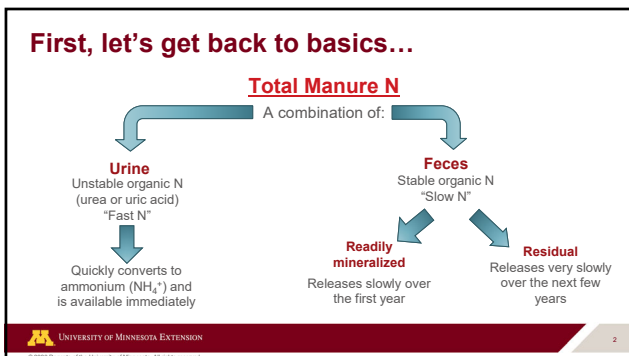
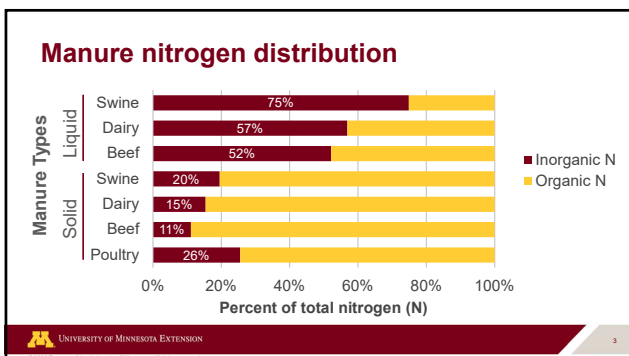




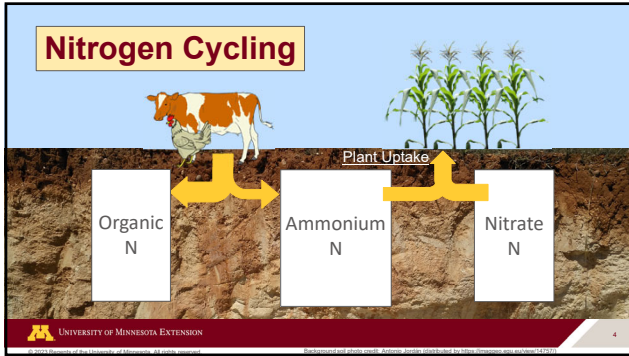
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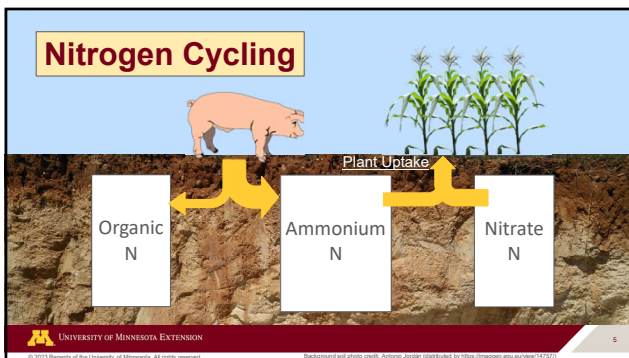
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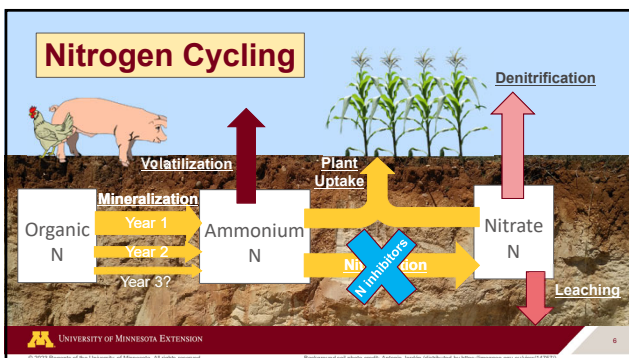
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Research in north central United States

- Waseca, Minnesota
- Boone, Iowa
- Arlington, Wisconsin



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Minnesota Research

- Study in south central Minnesota over 4 years (2011-2014)
 - Jeff Vetsch was the primary researcher
- The objective of this study was to determine the effects of swine manure application timing and nitrapyrin (Instinct™, Dow AgroSciences) on corn grain yield and N availability


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Study details

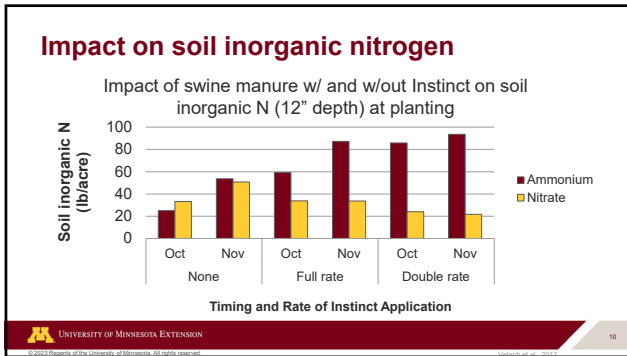
- Finisher swine manure:
 - 120 lbs of available N/acre
 - Sweep injected
- Two manure application timings:
 - Early October (immediately after soybean harvest)
 - Early November (soil temps < 50°F)
- Three rates of Instinct: 0, 35 (aka “Full rate”), and 70 oz./ac (aka “Double rate”)



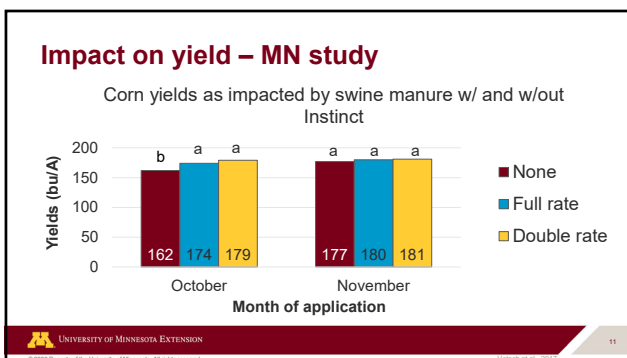
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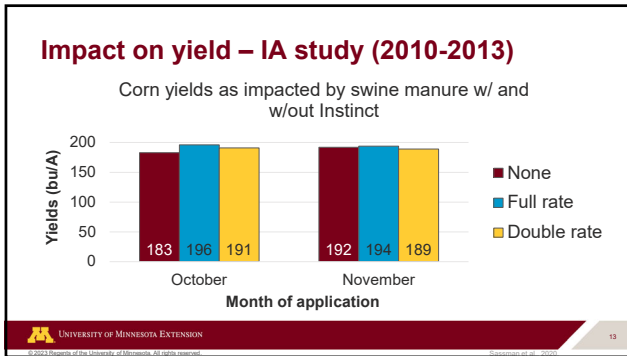
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Iowa Study

- Primary researchers:
 - Aaron Sassman and Dr. John Sawyer
- 2010-2013
- Similar setup to MN study
 - Liquid swine manure
 - Manure was coulter injected

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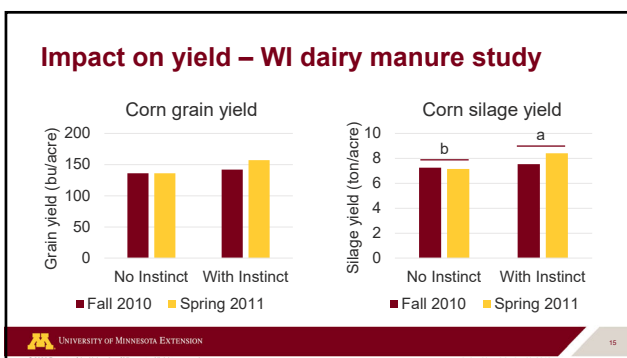
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Wisconsin Study

- Primary researchers:
 - Dr. Carrie Laboski and Todd Andraski
- 2011 growing season
- Broadcast dairy manure
 - Fall versus spring application, with and without Instinct

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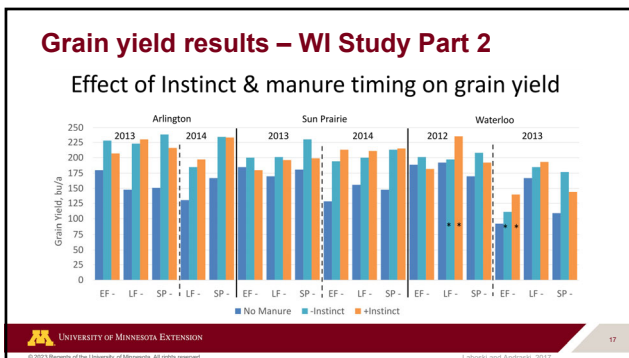
Wisconsin Study Part 2

- Primary researchers:
 - Dr. Carrie Laboski and Todd Andraski
- 2012-2014 growing season
- Injected dairy manure
 - Early fall, late fall, versus spring application, with and without Instinct



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Take home messages

- Swine manure
 - Instinct reduced nitrification in the soil
 - Only improved yields when applied in October
 - Delaying application to November - even without Instinct – had equivalent yields to October applications with Instinct
- Dairy manure
 - WI – works sometimes, doesn't others. Not recommended at this time in their state.

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Driven to Discover

Thank you!

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