MINNESOTA DEPARTMENT OF AGRICULTURE

February 2, 2008

To:

The Honorable Jim Vickerman, Chairman
Senate Ag, Vets Budget and Policy Division
75 Rev. Dr. Martin Luther King Jr. Blvd., Room 226
St. Paul, MN 55155-1606

The Honorable Al Juhnke, Chairman
House Ag, Rural, & Vets Finance Division
485 State Office Building
100 Rev. Dr. Martin Luther King Jr. Blvd.
Saint Paul, Minnesota 55155

From: Joe Martin, Assistant Commissioner, MDA
CC: Mr. Larry Muff, Chair, MN Agricultural Fertilizer Research and Education Council
Greg Buzicky, Director, Pesticide and Fertilizer Management Division, MDA
Steve Ernest, Director, Finance and Budget Division, MDA

Re: MN Agricultural Fertilizer Research and Education Council Legislative Report

The attached report is submitted in response to the following 2007 legislative directive:

> "$600,000 the first year is for grants for fertilizer research as awarded by the Minnesota Agricultural Fertilizer Research and Education Council under Minnesota Statutes, section 18C.71. No later than February 1, 2009, the commissioner shall report to the house and senate committees with jurisdiction over agriculture finance. The report must include the progress and outcome of funded projects as well as the sentiment of the council concerning the need for additional research funded through an industry check off fee".

The report includes the following materials:

- Timelines and accomplishments of the Council
- Listing and location of currently funded projects
- General summary of the sentiment of the Council
- Submitted letters of support
- ~~Estimates of refund costs by MDA (Letter to the Chair)~~
- ~~Additional details on funded projects.~~

Please let me know if you need any additional details.

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Attachment #1 Legislative Report, January 30, 2009

Milestones of the Ag Fertilizer Research and Education Council

- Nominations were submitted and official appointments were made by the Commissioner of Agriculture (summer of 2007);
- The Council officially started on 1/1/08, however many unofficial organizational tasks began in November, 2007;
- The Council quickly developed by-laws, elected officers, and develop internal operating procedures and utilized the "Recommendations of the Ag Nutrient Task Force Report" as the guiding principles (November, 2007 through January, 2008);
- Council identified priority needs to address Minnesota's current soil fertility conditions and fertilizer recommendations (November, 2007 through January, 2008);
- MDA assisted the Council in the development of an effective grants program using the "Request for Proposal" process (December, 2007 through January, 2008);
- Nineteen proposals, totaling $1.2 million, were submitted (January, 2008);
- Project managers, representing all nineteen projects, provided oral presentations to the Council (February, 2008);
- Nine projects were funded by AFREC using the entire allocation ($552,000). The MN Corn Growers funded two additional projects with their check-off program (February, 2008);
- All contracts were awarded in time for spring field work (April, 2008);
- Significant efforts were made by the researchers from the University of Minnesota and USDA-Agricultural Research Service to quickly implement the first year of field work;
- The Minnesota Crop Production Retailers Short Course was an excellent opportunity to showcase many of the 2008 activities; 500+ ag chemical retailers, crop consultants, state and federal agency staff and researchers attended the event (December, 2008);
- Every project is required to provide an oral annual update to the Council. Annual reports will eventually be readily available on the web and used for numerous winter workshops for producers and ag professionals (December, 2008);
- The Council met December 17, 2008 to discuss long-term funding options.

Minnesota's Agricultural Fertilizer
Research & Education Council
a farmer-led program to advance soil fertility research, technology development and education

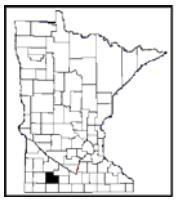
Project Overview

The Council awarded $552,000 to nine projects in 2008 and they are categorized into the following four topic areas:

A. Nitrogen, Phosphorus, and Potassium Production Research ($294,353)

1. ***Impact of Phosphorus Fertilization Strategies on Efficiency of Nitrogen Use by Corn Rotated with Soybean***

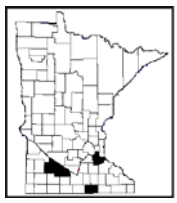
Dr. Daniel Kaiser, UM & Southwest Research and Outreach Center,
AFREC Funding: $96,721, Project Duration: 4/2008 to 3/2011



Project Brief: Soaring fertilizer prices have producers wondering if higher phosphorus (P) soil test levels are needed to maximize their nitrogen fertilizer inputs. New research will examine how phosphorus management strategies affect nitrogen use and the potential interaction with soil variability across the field.

2. ***Fertilizer Requirements for Native Perennial Plants Harvested for Biomass***

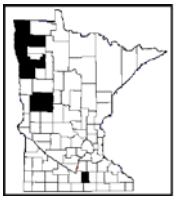
Dr. Craig Sheaffer, University of Minnesota,
AFREC Funding: $55,928, Project Duration: 4/2008 to 6/2010



Project Brief: Despite the great amount of interest in raising alternative energy crops, little is known on how to fertilize them. This project will determine fertilizer requirements for native perennials in a number of locations across Minnesota

3. ***Efficient Management of Nitrogen Fertilizer for Wheat Grown in Minnesota***

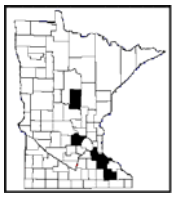
Dr. Daniel Kaiser, UM & Northwest Research and Outreach Center,
AFREC Funding: $77,431, Project Duration: 04/2008 to 12/2010



Project Brief: Improved varieties and greater yield potentials create the need for updating the nitrogen recommendations for spring and winter wheat.

4. ***Validating Topdressed K Fertilizer Recommendations in an Alfalfa-Corn Rotation***

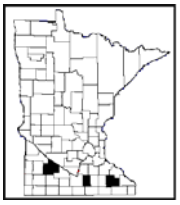
Dr. Michael Russelle, USDA-Agricultural Research Service & UM,
AFREC Funding: $64,273, Project Duration: 04/2008 to 03/2011



Project Brief: Potassium is crucial for top alfalfa yields and persistence, but K prices have tripled. This on-farm project will determine the optimum K rate in the last year of alfalfa, and on both N and K fertilizer needs for the following corn crop.

B. Sulfur and Micronutrient Production Research ($119,449)

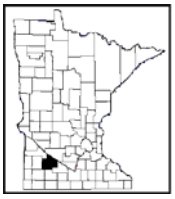
5. ***Zinc and Sulfur Fertilization for High Yield Corn Production***



Jeff Vetsch, UM Southern Research and Outreach Center,
AFREC Funding: $30,197 Project Duration: 04/2008 to 03/2010

Project Brief: With record setting corn yields over the past decade, there is a lot of interest in micronutrients for high yielding conditions. Effects of sulfur and zinc applications in starter-band and broadcast applications will be determined.

6. ***Tillage and Sulfur Management for Corn in Fine Textured Soils***

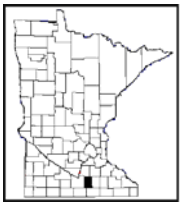


Dr. Jeff Strock, UM Southwest Research and Outreach Center,
AFREC Funding: $89,252, Project Duration: 04/2008 to 03/2012

Project Brief: This project will investigate the impacts of different tillage systems on sulfur mineralization and the need for supplemental S on corn.

C. Agricultural Water Quality Impacts ($123,198)

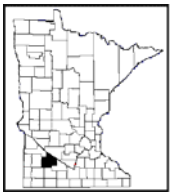
7. ***Minimizing Nitrate Loss to Drainage by Optimizing N Rate and Timing for a C-C-S Rotation***



Dr. Gyles Randall, UM Southern Research and Outreach Center,
AFREC Funding: $35,860, Project Duration: 07/2008 to 03/2011

Project Brief: With the potential to see more corn-corn-soybean rotations, a long-term study site at the Southern Research and Outreach Center (Waseca) will provide new fertilizer recommendations and information on the water quality percolating through the tile drains

8. ***Drainage Control to Promote High Crop Yields and Diminish Nutrient Losses from Agricultural Fields in Minnesota***

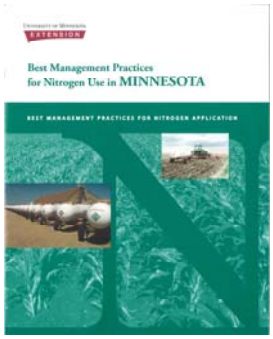


Dr. Jeff Strock, UM Southwest Research and Outreach Center,
AFREC Funding: $87,338, Project Duration: 04/2008 to 03/2010

Project Brief: A field-scale demonstration in Redwood County will provide farmers the unique opportunity to learn about the impacts of controlled drainage techniques on yields and drainage losses.

D. Ag Fertilizer Related Educational Programs ($15,000)

9. Advancing Improved Management of Nitrogen in Minnesota With Best Management Practices (BMP) Publications



Dr. John Lamb, UM and SROC,
AFREC Funding: $15,000, Project Duration: 04/01/2008 to 09/30/2008

Project Brief: The new nitrogen BMPs were just released and with the financial assistance from the Council, this critical management information is now getting into the hands of thousands of producers.