



INNOVATION GRANT, 2019

REQUEST FOR PROPOSALS

To foster innovative solutions to some of the greatest challenges facing Minnesota production agriculture, 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 MCR&PC and the MCGA are accepting proposals from farmers who would like to test or prove their ideas related to improved nitrogen and/or phosphorus management or conservation practice toward improved nutrient management through a field scale project on their corn production 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 AND WHO MAY APPLY

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

Projects must be applied for and conducted by an active Minnesota corn farmer subject to the Minnesota corn check-off (for Levels 1, 2 or 3) but may include student collaborators or family members working with that farmer. University research faculty (for a Level 4 funding request: see criteria below) may also apply for these grants.

PROJECT PRIORITIES

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

- 1) Improve nutrient management toward reduced nitrate and/or phosphorus loss and reduced contamination of ground and surface water. This may include rain fed or irrigated corn production. Projects are encouraged to 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) 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 (preferably three) of these tools must be included in the project and agronomics, economics, nutrient management, conservation and use efficiency, are expected to be part of the measured outcomes.

Previously funded projects are listed by year at <http://www.mncorn.org/research/innovation-grants/>. Preference will be given to novel proposals that are not replications of previously funded projects. One of the biggest challenges of implementing new ideas is having an accurate estimate of what they cost to execute. In order to discover and promote innovations that may benefit other corn farmers, providing accurate information on costs to a farmer who might implement the new practice will be expected as part of proposal and the final reporting of each innovation grant.

FIELD DAY OPTION

Level 1: Past and/or current Innovation Grant recipients may be solicited by MN Corn to host a field day showcasing their innovation grant project to local area farmers, local and state level governmental leadership, local business leadership and other influencers. This will be a MN Corn singular event solicited and scheduled through MN Corn staff. The field day will be coordinated with the host farm and must occur between April 1st and

November 15th, 2019. MN Corn staff will assist with coordination, advertisement, planning, set-up, and costs to support a farmer-hosted “Innovation Field Day” event.

PROPOSAL OPTIONS

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 accepted 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. Replicated trials with a statistical design and analysis methodology will be given priority consideration. *Up to ten projects involving development of a novel and 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 a non-MCR&PC project. The proposal must include a statistical design as well as plans for data collection and statistical analysis. Level 3 projects are expected to comprise replicated farm scale trials with publishable results that have the potential as 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 through site visits and via progress reporting in line with the proposed work plan. *Up to six projects involving replicated 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 two projects involving an innovation grant for university research faculty may be funded.*

PROPOSAL CONTENT

These instructions are intended to 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 project funding and proposed field days will be directed by MCR&PC. Funding for Level 2, 3 or 4 projects will be available from April 1st, 2019 to January 31st, 2020. 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 synopsis (≤ 500 words) of what you hope to investigate/research/demonstrate 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. Note: Level 4 funding has no collaborator requirement.
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.

Project Farmer Leader(s)

Name:

Mailing Address:

E-mail address:

Phone Number:

Acres of corn you intend to plant in 2019:

County where the project will be located:

MCGA Member: Yes No

MCR&PC 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 Action on Innovation Grant Proposals

Funded Not Funded

FY2019 Allocation _____

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

MCR&PC Comments: