

## Full Proposal Instructions

Citrus trees and crops face serious threats from infectious diseases, especially citrus greening disease or huanglongbing (HLB). This disease reduces production, destroys the economic value of fruit and usually kills infected trees. The spread and cause of HLB are associated with a phloem-feeding insect (Asian citrus psyllid (ACP)) and a fastidious bacterium (*Candidatus Liberibacter*). The Citrus Research and Development Foundation established the Citrus Advanced Technology Program (CATPO9) to search internationally for solutions to control HLB through sponsored research (Figure 1).

### Supported Areas of Research

The Foundation seeks to stimulate research leading to the field evaluation of interventions to break the citrus greening disease cycle. The research topics that will be given consideration are:

**Psyllid Transmission of Disease** The Foundation expects most funding to be for proposals on comprehensive methods of controlling ACP that can be implemented over the next 3-5 years (near-term projects). Examples include the discovery and development of novel methods of biological control and ACP behavior modifying agents.

**New Ideas for Citrus Greening Intervention** The Foundation also welcomes proposals on novel methods of control made possible by the recent publication of the bacterial genomic sequence:

<http://www.citrusgreening.org/>

Grants of \$100,000 or less will be awarded to test the feasibility of new concepts. Follow-on funding will be available to conduct field tests of promising new solutions. Examples include discovery and development of therapeutics for infected trees, novel methods of biological control and control of disease symptom expression.

### Funding

Individual award amounts are not capped for psyllid control projects and are \$100,000 or less for proof-of-concept studies. The Foundation will fund projects up to 3 years duration. Preference will be given to projects whose level of effort and time-to-results are commensurate with the urgency of the disease threats facing the industry. Continued funding will be contingent upon the online submission of brief quarterly written updates and annual reports that show satisfactory progress. Indirect costs will not be funded and should not be included in the budget.

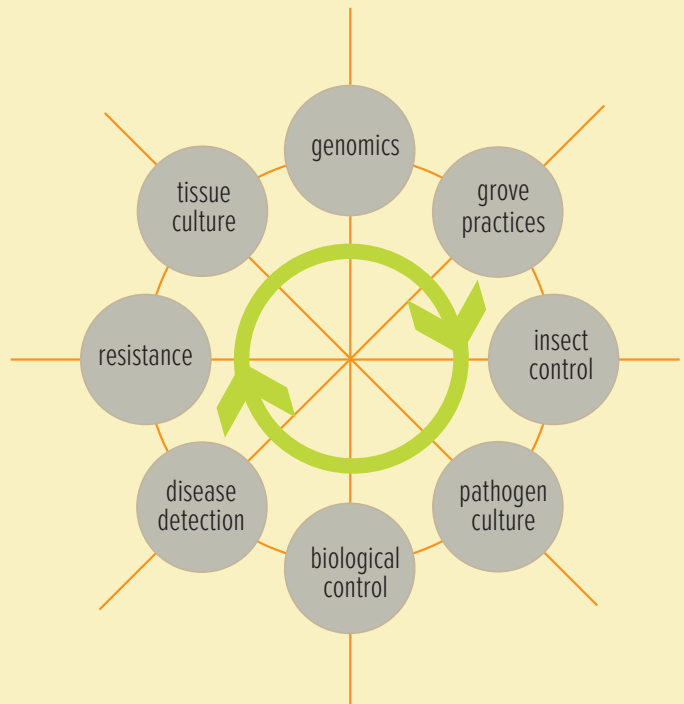


Figure 1. Some areas of research in citrus greening management.

### Eligibility

Any appropriate research institution or organization may apply for these funds, including academic, private, non-profit, commercial, federal or state and individuals from any geographical location, citizenship or residency.

### Application and Submission Information

**Submission Instructions** A single-page Preproposal Summary is required from those who plan to submit a full proposal to CATPO9. The form and instructions can be downloaded at the following URL:

<http://www.fcprac.com/proposals-2009.html/>

Our staff will evaluate Preproposal Summaries to determine the expertise needed for panel review and if necessary provide guidance in preparing Full Proposals.

The Foundation will communicate primarily through email, so applicants should provide accurate e-mail addresses. Other announcements will be through our Information Forum at [www.fcprac.com](http://www.fcprac.com), so applicants should also register there and opt-in for notices.

## Full Proposal Instructions *(continued)*

**Proposal Format and Content** Proposals should be in English and submitted as email attachments in Adobe PDF format. Page margins should be 1-inch on all four sides. Use Times New Roman or a similar typeface set to 12-point and 1.5 line spacing. Page numbers should be placed on the lower right hand corner with the PI's last name and the page number (e.g., Rogers-2). Please use single-spacing between sentences. The sections presented in Table 1 should be included.

SECTION	TITLE
1	<b>Cover Sheet</b> <a href="http://www.fcprac.com/proposals-2009.html">http://www.fcprac.com/proposals-2009.html</a>
2	<b>Abstract &amp; Project Summary</b> The abstract/project summary must not exceed 300 words. It should include the title, statement of the problem, a brief description of proposed solution to problem, and methodology.
3	<b>Project Narrative</b> The narrative should not exceed 15 pages and should include the following: <ol style="list-style-type: none"> <li>i. Introduction (should include the statement of the research question/problem, a review of relevant state-of-the-art technologies, ongoing research related to the proposed project, research goals/objectives)</li> <li>ii. Relevance of project to the program objective</li> <li>iii. Experimental Approach (proposed activities or sequence of activities to obtain results, methodology/techniques, how results will be assessed or analyzed, expected outcomes, scope of the study)</li> <li>iv. Practical Application (how research findings can be used to devise disease intervention methods)</li> <li>v. Cost/Benefit Analysis of proposed intervention, if applicable.</li> </ol>
4	<b>Principal Investigator/Project Director/Key Personnel</b> Request for proposals announcement
5	<b>Budget Form &amp; Justification</b> <a href="http://www.fcprac.com/proposals-2009.html">http://www.fcprac.com/proposals-2009.html</a>
6	<b>Literature Cited</b>

Table 1. Sections required in Full Proposal submissions.

### Submission Deadlines

Preproposal Summaries must be received by October 2, 2009. Selected applicants will then be invited to submit full proposals by October 23, 2009. Full Proposals must be received by COB on November 23, 2009 (5 pm Eastern Standard Time) (Table 2).

DATE	DEADLINE
August 21, 2009	Request for proposals announcement
October 2, 2009	Preproposal submission deadline
October 23, 2009	Invitations to submit full proposals sent to selected applicants
November 23, 2009	Full submission deadline
January 29, 2010	Award notification

Table 2. Timeline for submission and approval of CRDF proposals.

### Proposal Acceptance

Full Proposals may be ineligible for review and funding if: 1) the applicant did not receive an invitation, 2) the Full Proposal was not received by the deadline indicated in these instructions; 3) formatting guidelines (font size, page limitations, page/line numbering, etc.) were not followed, and 4) any of the required documents are missing (cover sheet, budget information, CVs, etc.).

### General Proposal Review Information

Full Proposals will be evaluated first for compliance with administrative requirements and then reviewed for technical and scientific merit by a panel assembled by the Foundation. The review panel will rely on the following evaluation criteria:

**Proposal Relevance** Clear articulation of objectives, relevance to CATP focus areas, strength of rationale, practical application;

**Proposal Quality** Appropriateness of experimental approach and methodology, consistency of timelines and milestones with nature of project and level of effort, feasibility/probability of success;

**Personnel, Facilities and Budget** Appropriateness and relevance of expertise involved, experience of key personnel, suitability of research facilities, appropriateness of budget;

**Proposal Confidentiality** Proposals will not be available to the public, but information from the proposals will be described in the recommendations of the review panel. Do not include proprietary information in the proposal. If you believe disclosing proprietary information is essential to the evaluation of your proposal, describe the circumstances of your situation in a letter and send it to [catp09@fcprac.com](mailto:catp09@fcprac.com);

**Award Notification** A list of successful award applicants will be reported in the Information Forum at [www.fcprac.com](http://www.fcprac.com) by January 29, 2010.

## Full Proposal Instructions *(continued)*

### Cooperative Agreement Terms

Communication and close collaboration with the Foundation staff is encouraged to quickly develop and commercialize promising disease interventions. Project results and data will be made available to the broader research community through the website at [fcprac.com](http://fcprac.com). Pathogen sequence information is available on the community resource web page [www.citrusgreening.org](http://www.citrusgreening.org)

Intellectual property (IP) resulting from research will be the property of the individual, institution, or corporation receiving the award. However, the sponsor will participate in licensing decisions <sup>and/or</sup> be granted non-exclusive rights to that IP for use in the Florida market. The Foundation must be notified in advance if formal IP protection will be sought. Awardees seeking to commercialize intellectual property will greatly benefit from a development partnership with the Foundation. Applicants are responsible for compliance with all applicable government regulations and permits during the performance of their research.

### Reporting Requirements

Brief, single-page quarterly updates are due on January 15, April 15, July 15, and October 15 and will summarize progress in the preceding 3-month calendar periods. Annual reports are due 30 days after the year anniversaries of the project awards. Awardees should detail progress towards stated milestones, including a summary of the relevant intellectual property, data sharing with scientific community, and next steps toward field applications.

Quarterly updates and annual reports are to be submitted online at the FCPRAC website:

<http://research.fcprac.com>

### Bibliography

Bove, J.M. 2006. Huanglongbing: A destructive, newly-emerging, century-old disease of citrus. *J. Plant Pathol.* 88(1):7-37.

### For more information

Citrus Research and Development Foundation, Inc.

- [www.fcprac.com](http://www.fcprac.com)
- [catp09@fcprac.com](mailto:catp09@fcprac.com)

