



مدينة الملك عبدالعزيز
للعلوم والتقنية KACST



وزارة البيئة والمياه والزراعة
Ministry of Environment Water & Agriculture
Kingdom of Saudi Arabia المملكة العربية السعودية

Red Palm Weevil Research Grant Program

CALL FOR PROPOSALS; ROUND ONE; MAY 2017

RPW Research Grant Program Secretariat
KACST | RIYADH

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Introduction to the Red Palm Weevil(*Rhynchophorus ferrugineus*) Research Grant Program

About the Program

During the last few decades, the Red Palm Weevil (RPW) has increasingly become a major threat to palm farms across the globe and especially our region. Hence, the Food and Agriculture Organization (FAO) has declared RPW as a category-1 pest on date palms in the Middle East. The first incident of infection by RPW reported in Saudi Arabia was in Alqatif (1987). Despite preventive/curative measures e.g. regular inspection of palms, pheromone trapping, insecticides/bio-pesticides treatments...etc., currently being implemented, none have been proven to be effective for RPW management. Accordingly, realizing the undisputed necessity and the need to develop alternative new methods and strategies to combat RPW, King Abdulaziz City for Science and Technology (KACST) has launched a dedicated R&D grant program to help resolve the RPW issue in the Kingdom. It is envisaged that this program will motivate and accelerate R&D themes focused on RPW management for a period of three years. This RPW research grant program (RGP) Call for Proposals (CFP) is a formal notice for the initiation of the first funding round. All eligible scholars within the Kingdom of Saudi Arabia (along with international collaborators) are invited to submit their research grant application covering the identified themes and priorities.

Program's Strategic Objectives

The RPW RGP is a concerted effort of the Saudi Arabian government to expand the knowledge base related to RPW. The Program has the following strategic objectives:

- Provide support to researchers to enhance the Saudi knowledge base in the RPW.
- Raise the role of applied scientific research to help eradicate the RPW.
- Contribute to the development of effective technologies for the eradication of the RPW.

Program Governance

The RPW RGP is a collaborative endeavor of two of the key national stakeholders dealing with the RPW challenge:

- The Ministry of Environment, water, and Agriculture (MEWA), and
- King Abdulaziz City for Science and Technology (KACST).

The Program is governed by an Oversight Committee drawn from the leadership of the previously mentioned agencies. The Program's Secretariat, responsible for smooth coordination and Program execution, resides within KACST.

R&D Focus

In consultation with leading experts in the field, the program's Oversight Committee has resolved the focus of the Program to consist of the following broad research themes:

- Early detection and monitoring of RPW infestation
- Cost effective RPW population eradication and suppression strategies
- Molecular and ecological mechanisms underlying Host-Pest interactions.
- Molecular and genetic modification approaches for RPW management
- Active monitoring and surveillance of RPW

Scope of the Program

The Program is envisioned to be administered through three rounds of competitive research grants. The first round, launched in May 2017, encourages proposals to be executed over a period of one, two, or three years. The intent is to execute projects with specific, measurable, and immediate impacts to urgently address the ever-increasing threats posed by the RPW.

To ensure selective funding of proposals of highest scientific quality and merit, the RPW RGP has set in place a highly selective process that includes an unbiased review of research grant proposal applications by independent external reviewers. The Program also adopts global best practices in research program management to ensure researchers deliver the intended results on time and within allocated budgets. More information on the grants proposal application and review process is provided in latter parts of this document.

Eligibility for Funding

Core and Participant Requirements

Research grant proposals must be prepared and produced to reflect and fulfill international research standards. The Program envisages supporting high quality research proposals submitted by individual Principal Investigators from academic/research institutions and agricultural research organizations within the kingdom. The Program encourages participants to maximally leverage their host institution's infrastructure, systems, and human resources to propose ready-to-execute projects.

Essential Activities

Proposals must focus on the following activities:

- Short- to medium-term, goal-oriented research with specific objectives;
- Information and knowledge exchange activities including sharing of research results at conferences, seminars and workshops;
- Activities to deploy research outputs and encourage adoption by industry and agricultural service organizations directly through licensing, consulting, or via spin-off startups;
- Strategic planning to achieve integration of research, education, outreach, and technology transfer and implement it in ways that engage faculty, students, and industry researchers and managers, and agricultural agencies.

Funding Level and Use of Funds

Overall Scale and Duration of Funding for the Program

The Program is anticipated to fund research over a period of three years. However, the actual funds disbursement, and therefore the number of proposals funded, will be driven by the total funds available annually, scientific quality of proposals received, and scale of investment required by selected proposals.

Scale of Funding per Proposal

The Program does not set a ceiling on funding amount per project; however, budget requested by each principal investigator (PI) must be fully, clearly, and convincingly justified. The RPW RGP assumes that proposals will leverage existing infrastructure and investments in their host institutions. Therefore,

researchers are requested to exercise good judgment to reduce use of Program funds to build infrastructure.

Use of Funds

Funding received from the Program may be used for the following categories:

- Rewards and financial incentives – broken down by specific categories – undergraduates, graduates, post graduate scholars, faculty, permanent staff, visitors, and consultants;
- Equipment to be purchased, including maintenance fees and upgrades;
- Software to be purchased, including maintenance fees and upgrades;
- Materials and supplies;
- Travel – domestic and international in separate categories;
- Fees related to management of intellectual property
- Legal and other professional services including consultant fees;
- Publication fees; and
- Support services

While the above expense categories are used to provide PIs with high-level guidance, the Program does not set limits or stringent criteria on how the funding can be best applied to achieve its goals. Rather the Program offers the PIs reasonable degrees of freedom in constructing high impact proposals. To ensure high impact within short periods, ready-to-execute proposals will be given highest priority.

PIs may have the flexibility in selecting the best possible mix of faculty, post-doctoral and graduate student researchers. PIs may also have the flexibility of selecting industrial and international experts to bring the maximum value to the Program and meet its goals.

Anticipated Duration of Projects in this Round

The general guideline is to formulate research proposals keeping short to medium-term targets in mind. The Program encourages proposers to construct proposals to be executed within a maximum of three years from date of funding award.

Extension or Renewal of Funding

The Program offers flexibility in terms of renewal of grants and extension of research projects. However, requests for renewal or extension must be comprehensively and reasonably justified. All research proposal extension requests will be subjected to stringent technical and management review. Only in cases where a renewal or extension may be deemed to further Program's goals, such requests may be approved.

Program Management

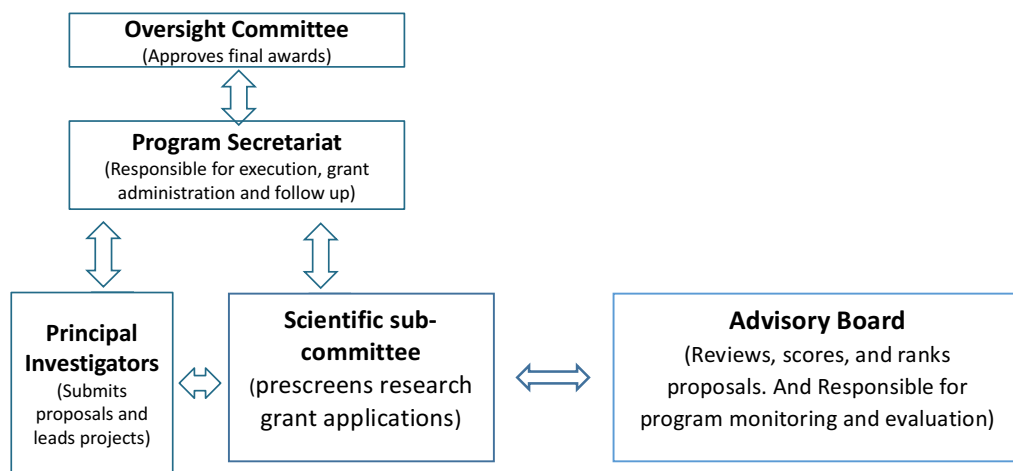
Organization Structure

The Program is governed by an Oversight Committee drawn from the leadership of The Ministry of Environment, water, and Agriculture, and from King Abdulaziz City for Science and Technology. The Oversight Committee sets the overall strategy and direction of the Program. Program execution is managed and orchestrated by the Program Secretariat, which resides in KACST. The Program Secretariat provides the administrative support required for proposal solicitation and review, and grant award management. A Scientific Review subcommittee serves as the interface between the PIs and the

Program Secretariat. The subcommittee establishes guidelines for research proposals, prescreens research grant applications for technical review by external reviewers and produces summary reports on the review process. During the prescreening process, the Scientific Review subcommittee ensures that all required information is furnished by the PIs and that the proposals selected for external review are aligned with the strategic objectives and thematic priorities of the RPW RGP.

To ensure highest level of objective review, research proposals are reviewed by a panel of external reviewers (Advisory Board) drawn from leading researchers around the world in pest control, entomology, and other related disciplines. Proposals are ranked based on the scores assigned by the external review panel unbiasedly based on the technical and scientific merits. Neither the Program Secretariat nor the Oversight Committee influences the selection of proposals.

Organization Structure Relevant to Proposal Solicitation, Review, and Selection



The Program lays emphasis on tangible research outcomes within a reasonable period through effective research management practices. Therefore quality assurance and performance management are key aspects of the Program. During the execution of the projects, the Advisory Board will act as a quality assurance and monitoring committee and will liaise with PIs to collect and compile necessary data and information on research teams, activities and outputs. This committee will facilitate reporting for each project and review of progress on behalf of the Program Secretariat. Based on periodic reviews, the committee will make recommendations to continue funding of the proposed project.

Role of Host Institutions

The Program offers significant freedom and flexibility to PIs to articulate research proposals, form their research teams, execute projects and compensate researchers who contribute effectively. However, the Program reckons that the PIs are affiliated with academic institutions that have their own policies and procedures regarding research project management. The Program encourages PIs to strictly follow their respective host institution’s policies and execute the projects in harmony with their affiliations. The host institutions must officially endorse the applications of PIs for the application to be eligible for review.

Application and Proposal Selection Process

Timeline

The following timeline will be followed for the first round of funding under the RPW RGP:

Activity/ Milestone	Date	Date Gregorian
Release of Call for Proposals	5 Ramadan 1438	31 May 2017
Deadline for Submission of Proposals	9 Dhu al-Hajjah 1438	31 August 2017
Award Announcement	~ Muharram 1439	~ October 2017

Application Process

The Program solicits applications in a predesigned format to facilitate comparable, consistent and expedited review. The portal is available to applicants through the KACST Directed Research Program website (<https://gpurc.kacst.edu.sa/DRP.aspx>) after PI's registration and account activation.

Applicants must read and understand guidelines for each section of the application form before completing the full application. No other means of submission is acceptable. All applications must be submitted no later than the deadline stipulated in the call for proposals.

Review Process

The RPW Program adheres to global best practice in research program management to ensure utmost degrees of objectivity and quality. A qualified Scientific Review Committee appointed by the Oversight Committee will monitor, guide and facilitate the entire grant review process. Throughout this process, the RPW RGP personnel and selected external reviewers will adhere to all conflict-of-interest and confidentiality requirements.

In keeping with best practices, the Program has adopted a two-step process for application review.

- First, an initial review of every application will be conducted upon receipt of the grant application forms to ensure that the proposal meets all requirements stipulated in this call for proposals document. The Scientific Review Panel will interact with PIs as needed to solicit any missing information.
- Second, complete grant applications that meet program priorities and budget constraints are subsequently evaluated in terms of scientific and technical merits. This step is conducted by at least three external and independent reviewers. Scientific committee of the program will select reviewers to each application based on relevant scientific expertise and/or research experience. Following the receipt of reviewer's feedback, a summary statement report for each application is prepared which include reviewers' written critiques/recommendations and an average final score. The summary statement is forwarded to the secretariat of the oversight committee and funding recommendation of highly scored applications will be approved. A notice of approval or rejection will be sent to the applicant once the review process is complete.

Award Process

The Scientific Committee will communicate with the PIs for necessary documentation and hand over the coordination to the quality assurance and monitoring committee. While the Program will follow KACST grant management infrastructure in general, the Program Secretariat will proactively interface with the relevant departments within KACST to ensure awarded projects are initiated smoothly and promptly.

Program Monitoring and Evaluation

The RPW RGP takes a balanced and systematic approach for continuous monitoring and evaluation. The Program Secretariat, in consultation with the Advisory Board, sets forth periodic reviews to ensure all funded project move towards timely completion with results. Technical and financial reports are expected to be submitted by the PIs in consistent format. The PIs of the winning proposals will be provided with the data collection forms and report templates upon grant award.

Reports

The Program will deploy three key tools for program monitoring and evaluation:

1. **Semi-annual Review:** to enable oversight across the Program, while at the same time, to minimize burden on the PIs, semi-annual reviews will be conducted by the Program Secretariat using simple forms and report templates.
2. **Annual Reports:** for projects spanning more than a year, an annual report will be submitted by the PIs. In this report, comprising a technical section and a management and financial section, the PIs are expected to show activities completed, ongoing activities, progress accomplished toward stated goals and any risks that may affect the project's progress.
3. **Final Project Report:** PIs will submit a final report for each project within 30 days of project completion. Like the Annual Report, the Final Report will comprise a technical section and a management and financial section. The final report will clearly articulate the research results. The report will be prescreened by the Scientific Committee before being reviewed by the Quality Assurance and Monitoring Committee. At their discretion, the Committee may have external reviewers review final technical reports.

Key Performance Indicators

A set of project performance indicators will be regularly tracked and reported by the Program. Each KPI is weighted in terms of points, and each project must exceed a certain number of points based on its budget and duration. It is critical to have the KPI's reported by PIs in the semi-annual review, annual reports and in the final project reports.

Example KPIs

- Number of publications
- Number of presentations at leading conferences
- Number of inventions disclosed
- Number of patents filed
- Number of students trained