

- Request for Research Proposals –

- Released December 7, 2016 -

The California Department of Food and Agriculture’s Pierce’s Disease and Glassy-winged Sharpshooter Board (CDFA PD/GWSS Board) is currently accepting proposals for research on the following serious pests and diseases of winegrapes:

- Pierce’s disease and its vectors, especially the glassy-winged sharpshooter
- Brown marmorated stink bug
- Grapevine fanleaf disease
- Grapevine leafroll disease
- Grapevine red blotch disease
- Mealybug pests of winegrapes.

Proposals are due via electronic submission by **January 31, 2017**. Research grants will be awarded for one to three years, beginning with fiscal year 2017-18 (July 1, 2017 to June 30, 2018). For projects awarded two or three years of funding, receipt of a subsequent year of funding will be contingent upon satisfactory progress being made during the prior year and the continuing relevance and importance of the project’s objectives.

Timeline

- Request for Proposals Released December 7, 2016
- Proposals Due January 31, 2017
- Award Notifications May 13, 2017
- Start Date for Projects July 1, 2017

Funding

- The CDFA PD/GWSS Research Program is funded by a special assessment paid by the California winegrape industry. Prior awards have ranged from \$4,300 per year to \$383,000 per year, with projects ranging from one to three years in duration.

General Information

- Funding preference will be given to projects deemed likely to yield results that expedite and/or directly yield applicable industry solutions. Research priorities for Pierce’s disease have been identified by the CDFA PD/GWSS Research Scientific Advisory Panel and are presented in Attachment A of this RFP. Proposals in other areas relevant to PD/GWSS management will also be considered, as will proposals dealing with the pests and diseases of winegrapes mentioned above.
- Multi-disciplinary team projects are encouraged.
- Researchers are responsible for obtaining all governmental permits required for conducting their research. For more information, please visit the following websites:
 - California permits: <https://www.cdfa.ca.gov/plant/permitsandregs.html>
 - Federal permits: <https://www.aphis.usda.gov/wps/portal/aphis/resources/permits>
- Submitted proposals will not be returned. Confidential information and materials should not be submitted.

- Periodic progress reports and a final report will be required for each funded project (please see Attachment C for more information). Funded researchers are also expected to attend and report on their progress at the annual Pierce's Disease Research Symposium. The Proceedings from prior symposia are available at http://www.cdfa.ca.gov/pdcp/Research_Symposium_Index.html. Information on past and current research is also available at <http://www.piercesdisease.org/>. Researchers are encouraged to review this information to ensure proposed research represents new ideas or approaches.
- The research sponsor is committed to providing public access to data in a timely fashion in order to maximize progress and hasten the discovery of solutions to Pierce's disease and other serious pests and diseases of winegrapes. Therefore, similar to federal grant programs, funded researchers may be required to post project information, including progress reports and certain types of data (e.g., gene sequences, expression data, etc.), on designated websites (please see Attachment B for more information).
- This RFP document is available online at <http://fps.ucdavis.edu/vit/>.

Eligibility

- Any individual or group from publicly-funded research institutions is eligible and encouraged to submit proposals.

Format and Content of Research Proposals

- See "Research Proposal Format and Guidelines," starting on page 4. Researchers at the University of California and the California State University may submit their proposals in the AB 20 Model Agreement Template format, but please make sure the items indicated in the "Research Proposal Format and Guidelines" are included in the submission.

Definitions of Participant Responsibilities

- **Principal Investigator (PI):** The Principal Investigator is the person with overall responsibility for the scientific conduct of the project and for expenditures of funds. Each project has only one PI.
- **Co-Principal Investigator (Co-PI):** A Co-Principal Investigator is a person who receives research support or material of significant value from the project. A project may have more than one Co-PI.
- **Cooperator:** A Cooperator is a person who provides advice, materials, or data to the project, makes arrangements for advancement of project activities, uses results developed in the project, and/or carries out research in parallel to the project research and which is mutually beneficial. A Cooperator does not receive research support or material of significant value from the project. A project may have more than one Cooperator.

Review Process and Criteria

Proposals will be reviewed by review panels and/or individual reviewers. In addition, the PD/GWSS Board's Research Screening Committee will review and make recommendations to the PD/GWSS Board on the funding of proposals. The PD/GWSS Board will then make a funding recommendation to the Secretary of CDFA.

Research Proposals will be reviewed and evaluated in the following areas (100 points possible):

- **Objectives of Proposed Research, and Relevance** - Are the objectives clearly stated, justified, worthwhile, and reasonable? Is the proposed research likely to contribute significantly to solving the problem? Does the proposed research unproductively overlap with other research? (20 points)

- **Experimental Procedures to Accomplish Objectives** – Is the work plan reasonable, feasible and capable of meeting the stated goals and objectives? Is the work plan of good scientific merit? (40 points)
- **PI, Co-PI(s) & Others** – Do they have appropriate backgrounds, expertise, experience, and capabilities for the proposed tasks? Is the team missing any critical capabilities? (10 points)
- **Research Capacity & Likelihood of Accomplishing Objectives** – Assuming that requested funds are awarded, will the investigators have the resources, including facilities, to achieve the objectives? (10 points)
- **Research Timetable for Project** – Are the milestones appropriate? Are they achievable? (10 points)
- **Budget** – Is the budget reasonable and appropriate, including support for Co-PI activities? (10 points)

Due Date for Submissions

- Proposals should be submitted electronically via the internet at <http://fps.ucdavis.edu/vit/>. The submission due date is **January 31, 2017**. It is not necessary to submit printed copies. Proposals that are incomplete, late, or exceed the maximum page length (10 pages + title page, biographies, citations, budget, and current, planned, pending, and recent past support for related research; 11-point font; one-inch margins) may be eliminated from consideration. Researchers at the University of California and the California State University may submit their proposals in the AB 20 Model Agreement Template format, but please make sure the items indicated in the “Research Proposal Format and Guidelines” are included in the submission.

Questions

Questions about this RFP may be directed to the CDFA Pierce’s Disease Control Program at 916-900-5024 or pdresearch@cdfa.ca.gov.

RESEARCH PROPOSAL FORMAT AND GUIDELINES

for submissions to the CDFA PD/GWSS Board

- Proposals should not exceed the maximum page length (10 pages + title page, biographies, citations, budget, and current, planned, pending, and recent past support for related research).
- Please use 11-point font, and one-inch margins.
- Please define (spell out) all acronyms and abbreviations when first used.
- Submit online at <http://fps.ucdavis.edu/vit/>, where much of the information requested below can be entered in the corresponding blanks or as checked boxes.
- Submissions are due **no later than January 31, 2017**.
- Researchers at the University of California and the California State University may submit their proposals in the AB 20 Model Agreement Template format, but please make sure the items indicated in the “Research Proposal Format and Guidelines” are included in the submission.

Project Title

Please give the title of the proposal, in 150 or fewer characters. If this is a continuing project and you are changing the title, please explain why.

Signature and Authorization Page

Please furnish proof of authorization and agreement to conduct the proposed research by providing required institutional approvals and signatures of the PI, Co-PIs, and Cooperators.

Principal Investigator (PI)

Please see the definitions for PI, Co-PI and Cooperator on page 2. Indicate the PI, i.e., the person responsible for overall project management, coordination, and execution. Include institutional affiliation, address, phone number, and e-mail address.

Co-Principal Investigators (Co-PIs)

Please include institutional affiliations, addresses, phone numbers, and e-mail addresses. Indicate the roles of each Co-PI and make sure that each Co-PI is aware of his/her proposed participation.

Cooperators

Please indicate the roles of each cooperator, and make sure they are aware of their proposed participation.

Research Area

Please indicate, from the following list, the one primary research area in which the project falls, as well as any secondary areas:

- Crop Biology
- Disease Epidemiology
- Field Trial
- Pathogen Biology & Ecology
- Pathogen & Disease Management
- Pest Biology & Ecology
- Pest Management
- Pest/Pathogen Interaction
- Other

Expected Duration of Project

Please indicate the number of years for which funding is requested (three years maximum).

Budget Summary

Please supply the budget total for each year requested. (Note: more information on the proposed budget, including detail and justification, is requested below)

Keywords

Please supply important keywords that characterize this project.

Project History

Please indicate if this is a new or continuing project. If a continuing project, indicate when it began, the number of years of activity, and the sources of funding. Also, indicate how this project relates to other past, current, and anticipated future research projects. Summarize previous work in this area (1,600 characters).

Clarification about Progress Reports: Please be advised that progress reports should not be included as part of your submission. Instead, use the sections titled "Project History" and "Summary" to briefly discuss any previous work on your project that is relevant to the present proposal.

Layperson Summary

Please include a layperson summary of this project (approximately 100 words).

Objectives of Proposed Research and Path to Application

Please state the aim or broad goal of the proposal, followed by a numbered list of specific objectives. After the specific objectives provide a summary of the potential impact and relevance of the proposed research, covering the points indicated below. Describe how the project's findings will lead to practical applications in California winegrape production and describe the steps that must be taken to achieve field application. Provide an estimate of the timeframe involved. Describe how the overall project and each objective address the fundamental goal of protecting winegrape production in California. Cite relevant literature. Describe the project's relevance to the research recommendations provided in Attachment A of this RFP (3,200 characters maximum).

Methodology to Accomplish Objectives

Discuss the experimental procedures for each objective. Discuss laboratory experiment or plot design, expected results, statistical analyses, methods to be used, parameters of data collection including sampling methods, and potential pitfalls and limitations. For research that has a field component, discuss site selection and how the field component will help accomplish the stated objectives. Cite relevant literature.

Research Timetable

Please outline the timeline for the research project, indicating start dates, periods of activity, and completion dates for each activity and objective, and for the entire project.

Research Capacity and Likelihood of Accomplishing Objectives

Please summarize how the principal investigators' and cooperators' research capacities (i.e., dedicated financial sources, computer facilities, laboratory and field resources, and human resources) and previous work make the proposed work feasible and increase the likelihood for accomplishing the stated objectives. For field studies, principal investigators should indicate who will maintain the field site and include a statement describing how the site will be maintained that demonstrates awareness of good farming practices.

Intellectual Property

Please describe any intellectual property, other than copyrighted publications, that this project is likely to produce, and provide information or a URL describing your institution's policies for managing intellectual property. In addition, researchers should make reasonable efforts to describe any proprietary technologies, including methodologies, that your research will necessarily use or incorporate and the steps, if any, that may be required in order to use these proprietary technologies for practical field applications of the project's research results. See Attachment B for more information about intellectual property and data sharing.

Literature Cited

Please include a list of literature cited in the research proposal. Provide complete citations (authors, year published, full title, journal or book title, and inclusive page numbers). Within the proposal, cite references by author and year.

Current, Planned, Pending, and Recent Research Support

Please use the following format to identify support for your current, planned, pending, and recent projects that have any component related to the research proposed in your submission.

- Provide information on all current, planned, pending, and recent projects, whether or not there is a specific time commitment by a PI or Co-PI. Where there is a time commitment (with or without a salary provision) indicate the percentage of time on an annual basis. If there are no current, planned, or pending projects, please state "NONE."
- Explain any connections and/or overlaps between existing and/or pending support and this submitted proposal. How will the total support package tie together? If there is overlap, please provide a short narrative describing what activities overlap and the percentage of effort on the proposed project that is to be devoted to the overlapping activities. If no overlap is expected, please state "NONE."

Related current projects

Name	Supporting agency & project number	Total budget	Effective & expiration dates	Percent of time committed	Project title
(PIs and Co-PIs)					
(PIs and Co-PIs)					

Related projects that are planned (within the next 6 months) or for which funding is pending, and recent (past 5 years) projects for which funding was received

Name	Supporting agency and project number	Total budget	Proposed effective & expiration dates	Percent of time committed	Project title
(PIs and Co-PIs)	This proposed project				
(PIs and Co-PIs)					

Biographical Sketches

Please include a brief biographical sketch for each PI and Co-PI. List up to 15 of his/her most recent publications (not just those relating to the current project). Maximum of two pages per PI or Co-PI, excluding the list of publications.

Budget Request

- Please present the budget request on a separate page, in the format provided on the following page. Do not put amounts in shaded areas. Provide a narrative explanation and justification of budget items.
- Indirect cost rates for research grants with the University of California and California State University are currently being negotiated. Allowable indirect cost charges, if any, will be determined by the outcome of those negotiations. Until a final decision is reached, no indirect cost charges should be included in submitted proposals.
- CDFA retains the right to claim ownership of any equipment purchased using CDFA funds.
- Services of private subcontractors must be obtained through a competitive bidding process.

Budget request format for submissions to the CDFA PD/GWSS Board

	FY 2017-18		FY 2018-19		FY 2019-20		
	% of Time on Project	Amount (\$)	% of Time on Project	Amount (\$)	% of Time on Project	Amount (\$)	TOTAL
Salaries & Wages							
Professional							
SRA/Tech							
Lab Assistant							
Other							
Employee Benefits							
SUBTOTAL (Salaries, Wages, & Benefits)							
Supplies and Expenses							
Equipment							
Travel							
Other							
Indirect Costs*							
SUBTOTAL (Supplies, Expenses, Equipment, etc.)							
TOTAL							

* Indirect cost rates for research grants with the University of California and California State University are currently being negotiated. Allowable indirect cost charges, if any, will be determined by the outcome of those negotiations. Until a final decision is reached, no indirect cost charges should be included in submitted proposals.

CDFA PD/GWSS¹ RESEARCH PRIORITIES

(December 1, 2016)

(Based on: PD/GWSS Research Scientific Review, Final Report, August 2007, CDFA PD/GWSS Research Scientific Advisory Panel (RSAP); updated for this RFP)

- **Research proposals that address the following key research areas will be given funding priority by the CDFA program. Proposals in other areas relevant to PD/GWSS management will also be considered. All proposals should include an explanation of how the proposed research can lead to reductions in the Pierce's disease problem and development of a sustainable Pierce's disease management strategy. The CDFA will take into account the perceived applicability of the anticipated results when making awards.**
- **Information on past and current research is available at <http://www.piercesdisease.org/> and <https://www.cdfa.ca.gov/pdcp/Research.html>. Researchers are encouraged to review this information to ensure proposed research represents new ideas or approaches and does not unproductively overlap with prior efforts.**

Research Priorities

The CDFA will consider highly innovative research projects that are targeted towards commercial application within 10 years, and encourages demonstration of efficacy in the field, when appropriate. Examples of priority areas are provided below.

Exploiting *Xylella fastidiosa* (*Xf*) virulence factors to control Pierce's disease. Efforts to identify *Xf* virulence genes followed by testing the mutant strains for reduced virulence on grape have led to insights that can potentially be applied to new Pierce's disease control strategies, including transgenic or non-transgenic means of interfering with the function of virulence factors to confer resistance to *Xf* infection.

Examples of research areas include:

- Use of diffusible signal factor (DSF) for disrupting *Xf* colonization, including delivery by plant-associated microbes, transgenic rootstocks, and application of chemical analogs.
- Inhibition of *Xf* polygalacturonase (PG), such as using polygalacturonase-inhibiting proteins (PGIPs) with high activity against *Xf* PG, delivery of PGIP to grape plant scions from transgenic rootstocks, and development of small molecule inhibitors of *Xf* PG.
- Targeting *Xf* proteins/small molecules required for virulence. This includes development of protein/peptide-based inhibitors of cell surface proteins such as pilins and adhesins, along with identification of chemical inhibitors of these proteins.

Biological control of GWSS using parasitoids and other agents. The use of parasitoids to reduce population densities of GWSS continues to show promise, especially in settings where synthetic insecticidal sprays cannot be used (e.g., organic farms, urban areas, or other non-crop habitat). The use of natural GWSS pathogens (e.g., viruses and fungal pathogens) to reduce GWSS populations may also be promising, as could approaches to disrupt GWSS endosymbionts.

¹ CDFA = California Department of Food and Agriculture; PD = Pierce's disease; GWSS = glassy-winged sharpshooter.

Examples of research areas include:

- Elucidation of biochemical cues that parasitoids utilize to identify and parasitize their hosts.
- Production of parasitoids, with a particular emphasis on developing efficient means of mass producing GWSS eggs or an alternative suitable host for large-scale production of parasitoids.
- The ability of natural enemies (with an emphasis on native and introduced parasitoids) to suppress Pierce's disease vectors, particularly with respect to impact on GWSS populations in the field and under diverse environmental conditions. Research could also include approaches to conserve existing parasitoids through environmental manipulation (e.g., with understory plantings that provide key resources, such as planting nectarines as supplemental food sources, over-wintering sites, etc.), with particular consideration given to agents that are effective early in the season and in the California climate.

Behavioral modification of GWSS. One approach would be to disrupt mating behavior, such as with acoustic modification.

Plant-GWSS interactions. Factors that make host plants either good and/or attractive hosts versus poor and/or unattractive hosts constitute an understudied area. Do poor hosts chemically repel GWSS? Are there aspects of plant physiology that can be manipulated or compounds that can be generated *in planta* to prevent GWSS feeding and/or reproduction? Can host plant physiology be manipulated to reduce GWSS attraction and/or growth?

Examples of research areas include:

- Determine the mechanisms by which GWSS locates its plant hosts, including the chemical ecology of GWSS-grapevine interactions/relationships (e.g., plant host factors that influence their attractiveness to females for oviposition and egg maturation, or xylem metabolites that limit sharpshooter feeding).
- Identification of GWSS repellents in plants.
- Identification of factors that reduce GWSS attraction and/or fitness that can be delivered through host xylem, such as novel compounds and pesticides with sublethal effects (particularly the new generation systemic pesticides).

Plant-mediated disruption of GWSS life cycle or *Xf* transmission using molecular approaches. Current molecular approaches may provide opportunities to disrupt the GWSS life cycle and GWSS transmission of the *Xf* pathogen.

Examples of research areas include:

- Develop RNA interference approaches that target GWSS, including developing expression and delivery systems, and identifying and evaluating targets for silencing.
- Develop other transgenic approaches that target GWSS, including expressing insecticidal proteins such as protease inhibitors, or promoting the production of small molecules that are lethal to insects.

Host resistance to *Xf* and GWSS. In crop production, the most cost-effective and environmentally safe method for preventing disease is breeding for resistance. This breeding could be accelerated by the availability of information on Pierce's disease resistance in existing commercial grape varieties, the response of these varieties to chemical and biotic inducers of systemic plant resistance, and the linkages between genes controlling resistance and DNA-based molecular markers that can be scored in a high throughput fashion.

Examples of research areas include:

- Marker assisted selection-based breeding for resistance.
- Assessment of various modes of resistance to the pathogen and vector in existing commercial grape varieties, non-commercial varieties, wild *Vitis* relatives, and asymptomatic hosts including non-*Vitis* species.
- Assessment of Pierce's disease resistance in existing commercial grape varieties following treatment with chemical or biotic inducers of resistance. Given the limited success of inducers in other crops, a proposal in this area should include substantial preliminary data on the effectiveness of one or more agents.
- Proteomic, metabolic, and gene expression studies to determine the basis of resistance and susceptibility in grape germplasm.
- Development and application of modern genome editing technology (e.g., CRISPR) to identify important host genes controlling grape/*Xylella*/sharpshooter interactions.
- Development of methods to accelerate the grape breeding cycle, such as by regulating flowering time.

INTELLECTUAL PROPERTY, DATA SHARING, AND PROGRESS REPORTS

(December 7, 2016)

Intellectual Property and Data Sharing

(From: Plant Genome Research Program RFA for FY 2007, Program Solicitation NSF 07-531, National Science Foundation)

Describe the management of intellectual property rights related to the proposed project, including plans for sharing data, information, and materials resulting from the award. This plan must be specific about the nature of the results to be shared, the timing and means of release, and any constraints on release. The proposed plan must take into consideration the following conditions where applicable:

-- Sequences resulting from high-throughput large-scale sequencing projects (low pass whole genome sequencing, BAC end sequencing, ESTs, full-length cDNA sequencing, etc.) must be released according to the currently accepted community standard (e.g. Bermuda/Ft. Lauderdale agreement) to public databases (GenBank if applicable), as soon as they are assembled and the quality checked against a stated, pre-determined quality standard.

-- Proposals that would develop genome-scale expression data through approaches such as microarrays should meet community standards for these data [for example, Minimum Information About a Microarray Experiment (MIAME) standards; see <http://www.mged.org/Workgroups/MIAME/miame.html>]. The community databases (e.g. Gene Expression Omnibus) into which the data would be deposited, in addition to any project database(s) should be indicated.

-- If the proposed project would produce community resources (e.g. epidemiological data, genotyping data, biological materials, software, etc.), these resources should be made available to the research community in a timely fashion. The timing of release should be stated clearly in the proposal, and how the resources will be disseminated and stored should be described. The resources produced must be available to all segments of the scientific community, including industry. A reasonable charge is permissible, but the fee structure must be outlined clearly in the proposal. If accessibility differs between industry and the academic community, the differences must be clearly spelled out.

The Bermuda / Ft. Lauderdale agreements can be found online at http://www.ornl.gov/sci/techresources/Human_Genome/research/bermuda.shtml and <http://www.genome.gov/Pages/Research/WellcomeReport0303.pdf>.

Progress Reports

Funded researchers will be required to submit project information, including progress reports, publications, and links to project-related sequence data, onto the following website: <http://www.piercesdisease.org/>.

REPORTING REQUIREMENTS FOR RESEARCH PROJECTS FUNDED BY THE CDFA PD/GWSS BOARD

(December 7, 2016)

Periodic progress reports and a final report are required for each research project funded by the CDFA PD/GWSS Board. The reports are used to communicate research activities, progress, and findings, and to document that the terms of the agreement are being fulfilled. Provided below is information about the reports.

1. Three reports are required per year (due approximately every four months).
2. Progress Reports are required while the agreement is still in effect. Their purpose is to report the progress made on the project. Once the agreement has ended, it is no longer necessary to submit Progress Reports. Instead, a Final Report becomes due for the agreement.

There are three types of Progress Reports, as follows:

- a. Interim Progress Reports – These provide information on the research progress made since the previous progress report for that agreement, or further back if the researcher chooses. The requirements for these reports are provided below. These reports are submitted by the researcher to a website constructed for this purpose. They are usually due in March and July.
 - b. Renewal Progress Reports – These are required for projects having multi-year agreements, and are used to determine if the project should be continued into the next fiscal year of the agreement. The requirements for these reports are provided below. These reports are submitted by the researcher to a website constructed for this purpose. They are usually due in March and satisfy the requirement to submit an Interim Progress Report at that time.
 - c. Symposium Proceedings Reports – These reports are published in the Proceedings of the annual Pierce's Disease Research Symposium. They are also made available on the internet. They are usually due in October. (Note: This report will still be required in years when a Symposium is not held.) The requirements for these reports are provided below.
3. A Final Report is due at the end of the agreement. The Final Report is a comprehensive, stand-alone report that covers the activities and findings for the entire agreement period. It is due within 30 days of the end of the agreement. The formatting and content guidelines are the same as for the Symposium Proceedings Reports. Submitted final reports will be included in that year's Proceedings document.
 4. Payment of invoices is held up if required reports are not submitted.

Guidelines for Interim Progress Reports

- Title of report (that is, "Interim Progress Report for CDFA Agreement Number _____.")
- Title of project. (Please use the same title as was used for the approved research proposal.)
- Principal investigators, Co-PIs, cooperators, etc., and their affiliations.
- Time period covered by the report.
- Introduction.
- List of objectives. (Please use the same list of objectives as was used in the approved research proposal).
- Description of activities conducted to accomplish each objective, and summary of accomplishments and results for each objective.
 - Please use each objective as a heading in your report, under which you discuss the progress and results for that objective.
 - For field trials, please include information on the status of the field trial, including planting and sampling activities, the condition of the plants, and any factors impacting the progress of the field trial. Also, please include photos of the field planting.
- Publications produced and pending, and presentations made that relate to the funded project.
- Research relevance statement, indicating how this research will contribute towards finding solutions to the pest or disease being studied.

- Layperson summary of project accomplishments.
- Status of funds.
- Summary and status of intellectual property associated with the project.
- Literature cited.
- Please submit the report online at <http://www.piercesdisease.org/>. Click on “Researcher Login” and follow the instructions. Questions about the website or uploading your report can be emailed to questions@piercesdisease.org

Guidelines for Renewal Progress Reports

- Title of report (that is, "Renewal Progress Report for CDFA Agreement Number _____.")
- Title of project. (Please use the same title as was used for the approved research proposal.)
- Principal investigators, Co-PIs, cooperators, etc., and their affiliations.
- Time period covered by the report.
- Introduction.
- List of objectives. (Please use the same list of objectives as was used in the approved research proposal).
- Description of activities conducted to accomplish each objective, and summary of accomplishments and results for each objective.
 - Please use each objective as a heading in your report, under which you discuss the progress and results for that objective.
 - For field trials, please include information on the status of the field trial, including planting and sampling activities, the condition of the plants, and any factors impacting the progress of the field trial. Also, please include photos of the field planting.
- Publications produced and pending, and presentations made that relate to the funded project.
- Research relevance statement, indicating how this research will contribute towards finding solutions to the pest or disease being studied.
- Layperson summary of project accomplishments.
- Status of funds.
- Summary and status of intellectual property associated with the project.
- Literature cited.
- Please submit the report online at <http://www.piercesdisease.org/>. Click on “Researcher Login” and follow the instructions. Questions about the website or uploading your report can be emailed to questions@piercesdisease.org

Guidelines for Symposium Proceedings Reports

Formatting

- Font and Justification: Times New Roman font, 11-point, left justification. Use bold capital letters for the title of the report and the section titles.
- Margins: One-half inch top and bottom; three-quarter inch left and right.
- Tables: Create using MS Word’s Table Utility. Please do not use tabs to create a table, or paste a graphic of a table from another document.
- Length: No more than twelve pages total. (If more is needed, please contact CDFA to discuss.)
- Please center tables and figures on the page, and do not wrap text around them. Titles of tables should be placed above the table. Captions for figures should be placed below the figure.
- The information on Principal Investigators, Co-PI’s, Cooperators, etc. should be positioned using a three-column table. Please don’t use tabs.
- Please spell out abbreviations and acronyms where they are first used in the report.

Content -- the reports should include the following information/sections, in the order indicated.

- Title of report.
- Names, affiliations, and e-mail addresses of the Principal Investigator, Co-Principal Investigator(s), and Cooperator(s). (Please indicate the role of each person listed; for example, “Principal Investigator,” “Co-Principal Investigator,” “Cooperator,” etc.)

- Reporting Period. [This section should be constructed to read as follows: “The results reported here are from work conducted (date) to (date).”]
- Abstract.
- Layperson Summary. (Please indicate in the summary how the results from the project will contribute to the management of the pest or disease being studied.)
- Introduction.
- Objectives.
- Results and Discussion.
- Conclusions. (Please summarize the research findings and describe how they will contribute to the management of the pest or disease being studied.)
- References Cited.
- Funding Agencies. (Please make sure that funding agencies are properly identified. This section should be constructed to read as follows: “Funding for this project was provided by ...”).
- Acknowledgments (optional)

Additional Information

- A Call for Progress Reports will be emailed to researchers approximately one month before the Proceedings Reports are due. It will include guidelines for content and formatting.
- Examples of reports presented in the proper format can be found in the Proceedings from the previous year. It is available online at <https://www.cdfa.ca.gov/pdcp/Research.html>.
- Reports should be emailed in MS Word format (.doc or .docx) to pdsymposium@cdfa.ca.gov. Authors are encouraged to also provide the report in pdf format.

Guidelines for Final Reports

- Final Reports should be comprehensive and stand-alone (i.e., cover the entire agreement period, and not require going back and reading earlier progress reports to find out the main activities and findings from the project).
- The formatting and content guidelines for Final Reports are the same as for Symposium Proceedings Reports, other than changing the subtitle to indicate that it is a Final Report, not a Progress Report.
- Submitted Final Reports may be included in that year’s Proceedings document.

Questions?

- Contact the CDFA Pierce’s Disease Control Program at 916-900-5024 or pdresearch@cdfa.ca.gov.