



INNOVATION GRANT REQUEST FOR PROPOSALS

Minnesota corn farmers may have solutions to some of the greatest challenges they are currently facing. These solutions often arise with individual innovative insights that farmers would like to try on their operations to see if the idea may improve their management practice. Research faculty also frequently have innovative research ideas which they would still like to test but that may not be ready for a full research grant. Those innovative ideas often require a small capital investment for a limited scale project to see if the idea works, and has the potential to help farmers address the challenges facing their operations.

To foster these innovative solutions, the Minnesota Corn Research & Promotion Council (MCR&PC) and the Minnesota Corn Growers Association (MCGA) have allocated funding to aid farmers (or research faculty in a Level 4 funding request: see criteria below) who would like to test or prove an innovative practice on their farm to solve a specific challenge. In the next growing season, we anticipate that there will be continued public focus on water quality, nitrate loss and soil conservation efforts in Minnesota agriculture. The Minnesota Corn Research & Promotion Council (MCR&PC) and the Minnesota Corn Growers Association (MCGA) are accepting proposals from farmers who would like to test or prove their ideas related to improved nitrogen management and/or conservation practice through a field scale project on their corn production farm or to showcase their ongoing nitrogen management/soil conservation practice through a field day on their farm. Proposals will also be accepted from research faculty with an innovative idea that matches the project priorities and Level 4 criteria listed below.

PURPOSE OF THE GRANTS

These grants are intended to showcase the ingenuity of Minnesota corn farmers or university researchers in solving questions related to production agriculture and environmental stewardship. Please see priorities below.

WHO MAY APPLY

Any active Minnesota corn farmer subject to the Minnesota corn check-off (for Levels 1,2 or 3) or university research faculty (for a Level 4 funding request: see criteria below) may apply for these grants.

PROPOSAL OPTIONS

Level 1: Up to \$5,000 (one time) to support a farmer-hosted "Innovation Field Day". The field day will be used to highlight existing innovative or established practices that demonstrate successful conservation practices, nutrient management toward reduced nitrate loss or soil conservation practice, etc. as per the priorities below. Proposals will be evaluated on practices to be showcased as well as potential for success and location across the state.

The proposed field day must be directly identified as a Minnesota Corn Growers Association (MCGA) event and coordinated through MN Corn communications staff. Other collaborators will be welcome to participate in the day's events, however the content of this field day event will be developed between MN Corn staff and the lead farmer. Field days should include invitations to local area farmers, local and state level governmental leadership, local business leadership and other influencers, and must occur between April 1 and November 15, 2017. Weather-related cancellation does not eliminate the requirement for an event to be held at an alternate date within the specified months.

Level 2: Up to \$7,000 (per year) grant toward development of a farmer lead innovative concept or best practice idea within a corn production system. Funding may be used to develop or modify equipment to test a novel

practice. Project funding is not intended to retroactively support an already funded project or ongoing farming practice at the proposed location unless it is a continuation of a previously awarded MN Corn innovation grant.

Projects should be applied to no less than 20 acres of corn production to test the innovative concept with comparison to normal production practice. A submitted proposal should involve one growing season with potential for evaluation to justify renewal of the grant each year for up to three years total. Collaboration with at least one representative from a SWCD, NRCS, university and/or other agency personnel is expected.

Up to ten projects involving development of an innovative concept may be funded.

Level 3: Up to \$30,000 (per year) grant to test a farmer lead innovative practice in replicated farm scale trials. Collaboration with a qualified individual(s) [private, agency, university, etc.] to develop a sound farm trial experimental design is expected as part of the proposal however funding is not meant to be a supplement for an ongoing/funded non-MCR&PC project. The proposal must include a statistical design as well as plans for data collection and analysis. Level 3 projects are expected to propose farm scale trials with publishable results that have the potential for proof of concept research toward broad adoption of a technique or practice focused on priorities listed in this RFP. Equipment purchase is limited to no more than 10% per year of the award and must be for the purpose of the research. Proposals should involve three growing years to capture treatments in multiple environments as part of the design. Annual renewal of the project grant will be based on evaluation of progress in line with the proposed work plan.

Up to four projects involving replicated farm trials of an innovative practice may be funded.

Level 4: Up to \$10,000 (one year) grant for a university research faculty to test an innovative or novel scientific approach or develop preliminary data to be used to leverage greater funding concerning one of the priorities identified below. Funding is not intended to be used for new equipment, salary or to supplement ongoing research but to facilitate investigation of novel ideas similar to Level 2 funding for farmers.

Up to four projects involving an innovation grant for university research faculty may be funded.

PROJECT PRIORITIES

This request for proposals has a specific focus of investigating innovations as well as replicated trial research to:

- 1) Improve nitrogen management toward reduced nitrate loss and reduced contamination of ground and surface water. This may include irrigated corn production or rain fed corn production. Projects may also include monitoring drainage tile flow, where applicable, for nutrient loss under the proposed practice(s), OR
- 2) Innovative conservation practices to reduce soil erosion, improve soil health and improved ground and/or surface water quality associated with the focus farm operation OR,
- 3) Improve and monitor existing in-field drainage systems to reduce nutrient loss from the field landscape OR,
- 4) Trials comparing and contrasting the measurable value(s) to Minnesota corn farmers of utilizing large data set decision tools including but not limited to products such as EncircaSM, Climate FieldViewTM, R7[®], Ag Solver, Adapt-N, etc. At least two of these tools must be included in the project and agronomics, economics, nutrient management, conservation and use efficiency, should be part of the evaluation.

One of the biggest challenges of implementing new ideas is having an accurate estimation of what they cost to execute. In order to discover and promote innovations that may benefit other corn farmers, producing accurate information on costs to a farmer who might implement a new practice will be very important as a final outcome of each innovation grant.

PROPOSAL CONTENT

These instructions give the applicant guidelines for the proposal format as well as expectations for reporting information gained as a result of the project (**see Conditions of Funding Acceptance below**). The instructions are intended to insure submission of a complete proposal with high potential for successful completion. Level 1 funding is for a one-time field day expense. Funding for Level 2, 3 or 4 projects will be on a 12 month basis (April 1, 2017 – March 31, 2018). For each proposal, objectives and goals must be identified that can be completed in the designated duration of the grant.

The **unbound** proposal should address the following sections in no more than a **total of five single-spaced 8.5" X 11" pages including the cover page and budget section**:

1. Cover page should be completed and attached to your proposal (**SEE BELOW**).
2. Include a brief (≤ 250 words) synopsis of what you hope to develop/demonstrate or investigate with the grant. If the project is funded, this synopsis will be reproduced in the MN Corn Research Directory.
3. Identify the Level of the proposed project matching one of the Proposal Options.
4. Identify each collaborator(s) [SWCD, NRCS, university, or other agency] for the proposal and the level of involvement. Note: At least one person from any of these entities is required as a collaborator for Level 2 or 3 grants. List each collaborator, their work affiliation and area of expertise, and how they will contribute to the project.
5. Identify all other external sources of funding associated with the project whether past, current, or applied for. Note: Failure to disclose all collaborators and external sources of funding may negate the terms of a grant award.
6. Provide as much detail as possible on the project objectives and how they will be accomplished (the methods used) during the funding cycle.
7. Identify the deliverables – what you hope to demonstrate at completion of the project.
8. Include a general itemized budget section with the proposal including but not limited to: supplies and materials, equipment, laboratory analysis, consulting or invited speaker expense, or other costs. Any equipment or components to be purchased using these funds must be identified in the initial proposal.

Note: Sections 4 and 5 above may not be applicable for Level 4 proposals.

PROPOSAL DELIVERY AND DEADLINE

Either a hard-copy or an electronic version of the proposal must be received at the contact below no later than 3:00 p.m., Central Standard Time, **December 15, 2016**.

Mail or email proposals to:

Physical Address: *Minnesota Corn Growers Association
Attn: Paul Meints - Research Director
738 1st Avenue East
Shakopee, MN 55379*

Email Address: Pmeints@mncorn.org
952.460.3601

PROPOSAL EVALUATION

Members of the MCGA/MCR&PC Production Stewardship Focus Team as well as agency and industry representatives will evaluate each proposal based on the following criteria:

- Relevance of the project to the priorities and fit to the expectations indicated in this RFP
- Soundness of proposed work and experimental design where appropriate
- Proposal ingenuity to provide possible solutions to the RFP priorities
- Proficiencies of lead farmer(s) and collaborator(s)
- Probability of successful completion and potential to be of value to MN corn farmers

Successful and non-successful applicants will be notified by **March 1, 2017**.

CONDITIONS OF FUNDING ACCEPTANCE

- A contract and associated work-plan must be completed for selected proposals.
- The lead farmer/faculty researcher on each successful proposal for 2017 will also be expected to provide one-page quarterly progress updates on *July 31, 2017, October 31, 2017* and *December 31, 2017* and an additional final report will be due on or before *April 30, 2018* for Level 2, 3 and 4 projects.
- The lead farmer/researcher may be asked to participate in interviews conducted by either Minnesota Corn communications staff or other media (we will assist in preparation if requested) during the grant period. Further public engagement, such as panel participation at a state agricultural event to discuss successes and/or challenges that occurred during the project may also be requested.
- A summary paragraph (abstract) included with the final report upon completion of the field day or research is due with the final invoice, and will also be used in the Minnesota Corn Research Summary.

**Minnesota Corn Research & Promotion Council
Minnesota Corn Growers Association
Innovation Grant Proposal Cover Page, FY17**

Proposal Title (ten words or less):

Project Farmer Leader(s)

Name:

Mailing Address:

E-mail address:

Phone Number:

Acres of corn you intend to plant in 2017:

County where the project will be located:

MCGA Member: Yes No

MCR&PC/MCGA Innovation Grant Topic

Check the appropriate Innovation Grant level the proposal matches and list all collaborators/advisors involved with the project:

Level 1: _____

Level 2: _____

Level 3: _____

Level 4: _____

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MCR&PC/MCGA Action on Innovation Grant Proposals

Funded Not Funded

FY2017 Allocation _____

Project #: _____ (will be assigned after successful funding)

MCR&PC/MCGA Comments: