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NORTH CENTRAL EXTENSION-INDUSTRY SOIL FERTILITY CONFERENCE

109 E. Main St., Monticello, IL 61856

51st Annual

## NORTH CENTRAL EXTENSION-INDUSTRY SOIL FERTILITY CONFERENCE

17-18 November 2021





# 51st Annual NORTH CENTRAL EXTENSION-INDUSTRY SOIL FERTILITY CONFERENCE

#### **WEDNESDAY, NOVEMBER 17**

1:00 pm	Dr. Bijesh Maharjan, Co-Chair, Welcome
1:05 pm	Raj Khosla, Farming the Data: New Paradigm in Precision Agriculture
1:40 pm	<b>Trenton Roberts,</b> A New Frontier Below the Horizon: My Work with Pivot Bio Biologicals
2:15 pm	Poster Break
3:00 pm	Emerson D Nafziger, The MRTN Approach: Past, Present, and Future
3:35 pm	Carrie Laboski, Implementation and Validation of the MRTN Recommendation System in Wisconsin
4:10 pm	<b>David Franzen,</b> Independence of Yield and N-Rate, and Use of EONR in N Fertilizer Recommendations in North Dakota
4:45 pm	Poster Break and Cash Bar
5:45 pm	Banquet and Awards

#### **THURSDAY, NOVEMBER 18**

THURSDAY	, NOVEMBER 18
8:00 am	Carolyn Dindorf, Chloride from Fertilizer and Water Pollution – Should I Be Concerned?
8:35 am	Daniel Kaiser, Should Potassium Chloride be Applied to Soybean?
8:55 am	<b>Dorivar Ruiz Diaz,</b> Evaluation of Soil Test Methods and Early Tissue Analysis to Assess Potassium Response in Soybean
9:15 am	Poster Break
9:45 am	<b>Alan Blaylock,</b> Fertilizer Manufacture - Converting Nature's Nutrient Storehouse to Plant Nutrition
10:20 am	<b>Laila Puntel,</b> Impact of Site-Specific Variability on the Effectiveness of Active Canopy Sensors for In-Season N Management in Corn
10:40 am	<b>Jason Clark,</b> Corn Nitrogen Fertilizer Management Practices in Eastern South Dakota
11:00 am	Larry Cihacek, Some Thoughts on Nutrient Mineralization and Cycling in No-Till Systems
11:20 am	Dr. Bijesh Maharjan, Co-Chair, Closing Session/Adjourn

#### **POSTER PRESENTATIONS**

#### GENERAL

Banded Fertility: Music for Higher Corn Yields

Scott Foxhoven - University of Illinois

Comparison of Mehlich-3 and Haney H3A-4 Soil Tests in Kansas Soils

Bryan Rutter - Kansas State University

Effect of Liquid Calcium as a Liming Agent in Soil

Ben Setchell - University of Kentucky

Implications of Clay Mineral Analysis for Improved Calibration of Corn Potassium Fertilizer Recommendations

Andrew Ahlersmeyer - South Dakota State University

Maize Yield Increased by Optimal Timing and Placement of Polymer-coated Nitrogen Fertilizer

Stephen Schwartz - University of Illinois

Site-Specific Yield and Protein Response to Nitrogen Rate and Timing in Winter Wheat

Jose Guilherme Cesario Pereira Pinto -University of Nebraska-Lincoln

Soil Mineral Nitrogen Response to Nitrogen Fertilizer Application in Corn Early Growth Season

Pedro Morinigo - Kansas State University

#### **GRADUATE AWARD STUDENT POSTER**

Biomass and Nitrogen Partitioning of the Modern Russet Varieties of Potatoes Under Nitrogen Stressed and Optimum Conditions

Ashmita Rawal - University of Wisconsin-Madison

Can ProveN Reduce Corn Nitrogen Requirement in Minnesota?

Mason Currie - University of Minnesota

Comparative Effects of Herbicide, Nitrogen Inhibitors and Nitrogen Source on Nitrification and Corn Yield

William Neels - University of Nebraska Lincoln

Corn Response to Phosphorus Fertilization and Evaluation of Soil Test Methods in Kansas Soils

Gustavo Roa - Kansas State University

Nutrient Removal and Nutrient Harvest Index of High-Yield Corn Under Intensive Management

Garrett Verhagen - Purdue University

Soil and Soybean Responses to Planting into Terminated Prairie Strips

Cole Dutter - Iowa State University

Soil Health Indicators Help with Fertilizer Application Decisions in South Dakota Corn

Benjamin Groebner - South Dakota State University

Synergism Between Lime and Phosphate Fertilizer Application Enhances Soil Phosphorus Availability

Marcos Harm Loman - University of Illinois

Winter Wheat Grain and Straw Impacts from Autumn Starter and Spring Nitrogen Fertilizer Strategies

Lacie Thomas - Michigan State University

#### GRADUATE AWARD STUDENT/STATE POSTER

Can Soil Health Metrics Improve Standard Soil Fertility Recommendations?

Jeffrey Svedin - University of Missouri

Managing Nitrogen to Optimize Yield and Quality of North Dakota Two-row Malting Barley

Brady Goettl - North Dakota State University

#### STATE POSTER

High Gypsum Application Rates Impacts on Iowa Soil Properties, Dissolved Phosphorus Loss, and Crop Yield

Antonio Mallarino - Iowa State University

Nitrogen Timing Fertilization Strategies for Winter Wheat in Wisconsin

Carrie Laboski - University of Wisconsin-Madison

Seed Germination as Influenced by Fertilizer Type, Seed Coating, and Duration of Storage

Edwin Ritchey - University of Kentucky

Soil Fertility Research in Manitoba

John Heard - Manitoba Agriculture

Soybean Growth and Yield Effects from Starter Fertilizer and Nitrogen Application

Storm Soat - Michigan State University