

49th Annual

NORTH CENTRAL EXTENSION-INDUSTRY SOIL FERTILITY CONFERENCE

5-6 November, 2019

Airport Holiday Inn
Des Moines, Iowa

2019 PLANNING COMMITTEE

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South Dakota State University

Edwin Ritchey

University of Kentucky

Antonio Mallarino

Iowa State University

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Purdue University

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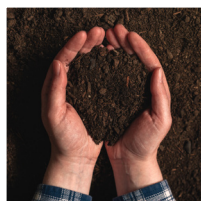
University of Nebraska-Lincoln

Seth Purucker

Michigan State University

Conference Organizer: Quentin Rund, PAQ Interactive, Inc.

ONLINE PROCEEDINGS: northcentralfertility.com



49th Annual NORTH CENTRAL EXTENSION-INDUSTRY SOIL FERTILITY CONFERENCE

TUESDAY, NOVEMBER 5

SESSION 1 - Moderated by John Jones, TFI

1:00 pm	Welcome
1:05 pm	Melinda Sposari , <i>Fertilizer: Past, Present, and Future</i>
1:40 pm	Paul Fixen , <i>A 2020 Vision on Nutrient Use Decisions</i>
2:15 pm	Flash Talks
2:40 pm	Poster Break

SESSION 2 - Moderated by Daniel Kaiser, Minnesota

3:10 pm	Sulfur Panel
3:15 pm	Shaun Casteel
3:35 pm	Jasper Teboh
3:55 pm	Kyle Freeman
4:15 pm	Panel Discussion Q & A
5:00 pm	Poster Break / Cash Bar
6:30 pm	Banquet and Awards

WEDNESDAY, NOVEMBER 6

SESSION 3 - Moderated by Dave Franzen, NDSU

8:00 am	Antonio Mallarino , <i>Efficacy of Variable-Rate Application Technology for Phosphorus, Potassium, and Lime Management</i>
8:35 am	Carl Rosen , <i>The Ins and Outs of Biological Crop Stimulants</i>
9:10 am	State Report: Indiana, Jim Camberato , <i>Corn Response to In-Furrow Biostimulants</i>
9:35 am	State Report: Kansas, Dorivar Ruiz-Diaz , <i>Evaluating Relationships between Soil Respiration and Nitrogen Use Efficiency in Corn</i>
10:00 am	Poster Break

SESSION 4 - Moderated by Dorivar Ruiz-Diaz, Kansas State

10:30 am	State Report: Minnesota, Fabian Fernandez , <i>Re-Evaluating Rate, Time, and Placement of Urea and Other Nitrogen Sources in Minnesota</i>
10:55 am	State Report: Nebraska, Virginia L Jin , <i>How Agronomic Management Affects Soil Nitrous Oxide Emission</i>
11:20 am	State Report: South Dakota, Jason Clark , <i>No-till and Cover Crops Influence Soil Health and Nitrogen Rate and Timing Recommendations: Early Results</i>
11:45 am	Closing Session / Adjourn

POSTER PRESENTATIONS

STATE REPORTS

1. **Edwin Ritchey** – University of Kentucky, Poster title: Does Starter Fertilizer Benefit Late Planted Corn?
2. **John Sawyer** – Iowa State University, Poster title: Evaluation of sulfur fertilizers in corn production.
3. **David Dunn** – University of Missouri, Poster title: Four R Nitrogen management for cotton. MU-FDRC research update.
4. **David Franzen** – North Dakota State University, Poster title: Nitrogen credit for long-term no-till crop production in North Dakota.

GRADUATE STUDENT AWARD WINNERS

5. **Giovani Preza-Fontes** – University of Illinois, Poster title: Poster title: Soil N₂O emissions in continuous corn as affected by 4R and cover crops.
6. **Dakota Miller** – Purdue University, Poster title: Nitrogen and sulfur application effects on soybean quality and yield.
7. **Camila Martins** – Iowa State University, Poster title: Winter Cereal Rye Nitrogen Response and Fertilization Requirement
8. **Christopher Weber** – Kansas State University, Poster title: Evaluation of soil test methods and crop response to phosphorus fertilization in Kansas.
9. **Sam Leuthold** – University of Kentucky, Poster title: Understanding spatial variability in cover crop growth and decomposition.
10. **Seth Purucker** – Michigan State University, Poster title: Integrating multiple-input management systems to improve soft red winter wheat grain yield
11. **Chris Pfarr** – University of Minnesota, Twin Cities, Poster title: Side-dressed swine manure slurry via dragline hose produces comparable corn grain yields as commercial fertilizers
12. **Deepak Ghimire** – University of Nebraska, Lincoln, Poster title: Can nitrogen application rate and time

management contribute to yield benefit in dryland winter wheat?

13. **Greg McGlinch** – Ohio State University, Poster title: Optimizing Nitrogen Rate to Maximize Winter Malting Barley Grain Yield While Meeting Protein
14. **Hannah Francis** – University of Wisconsin, Madison, Poster title: Nitrogen benefits when inter-seeding red clover into continuous corn.
15. **Alexandra Walters** – University of Wisconsin, Madison, Poster title: Nitrogen Application, Biological N Fixation, and N Uptake

OTHER STATE POSTER SUBMISSIONS

16. **Eric T. Winans** – University of Illinois, Poster title: Variation among commercial corn hybrids in response to agronomic management.
17. **Benjamin Wiegmann** – University of Illinois, Poster title: Does maize need pre-plant N if sub-drip fertigation can be used to provide season long N?
18. **Scott Foxhoven** – University of Illinois, Poster title: Is there a better way to fertilize corn with potassium?
19. **Sonia Menegaz** – University of Minnesota, Twin Cities, Poster title: Nitrogen source and application timing to improve corn yield and reduce nitrate in tile-drain water.
20. **Jared Spackman** – University of Minnesota, Twin Cities, Poster title: 4R nutrient management for corn production on upper Midwest soils.
21. **Amin Rahhal** – South Dakota State University, Poster title: Do cover crops improve soil health and enhance nutrient availability to cash crops?
22. **Hunter Bielenberg** – South Dakota State University, Poster title: Does cover crop composition improve soil health and enhance nutrient availability to cash crops?
23. **Debankur Sanyal** – South Dakota State University, Poster title: cover crops influence soil health and nutrient cycling in a multi-location study in South Dakota.

Thanks to our Sponsors

We would like to extend a great thank you to all of our sponsors for our upcoming conference, as well as our past conferences. If you would like to become a sponsor for the 50th Annual North Central Extension-Industry Soil Fertility Conference, please contact us!



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109 E. Main St.
Monticello IL 61856

217-762-7955 | info@northcentralfertility.com
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