Request for Proposal of Research
Fiscal Year 2022-2023

Proposals Due: April 1, 2022, 5:00 pm PST

Background and Purpose
The California Department of Food and Agriculture (CDFA) is pleased to announce, in coordination with the California Fruit Tree, Nut Tree, and Grapevine Improvement Advisory Board (IAB), a competitive solicitation process to promote production of high-quality tree and grapevine nursery stock. Funding is made possible from assessments on fruit tree, nut tree, olive, and grapevine nursery stock.

Funding and Duration
CDFA and the IAB reserve the right to offer an award that is less than the amount requested.

Funds awarded under this solicitation cannot be expended before July 1, 2022 or after June 30, 2023. Researchers may submit multiyear projects; however, if the current year of a multi-year project is selected for funding, there is no guarantee that the project will be funded in the future.

Research Priorities
The IAB has identified the following research priorities to help prospective applicants develop their projects and submit their projects to the most appropriate priority. Additional consideration may be given for projects that address the research priorities identified below.

- **Diseases and Genetic Disorders.** Projects addressing this priority should focus on at least one of the following:
  - Developing new or improving existing detection methods for virus and virus-like diseases (ELISA, PCR, biological indicators, etc.).
  - Virus elimination research (heat therapy, cold therapy, shoot tip culture, etc.).
  - Determining spread of viruses from one plant to another and developing management strategies.
  - Genetic disorders (bud failure, crinkle, etc.).

- **Variety Identification.** Projects addressing this priority should focus on developing or applying methods to identify varieties, including ampelography, fingerprinting, DNA markers, etc.

- **Registration and Certification (R&C) Program.** Projects addressing this priority should focus on the development of improved disease detection technology for the R&C Programs.

- **Education and Outreach.** Projects submitted under this priority should focus on promoting California-produced nursery stock by improving the public’s knowledge and understanding of the California nursery industry (i.e., through the development of flyers, posters, videos).
• **Rootstock Issues.** Projects under this priority need to evaluate rootstock health and performance as it relates to the production of high-quality tree and grapevine rootstock.
  o Research on nematode distribution, nematode affects to rootstock, and development of mitigation or treatment measures.
  o Research into disease and pest-resistant rootstock varieties.
  o Development of alternatives to fumigants currently in use.
  o Research on other important diseases and pests that significantly affect the quality of rootstock.

• **Miscellaneous.** The IAB understands there is variability in research projects. For this reason, applicants may submit under this priority if projects focus on:
  o Assessment of economic impact of viruses (if data is lacking).
  o Research on other important diseases and pests that significantly affect the quality of nursery stock (e.g., crown gall).
  o Research that affects the whole industry.
  o New pests and diseases.
  o Research to improve the resilience and/or physiology of nursery plants.

**Proposal Submission Process**

Applicants are **required** to submit all of the items listed below:

1. Coversheet
2. Proposal Narrative
3. Budget Itemization
4. Proposal Presentation

Samples of these attachments are also available at: [https://www.cdfa.ca.gov/plant/pe/nsc/iab/](https://www.cdfa.ca.gov/plant/pe/nsc/iab/)

Proposals must be submitted electronically to IAB@cdfa.ca.gov 5:00pm PST on April 1, 2022.

Using the guidelines below, applicant’s proposals must include:

1. **COVERSHEET:**
   - The project title should be brief and descriptive.
   - Indicate fiscal year and projected duration of the project (i.e., ongoing, year 1 of 3, etc.). If the current year’s project is selected for funding, there is no guarantee that the project will be funded in future years.
   - Identify the project leader’s name, affiliation, mailing address, telephone number, and e-mail address.
   - Identify any cooperating personnel’s name(s) and affiliation(s), mailing address, telephone number, and e-mail address.
   - Identify the contact person and his/her mailing address, telephone number, and e-mail address for further communication if different from above.
   - See Attachment#1 for an example coversheet template. Coversheet template is also available online at: [https://www.cdfa.ca.gov/plant/pe/nsc/iab/](https://www.cdfa.ca.gov/plant/pe/nsc/iab/).
2. GENERAL GUIDELINES:

- Consult the above list of IAB Research Priorities to develop your project.

- Project Summary/Abstract – Provide a clear and concise summary of the proposed project, not to exceed one-half page. State the specific objectives of the proposed project and describe the approach to be used, as well as criteria to evaluate the project’s success. Include other ideas that may be applied to nursery stock improvement that are not mentioned in IAB’s priorities.

- Project’s Benefit to Nursery Industry – Specify the problem to be addressed by the project and describe its extent, severity, and magnitude. Explain its linkage to IAB goals. Indicate the project’s potential for measurable progress toward long-term or short-term solution(s) to the specific problem(s) addressed in the proposal. If applicable, explain the project’s contribution to current knowledge. What new information or product will the project generate? If applicable, discuss incentives for growers to adopt proposed practices. Do not exceed three pages.

- Objectives – Provide a clear, concise, and complete statement of each specific research and/or educational objective.

- Workplans and Methods – Describe the activities and/or products that address each of the stated objectives. Explain the methods to be employed, indicating data to be gathered, parameters to be measured, and methods of analysis to be used, including sampling scheme and experimental design, if applicable. For multi-year projects, include a workplan for each year of the project. The workplan should be organized into project tasks and sub-tasks, which are units of work designed to achieve specific objectives. Each task should be numerically identified and have a descriptive title, and should include the following information:
  a. Brief task objective(s)
  b. Activities and methods description
  c. Task products and estimated completion dates

- Applicant must describe methods and procedures, in sufficient detail, to provide a good understanding of how each task will be conducted. Describe interim and final products or milestones for each task. Be sure sufficient time is allocated to complete each project task. Detail must be sufficient to allow for an evaluation of the reasonability of time and cost.

- Project Management and Evaluation – Describe the role of project leaders and cooperators. Briefly explain how the various participants’ work will be coordinated. For projects that are primarily research oriented, provide a method for assessing the progress and success of the project. A peer review of on-going projects may occur, including a visit to your project site.

- Literature Review – Provide a review of the literature on similar problems. The published work of others may be quoted, provided quotations are clearly referenced. Provide information regarding this or similar proposals by you, or co-investigators, that have been submitted to other agencies or funding sources.

- Current and Pending Support – Identify the sources and amounts of all current and/or pending sources of support for this project.
3. BUDGET ITEMIZATION:
   - Provide a project budget proposal (Attachment #2). An example budget template is available online at: https://www.cdfa.ca.gov/plant/pe/nsc/iab/.
   - July 1, 2022 will be used as the project’s start date. Complete a budget table for each fiscal year (July 1 - June 30) of the project. For multiple-year projects, include a budget page for each fiscal year of the project. There is no guarantee that a multiple-year project will be funded in the future.
   - If your project requires the use and acquisition of nursery stock, please include those costs in your project budget.

   The maximum indirect cost rate is ten (10) percent of the total personnel cost (salary and fringe benefits).

4. PROPOSAL PRESENTATION:
   - In addition to a written proposal, applicants will need to prerecord a presentation outlining their proposed research and provide any relevant information for the board’s consideration. The presentation can be recorded on any streaming medium (Zoom, YouTube, iMovie, or other screen casting website) and is not to exceed 15-minutes in length. As a reference, examples of presentations from FY 2021-22 Request for IAB Research Proposals are available online at: http://maps.cdfa.ca.gov/Presentations/IAB

Review and Evaluation Process
The review process consists of two levels. The first level is an administrative review to determine whether proposal requirement was met.

The second level is a technical review by a peer review panel to evaluate the merits of the proposal using the evaluation criteria outlines in Attachment #3.

General Guidelines for Progress and Final Reports

   - Progress Reports – A minimum of one progress report must be submitted during the current funding year. An additional interim progress report may be required for consideration in evaluating funding of multiple-year projects. For each project objective:
     a. Summarize the activities that are underway to accomplish this objective.
     b. If planned activities or procedures were modified during this time period, please discuss.
     c. Include data summaries and graphs as appropriate.

   - Final Report – A final report must be submitted at the end of each fiscal year before the final invoice can be paid. Ten percent (10%) of the total contract amount will be withheld for the research project until receipt and approval of the final report. Restate the project objectives and timetable as stated in the original funded proposal and note, and justify any revisions in objectives and/or timetable as follows:
     a. Report specific accomplishments and findings during the funded period.
     b. Include data summaries and graphs as appropriate.
     c. Where possible, relate accomplishments to practical application in the nursery industry.
Progress and final reports should be limited to 2-5 pages. Please reference the assigned IAB agreement number on your reports and final invoices.

**Summary** – A concise research summary/abstract, not to exceed more than one page, must be submitted for all projects funded by IAB at the end of each fiscal year. The summary/abstract should ideally be in an informative style, such as in *California Agriculture*. Please include graphs or pictures if necessary. This summary is an essential part if any research project and will be used by IAB to communicate research findings to the nursery industry, to the press, and to others.
## IAB – Sample Coversheet

<table>
<thead>
<tr>
<th>Proposal To:</th>
<th>California Department of Food and Agriculture Pest Exclusion Branch Nursery, Seed, and Cotton Program Attn: Katherine Filippini/Phuong Lao 1220 N Street Sacramento, CA 95814 (916) 654-0435 <a href="mailto:IAB@cdfa.ca.gov">IAB@cdfa.ca.gov</a></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Title of Proposed Research:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Proposed Duration:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Starting Date:</strong></td>
<td>July 1, 2022</td>
</tr>
<tr>
<td><strong>Total Amount Requested:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Submitting Organization:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Department:</strong></td>
<td></td>
</tr>
</tbody>
</table>
| **Principal Investigator:** | PI Name  
Mailing Address  
Phone  
Email  |
| **Cooperating Personnel:** | Name  
Affiliation  
Mailing Address  
Phone  
Email  |
| **Send Award Notice to:** | Program Name  
Contact Person  
Mailing Address  
Phone  
Email  |
IAB - BUDGET PROPOSAL

Project Title/Description: _______________________________________________________

Project Leader: ______________________________________________________________

Proposed Fiscal Year: ________________

A. PERSONNEL SERVICES:
   Individual’s Classification @ $________/hr. _____ (total hr.) $________
   Staff Benefits = ______% $________

   TOTAL PERSONNEL SERVICES $________

B. OPERATING EXPENSES:
   Laboratory Supplies $________
   Travel (per diem) $________
   Postage $________
   Other: (Specify, i.e., cost of nursery stock) $________

   TOTAL OPERATING EXPENSES: $________

C. INDIRECT COST: $________

D. TOTAL BUDGET REQUESTED: $________

*Round dollar amount to the nearest dollar
*Type out acronym “FTE”
*Make sure % and dollar amount add up
Fruit Tree, Nut Tree and Grapevine Improvement Advisory Board (IAB)

Research Proposal Evaluation Form
Fiscal Year 2022-23

Please include scores for all criteria below. **Peer (science) reviewers**, please place emphasis on proposal objectives, scientific methodology, and cost to perform proposed work. **Industry reviewers**, please emphasize significance of problem to the industry, applicability of results, and whether anticipated benefits will justify cost.

<table>
<thead>
<tr>
<th>Date Submitted for Review:</th>
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<tbody>
<tr>
<td>Project/Research Title:</td>
</tr>
<tr>
<td>Years to Complete Project:</td>
</tr>
<tr>
<td>Amount Requested Fiscal Year 22/23:</td>
</tr>
<tr>
<td>Other Sources of Funding and Amount:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Evaluation: (Maximum 100 points)</th>
<th>Maximum</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>The problem identified is significant to the nursery industry.</td>
<td>20</td>
<td></td>
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<tr>
<td>The objectives identified are specific and clearly stated.</td>
<td>20</td>
<td></td>
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<tr>
<td>The research methodology is sound and appropriate for stated objectives.</td>
<td>20</td>
<td></td>
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<tr>
<td>The results will have immediate applications for the nursery industry.</td>
<td>15</td>
<td></td>
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<tr>
<td>The budget is justified and appropriate.</td>
<td>15</td>
<td></td>
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<tr>
<td>The time frame is reasonable for proposed research.</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>The proposal will stimulate funding from other sources.</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
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</tbody>
</table>

**Comments:** Please write any comments that will help the Board to evaluate this proposal, such as its scientific and technical qualities, or if this proposal duplicates other research, etc.