CDFA Pierce's Disease and Glassy-winged Sharpshooter Board

Current Research Grants

(October 28, 2026)

Pest or Disease	Title	Project Leader	Institution	Start Date	End Date	Budget
PD/GWSS	Augmenting Pierce's disease winter recovery using pre-winter treatments	Almeida, Rodrigo	University of California, Berkeley	7/1/2026	6/30/2028	$277,418
PD/GWSS	Development of Pierce's disease–resistant grapevines using PdR1 allelic diversity and genome editing	Cantu, Dario	University of California, Davis	7/1/2026	6/30/2027	$109,524
PD/GWSS	Management of the federal permits for multi-investigator field-testing of transgenic grapevine rootstocks in California	Dandekar, Abhaya	University of California, Davis	7/1/2024	6/30/2027**	$116,421
PD/GWSS	Management of the federal permits for multi-investigator field-testing of transgenic grapevine rootstocks in California	Dandekar, Abhaya	University of California, Davis	7/1/2026	6/30/2028	$45,606
PD/GWSS	Current status and impact of glassy-winged sharpshooter (*Homalodisca vitripennis*) biological control in California	Daugherty, Matthew (Achhami)	University of California, Riverside	7/1/2026	6/30/2028	$114,978
PD/GWSS	Development of a protoplasts-based platform to knock-in agriculture relevant genes into grapevines	Debernardi, Juan	University of California, Davis	7/1/2024	6/30/2027	$237,912
PD/GWSS	Optimizing biopesticide strategies for Pierce's disease management in recovered vineyards	Eskalen, Akif	University of California, Davis	7/1/2025	6/30/2028	$188,073
PD/GWSS	Field evaluation of cross-graft protection effective against Pierce's disease by dual DNA constructs expressed in transgenic grape rootstocks	Gilchrist, David	University of California, Davis	7/1/2022	6/30/2027**	$68,099
PD/GWSS	Genetic control of glassy-winged sharpshooter	Walling, Linda	University of California, Riverside	7/1/2025	12/31/2026**	$158,103
PD/GWSS	Identification of grapevine phenolic and vineyard-associated biocontrol agent fungal compounds for management of *Xylella fastidiosa* by reducing sharpshooter spread	Wenger, Jacob	California State University Fresno	7/1/2025	6/30/2027	$160,000
PD/GWSS & spotted lanternfly	Can spotted lanternfly transmit Pierce's disease? An in-depth investigation into potential acquisition of *Xylella fastidiosa* by spotted lanternfly	Urban, Julie	Pennsylvania State University	7/1/2025	6/30/2027	$225,634
Leafroll & mealybugs	Latency and incubation periods of Grapevine Leafroll-associated Virus 3 following inoculation with the vine mealybug and potential of RNA interference for management	Fuchs, Marc	Cornell University	7/1/2026	6/30/2027	$265,664
Leafroll & mealybugs	Movement behaviors of the vine mealybug and spread of Grapevine Leafroll-associated Virus 3	Fuchs, Marc	Cornell University	7/1/2026	6/30/2027	$251,203
Mealybugs	Grape germplasm evaluation to identify potential host plant resistance for vine mealybug	Diaz-Garcia, Luis	University of California, Davis	7/1/2025	12/31/2026**	$263,758
Mealybugs	Grape germplasm evaluation to identify potential host plant resistance for vine mealybug	Riaz, Summaira	USDA ARS	7/1/2026	6/30/2028	$299,166
Red blotch	From vector to vine: detection method development, vector competence, and latency of grapevine red blotch virus	Cieniewicz, Elizabeth	Clemson University	7/1/2026	6/30/2028	$480,713
Red blotch	Evaluating the impact of dsRNA-induced silencing of four C1-protein interactors on GRBV activity in infected grapevine	Deluc, Laurent	Oregon State University	7/1/2025	6/30/2027**	$89,924
Red blotch	Biology and role of treehoppers in grapevine red blotch disease with emphasis on *Tortistilus albidosparsus*	Zalom, Frank	University of California, Davis	7/1/2023	6/30/2027**	$303,233

* Two year project started in 2025-26, Project Leader moved institutions

** Currently under no-cost extension.

Current Research Grants (continued)

(October 28, 2026)

Pest or Disease	Title	Project Leader	Institution	Start Date	End Date	Budget
Viruses	Development and validation of Hiplex assays for improved detection of GLRaVs and GRBV in grapes	Al Rwahnih, Maher	University of California, Davis	7/1/2024	12/31/2026**	$195,802
Viruses	Development and validation of a multi-virus HiPlex PCR assay for grapevine viruses regulated in California	Al Rwahnih, Maher	University of California, Davis	7/1/2026	6/30/2028	$147,297
Viruses	Plant-level early and autonomous field-detection of virus infections in white and black grape vines	Brillante, Luca	California State University Fresno	7/1/2024	6/30/2027	$397,017
Viruses	Virus-based delivery of interfering RNAs targeting grapevine leafroll-associated virus(es) and grapevine red blotch virus	Kuo, Yen-Wen	University of California, Davis	7/1/2025	6/30/2027	$437,326
Spotted lanternfly	Development of multimodal lures for early detection of spotted lanternflies*	Bhamla, Saad	University of Colorado, Boulder	7/1/2026	6/30/2027	$310,058
Spotted lanternfly	Risk maps and apps for the spread of spotted lanternfly *(Lycorma delicatula*) in California	Helmus, Matthew	Temple University	7/1/2025	6/30/2027**	$56,608

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Recently Ended Research Grants

(October 28, 2026)

Pest or Disease	Title	Project Leader	Institution	Start Date	End Date	Budget
PD/GWSS	Modeling the bacterial transmission process by integrating new behavioral insights into computational fluid dynamics simulations	Almeida, Rodrigo	University of California, Berkeley	7/1/2024	6/30/2026**	$96,440
PD/GWSS	Progression of Pierce's disease symptoms and *Xylella fastidiosa* colonization of grapevines under field conditions	Almeida, Rodrigo	University of California, Berkeley	7/1/2024	6/30/2026**	$143,757
PD/GWSS	Blocking the acquisition and transmission cycle of *Xylella fastidiosa* by glassy-winged sharpshooter using genetic control	Atkinson, Peter	University of California, Riverside	7/1/2024	6/30/2026**	$242,085
PD/GWSS	Development of tools for precise breeding of grapevine cultivars resistant to Pierce's disease	Cantu, Dario	University of California, Davis	7/1/2022	6/30/2026**	$316,436
PD/GWSS	Assessing the effectiveness of flupyradifurone at eliminating *Homalodisca vitripennis* egg masses on nursery stock	Daugherty, Matthew	University of California, Riverside	5/1/2025	8/31/2026**	$94,736
PD/GWSS	Advancing biopesticides for management of Pierce's disease	Eskalen, Akif	University of California, Davis	7/1/2022	6/30/2026**	$151,379
PD/GWSS	Using the native grapevine immune system to generate Pierce's disease resistant grapevines	Roper, Caroline	University of California, Riverside	7/1/2023	6/30/2026**	$220,286
Fanleaf	Foundations to develop new grape cultivars resistant to grapevine fanleaf decline	Diaz-Garcia, Luis	University of California, Davis	7/1/2024	6/30/2026**	$159,763
Leafroll & mealybugs	Epidemiology of grapevine leafroll-associated virus 3 and RNA interference against the virus and its major mealybug vectors	Fuchs, Marc	Cornell University	7/1/2025	6/30/2026	$222,986
Red blotch	Ecology of grapevine red blotch virus disease	Almeida, Rodrigo	University of California, Berkeley	7/1/2024	6/30/2026**	$107,257
Red blotch	Transmission ecology of grapevine red blotch virus genetic clades	Almeida, Rodrigo	University of California, Berkeley	7/1/2025	6/30/2026	$165,914
Red blotch	Investigating the impact of grapevine red blotch virus (GRBV) on grape skin cell wall metabolism and soluble pathogenesis-related proteins in relation to phenolic extractability	Oberholster, Anita (Montpetit)	University of California, Davis	7/1/2021	6/30/2026**	$257,142
Red blotch	Investigating the relationship between Grapevine red blotch virus (GRBV) titer levels, years of infection and symptomology	Oberholster, Anita (Montpetit)	University of California, Davis	7/1/2022	6/30/2026**	$292,940
Viruses	Propagation and testing of vital material for indoor foundation grapevine collection	Al Rwahnih, Maher	University of California, Davis	7/1/2025	6/30/2026	$115,837
Viruses	Improved decision-making for grapevine leafroll and red blotch diseases using rapid identification tools and a regional approach to monitoring and management	Cooper, Monica	University of California, Davis	7/1/2021	6/30/2026**	$471,618
Spotted lanternfly	Preparing for the arrival of spotted lanternfly: outreach and grower engagement about the value of coordinated area-wide responses	McRoberts, Neil	University of California, Davis	9/1/2024	8/31/2026**	$99,023
Spotted lanternfly	Development of multimodal lures for early detection of spotted lanternflies*	Bhamla, Saad	Georgia Tech	7/1/2025	6/10/2026*	$388,215

* Two year project started in 2025-26, Project Leader moved institutions

** Ended after no-cost extension.