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

Final Report

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In Minnesota, Best Management Practices (BMP's) for nitrogen use were first formalized in publications in the early 1990's. Research that focused on N management did not stop at that time. Development of improved management practices for N fertilizers is a continuous process that requires dynamic research efforts. Since the early 1990's, N management practices have been revised and updated based on an extensive data base.

Based on new research, the original BMP's have been revised and updated and were published as part of this project. The audience was composed of farmers, ag-professionals, and federal and state agency personnel.

The revised BMP's emphasize the agronomic, economic, and environmental aspects of N management. They compliment the adoption of the new concept for N rate guidelines incorporated into Extension educational programs beginning in January of 2006. The soaring cost of fertilizer N places additional emphasis on the publication of BMP's. The revised BMP's concentrate on management practices that keep losses of fertilizer N to a minimum.

In addition to the printed copies, the BMP publications were placed on appropriate web sites within the University of Minnesota system and fully integrated into the existing educational network of the University of Minnesota Extension Service.

Because of diversity of soils and climate, there is no single set of BMP's that fits the entire state of Minnesota. Therefore, a set of seven publications was prepared and published. The titles, number printed, and number left are in Table 1.

The publications were distributed to the Extension Educators in the Commodity Crops Area of Minnesota Extension, Research and Outreach Center Soil Scientists, State Soil Extension Specialists, Individually mailed to attendees of the World of Nitrogen extension program in Fall 2007, commodity crop grower meetings, and through a Minnesota Department of Agriculture mailing.

The publications have been well received. They were award winning in the Extension division of the American Society of Agronomy publication contest. The authors wish to thank the Agricultural Fertilizer Research and Education Council for the funding to publish this set of publications.

Table 1. Publication title, number printed, and number left to distribute.

Title	Number printed	Number left
Best Management Practices for Nitrogen Use in Minnesota	4580	1000
Best Management Practices for Nitrogen Use in Northwestern Minnesota	650	100
Best Management Practices for Nitrogen Use in Southwestern and West-Central Minnesota	2600	700
Best Management Practices for Nitrogen Use in South-Central Minnesota	2650	400
Best Management Practices for Nitrogen Use in Southeastern Minnesota	2650	500
Best Management Practices for Nitrogen on Coarse Textured Soils	600	50
Best Management Practices for Nitrogen Use: Irrigated Potatoes	600	100