

CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE  
OFFICE OF ENVIRONMENTAL FARMING AND INNOVATION

**BIOLOGICALLY INTEGRATED FARMING SYSTEMS**  
**REQUEST FOR PROPOSALS (RFP)**

Release date: August 29, 2022

**Grant Proposals Due Date:** October 31, 2022

Late grant proposals will not be accepted

<https://www.cdfa.ca.gov/oefi/opca/bifs.html>

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## About the program

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The California Department of Food and Agriculture's (CDFA) Office of Pesticide Consultation and Analysis (OPCA) is pleased to announce grant funding available for the Biologically Integrated Farming Systems Program (BIFS). CDFA received a one-time appropriation of \$2 million for this program as part of the 2022-2023 budget, and the full amount of this appropriation will be available during this funding cycle. For the current request for proposals (RFP), the maximum budget allowed is \$1 million per project, though smaller projects are also encouraged to apply. The purpose of this RFP is to develop projects to demonstrate and refine outreach of innovative, biologically integrated farming systems that reduce chemical pesticide inputs. Only public or private colleges and universities, local and federal government entities including tribal governments, and non-profit organizations are eligible to apply. The project lead(s) and their institutions must be based in California though out-of-state collaborators are allowed.

### Background

The Biologically Integrated Farming System (BIFS) program initially ran from 1995 to 2010. Projects focused on fostering farmer-to-farmer information exchange and on-farm demonstration of integrated farming practices that promote IPM and biological systems while allowing growers to maintain profitable businesses. Originally a project of Community Alliance with Family Farmers (CAFF), BIFS transitioned to a grant program administered by the University of California (UC) Sustainable Agriculture Research and Education Program (SAREP), based at UC Davis. The program received supplemental funding and cooperation from the California Department of Pesticide Regulation (CDPR) and the US Environmental Protection Agency (EPA).

The SAREP BIFS program funded twelve projects in eleven different farming systems. The adoption of BIFS practices was found to reduce pesticide use, improve soil fertility, decrease erosion and nitrogen leaching, and increase populations of beneficial insects, fishes, birds, and game. For example, BIFS wine grape growers nearly eliminated use of chlorpyrifos and other organophosphate insecticides in the Central Coast. In BIFS apple orchards, organophosphate use was decreased by 33 percent through the use of pheromone mating disruption. Post-project research found that the 650 growers in the Lodi-Woodbridge Winegrape Commission continued to implement BIFS practices after the project ended.

## Project Priorities

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**Whereas earlier BIFS grant programs focused on a broader range of agricultural operations and practices, the focus of this RFP is on chemical pesticide reduction in crop-based farming systems. The objective of this program is to demonstrate and refine IPM-based farming projects designed to reduce chemical pesticide inputs, especially non-selective, biologically disruptive insecticides, fungicides, and herbicides that pose greater risk to human health or the environment. Applicants should discuss the risks of the pesticide(s) they are aiming to reduce. All aspects of the farming system may be considered as they relate to pest management, including factors such as adjacent landscapes, whether they are farmed or not.**

Projects will typically include the following three elements:

1. On-farm demonstration/evaluation of an innovative, biologically-based farming system, that employs IPM strategies;
2. A collaborative outreach effort for sharing technical information about the farming system with growers, PCAs, commodity groups, and others engaged in pest management, and;
3. An organized program of monitoring key biological and economic variables so as to inform on-farm decision making as well as evaluate project success.

### Farming System

Proposals should describe a farming system that integrates key technical elements such as biological and cultural controls of pests, habitat management on-farm and at the landscape scale (including adjacent agricultural and non-agricultural land where applicable) to reduce pest problems, and reduced reliance on chemical pesticides. Proposed projects should employ techniques such as field monitoring for pests and beneficial organisms, collection of weather data, reliance on research-based action thresholds for decision making, and the use of selective, lower-risk pesticides. Proposals should describe the inherent links between the components of the farming system to pest management where applicable (e.g., tillage practices, crop rotation, irrigation) and the larger landscape or watershed. One means of demonstrating the potential effectiveness of the alternative practices would involve a side-by-side comparison of the current versus alternative farming system with corresponding monitoring of key biological and economic variables. While a key component of the project should be outreaching established IPM based methods (field days, websites, social media, etc.), an applied experimental component to the project is allowed.

### Outreach Efforts and Management Team

Proposed projects should utilize existing partnerships or build new partnerships that are voluntary and collaborative in nature. Outreach efforts should bring scientists, farmers, and consultants together in a collaborative, "co-learning" environment that enables farmers to

learn and adapt integrated farming practices to local conditions. Projects teams are encouraged to provide outreach materials and workshops in languages other than English to ensure that all growers have access to project information. Industry partners can participate by providing matching funds, infrastructure for project support activities, and/or cost sharing rebates for farming system inputs such as cover crop seeds, beneficial organisms (arthropods and micro-organisms), insectary shrubs and trees, insect traps, laboratory services, and/or farm implements. Matching funds from industry partners, while not required, are encouraged.

Proposals should describe a management team of persons experienced in the farming system, that will be responsible for tasks such as hands-on field days, monitoring of key biological and economic parameters, and written and on-line materials. The management team should include an array of knowledgeable individuals/organizations including but not limited to growers, extension specialists, farm advisors, grower representatives such as PCAs, and commodity boards. The role of the management team is to implement the proposed outreach program and to serve for its duration as resources for participating farmers.

## **Funding and Grant Term**

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Proposals will be selected based on the criteria presented below in the Evaluation Criteria section. Total funding available is \$2 million and maximum funding per project is \$1 million. CDFA expects to fund two to four projects. Matching funds from industry partners, while not required, are encouraged. Projects are anticipated to begin February 2023 and last for approximately 4 years.

Funding must supplement, not supplant, existing activities/programs. Supplement is defined as adding to existing funds to enhance or expand existing activities. Supplant is defined as replacing existing funds for an activity because grant funds are to fund the same activity.

CDFA reserves the right to offer an award different than the amount requested.

## **Project Eligibility**

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Public or private colleges and universities, local and federal government entities including tribal governments, and non-profit organizations are eligible to apply.

The project lead(s) and their institutions must be based in California; out-of-state collaborators are allowed.

California state agencies may not submit proposal applications but may be listed as subcontractors on other proposals. A state agency's share of funding may not exceed 30% of total funding. State agencies may not take the lead in project management.

## How to Submit a Grant Proposal

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Grant proposals must be submitted via the Amplifund application portal (<https://www.gotomygrants.com/Public/Opportunities/Details/5ae501dd-ce70-4893-86fd-bce7629c1ca6>) no later than the grant due date at 5 pm. Applicants must first create an account through Amplifund, login, and fill out all required sections of the online application form. Completed budget templates and appendices (e.g. CVs, letters of support) must be uploaded and submitted through the portal as well.

*Late submissions will not be accepted.*

CDFA cannot assist in the preparation of grant proposals; however, general questions may be submitted to [cdfa.opca@cdfa.ca.gov](mailto:cdfa.opca@cdfa.ca.gov). In order to ensure all potential applicants benefit from all submitted questions and answers, all questions and responses will be posted on the BIFS webpage: <https://www.cdfa.ca.gov/oefi/opca/bifs.html>. To ensure a response from CDFA, all questions must be submitted according to the timeline below. Answers will be posted according to the same timeline.

Questions Received by	Answers Provided by
September 8, 2022	September 12, 2022
October 17, 2022	October 23, 2022

### Proposal Review and Evaluation

A review committee consisting of scientists and specialists at CDFA, United States Department of Agriculture (USDA), California Department of Pesticide Regulation (CDPR), University of California (UC) and California State University (CSU) as well as non-governmental environmental organizations, growers and/or grower representatives will review and evaluate the merits of the proposals. Any member of the committee who is connected to a submitted project will recuse themselves from the process. The evaluation criteria are found at the end of this document.

### Award Notification

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All applicants will be notified regarding the status of their proposal. Comments will be provided. Successful applicants will be provided a grant agreement following the award announcement. Grant recipients may not begin project activities until a grant agreement is executed by both parties. Grant recipients will be required to submit semi-annual reports and a final report to demonstrate project accomplishments, address problems and delays, and describe activities

planned during the next reporting period. Invoices should be submitted quarterly for reimbursement. More frequent invoice submission will be considered on a case-by-case basis.

### Disqualifications

The following will result in the disqualification of a grant proposal:

- Incomplete grant proposals, including grant proposals with one or more unanswered questions and/or missing, blank, unreadable, corrupt, or otherwise unusable attachments.
- Applicant is not an eligible entity
- Grant proposals requesting more than the maximum or less than the minimum award amount.
- Grant proposals with unallowable costs or activities necessary to complete the project objectives.
- Grants with only out-of-state project leads

### Appeal

Any disqualification taken by the Office of Environmental Farming and Innovations (OEFI) during the administrative review for the preceding reasons may be appealed to CDFA's Office of Hearings and Appeals within 10 business days of receiving a notice of disqualification from CDFA. The appeal must be in writing and signed by the responsible party name on the grant application or his/her authorized agent. It must state the grounds for the appeal and include any supporting documents and a copy of the OEFI decision being challenged. The submissions must be sent to the California Department of Food and Agriculture, Office of Hearings and Appeals, 1220 N Street, Sacramento, CA 95814 or emailed to [CDFA.LegalOffice@cdfa.ca.gov](mailto:CDFA.LegalOffice@cdfa.ca.gov). If submissions are not received within the time frame provided above, the appeal will be denied.

## Grant Proposal Requirements

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All sections of the grant proposal, described below, must be submitted through the online application form here:

<https://www.gotomygrants.com/Public/Opportunities/Details/5ae501dd-ce70-4893-86fd-bce7629c1ca6>.

Appendices (Section D) must be submitted as a single PDF file attachment.

### Allowable and unallowable costs

A cost is allowable if it directly relates to the project and is incurred solely to advance work under the Grant Agreement. Allowable costs include, but are not limited to, salaries and wages,

indirect costs, fringe benefits, consultant services, travel, telephone, equipment (lease/rental), subcontractors and materials, data processing, land rentals, training and communications. Indirect costs must be treated in accordance with your organization's policies and procedures. In the absence of a policy, applicant's indirect costs must not exceed ten percent of the total modified direct cost. University of California applicants should use the agreed upon indirect rate of 30% of total modified direct cost.

Unallowable expenses include but are not limited to costs for hospitality suites, alcoholic beverages, costs of entertainment, costs for organized fund raising including financial campaigns and solicitation of gifts, and travel to states with active discriminatory laws as detailed in the travel section below. A list of prohibited states can be found here: <https://oag.ca.gov/ab1887>. Unallowable costs will not be reimbursed.

## A. APPLICANT INFORMATION

### 1. Project Leader(s)

Specify each project leader's name, title, affiliation, mailing address, telephone number, and email address on the online application form. A curriculum vitae, a list of recent publications, and a description of current research/outreach activities must be uploaded for each project leader in Section D: Appendices.

### 2. Management Team

Specify each management team member's name, title, affiliation, mailing address, telephone number, and email address. Commodity boards/growers/grower groups providing funding or in-kind support should be included here. It is recommended that a letter from each collaborator be included in Section D: Appendices describing their role in the project, estimated time commitment, and a statement of agreement to participate in the project.

### 3. Other Cooperators

Specify organizations and/or individuals that support the ideas and objectives of the project but are not providing funding. It is recommended that a letter from each supporter be included under Section D: Appendices explaining the rationale for their support.

## B. PROJECT INFORMATION, including:

### 1. Project Title

Provide a unique and concise title for the proposed project that adequately describes the project.



**2. Project Summary.** Concisely describe the project, including project objectives.

**3. Introduction and justification**

3.1 Give an overview of the crop production system and discuss environmental issues associated with this farming system as well as the economic viability of the current farming system.

3.2 Give an overview of the alternative farming system to be demonstrated. Discuss the possible environmental and economic benefits of the alternative farming system. If information is lacking, benefits or impacts may be estimated if supported by the literature and/or grower experience.

3.3 Discuss briefly how information exchange and outreach will occur in the project. Describe the kind of outreach efforts to be used and why this approach will be the most effective.

3.4 Discuss briefly how the project will be evaluated, what kinds of monitoring, surveys and/or data evaluation might be employed and why these are the most effective methods to assess success in conducting the planned activities, adoption of the farming system, and impact or success in extending benefits beyond project boundaries.

**4. Work Plan and Methods**

**4.1 Farming System**

- a. Describe the conventional farming system currently in use. Describe the pest complex and pest management strategies employed (include pesticides, total amounts and frequency of use). Include soil and water management practices, rotational cropping patterns, and other management practices as they relate to pest management where applicable.
- b. Describe the alternative farming system to be demonstrated focusing on the alternative biological and cultural pest management strategies employed (include pesticides, total amounts and frequency of use). Include soil and water management practices, rotational cropping patterns, and other management practices as they relate to pest management where applicable.

**4.2 Outreach efforts**

- a. Describe how the project will use collaborative methods for outreach and information exchange, such as field days, social media, websites, etc. Describe how the project will bring scientists, farmers, and consultants together in a "co-learning" environment.

- b. Describe the roles of the management team members, and other cooperators in the extension activities of the project.
- c. Describe any institutional support available for use in information sharing and outreach activities.
- d. Describe how the goals and desired impact of the project will be sustained beyond this initial funded phase.
- e. List proposed field days and topics for the first year.

**5. Monitoring, documentation, evaluation**

**5.1** Describe what biological (and other) monitoring data will be collected to make comparisons between the current and alternative farming systems.

**5.2** Describe what data will be collected and how it will be analyzed to evaluate the effectiveness, economic viability and applicability of the farming system.

**5.3** Include a description of how you will document and evaluate participation in the project and adoption or “buy-in” of the farming system by growers, PCAs, CCAs, Farm Advisors or others within the project.

**6. Project Timeline (for the length of the proposed project)**

Specify project start date, tentative management team meeting dates, in-season data collection schedule, proposed field day dates and topics, and other milestones and metrics as applicable.

**C. BUDGET**

Complete the budget table and upload to the online application form. An Excel version of the budget table can be found on the BIFS webpage: <https://www.cdfa.ca.gov/oefi/opca/bifs.html>. If there is a subaward, complete a budget table for the subaward as well. Costs that are not personnel, operating expenses, or subawards should be listed individually under other direct costs.

BUDGET CATEGORY	From:					
	To:	Year 1	Year 2	Year 3	Year 4	Total
PERSONNEL: <i>Salary and fringe benefits.</i>						
Salary						
Fringe benefits						
OPERATING EXPENSES						
Travel						
Materials & Supplies						
Equipment						
SUBAWARD	<i>Not subject to IDC Calc</i>					
OTHER DIRECT COSTS (ODC)	<i>Subject to IDC Calc</i>					
<i>Other direct cost 1</i>						
<i>Other direct cost 2</i>						
<b>TOTAL DIRECT COSTS</b>						
Indirect (F&A) Costs	<u>F&amp;A Base</u>					
<i>Rate</i>	<i>MTDC *</i>					
<b>TOTAL COSTS PER YEAR</b>						
<b>TOTAL COSTS FOR PROPOSED PROJECT PERIOD</b>						

\* MTDC = Modified Total Direct Cost

Provide a detailed narrative of your proposed budget broken into years 1, 2, 3 and 4 (if applicable). The budget should contain a narrative in paragraph format for each budget category to justify whether costs are reasonable and allowable. Allowable and unallowable costs are defined in the Allowable and Unallowable Costs section above. Assume the start date listed on the timeline (<https://www.cdfa.ca.gov/oefi/opca/bifs.html>) and explain all of the following:

- 1. Personnel.** Provide classification level, percent of time based on full time salary/wages, benefits, employment period, and name of individual to be hired, if available.
- 2. Operating Expenses.** Itemize and justify all of the following operating expenses:

A. Supplies: Itemize and justify all supplies to be purchased. Supplies include all consumable materials with an acquisition cost less than \$5,000 per unit. Supplies must be used exclusively for the project. For each grant year, provide an itemized list of projected supply expenditures, the dollar amount for each item, and describe how it will support the purpose and goal of the project.

B. Travel: The maximum travel rates allowable are the rates in effect at the time of travel as established by the California Department of Human Resources (CalHR). Exceptions: Colleges and Universities must comply with their institution's travel policies. For each grant year, itemize and indicate the following information, if applicable, for each trip: (a) destination; (b) purpose of trip; (c) number of trips; (d) identify travelers; (e) number of days traveling; (f) estimated airfare costs; (g) estimated ground transportation costs; (h) estimated lodging and meals costs; and, (i) estimated mileage rate.

Additionally, in accordance with [California Assembly Bill 1887](#), state funded and state sponsored travel to states with discriminatory laws is prohibited. **Grant funds cannot be used to support costs for travel to states with active discriminatory laws.** For the most up-to-date list of prohibited states, please visit <https://oag.ca.gov/ab1887>.

C. Other Direct Costs: Identify and explain any additional expenses not covered by the above categories. Other expenses include, but are not limited to: conferences or meetings, communications, speaker/trainer fees, publication costs, data collection, and other budgeted costs associated with the project.

D. Indirect costs are any costs that are incurred for common or joint objectives that therefore cannot be readily identified with an individual project, program, or organizational activity. They generally include facilities operation and maintenance costs, depreciation, and administrative expenses. It is generally unallowable to charge an indirect cost as a direct cost. Indirect costs must be treated in accordance with your organization's policies and procedures. In the absence of a policy, applicant's indirect costs must not exceed ten percent of the total modified direct cost. Any non-UC applicants requesting an indirect rate of over 10% will need to provide their Negotiated Indirect Cost Rate Agreement. UC applicants should use the agreed upon of 30% of the total modified direct cost.

**3. Other Funding Sources.** Indicate if any Federal, State or other grant program(s) are providing funding for this project. Identify the Federal, State agency or organization administering the program(s), and the amount(s) of funds requested/awarded.

#### D. APPENDICES (uploaded as single PDF file)

**1. Project Leader(s):** Include a two-page resume and list of recent publications if relevant to the project. Also include a description of current research/outreach activities; provide information on all current, planned, pending, and recent projects, whether or not there is a specific time commitment and how it will impact the proposed project.

**2. Management team:** It is advisable to include a letter of support from each research collaborator, including a description of their role in the project and statement of agreement to participate in the project.

**3. Collaborators:** It is advisable to include a letter from each supporter explaining the rationale for their support. Scanned copies of letters are acceptable if attached to the proposal at submission time.

#### 4. Literature Cited

## Evaluation Criteria

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All applications will be evaluated based on the criteria detailed below:

<b>EVALUATION CRITERIA</b>	<b>Max points</b>
<p><b>Proposal Quality</b></p> <ul style="list-style-type: none"><li>• Project Summary: Concisely defines the issue, describes the approach to be used, and identifies objectives and criteria that will be used to evaluate the project's success.</li><li>• Work Plans and Methods: Work plan is organized by tasks and subtasks and includes milestones. Clearly explains any experimental design and statistical analyses.</li><li>• Project Management and Evaluation: Gives detailed timeline and evaluation metrics.</li><li>• Additional information: includes information for project leaders, cooperators, and supporters.</li></ul>	25
<p><b>Project Justification</b></p> <ul style="list-style-type: none"><li>• Relevance to Project Priorities: Clearly states how growers can reduce high risk pesticides in an economically feasible manner.</li><li>• Justification: Defines/describes the issue, particularly how the alternative farming system will maintain yields and quality, provide suitable pest management, and reduce chemical pesticide inputs in an economically effective</li></ul>	30

manner. Describes how the alternative farming systems will be outreached to growers.	
<p><b>Project Team and Resources</b></p> <p><i>Team</i></p> <ul style="list-style-type: none"> <li>• Are the project leaders, management team and other cooperators well-suited to the project?</li> <li>• Does the team have complementary and integrated expertise and the leadership approach/governance and organizational structure appropriate for the project?</li> <li>• Does the project proposal have strong support from relevant organizations/ individuals?</li> </ul> <p><i>Resources</i></p> <ul style="list-style-type: none"> <li>• Are the institutional support, equipment, and other physical resources available to the investigators adequate for the project proposed?</li> <li>• Are matching funds provided by industry partners?</li> </ul>	15
<p><b>Feasibility and Impact</b></p> <ul style="list-style-type: none"> <li>• Project is manageable within proposed framework of budget, time and personnel.</li> <li>• The overall strategy, work methodology, and analyses methods are well-reasoned and appropriate to accomplish the objectives of the project. Potential problems, alternative strategies and benchmarks for success (changes in pesticide usage, grower participation/adoption) are included.</li> <li>• Does the project have clear strategy for outreach to interested farmers and agricultural consultants beyond the project duration?</li> </ul>	20
<p><b>Fiscal Merit</b></p> <ul style="list-style-type: none"> <li>• Project's budget is detailed, reasonable, and accurate.</li> <li>• Budget Narrative: Itemizes, describes, and justifies all project expenses.</li> </ul>	10
<b>Total points</b>	100