

REQUEST FOR PRE-PROPOSALS

Center for Tropical and Subtropical Aquaculture

Due Monday, June 5 2017

The Center for Tropical and Subtropical Aquaculture (CTSA) requests pre-proposals for applied research and extension that addresses problems and opportunities in the regional aquaculture industry.

CTSA stakeholders have identified the below strategic areas and species as the top aquaculture development priorities. Pre-proposals that target these strategic areas and priority species will receive highest preference. However, pre-proposals that do not fall under specific priority areas but address CTSA's mission will be considered in our development process. **Our main focus is on funding projects that will have immediate, positive impacts on the regional aquaculture industry.**

CTSA's mission is to support aquaculture research, development, demonstration, and extension education in order to enhance viable and profitable aquaculture in the United States. CTSA is funded by an annual grant from the U.S. Department of Agriculture's National Institute of Food and Agriculture (NIFA). The current CTSA region includes the following areas: American Samoa, Guam, Hawaii, the Commonwealth of the Northern Mariana Islands, the Republic of the Marshall Islands, the Federated States of Micronesia, and Palau. Pre-proposals should utilize innovative approaches that take into account the unique environmental situation of the region. **One of CTSA's primary goals is capacity building. Accordingly, we strongly encourage collaboration between institutions and agencies in the region, as well as shared funding of large priority projects. Cultivating strong regional partnerships will catalyze the greatest changes in our industry, and projects that demonstrate an understanding of this principal are more likely to be supported.**

Please note: Desired outcomes and/or deliverables are included where applicable. They represent industry-identified requests and it is strongly recommended that they be addressed in your pre-proposal.

FY 2017 Strategic Areas & Priority Species

Mangrove Crab

Mangrove crabs are a highly desired food in the Pacific islands and have thus been heavily harvested throughout the region. CTSA has supported projects to produce juvenile mangrove crabs for farming and restoration efforts in Palau, but more work is needed to produce the necessary quantities to meet the market demand. CTSA is seeking a proposal to improve culture technology to establish affordable mass hatchery production of mangrove crabs; the specific deliverable of the project should be a consistent supply of 5,000 crablets per production unit / 1.5 x 5m tank.

Shellfish

CTSA stakeholders continually express their desire to farm shellfish in Hawaii and the US-affiliated Pacific islands using traditional Hawaiian Fishponds or other aquaculture technologies, including land-based tank culture. One species in particular that stakeholders have expressed much interest in is the opihi. CTSA has supported four years of work on closing the lifecycle of this culturally significant species, but there are still bottlenecks that must be addressed in order to produce large quantities from the hatchery. CTSA is seeking a proposal to better understand and address the bottlenecks facing commercial production of opihi with an ultimate goal to stabilize hatchery production and grow out. CTSA will also consider a proposal relooking at greenwater tank culture for land based grow-out of clams and/or oysters in a recirculating polyculture system with fish or shrimp, provided the proposal can prove it is economically feasible.

Sea Cucumber farming technology

With an increased demand for sea cucumber in Asian markets, natural stocks of the species have been over harvested in some Pacific Islands, resulting in impacts to the conditions of the habitat for other species as well. To mitigate this problem, CTSA recently funded projects to develop and transfer sea cucumber hatchery technology to Pohnpei and Yap. However, researchers are still experiencing high mortality during the nursery phase before seedstock can be released into the wild or cultured on farms. CTSA is seeking a proposal to identify the cause of this mortality, and to provide solution(s) to make sea cucumber production commercially feasible.

Cost Effective Locally-Made Aquatic Feed

Affordable feed has been identified as one of the major constraints in the regional development of aquaculture. CTSA has supported many local feeds projects, including two recently approved projects to use locally available ingredients for feed production at the new OI/UH research feed mill in Hilo. However, there are still gaps in knowledge of the cost-effectiveness of producing local feeds. Considering the significance of this issue in the region, CTSA welcomes any new and innovative suggestions to make aquatic feed more affordable for farmers in the region.

Marine Finfish Farming Technology

Farming of marine finfish, such as rabbitfish, moi, Kahala, milkfish, mullet and groupers, is important for the region and has been identified as a commercial aquaculture practice with potential for growth. CTSA has currently and previously supported the development of farming technology for several of the aforementioned species, and will accept proposals to help solve remaining culture issues (primarily pertaining to reliable source of fingerlings, affordable feed and sustainable farming practices and systems, etc.). In addition, CTSA will consider proposals that readdress hatchery technology for selected marine ornamental fish (such as yellow tang and flame angelfish) from the perspectives of both supplying the marine aquarium market and the restoration of coral reefs. CTSA has supported such efforts in the past, but stopped due to a lack of progress. Therefore, we will only consider proposals that build on the previous results and present innovative and promising approaches to address the critical bottlenecks.

Other

Edible seaweed has been identified as a priority for aquaculture production in the Pacific islands. While there is some farming ongoing in Hawaii, there are still technical challenges that must be addressed to make seaweed production commercially viable. CTSA will consider proposals that seek to establish seaweed aquaculture with an emphasis on food security and without any potential threat to natural habitats.

Process and Instructions

Pre-proposals that do not follow the guidelines outlined in this section will be rejected. Properly formatted pre-proposals received by the deadline, 5pm HST Monday June 5 2017, will be reviewed by CTSA's Industry Advisory Council (IAC) and Technical Committee (TC). Only pre-proposals that receive a majority of votes will move forward with requests for a full proposal. Full proposals will receive both internal and external review for technical quality and industry impact. **Not all full proposals may be awarded.** Full proposals approved by the CTSA Board of Directors and the USDA as part of the CTSA FY17 Plan of Work are expected to have funding available for implementation by July 2018.

CTSA typically does not fund projects for more than \$100,000 per year. However, a project will not be automatically rejected if it exceeds that amount. CTSA gives preference to projects that will deliver the most benefits at the lowest cost. Due to its limited project budget (< \$600,000), CTSA will distribute funding to the highest ranked proposals until it has exhausted all available funds.

Eligible Applicants

Universities, community colleges, or nonprofit research institutions and organizations must lead project execution. Private individuals or commercial companies are welcome to participate in research work but cannot act as the prime contractor for any project.

Pre-Proposal Guidelines

When submitting pre-proposals, researchers must identify the strategic area(s) and priority targeted. In addition, they must identify the type of project they are proposing: Research, Extension, or Integrated (Research & Extension).

Although an individual may submit a maximum of three pre-proposals, a researcher can act as principal investigator to only two projects in a single funding cycle. Pre-proposals must be no more than two pages (single-spaced, 12-pt. font, 1-inch margins), and the required format is Microsoft Word.

Pre-proposals must include the following sections:

1) Proposed title or main idea

2) Strategic Area and Priority targeted

3) Problem statement

Clearly explain the significance of the targeted problem and its relation to current and future industry development.

4) Proposed objectives

Define and number objectives that are achievable and measurable. Please visit the CTSA Web site (www.ctsa.org) to view previously funded projects so that your pre-proposal does not duplicate the work of completed or current projects.

5) Expected Industry Impacts

You must clearly define how your proposed project will realistically impact the regional aquaculture industry in economic terms, and indicate the potential return on investment. Please be specific in your description. CTSA typically funds projects that benefit multiple stakeholders. However, single beneficiary projects with compelling reasons will be considered. If the project will result in a new industry, the estimated economic impact of the industry has to be discussed.

6) Approach

Describe the principal approach that the project work group will use to accomplish the objectives outlined in your pre-proposal.

7) Duration

If a project's duration is to be more than one year, then your pre-proposal must include objectives and approach for each year. Objectives listed should be accomplished within a three- year time frame.

8) Estimated budget

Estimate the amount of funding needed to accomplish objectives. A breakdown need only include total estimates for major categories, such as salary, supplies, and equipment.

9) Project work group members

List members, by name and affiliation, who will participate in the execution of the proposed project.

10) Related research

If any participant has previously received CTSA funding to address the same species or subject area covered in the current proposal (or similar issues), provide a brief statement highlighting the results of that work and justification for the proposed project.

How to Submit

Please e-mail pre-proposals to mbrooks@ctsa.org by 5pm HST, Monday June 5, 2017. If you have any questions, please contact Meredith Brooks via e-mail or by telephone at (808) 292- 1323. If necessary, pre-proposals may be faxed to (808) 259-8395 or mailed to the following address:

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