The mission of the Michigan Soybean Promotion Committee is to manage checkoff resources to increase return on investment for Michigan soybean farmers while enhancing sustainable soybean production.

For 2014, the Michigan Soybean Promotion Committee is embarking on an organizational restructuring of our production research program. The research program is intended to provide structure and focus in dividing limited research resources while ensuring flexibility and transparency. The specifics of this research structure and its relevance in this request for proposal process are outlined below.

As a farmer board of diverse, leading producers, one of our organizations strengths is articulating limitations and challenges of soybean production, not necessarily creating the solutions. This structure is intended plays to the board’s and the researcher’s strengths. Researchers are empowered to devise creative solutions and figure our new ways to approach challenges.

This Request for Proposals is viewed as the first step in developing the MSPC research plan for 2014. Not all areas in this research structure will be fully addressed with proposals and additional research and educational efforts will be filled in around funded research projects to best achieve progress on these outlined production challenges.

Background
The Michigan Soybean Promotion Committee (MSPC) has been administering programs in the areas of soybean research, education, and market development since a grower approved assessment program became effective in 1976.

Headquartered in Frankenmuth, the Committee is governed by a seven member board of soybean producers representing seven distinct soybean producing districts as defined in the 1976 approved referendum and subsequently amended. This board directs the program for which these Proposals are being solicited. Any project approved and administered by the MSPC shall be conducted in accordance with the Soybean Promotion, Research and Consumer Information Act, P.L. 101-624 and with the Soybean Promotion and Research order, 7 CFR Part 1220 by virtue of the MSPC being appointed by the United States Department of Agriculture to administer the federal program in Michigan. Through the years, the MSPC has strived to act on behalf of our states nearly 11,000 soybean producers to solicit worthy projects designed to accomplish our mission statement.

Objective
The Michigan Soybean Promotion Committee seeks research projects through the Request for Proposal process that address production challenges outlined in the 2014 Research Priorities in order to best accomplish our mission of managing checkoff resources to increase return on investment for Michigan soybean farmers while enhancing sustainable soybean production.
Procedures
Proposals should be preceded by a cover sheet that lists project title, project program area and focus area, budget request, organization information, project summary, and signature of principle investigator.

Proposal submissions should be limited to three pages and written for review by non-technical reviewers.

A project budget form should accompany each proposal. Multiple year projects must request funding annually. Supplemental detail must be provided on all direct costs including materials and supplies, travel, publication costs and computer costs that exceed $1,000. Leveraged fund sources and amounts are to be provided. Principle investor salaries and benefits, nonexpendable equipment, and administrative overhead charges including indirect costs are not permitted for inclusion on MSPC grants.

**New for 2014, MSU proposal requests will be routed through MSU’s e-transmittal system.**
A separate e-transmittal is required for each proposal. Questions regarding this process should be directed to Tonia DuMont at tdumont@msu.edu or 517-355-0123.

Non-MSU proposal requests should be sent directly to MSPC via Tim Boring, tboring@michigansoybean.org. Expect email confirmation of your proposal submission.

All forms, including the Request for Proposals, proposal cover sheet and budget sheet are available at michigansoybean.org under the Research tab, or among the Agricultural Commodity Group RfP listing at AgBioResearch’s website under Researcher Resources.

Proposals are due December 16, 2013.

Time-frame
MSPC legal requirements dictate research projects are funded in one year increments, though projects with multi-year time frames will receive priority contingent upon adequate progress and adherence to proposed time-lines.

Funding level
While no formal parameters dictate funding levels, strong justification is necessary for projects exceeding $30,000 for projects with graduate student education components or $20,000 without graduate student components.

Research Structure
The MSPC is implementing a new research structure for 2014 designed to identify production limitations and provide structure for developing strategies to address those issues. A number of research efforts will be utilized to address these production limitations, including external research projects solicited with this call for proposals. It is the intention of MSPC to tackle current and emerging production issues through a variety of research and educational approaches.
Four key research categories have been identified, each representing specific areas of soybean production and profitability.

- Resource limitations: factors that impact attaining maximum genetic potential
- Plant health: issues that compromise and detract from plant health
- Genetics: inherent genetic potential of soybean plants
- External Factors: factors that impact soybean profitability external plant production

Within each category, specific focus areas are outlined. In some cases, clear distinctions exist between focus areas. In others, complex interactions exist between focus areas, making distinctions difficult. Research projects are intended to work across focus areas and develop integrated solutions to production issues. For instance, row spacing studies impact resource competition and environmental focus areas.

For each focus area, allocation percentages are outlined. These allocation percentages are intended to serve as guidelines for the relative importance of each focus area and represent a combination of time, effort and allocated funding.

Priorities for 2014 are listed for each focus area. Research projects addressing these priorities will receive priority, though proposals for research projects addressing issues outside of these priorities will be considered.

**Evaluation Criteria**
Project proposals will be evaluated based on relevancy to 2014 research priorities, impact potential for Michigan soybean farmers, feasibility, originality, scientific soundness, investigator qualifications and collaboration. Collaboration is encouraged not only among investigators, departments, institutions, and organizations, but between disciplines and research focus areas as well. Progress in specific focus areas will necessitate diverse, multidisciplinary solutions, just as specific disciplines will have assets to contribute in multiple focus areas.

For basic science proposals in particular, these research funds are intended to function as seed money in order to leverage outside funds.

**Confidentiality**
Proposals are distributed to the MSPC board of directors and the Production Program Area representatives for review. Proposals may be selected for peer review. Proposals are considered privileged information and are shared only on a confidential basis. Special requirements for confidentiality should be included with proposals.
2014 MSPC Research Priorities

Resource Limitations

Environmental factors

Allocation: 0.5%

Goal: Maximize light, temperature, and other environmental resource limitations

2014 research priorities:
Novel approaches to increase access to light and temperature

Water

Allocation: 6.0%

Goal: Ensure optimal moisture conditions by maximizing water availability through soil water holding capacity, supplemental irrigation, and artificial drainage

2014 research priorities:
Improve irrigation management with overhead systems
Novel approaches to supplemental irrigation

Nutrients

Allocation: 12.0%

Goal: Sustainably manage crop nutrient availability

2014 research priorities:
Improve understanding foliar fertilizer yield responses to environment and management
Explore crop nutrition interaction with disease management
Role of sulfur in soybean production

Resource competition

Allocation: 12.0%

Goal: Manage biotic competition for resources

2014 research priorities:
Develop multi-faceted weed control management plans
Combat herbicide resistance issues
Optimize soybean plant populations by yield potential and environment

Resource utilization

Allocation: 2.0%

Goal: Mitigate abiotic factors that limit resource availability

2014 research priorities:
Improve seedbed preparation systems
Manage systems for optimal root growth and development
Plant physiology

Goal: Modify plant physiology to maximize genetic potential

Allocation: 9.0%

2014 research priorities:
Modify plant physiological responses to environment and management
Explore applications for foliar growth promoters
Improve understanding of fungicide yield responses in absence of disease pressure
Improve stress mitigation

Soil health

Goal: Promote biotic and abiotic interactions in the soil for increased agronomic utilization

Allocation: 3.5%

2014 research priorities
Develop integrated systems for wide-scale implementation

Plant Health

Nematology

Goal: Mitigate yield reduction from nematodes

Allocation: 8.0%

2014 research priorities:
Improve understanding of SCN distribution and prevalence
Evaluate emerging technologies for nematode control
Maintain relevant and current management recommendations

Pathology

Goal: Mitigate yield reduction from disease

Allocation: 11.5%

2014 research priorities:
Foster awareness and management of new and emerging pathology issues
Improve understanding of pathology interactions with environment and management

Entomology

Goal: Mitigate yield reduction from insects

Allocation: 2.5%

2014 research priorities:
Manage of new and emerging entomology issues
Ensure rapid response to seasonal threats
Genetics

Yield

Goal: Identification of yield potential and development of new germplasm

Allocation: 8.0%

2014 research priorities:
Identify high yielding varieties
Increase understanding of yield interactions with management and environment
Develop new high yielding varieties

Protein and oil

Goal: Increase soybean value through protein and oil characteristics

Allocation: 8.0%

2014 research priorities:
Improve national and international positioning of Michigan’s inherent high protein
Implement non-GMO varieties with high oil characteristics
Increase protein and oil with management
Develop new high protein and oil varieties

Value-added traits

Goal: Increase soybean value through genetic characteristics

Allocation: 12.0%

2014 research priorities:
Identify and develop white mold resistance
Identify and develop sudden death resistance
Develop of novel, high value, non-GMO traits

External Factors

Harvest and handling

Goal: Minimize harvest losses and quality degradation in storage

Allocation: 0.5%

2014 research priorities:
Improve combine harvest efficiency
Develop recommendations for on-farm storage in Michigan

System approaches

Goal: Develop soybean management strategies that maximize profitability and sustainability across the crop rotation

Allocation: 4.5%

2014 research priorities:
Develop system-wide fungicide management plans