# REQUEST FOR STATEMENTS OF INTEREST/REQUEST FOR PROPOSALS NUMBER N40192-25-2-8012 PROJECT TO BE INITIATED IN FISCAL YEAR 2025

**Project Title:** BIOLOGICAL CONTROL OF CYCAD SCALE, *AULACASPIS YASUMATSUI*, ON *CYCAS MICRONESICA* 

Responses to this Request for Statements of Interest (RSOI) will be used to identify potential Recipients for a project to be funded by the Department of the Defense (DOD) to:

- 1. Develop a long-term strategy for protecting *Cycas micronesica* from A. *yasumatsui*.
- 2. Collaborate with partners conducting Cycad Aulacaspis Scale (CAS) predator surveys in the Marianas to understand what species are currently present and their efficacy and mechanism of controlling CAS.
- 3. Identify potential biological control agents to combat the *A. yasumatsui* scale insect.
- 4. The biological control agents shall include a suite of species with life history traits and CAS control mechanisms addressing a range of CAS vulnerabilities and complementary to that of existing control agents (e.g. *Rhyzobius lophanthae*).
- 5. Recipient shall identify the procedures needed for rearing and introduction of new biological control agents on Guam and Tinian.

Approximately \$251,353.56 is expected to be available to support this project (contingent upon availability of funds). The DON's obligation to pay or reimburse any costs hereunder is subject to the availability of appropriated funds and limited by funds obligated and nothing in this Agreement will be interpreted to require obligations or payments by the Federal Government in violation of the Anti-Deficiency Act, 31 U.S.C. §1341.

Competition: It is the Government's intent to use a Cooperative Agreement to award this requirement and it will be solicited via the Gulf Coast Cooperative Ecosystems Studies Unit (CESU), Hawaii Pacific Islands CESU, Pacific Northwest CESU and Rocky Mountain CESU network to any potential Recipient who qualifies under the DoDGARS 32 (Institutions of Higher Education, Hospitals, and Non-Profit Organizations).

### **Background:**

As mandated, under the U.S. Endangered Species Act (ESA), the Department of Defense is required to protect listed species and their habitat. Additionally, the legislative purposes of the Sikes Act (P.L. 86-797, as amended, 16 USC§ 670), includes the requirement that the Secretary of each military department manage the natural resources of each military reservation under their jurisdiction "so as to provide multipurpose uses of those resources." Compliance with the ESA and Sikes Act, allows military operations or exercises, essential to mission readiness and effectiveness, to proceed without delays or restrictions.

Fadang or Micronesian cycad (Cycas micronesica), an endemic plant found on the islands of Guam and Rota, was the dominant plant and the most abundant 'tree' in Guam's forests in 2000. The invasion of the cycad scale Aulacaspis yasumatsui in 2003 and the butterfly Luthrodes pandava (formerly known as Chilades pandava) in 2005 initiated an epidemic mortality of plant populations such that C. micronesica was listed as threatened under the U.S. Endangered Species Act by the US Fish & Wildlife Service (USFWS) in 2015.

The CAS insect, *Aulacaspis yasumatsui*, was originally described from specimens collected on a *Cycas* sp., in Bangkok, Thailand, in 1972 (Takagi 1977). In Thailand, this armored scale is considered a pest of cycads, but is usually maintained in low densities by parasitoids (Tang et al. 1997). Effective pest control measures are necessary to ensure the preservation of this ESA-listed species, including the introduction of natural enemies (biological control). Annually, 5-8% of the living population dies, mainly due to cycad scale pressure and its indirect effects. If this rate of loss continues, the species ESA status could change from threatened to endangered and warrant additional requirements. Determining an effective biocontrol is a step that could reduce the annual rate of decline and the possibility of changing its ESA status.

Protecting Cycas micronesica through strategic pest control is essential to maintaining access to critical training areas and bolstering mission readiness. This project will work towards the establishment of a complex of effective biological control agents to develop a long-term strategy for protecting these plants.

### **Brief Description of Anticipated Work:**

The Recipient shall:

- 1. develop a long-term strategy for protecting Cycas micronesica from A. yasumatsui
- 2. collaborate with partners conducting CAS predator surveys in the Marianas to understand what species are currently present and their efficacy and mechanism of controlling CAS
- 3. identify potential biological control agents to combat the A. yasumatsui scale insect.
  - a. The biological control agents shall include a suite of species with life history traits and CAS control mechanisms addressing a range of CAS vulnerabilities and complementary to that of existing control agents (e.g. *Rhyzobius lophanthae*); and
- 4. identify the procedures needed for rearing and introduction of new biological control agents on Guam and Tinian

Note: Please see the Statement of Work, provided as a separate document, for a full description of the project.

#### **Period of Performance:**

The proposed period of performance for the Cooperative Agreement is thirty-six (36) months from date of award. However, the parties may extend the period of the Cooperative Agreement by written modification.

A thirty (30)-day period, starting on the date of award, will be used for the Recipient to provide preliminary documents to the Cooperative Agreement Administrator and Cooperative Agreement Technical Representative. Documents include, but are not limited to, Insurance documents and certificates, Accident Prevention Plans, Draft and Final Work Plans, etc.

This project is a non-severable completion-based service that results in a comprehensive deliverable (Task J-6 – Draft and Final Project Report).

#### Materials Requested for Statement of Interest/Qualifications:

Please provide the following via e-mail attachment to Mark Fontenot (<a href="mailto:thelman.m.fontenot.civ@us.navy.mil">thelman.m.fontenot.civ@us.navy.mil</a>) and Joshua Tyquiengco (<a href="mailto:joshua.g.tyquiengco.civ@us.navy.mil">joshua.g.tyquiengco.civ@us.navy.mil</a>):

- 1) SF 424 (Enclosure 3)
- 2) Research & Related Senior/Key Personnel Form (Enclosure 4). Please see Factor 1 for additional submittal requirements.
- 3) Research & Related Budget Form (Enclosure 5). Please see Factor 3 for additional submittal requirements.
- 4) SF-LLL Disclosure of Lobbying Activities (Enclosure 6). If applicable, complete SF-LLL. Applicability: If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the grant/cooperative agreement, you must complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying."
- Government has a continuing commitment to monitor the operation of its review and award processes to identify and address any inequities based on gender, race, ethnicity, or disability of its proposed PDs/PIs and co-PDs/PIs. To gather information needed for this important task, the applicant should submit the requested information for each identified PD/PI and co-PDs/PIs with each proposal. Submission of the requested information is voluntary and is not a precondition of award. However, information not submitted will seriously undermine the statistical validity, and therefore the usefulness, of information received from others. Any individual not wishing to submit some or all the information should check the box provided for this purpose. Upon receipt of the application, this form will be separated from the application. This form will not be duplicated, and it will not be a part of the review process. This data will be kept confidential.

Reimbursement of pre-award costs will not be allowed.

Please note, that some of the forms functionality may be lost. Please visit <a href="https://www.grants.gov/web/grants/forms/r-r-family.html#sortby=1">https://www.grants.gov/web/grants/forms/r-r-family.html#sortby=1</a> to retrieve the forms directly from the Grants.gov website and use these forms when submitting your Statement of Interest.

#### **Review of Statements Received:**

Proposals will be evaluated based on the following three factors: 1) Credentials of Key Personnel, 2) Technical Approach, and 3) Reasonableness of Cost.

RELATIVE IMPORTANCE OF EVALUATION FACTORS – Factor 1, 2, and 3 are of equal importance.

NOTE: All requirements listed are minimum requirements. Offerors will be assessed on their ability to adhere to the listed requirements, complete responses, follow directions, comply with restrictions and provide quality control on their submittals. All page limits refer to 12-point font and single spaced one-sided pages. Submissions that exceed the page limitation specified within its corresponding factor may have additional pages removed from consideration.

### **Factor 1 - Credentials of Key Personnel**

The Offeror shall provide qualified personnel to design and execute all fieldwork activities and data collection methods along with any statistical analyses that may be appropriate when summarizing the data. The technical approach used must be scientifically sound and defensible using accepted methodologies. Proper experience for key personnel conducting this research is critical. Those conducting this work will meet the following minimum qualifications:

**A.** Principal Investigator (PI): Throughout performance of the Agreement, the Recipient shall provide the required natural resources services required by this Agreement.

The Principal Investigator shall have, at a minimum:

- A master's degree in biology, entomology, botany, conservation biology or similar field with three years of experience managing projects as a senior scientist or project manager working with biological studies and any other environmental related work;
- **B.** Project Manager (PM): The Recipient shall assign a PM for this Agreement, who shall be responsible for overseeing on a day-to-day basis necessary activities of the project.

The PM's oversight of the project includes:

Monitoring and controlling project costs;

- Assigning personnel consistent with the appropriate training and certifications consistent with the Agreement's requirements;
- Understanding and assuring compliance with all applicable local, Federal, DoD, and Navy/Air Force natural resources and environmental laws, policies, regulations, and other requirements;
- Being the first in line of control in ensuring that information/data obtained for the project are of high quality and accuracy; and
- Being responsible in keeping quality control and assurance inspections activities and record keeping of these inspections.

## The PM shall have, at a minimum:

- A master's degree in biology, entomology or similar field.
- Two years of experience planning or leading biocontrol program activities using integrated pest management principles.
- Two years of experience with federal and local regulations and permitting processes associated with insect pest control activities such as pesticide applications and biocontrol agent introductions.
- **C. Entomologist:** A professional entomologist shall provide technical expertise to the project team to improve the effectiveness and efficiency of biocontrol program development activities. The Entomologist shall have, at a minimum:
  - A master's degree in biology, entomology or similar field.
  - Three years of experience planning or leading biocontrol program activities using integrated pest management principles.
  - Three years of experience with federal and local regulations and permitting processes associated with insect pest control activities such as pesticide applications and biocontrol agent introductions.

Offerors shall submit documentation (i.e. resume, curriculum vitae, references, and/or similar) that substantiates the candidates meet the minimum qualifications. Information shall include the title of the project, location, and duration including the specific number of hours that were spent working on relevant projects. The Offeror shall also provide three references (with contact information) that are familiar and can confirm the candidate(s) meet the minimum qualifications. One person can occupy more than one key personnel position.

#### Factor 2 – Technical Approach

The Offeror shall develop an outline for their approach to addressing the anticipated work stated above. The Offeror shall be evaluated as to the soundness of the overall approach and use of any innovative techniques to accomplish project objectives.

#### Factor 3 - Reasonableness of Cost

After technical evaluation of the proposal, the offers will be analyzed for fair and reasonable pricing. The Offeror shall use OMB Circular A-21 "Cost Principles for Institutions of Higher Education", 48 CFR part 31 "Contract Cost Principles and Procedures," or 2 CFR 200 Subpart F "Audit Requirements" as applicable.

Evaluations will include an analysis to determine the Offeror's comprehension of the requirements of the solicitation as well as to assess the validity of the Offeror's approach. A clear cost breakdown of work elements to be accomplished detailing quantities for the various work items, unit, unit prices and extended prices will be required and will be evaluated. Evaluation will include an analysis to determine the Offeror's comprehension of the requirements of the proposed agreement as well as to assess the validity of the Offeror's approach.

Please provide your proposed budget on the provided pdf titled, "Research and Related Budget" form (Enclosure 5).

## \*Form: RESEARCH AND RELATED BUDGET:

Complete the Research and Related Budget form in accordance with the instructions on the form. You must provide a detailed cost breakdown of all costs by cost category, by the funding periods described below, and by task/sub-task corresponding to the task number in the proposed SOW. You may request funds under any of the categories listed as long as the item and amount are necessary to perform the proposed work and meet all the criteria for allowability under the applicable Federal cost principles. The budget should adhere to the following guidelines:

The budget should be driven by program requirements. Elements of the budget shall include:

- Direct Labor Individual labor category or person, with associated labor hours and unburdened direct labor rates.
- Indirect Costs Fringe benefits, overhead, G&A, COM, etc. (must show base amount and rate). Justify in Field K.
- Travel Number of trips, destination, duration, etc. Justify in Field K (on the form).
- Subcontract A cost proposal as detailed as the applicant's cost proposal will be required to be submitted by the subcontractor. If applicable, include in Research & Related Subaward Budget Attachment Form.
- Consultant Provide consultant agreement or other document that verifies the proposed loaded daily/hourly rate. Include a description of the nature of and the need for any consultant's participation. Strong justification must be provided, and consultants are to be used only under exceptional circumstances where no equivalent expertise can be found at a participating university. Provide budget justification in Field K.
- Materials Specifically itemized with costs or estimated costs. An explanation of any estimating factors, including their derivation and application, shall be provided. Include a

brief description of the applicant's procurement method to be used (competition, engineering estimate, market survey, etc.). Justify in Field K.

• Other Direct Costs - Particularly any proposed items of equipment or facilities. Equipment and facilities generally must be furnished by the cooperator/recipient (justifications must be provided when Government funding for such items is sought). Include a brief description of the applicant's procurement method to be used (competition, engineering estimate, market survey, etc.). Justify in Field K.

Budget Justification (Field K on the form): Provide the required supporting information for the cost elements as shown above (see Research & Related Budget instructions) and listed as follows: indirect cost, travel, consultant, materials, and other direct costs. Provide any other information you wish to submit to justify your budget request.

NOTE: Every deviation from the scope of work requirement must be identified. Proposer must identify the paragraph in the scope of work that is applicable and provide sufficient information to justify why the deviation is in the best interest of the government.

Please Send Responses or Direct Questions to: Mr. Thelman Fontenot, Grants Officer NAVFAC Marianas; Tel: (671) 349-4119; e-mail: <a href="mailto:thelman.m.fontenot.civ@us.navy.mil">thelman.m.fontenot.civ@us.navy.mil</a> AND Mr. Joshua Tyquiengco, Contract Specialist NAVFAC Marianas; Tel: (671) 349-3861; email: <a href="mailto:joshua.g.tyquiengco.civ@us.navy.mil">joshua.g.tyquiengco.civ@us.navy.mil</a>.

**Timeline for Review of Statements of Interest:** DON intends to use fiscal year 2025 funds for this project. In order to be considered, Statements of Interest shall be submitted for no later than 0900 Chamorro Standard Time (local Guam time) on 30 July 2025.