

2010 Wisconsin Fertilizer Research Program Request for Proposals

GENERAL INFORMATION

The Fertilizer Research Fund is derived from a tonnage assessment on fertilizer and soil amendments sold in the state. As directed by State Statutes [Sec. 94.64 (8m)], **proposals should outline an applied research study that addresses a component of a problem in the areas of soil management, soil fertility, or plant nutrition; or that addresses groundwater and surface water problems that may be related to fertilizer usage.** Funds can also be used for other designated activities that promote efficient and proper usage of fertilizer materials and can be used to disseminate the results of this research.

The mission of the Fertilizer Research Council is:

To fund research and other designated activities to provide a scientific basis for and promote the philosophy that the fertilizer industry supports economically and environmentally sound recommendations, practices and technologies on fertilizer material usage by the end user.

RESEARCH CRITERIA

Research proposals should detail original ideas specific to soil fertility, soil management, or plant nutrition, and be founded on current and future issues of importance to crop producers, the fertilizer industry, scientists and surface/groundwater protection.

High quality, well written proposals that focus on research problems related to the criteria herein will stand the best chance of receiving funding. Researchers seeking ancillary research funding have improved funding success. Creative and new project ideas with the potential for impacting a large audience will be given more attention.

This is a competitive grant program. All proposals are evaluated by out-of-state professionals in soil fertility and the fertilizer industry. Review criteria include emphases on originality, relevance and importance, achievable research objectives and logical methods. A well defined outreach component is very helpful in attaining a positive evaluation. The proposals are then reviewed and ranked by representatives of UW-CALS, and finally by the seven-member Fertilizer Research Council (FRC), which is comprised of representatives from farming, industry, and environmental specialties.

ELIGIBILITY AND AWARD

Researchers from the UW System are eligible to apply. If approved, funding is provided on a fiscal year basis (July 1-June 30) with potential for annual renewal for up to two additional years. **Funds awarded in response to this call will be available July 1, 2010.** A one to two month delay may occur when transferring funds to campuses other than UW-Madison. Pre-spending authority is granted for UW-Madison researchers, in which case accounts are created as early as April 1. Support renewal is given on an annual basis **pending evidence of progress and availability of funds.** Funding priority is given to successful continuing projects.

An annual progress report must be supplied by late December each year of funding, with a final report due within six months of project support termination.

PRIORITY RESEARCH TOPICS (All proposals will undergo review and ranking, regardless of topic)

Explore fall-applied nitrogen stability in Wisconsin soils.

Research Ca/Mg ratios related to liming and pH.

Effects of Manganese on winter wheat and soybeans.

Study freshwater fish-based fertilizers; their macronutrient content, plant availability, and the possibility of PCB (and other organic) contaminants that may possess health hazards if land-applied to specific crops and/or at certain rates. Similar studies could be performed on other waste-derived fertilizer and/or soil amendment products.

Study the variability of soil sample results taken in spring vs. summer vs. fall.

Research intense nitrogen management on corn to maximize yields, i.e. timing, number of applications, type of products, total amount applied, stabilizing agents.

Micronutrient availability and response when seed applied.

Test surface banding liquid phosphorous and potash applied at crop removal rates, compared to broadcast P and K on moderate to optimum testing soils. Test on corn and soybeans.

Discover whether any nutrient "cycling" is occurring in no-till/minimum till fields. Is the corn root system pulling nutrients from lower in the profile and is P and K from the surface moving down into the profile?

Sulfur fertilization for soybeans being applied pre-plant with maintenance fertilizer.

Research synergies and growing practices of potato/vegetable production in dairy operations. How does the 590 Standard effect commercial vegetable crop production?

Effect of dairy manure on sandy soils – are nutrients more available in this form?

Alfalfa production on low to medium pH soils (sands) – what can be done in the short term?

Update UW recommendations for micronutrients based on tissue samples (i.e. zinc on corn, manganese on soybeans, boron on alfalfa & corn).

Managing potassium on potatoes. Compare current practices of pre-plant and starter K applications to those two plus some K at hilling. Try to increase efficiency of K through application timing.

OTHER RESEARCH WILL BE CONSIDERED (See page 1, paragraph 1)

APPLICATION PROCESS

All necessary proposal documents can be found online at – <http://www.soils.wisc.edu/frc/>

1. New Research Proposals: UW-Madison applicants: Submit paper proposal and WISPER transmittal (with proposal attached) to CALS Research Division, 240 Agricultural Hall, by **August 28, 2009**. CALS will send 16 paper copies to Program Coordinator when processing is finished (or by September 4, 2009).

*Non UW-Madison applicants: Submit 16 paper copies (please print front and back of page to conserve paper) to the Program Coordinator by **September 4, 2009**. This assumes your proposal has met the requirements of your school or college.

2. Researchers are **strongly urged** to credit the Fertilizer Research Program when presenting results from projects funded in whole or part by the Fertilizer Research Fund. Doing this helps raise awareness of the program, and has the potential to help increase program funding for future research.

3. Proposals not fitting the format or requirements will be returned if ample time remains to make revisions. There is no limit to the number of new proposals submitted or funded per individual researcher.

4. Appropriate use of funds is detailed in the attached document "*Award Terms and Policies*".

5. Progress Reports for Continuing Projects: Submit the progress report, scope of work, and detailed budget to CALS Research Division, 240 Agricultural Hall, by **December 29, 2009**. CALS will send 10 paper copies to the Program Coordinator when processing is finished (or by January 5, 2010).

6. Principle Investigators must present their new research proposals and continuing project reports to the Fertilizer Research Council on **January 7 2010**, on the UW-Madison campus.

7. Proposals that show ancillary support from industry sources, commodity groups, etc. are encouraged. It is not necessary to show in-kind support from faculty and staff salaries. Ancillary support is requested for informational purposes only. Documentation/letters of ancillary support are, however, required. A relevant "Current and Pending" or partial list of pending support document is requested, if applicable, and may be used in conjunction with the supplied budget form.

8. Funds may be withheld for continuing projects if reporting requirements are not met. **You must submit an annual continuing progress report, clarification if there is to be a change in the scope of work submitted previously, and a detailed budget for the upcoming continuation year for each subsequent year of funding.**

TIMETABLE

June 2009	Request for new proposals distributed
August 28	UW-Madison applicants – full proposal due to CALS Research Division, 240 Agricultural Hall. Submit paper proposal with WISPER transmittal.
September 4	New proposals (16 paper copies from CALS) due to FRP Coordinator. Non-UW-Madison applicant submission deadline.
September 4 – December	Proposal review process
December 29	UW-Madison continuation applicants – continuing progress report, scope of work, and detailed budget due to CALS Research Division, 240 Agricultural Hall.
January 5, 2010	Continuing progress reports (10 copies from CALS) due to FRP Coordinator.
January 7, 2010	PI's present new proposals and reports to the Fertilizer Research Council.
February, 2010	FRC decides award recipients and PI's are notified of award status.
July 1, 2010	Funds available for awarded projects. Pre-spending is available (April 2010).

CONTACT & SUBMISSION INFORMATION

WFRP Program Coordinator:

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INSTRUCTIONS FOR PREPARING NEW RESEARCH PROPOSALS

Please follow these instructions when preparing your new proposal. Electronic versions of all necessary pages can be found online at <http://www.soils.wisc.edu/frc/pi.php>

1) Title Page: Please use the attached **New Proposal Title Page**.

2) Narrative: Include the title of your project on the narrative page. **Please do not include your name or any co-investigators names in the narrative of your project, for review purposes.**

- a. **Justification and Statement of Problem** - clearly state the **relevance** of the project, and why it should be funded by the FRP in particular. Include the importance of the problem, and describe the need for research.
- b. **Summary of Previous Work** – briefly review the results of relevant literature or unpublished findings as they relate to your research methods and the stated problem.
- c. **Hypothesis and Objectives** - State overall research hypothesis and specific objectives. What do you hope to accomplish? Objectives should be stated in such a way as to be verifiable upon completion of the project.
- d. **Approach** - Describe your research plan and methods, including standard techniques, special equipment, computer models, etc., to be used. Include a description of analytical and statistical methods, and the kinds of results you expect to generate.
- e. **Outreach Plan** – Identify potential users of the information to be developed in the project and/or explain how this information is applicable to the problem or opportunity being addressed. Describe how the information will be disseminated to users.

3) Budget: Complete the attached **Budget Request** page as part of your proposal. Completely outline and itemize the proposed budget for the first year. Estimate the total second and third year budget if applicable/possible. Include “Current and Pending” document if applicable.

See Timetable on page 4 for submission deadline information.