





Research,
Innovation,
Action
TWENTY YEARS
OF PROGRESS

## A PROACTIVE APPROACH FOR FIGHTING INVASIVE PESTS AND DISEASES

Globalization is fundamentally changing grape growing practices. In the face of increasing risks of invasive pests and diseases from around the world and nation, California's winegrape growers today can turn to the innovative grower-government partnership created two decades ago to help protect their vineyards.

The Pierce's Disease and Glassy-Winged Sharpshooter Board enables rapid and proactive responses to new pest and disease threats. The research, outreach and other activities the Board funds are all geared toward safeguarding California winegrapes. The program has matured faster and progressed further than anyone could have anticipated when growers established it after several vineyards in Southern California were severely damaged in the 1990s.

Projects funded by the PD/GWSS Board are showing promising results, PD-resistant winegrapes and other control techniques are headed toward commercial availability, and research continues to search for practical and sustainable solutions and control methods for PD, GWSS, and other serious winegrape pests and diseases. Through it all, the PD/GWSS Board, guided by winegrape growers and vintners from around the state, strives to ensure assessment funds are spent wisely and productively.



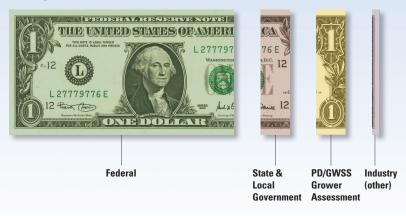


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## PARTNERSHIP FOR WINEGRAPE PEST SOLUTIONS

Growers' decision 20 years ago to fund research to protect their industry opened the door to a grower-government partnership that continues today. Thanks to statewide containment and management efforts funded by federal and state government and the winegrape grower assessment, GWSS has largely been prevented from spreading to new areas. This has given researchers time to search for long-term, sustainable solutions to PD/GWSS, supported by funds collected via the winegrape grower assessment. By sharing responsibility and resources, this partnership effectively addresses the pest and disease challenges facing California winegrape growers.

Funding for Pierce's Disease Activities Since 1999







"In just 20 years, the research supported by the Board has built a strong foundation of knowledge from which several potential solutions are being developed and commercialized against Pierce's disease, a threat that could have ruined our livelihoods. Likewise, our investments in research on other pests and diseases will help us learn how to manage these other challenges."

—STEVE MCINTYRE,
MCINTYRE VINEYARDS, SOLEDAD
PD/GWSS BOARD MEMBER
AND RESEARCH SCREENING
COMMITTEE CHAIR

## **RESEARCH AT WORK FOR YOU**

The PD/GWSS Board has invested in research to protect vineyards, prevent the spread of pests and diseases and deliver practical and sustainable solutions. The consistent, reliable research funding made possible by the winegrape grower assessment means our industry supports leading scientists dedicated to finding solutions to PD and other serious pests and diseases threatening winegrapes. Extensive research efforts since the program started have delivered many potential solutions to PD that are already undergoing field trials. Promising results from these field trials may lead to commercial applications that could ease the statewide threat of PD.

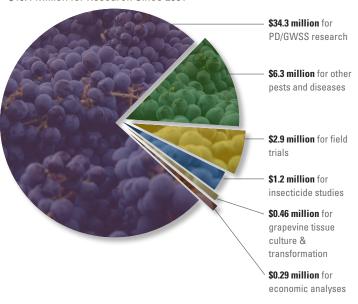
## Research Highlights for PD/GWSS:

- Addressing knowledge gaps in PD and GWSS
- Evaluating various approaches to making winegrapes PD-resistant
- Breeding and testing wine from PD-resistant winegrapes
- Protecting grapevines through various biological control techniques
- Investigating and managing GWSS insecticide resistance

## Research and Outreach Highlights for Other Designated Pests & Diseases:

- Helping eradicate European grapevine moth
- Improving understanding of the transmission of and effects of grapevine viruses
- Exploring management practices for brown marmorated stink bug and mealybugs
- Investigating grape cultivars and rootstocks with resistance to vine mealybug

#### \$45.4 Million for Research Since 2001



"Including growers from different areas of the state on the PD/GWSS Board gives it a solid, well-balanced perspective on the pest and disease concerns of all of California's winegrape growers. This helps the Board identify and focus its efforts where they will do the most good for the growers."

— DOMONIC ROSSINI, FRATELLO FARMING, DENAIR PD/GWSS BOARD MEMBER

### PRIMED FOR NEW THREATS

In today's global economy, California's wine industry is constantly under the threat of new pests and diseases. Quick action is essential to address emerging threats. The PD/GWSS Board and winegrape grower assessment gives the winegrape industry the ability to respond rapidly, without the need for additional legislation or other delays. This puts key decisions for funding research and outreach in the hands of the winegrape growers.

A remarkable success which the PD/GWSS Board participated in was the eradication of the European grapevine moth (EGVM), which was first detected in 2009 and eventually found in 10 California counties. Eradication of EGVM saved the winegrape industry hundreds of millions of dollars in crop loss, treatments, and loss of markets.

Winegrape assessment funds have supported research and outreach on other serious pests and diseases of winegrapes, including:

- European grapevine moth
- Brown marmorated stink bug
- Mealybugs
- Grapevine red blotch disease
- Grapevine leafroll disease
- Grapevine fanleaf disease







# Twenty Years of Progress

6 PESTS AND DISEASES

additionally eligible for research and outreach funding

20 PD-RESISTANT SCIONS

and 3 PD-resistant rootstocks headed toward commercial availability

2.7
MILLION

biological control agents released in 16 California counties FOR
EVERY \$1 GROWERS
INVESTED, AN
ADDITIONAL \$9

from federal, state, local government and industry has been committed

225 GRANTS

for research and outreach funded by the PD/GWSS Board since 2001

\$6.3 MILLION

invested in research for other designated winegrape pests and diseases since 2009

> 18 gwss

infestations eradicated from 8 counties

\$1.39 (PER \$1,000 OF CROP VALUE)

average grower assessment rate

\$34.3 MILLION

invested in research to find solutions to PD/GWSS since 2001

15 RESEARCH

symposia held for researchers to share ideas and progress

31 MILLION

plants shipped through the Nursery Stock Approved Treatment Protocol to prevent GWSS spread





For more information, you can visit these websites:

CDFA PD Control Program – www.cdfa.ca.gov/pdcp PD/GWSS Board – www.pdgwss.net Pierce's Disease Research – www.piercesdisease.org