineries are grateful that Governor Newsom has approved this measure so we may continue to collaborate with the California Department of Food and Agriculture (CDFA) to protect our vineyards."

"The Pierce's Disease Control Program has been fundamental in addressing the challenges posed by Pierce's disease and other pests and diseases," said Natalie Collins, president of the California Association of Winegrape Growers. "The program's success stems from strong partnerships between federal, state, and local agencies, with vital support from the winegrape industry." California winegrape growers will vote in spring 2025 on extending the PD/GWSS winegrape assessment through 2031 to fund research, outreach and other program activities. The annual assessment rate has held steady at \$1.25 per \$1,000 of value for the past three years and has averaged \$1.34 since 2001. The assessment has funded 298 research grants delivering practical and sustainable solutions and improving pest and disease management practices.

"The progress that the PD/GWSS Board has made in understanding and combatting this potentially devastating disease illustrates the importance of the industry and government working together for the common good," said Pete Downs, president of Family Winemakers of California.

The CDFA is working with wineries and winegrape processors to build a list of winegrape producers for the 2024 season. Every winegrape producer who pays the assessment in 2024 will receive a ballot in April 2025. Growers who operate multiple entities will receive a separate ballot for each entity. Each ballot should be voted on and returned.

At least 40% of ballots must be returned to validate the referendum. Passage requires either (a) at least 65% of those voting, representing a majority of assessments paid, vote yes OR (b) a majority of those voting, representing at least 65% of assessments paid, vote yes. Results will be announced in mid-June.

PESTS & DISEASES eligibile for research & outreach funding

\$1.34 (per \$1,000 crop value) average grower assessment rate since 2001

\$57.7 MILLION invested in research & outreach

since 2001