REQUEST FOR PROPOSALS
PROJECT APIS M. ON BEHALF OF THE NATIONAL HONEY BOARD

September 23, 2019

Background
U.S. Honey yield per colony is decreasing while colony losses are increasing, as many crops dependent on pollination services continue to expand. Winter honey bee colony losses in the United States were reported at 37.7% during 2019. Colony losses are often attributed to pathogens, parasites, pesticides, hive management (queen mating, genetics, maintenance), climate, and available nutrition. United States honey yield per colony averaged 54.4 pounds in 2018, down 2% from 55.5 pounds in 2017. (www.nass.usda.gov) Sustainable beekeeping is dependent on maximizing outputs (colony health, colony numbers, pollination contracts, honey production, profitability) while minimizing the inputs (time, money, personnel). A sustainable beekeeping industry contributes to a more sustainable agricultural landscape through a stable supply of bees for crop pollination. Therefore, PAm is requesting research proposals that focus on enhancing the health, survival and productivity of honey bee colonies, which provide practical and tangible solutions to the beekeeping industry.

The funding sponsor for these proposals is the National Honey Board (NHB), with Project Apis m. (PAm) administering the proposal, accountability and funding process. The NHB funds, collected by a federal research and promotion program ($0.015/lb), for Production Research, were approximately $347,000 in 2019. PAm administers several other initiatives with funding from many sources, including corporate sponsors, private donations and grants. Past proposals received and funded by PAm and NHB reflect a similar focus on supporting the industry.

The National Honey Board is an industry-funded agriculture promotion group that works to educate consumers about the benefits and uses for honey and honey products through research, marketing and promotional programs. Project Apis m. is the largest non-governmental, non-profit honey bee research organization in the USA. Established by beekeepers and almond growers in 2006, PAm has infused over $8 million into bee research to provide growers with healthier bees resulting in better pollination and increased crop yields.

Priority Areas for Funding
With this call for research proposals, PAm is requesting proposals for research addressing honey bee health, nutrition and productivity. Priority will be given to proposals which aim to produce solutions to industry problems. Current specific areas of interest include, but are not limited to:

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• Addressing practices for sustainable profitability of beekeeping and the provision of pollination services to agriculture
• Innovations to control and manage AFB, EFB, nosema, varroa and viruses
• Studying and developing innovative management techniques including: indoor overwintering; supplemental forage impacts on pollinators, resource management, and landscape carrying capacity; cropping system management.
• addressing gaps in honey bee complete nutrition
• pollination and colony density economics, including stocking rates, land use and landscape level comparisons, transportation and inspection impacts
• cover crop efficacy and management studies including seed composition, implementation, establishment, termination, soil benefits, pest/pathogen/beneficial insect use, frost, irrigation, etc.

Other projects will be considered, and research outside the U.S. is possible (all application materials must be in English). The goal of this research is to help producers maintain colony health and honey production. Most proposals will likely be of one-year duration. If multi-year projects are considered, it is with the understanding that funding for subsequent years would be contingent on performance and National Honey Board budget availability beyond 2020. The amount of funds available for a particular proposal will depend on the number and merit of successful proposals. The submission guidelines are based on the format requested by PAm; they can be reasonably short as long as they include the items specified in the guidelines below.

Proposals must be received by Project Apis m. via online submission here http://bit.ly/pamsubmitaproposal by midnight (PDT), October 23, 2019. Copies of proposals will be distributed to a select Review Committee composed of representatives from Project Apis m. and the National Honey Board.

Since the USDA oversees these projects, a Research Rights Issue Statement between the National Honey Board and the university or agency must be signed and returned with any proposal to be considered. Funds are distributed to the researchers, periodically, upon receipt of progress reports and a final report, which will be delineated in an agreement upon funding. Reasonable restrictions exist on dissemination of research information, etc. (see Research Rights Issue Statement below).

Submission Guidelines
Please limit proposals to 5 pages of project description (e.g., introduction, relevance to beekeeping industry, background, aims/objectives, experimental plan, expected results, potential pitfalls and solutions, plan to disseminate information, summary), and 10 pages total including budget justification, PI information, etc., but excluding references).

Required elements include:
1. Title and Principal Investigator – Clearly state the title and principal investigator (PI) of your proposal. Provide the PI’s title, address, email address and telephone number. List cooperating investigators with their names and email addresses. Cooperating investigators must be aware of this proposal. If cooperating investigators are contacted by PAm and are unaware that their names have been added to the proposal, the proposal will not be considered.
2. **Information Regarding Prior or Simultaneous Submissions**– Proposals submitted to NHB/PAm that have been previously submitted to other funding organizations (e.g., USDA, NSF, etc.) must indicate which organization(s) have reviewed (and/or are simultaneously reviewing) the proposal, and must include a maximum one-page summation of that review process (e.g., changes made to address reviewers’ concerns).

3. **Date and Duration of Proposed Study - Project Timeline**– The proposed project timeline should be January 1, 2020 through December 31, 2020. Expected timeline and updates on progress, and submission to PAm of data collected. Projects may include proposed phases beyond this year, but funding will be granted one year at a time based on performance and available funds. Proposal details can be included for the anticipated duration of the study.

4. **Problem and Significance**– To provide a background to the proposed study, state the problem the study addresses and its significance to managed honey bee colonies and/or pollinated crops. If this is a continuation of a previous PAm or NHB project, please state the title and funding provided in the previously funded project, the outcome of the previously funded project and justification for continuing research.

5. **Objectives / Specific Aims**– Clearly outline the objectives of the project.

6. **Experimental Design / Materials and Methods**– Describe the experimental approaches that will be utilized to address the specific aims, detail the specific methodology that will be utilized to address the project’s objectives. This description should be scientifically sound and include logically linked experiments. Please address the feasibility of the project and include potential pitfalls and solutions when necessary.

7. **Intended Outcome**– Give a brief statement of the intended outcome of the project. This may be used to better describe your project in a press release or website, it should blend the objectives into a concise summary of the project while providing the bottom-line justification for its funding.

8. **Dissemination of Findings, including publications and presentations**– Indicate the plan to present findings at professional meetings, conferences, and in publications (be specific). In addition, clearly state how you will share this information with beekeepers.

9. **Budget Request**– Include a) salaries and benefits, b) supplies, c) equipment, and d) travel. If applicable, list other entities funding this research and the amount they are contributing. If this proposal is being submitted for consideration by other organizations, please list the organization and the amount requested. PAm and NHB policy is consistent with California commodity groups; we do not pay overhead or indirect costs. (These, typically, are expenses such as rent, utilities, depreciation, insurance, administrative or miscellaneous supplies, legal or accounting services, salaries/wages allocated to the project for persons not working directly on the project.) If proposal is for matching funds, then NHB/PAm funds will not be released unless the PIs obtain funding for the entire project and/or clearly state how PAm funds would be utilized independent of additional funding.

10. **Economic Feasibility for New Products**– If the study involves new product development, please provide economic evaluation of the new product. This would include projected cost of the final product. Justification for the projected cost and cost-effectiveness will be a prime consideration in evaluating the proposal.

11. Information regarding correspondence with PAm or NHB members regarding the project prior to proposal submission.
12. References – Provide literature references pertinent to your proposal. Letters of Support can be included but are not required.

13. Research Rights Issue Statement – Sign and return this page with your proposal. The NHB reserves the right to review and approve research results with a 60 day turnaround, in advance of publication.

Selection Criteria
A Review Committee comprised of PAm and NHB representatives will review proposals and make decisions based on the following criteria:

1. Compatibility of the research objectives outlined in the project description with priority areas and focused on solving problems relevant to the commercial beekeeping industry. PAm is interested in both short and long-term proposals, but primarily funds short-term applied research.

2. Likelihood of obtaining practical/usable results for the beekeeping industry.

3. Overall scientific merit and originality, including the project’s strengths and weaknesses.

4. Use of adequate experimental approaches, inclusion of logically linked experiments and project feasibility.

5. Inclusion of an assessment of the potential pitfalls (or risks) associated with the project and alternative strategies to mitigate those risks.

6. Inclusion of unique strategies, sustainable solutions, or establishment of knowledge that will lead to sustainable solutions in the long-term.

7. Likelihood of success (i.e., PIs credibility, record of success, experience with techniques, etc.)

8. Adequate indication that PI(s) will communicate their findings to commercial beekeepers.

9. Economical and adequate budget for proposed research

10. Proposed dissemination of findings.

Approval and Funding
PAm will notify the PI shortly after approval by the Review Committee. We anticipate approval by January 2020. Unless other terms are stated, half of the requested funding will be provided at the commencement of the study, with the remaining half disbursed upon receipt of the final report.

Expectations
PAm and NHB assume projects will be executed as stated in the proposal, specifically with reference to the defined objectives, timeline, and budget. Successful applicants will sign an agreement with PAm. Interim and annual reports will be provided to PAm, which will then be forwarded to NHB. PAm and NHB reserve the right to review and comment on publications arising from the sponsored project.

Questions Contact patty@projectapism.org with brief questions concerning submission of proposals to Project Apis m.
Research Rights Issue Statement
The undersigned agrees that all non-proprietary information collected as part of the project will be the property of the National Honey Board (the “NHB” or the “Board”). The NHB reserves the right to review and approve research results with a 60 day turnaround, in advance of publication.

In accordance with § 1212.62 Patents, copyrights, inventions, product formulations, and publications.
Except for a reasonable royalty paid by the Board to the inventor of a patented invention, any patents, copyrights, inventions, product formulations, or publications developed through the use of funds collected under the provisions of this subpart shall be the property of the U.S. Government, as represented by the Board, and shall along with any rents, royalties, residual payments, or other income from the rental, sales, leasing, franchising, or other uses of such patents, copyrights, trademarks, information, publications, or product formulations, inure to the benefit of the Board; shall be considered income subject to the same fiscal, budget, and audit controls as other funds of the Board; and may be licensed subject to approval by the Department. Upon termination of this Order, § 1212.83 shall apply to determine disposition of all such property.

I have read this statement and confirm that I, the co-investigators, and the institution presenting this proposal can comply with it.

Signed: ________________________________
Print name: ______________________________
Title: ________________________________
Date: ________________________________
Institution or company: ____________________

Sign and include this page, Research Rights Issue Statement, with your online proposal submission.