TITLE: 4R Plant Nutrition: linking science to practice

SPEAKER: Dr. Tom Bruulsema

LOCATION: Room 1307-Thornbrough Bldg

TIME: 3:30 pm

DATE: February 13

ABSTRACT: The global fertilizer industry has adopted 4R Nutrient Stewardship as an innovative approach for fertilizer best management practices. The concept is simple—apply the right source of nutrient, at the right rate, at the right time, and in the right place—but the implementation is knowledge-intensive and site-specific. The term "right" considers economic, social, and environmental dimensions essential to sustainability of agricultural systems. The 4R Plant Nutrition Manual, released in 2012 by IPNI, outlines the scientific principles that define the four “rights.” This presentation will provide an overview of these principles, and illustrate their application to current nutrient stewardship issues, including:
1) interactions of nitrogen with climate change impacts on agriculture,
2) management of phosphorus to control harmful algal blooms,
3) maintenance of soil fertility,
4) fertilizing crops for qualities that improve human health.

Biography: Tom Bruulsema has been directing research and education programs focused on responsible management of plant nutrition since 1994. He represents the International Plant Nutrition Institute (IPNI), a not-for-profit, scientific organization in the Northeast region of North America. Dr. Bruulsema is a Fellow of the Canadian Society of Agronomy, the American Society of Agronomy and the Soil Science Society of America, and a Certified Crop Adviser. He has research experience in soil science with Cornell University and the University of Minnesota, and in Bangladesh agronomy with the Mennonite Central Committee.