



Identifying and promoting opportunities for corn growers while enhancing quality of life.

REQUEST FOR PROPOSALS (RFP) FOR CORN RESEARCH

The Minnesota Corn Research & Promotion Council (MCR&PC) is accepting proposals related to corn production and stewardship, and expanded uses for corn.

GENERAL RESEARCH PRIORITIES

Proposals addressing needs in Production Stewardship should focus on the following topics related to corn production in Minnesota: soil fertility, nutrient management, water quality, drainage systems, agronomics, tillage and soil health, or genetics. Proposals addressing needs in Expanded Uses should focus on: new product development utilizing corn, ethanol or other distilled product utilization, green chemistry, expanded co-product utilization or export, or novel utilization for livestock. Economic return as predicted value to a Minnesota corn farmer is considered a very important component of funded research.

Where applicable, estimation of the cost to a farmer of an adopted practice or discovery OR potential economic value to a farmer of an adopted practice or discovery is strongly encouraged to be included in the proposed research.

Examples of project priorities identified by the MCR&PC Board have been listed below.

PROJECT PRIORITIES

Three general priority categories for project proposals are defined below.

A. Production Stewardship Research Priorities (New)

- Development of a multi-disciplinary research and extension/education efforts to address key challenges facing MN corn producers across focus areas including but not limited to water quality, soils, genetics, physiology, economics, and corn production systems.
- Evaluation of innovative irrigation or drainage system practices designed to optimize field productivity while maintaining sound environmental stewardship and sustainability.
- Evaluate the environmental, societal and economic impacts of true land use change.
- Research in soils and nutrient management including but not limited to phosphorus, improved time release nitrogen fertilizer, manure management, and increased understanding of nitrogen mineralization or immobilization processes.
- Evaluation of crop management decision tools and/or precision agriculture tactics for optimizing both productivity and economic advantage in corn production while maintaining sound environmental stewardship and sustainable practice.
- Development of conservation strategies such as reduced tillage in rotation systems and cover crop systems for MN corn production. Research should endeavor to address challenges including but not limited to residue management, cover crop establishment, crop competition, nutrient management, weed management and economic viability with a multi-disciplinary approach rather than a single element focus.

B. Expanded Uses Research Priorities (New)

- Research with high potential to increase bio-based opportunities for corn utilization (i.e. polymers, plastics materials and chemical extracts, etc.) as well as research advancing the progression from discovered materials to consumer products.
- Advancement in corn and/or co-product conversion to value-added products (i.e. green chemicals, fuels, nutrient sources, oil, acids, feed sources, etc.).
- Evaluation of the long term economic, environmental and societal benefits of utilizing ethanol blended transportation fuels.
- Research with potential for advancement of engine technology toward more efficient and environmentally sound utilization of ethanol blended fuels and evaluation of possible advantages of ethanol blends for ICE's beyond octane.
- Development of novel utilization of corn or co-products for livestock nutrition including investigation of challenges with DDGS variability, protein content, presence of antibiotics or mycotoxins, and determining best fit for domestic use and international export.

C. Extended Duration Projects for both Production Stewardship and Expanded Uses focus **

Ongoing extended duration projects funded prior to October 1, 2018 will have funding priority. These include projects proposed to be multi-year, with an existing contract already in place. These extended duration projects, with further work as part of the initial submitted proposal/work plan will need to submit a new work plan for continued funding in 2019. Projects that may desire additional support but have already been fully funded through the time frame proposed in the original proposal and work plan (i.e., a project initiated in 2016 and proposed to be completed in 2018) are not considered extended duration projects.

D. Unsolicited Research

- Research projects that do not match the above priorities will be given limited consideration or may be considered for partial funding to be used to leverage other funding sources.

PROPOSAL CONTENT

These instructions prescribe the proposal format and the approach for development of a preliminary proposal. It is anticipated that the project may require more than one year to complete, therefore identify realistic 12 month workloads that can be completed in each year. The web-based Primary Research Proposal form includes the following required information:

1. General Information;
2. Summary; (Language within the proposal must Not include "the Minnesota Corn Growers Association" because of auditing requirements)
3. Background and Goal(s) of the research;
4. Objectives and Timeline; (Provide general yearly timeline if project is multiple year).
5. Materials and Methods; (Citations should be limited to those needed to support the proposal)
6. Deliverables;
7. Education and Outreach; (If relevant)
8. Collaborator(s); (Identify each, their area of expertise, and email contact information)
9. A reasonably precise budget page should be completed as part of the proposal; (Individual Co-PI budgets should be also included if applicable and can be uploaded at the end of the proposal).

Funding will move forward annually with extended duration projects. Contract extensions are not required by MCR&PC to carry over unused annual funding through the duration of an extended duration project, however institution administration may require that one be filed each year. **Please note that contract extension requests at the end of the proposed work will be strongly discouraged and requests will be critically evaluated.**

Successful funding will also require the PI to submit a Synopsis (250 words or less) of the proposed project along with the Work Plan and a separate Statement of Benefits to Minnesota Corn Farmers} (125 words or less). Language must Not include “the Minnesota Corn Growers Association” because of auditing requirements. **These additional documents are not expected with the preliminary proposal but will be requested with successfully funded projects.** The synopsis should describe the relevance of the project to one or more of the research priorities and the methods proposed to produce research that will advance existing knowledge of the topic (The synopsis will also be used in the MN Corn Research Directory).

PROPOSAL DELIVERY

A proposal template for this Primary RFP is available at <http://www.mncorn.org/research/>. The completed proposal must be submitted on-line no later than 3:00 p.m., Central Standard Time, December 5, 2018.

Call or email Paul Meints, Senior Research Director, with questions concerning this RFP: 952-233-0333; Pmeints@mncorn.org.

PROPOSAL EVALUATION

The Production Stewardship Focus Team or Expanded Uses Focus Team will review preliminary proposals based on the following criteria: relevance of the project to the priorities set forth in the RFP; technical soundness and scientific merit; non-duplicative and novel objectives of the research; capabilities of investigator(s) and collaborator(s); and relevance to Minnesota agriculture. Investigators of selected projects may be asked to make an in-person presentation of the proposal **February 5th or 6th, 2019** (dates are focus team specific) at the MCGA office in Shakopee. Lack of an invitation to make an in-person presentation does not imply the proposal was unacceptable for funding consideration. Following a review by the Production Stewardship Focus Team or Expanded Uses Focus Team, successful and non-successful respondents will be notified by **February 28, 2019**. Successful proposals will need to submit a work plan, synopsis, and statement of benefits to MN corn farmers (above) by **April 1, 2019**.

CONDITIONS OF FUNDING ACCEPTANCE

A contract and associated work-plan must be submitted for selected proposals. **Funding for each successful proposal for 2019, including all extended duration projects, will also be expected to produce quarterly reports (dates will be identified in the 2019 contract) for the respective focus team. On-time reporting is directly tied to invoicing on funded projects.** Funding expectations may also include a possible media interview(s) concerning the project, set up by MN Corn communications staff, and/or an invited poster at Ag Expo (booth space expensed to the project), and a final report upon completion including a full abstract as outlined in the contract. Quarterly and final reports are considered non-proprietary and will be placed on the MCGA website and used to communicate with Minnesota corn growers and the general public. Media interviews or the poster at Ag Expo are intended to communicate with both corn farmers and the general public the value of the research and its relevancy to Minnesotans. The abstract submitted with the final report upon completion of the research will also be used in the MN Corn Research Summary. The final report on the completed project will be due before the final 10% of the funds are remitted.

The MCR&PC is a producer-funded organization and it is essential that the MCR&PC be recognized as a funding source when research information is orally presented or distributed in written form.