MICHIGAN CROP IMPROVEMENT ASSOCIATION
P.O. Box 21008
Lansing, Michigan, U.S.A. 48909-1008

Request for Research Proposals

The Michigan Crop Improvement Association (MCIA) will accept research proposals that address their research priorities until November 30, 2019. Approximately $50,000 dollars will be available to further research that leads to improved profitability for the Michigan public seed industry. The MCIA Board of Directors at their December meeting will determine awards. A detailed list of research priorities for each targeted field crop is attached. Research awards will be made for the period of January 1, 2020 – December 31, 2020.

All proposals must follow the specified format and be a maximum of two pages in length excluding the budget attachment (12 point font with a minimum of 1" margins). They need to be submitted no later than 5:00 p.m. on November 30, 2019.

- Non-MSU researchers should provide an electronic copy of each proposal to Jackie DeSander at jdesande@msu.edu.
- **MSU researchers should submit their proposals electronically, through MSU's KC**. **A proposal document number is required for each proposal.**

PROPOSAL FORMAT

- **MCIA project number:** (to be assigned by AgBioResearch)
- **Title:**
- **Principal Investigator:** (name, organization, mail and e-mail address)
- **Cooperators:** (name, organization, mail and e-mail address)
- **Justification:** (a brief problem statement, with anticipated benefits to be realized through proposed research. MCIA priorities addressed by the proposed research should be identified.)
- **Objectives and hypotheses**: (short, focused, specific, and measurable statements with appropriate hypotheses to be tested)
- **Procedures:** (specifics of the research proposed with some details as to the treatments, experimental design(s), and methodologies)
- **Progress to date:** (summary of preliminary results from ongoing projects that will serve as a launching point for the proposed project)
- **Funds requested:** (total dollars requested from budget sheet)
- **Matching Funds:** (total dollars and sources of matching funds that will be directed to the proposed project)
- **Impact on Michigan agriculture:** (economic and ecological impact of proposed project and how it will be measured)
- **Budget:** (attachment)
- **Principal Investigator Signature:**
- **Authorizing Organizational Representative:**

Michigan Crop Improvement Association

Budget

MSU Sponsor Code: 013418
RFP Deadline: November 30, 2019
Project Date: January-December

Organization and Address Michigan State University (Department) East Lansing, MI 48824	MCIA Project No. (assigned by AgBioResearch)	
Principal Investigator(s)/Project Director(s):	Proposed Budget	Approved Budget by MCIA
A. Salaries and Wages		
1. (Co)-PI(s)/PD(s)		
2. Senior Associates		
3. Research Associates-Postdoctorate		
4. Other Professionals		
5. Graduate Students		
6. Prebaccalaureate Students		
7. Secretarial – Clerical		
8. Technical, Shop, and Other		
Total Salaries and Wages		
B. Fringe Benefits (if charged as a Direct Cost)		
C. TOTAL – salaries, wages, & fringe benefits (A + B)		
D. Nonexpendable Equipment (attach supporting data: list icons and dollar amounts for each item)		
E. Materials and Supplies		
F. Travel		
G. Publication Costs/Page Charges		
Total Direct Costs		
TOTAL FUNDS REQUESTED		

Michigan Crop Improvement Association
Research Priorities 2020

Dry Bean Research

A. Development and release of superior dry bean varieties to MCIA members
   1. High yield potential
   2. Upright plant architecture (direct cut ability)
   3. Disease resistance for Bacterial Blights, Anthracnose, Rust, BCM Virus, and Root rots.
   4. Industry acceptable color, size, and canning quality.

B. Important areas
   1. **Development of varieties that are resistant to Common Bacterial Blight**. Bacterial blight diseases have been the major factor causing the dry bean seed industry to move its seed production to western states. Research into resistance to bacterial blights would greatly enhance the ability of Michigan dry bean seed producers to compete and become successful in this market.
   2. **There is a need for the re-selection of popular or high use varieties**. Dry bean varieties tend to last longer than varieties of other field crops. Re-selection will insure that clean seed stocks are available through the life of the variety. This practice will normally extend the life of the variety.
   3. **Development of root rot resistance in dark red kidney beans**. Root rots can cause stand reductions and affect the grower's ability to successfully raise kidney beans.
   4. **Development of a high yielding navy bean**. There is a need for a high yielding navy bean variety for MCIA members.

Wheat Research

A. Development and release of superior red and white wheat varieties to MCIA members.
   1. High yield potential
   2. Excellent lodging resistance, high test weights, sprout resistance, and good winter hardiness.
   3. Disease resistance for scab, septoria, powdery mildew, and rust.
   4. Industry acceptable milling and baking qualities.
   5. The importance of wheat in a cropping system.

B. Disease Resistance
   1. **Development of scab resistance varieties**. Scab resistant varieties would greatly benefit the Michigan wheat industry from producer to processor. Soft white wheat is really a specialty crop used in the Michigan milling industry. It is important to keep competitive varieties available so that we don't loose this industry. In the past 11 years many farmers have switched to corn or soybeans and away from wheat in their cropping systems.

C. Wheat Management

1. **Determine the best management practices for newly developed MCIA wheat varieties.** As new varieties are released there is a need to determine the best way to manage these new wheat varieties. Research should focus on fertility, disease susceptibility and other factors that affect maximizing wheat profitability.

Oat Research

A. Development and release of new superior oat varieties to MCIA members.
   1. High yield potential
   2. High test weight and milling qualities
   3. Improved disease resistant and agronomic qualities