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2007 Wisconsin Corn Conferences

Joe Lauer
University of Wisconsin

Belmont, Baldwin, and Kimberly
January 23-25, 2007
Overview

• Are these yields trends real? Can we count on them?
  ✓ Maximum yields
  ✓ Transgenic corn

• Continuous corn production systems
  ✓ Tillage * Rotation interactions

• The “Lancaster rotation experiment”
  ✓ Agronomics of rotation
  ✓ Economics of rotation

• "Managing the Band"
  ✓ Strip tillage
  ✓ Fertilizer placement
  ✓ Berms
Highlights for corn production during 2006

• **Records**
  - First time a location had a 10-yr average > 200 bu/A = 3 locations
  - Top 50 Zone performances = 10 hybrids
  - Top 50 Location performance = 4 hybrids

• **Growing season**
  - Lost grain trials at four sites
    - Imbibitional chilling
    - Second year of drought in NW WI
  - “Glad it is over!”

• **New things in the Hybrid Trials**
  - “Systems” trials
    - RR – S, SC
    - CRW – S, SC
    - Organic – S
  - Silage performance index = Milk2006
Know Your Production Costs
Changes in Grower Return With PEPS Participation
(1987-2003, n=128)

- Cash Corn = $24/A yr
- Livestock Corn = $13/A yr
- Soybean = NS

Grower return ($/A)

Year in PEPS

http://corn.agronomy.wisc.edu

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Highest recorded corn yields (bu/A) in Wisconsin counties (1983-2006). Data includes participants in the NCGA yield contest and Wisconsin PEPS program.
Corn yield in Wisconsin since 1866

- Top Hybrid = 2.6 bu/A yr
- Arlington = 2.7 bu/A yr
- Marshfield = 2.6 bu/A yr

Source: UW Hybrid Trials

- 1866 to 1930 = 0.0 bu/A yr
- 1931 to 1995 = 1.4 bu/A yr
- 1996 to 2006 = 1.9 bu/A yr

Source: USDA Statistics
Deviation from Trend Yield for Corn in Wisconsin

(Trend calculated using simple regression for each period)

Source: USDA-NASS
Corn Yield Progress in Wisconsin
Top Producer in Category (1983-2006)

All = 3.6 bu/A yr

- PEPS Cash Corn = 4.8 bu/A yr
- PEPS Livestock Corn = 4.4 bu/A yr
- NCGA Non Irrigated = 4.8 bu/A yr
- NCGA No Till/Strip Till Non Irrigated = 4.5 bu/A yr
- NCGA No Till/Strip Till Irrigated = 3.0 bu/A yr
- NCGA Irrigated = 3.2 bu/A yr
- NCGA Ridge Till Irrigated = 3.3 bu/A yr
- NCGA Ridge Till Non Irrigated = 3.5 bu/A yr

Data derived from grower yield contests (PEPS = 1987 to 2006; NCGA = 1983 to 2006)
Production Zones = S, SC, NC, and N
## 2006 Wisconsin Corn Performance Trials
### Grain Summary

<table>
<thead>
<tr>
<th>Location</th>
<th>1996-2005</th>
<th></th>
<th>2006</th>
<th></th>
<th>Percent change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Yield</td>
<td>N</td>
<td>Yield</td>
<td></td>
</tr>
<tr>
<td>Arlington</td>
<td>1821</td>
<td>205</td>
<td>251</td>
<td>215</td>
<td>5</td>
</tr>
<tr>
<td>Janesville</td>
<td>1820</td>
<td>204</td>
<td>230</td>
<td>230</td>
<td>13</td>
</tr>
<tr>
<td>Lancaster</td>
<td>1819</td>
<td>197</td>
<td>188</td>
<td>225</td>
<td>14</td>
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<tr>
<td>Fond du Lac</td>
<td>1614</td>
<td>178</td>
<td>34</td>
<td>202</td>
<td>13</td>
</tr>
<tr>
<td>Galesville</td>
<td>1611</td>
<td>189</td>
<td>170</td>
<td>206</td>
<td>9</td>
</tr>
<tr>
<td>Hancock</td>
<td>1610</td>
<td>206</td>
<td>178</td>
<td>234</td>
<td>13</td>
</tr>
<tr>
<td>Chippewa Falls</td>
<td>1508</td>
<td>147</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Marshfield</td>
<td>1342</td>
<td>163</td>
<td>158</td>
<td>170</td>
<td>4</td>
</tr>
<tr>
<td>Seymour</td>
<td>1184</td>
<td>163</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Valders</td>
<td>1510</td>
<td>160</td>
<td>142</td>
<td>184</td>
<td>15</td>
</tr>
<tr>
<td>Rhinelander/White Lake</td>
<td>493</td>
<td>113</td>
<td>50</td>
<td>190</td>
<td>68</td>
</tr>
<tr>
<td>Spooner</td>
<td>1560</td>
<td>142</td>
<td>100</td>
<td>75</td>
<td>-47</td>
</tr>
</tbody>
</table>
Frequency of ‘Non-Transgenic’ Corn Hybrids and Soybean Varieties Yielding Above and Below the Trial Average in UW Trials

![Graph showing frequency of corn and soybean varieties yielding above and below the trial average.](http://corn.agronomy.wisc.edu)
Insect Resistant Transgenic Corn Hybrids

European Corn Borer
(Ostrinia nubilalis)

Corn rootworm
(Diabrotica sp.)

Northern

Western

Southern

Map indicating high and moderate risk areas.
Advantage of “YieldGard ECB” (Mon810) to non-transgenic corn hybrids (All hybrids or Top 20% of hybrids)

-20-15-10 -5 0 5 10 15 20
Grain yield (bu/ A) advantage

Mon810 N=3276
Mon810 + IT N=9
Mon810+ Mon863 N=77
Mon810+ MonGA21 N=97
Mon810+ Nk603 N=1025
Mon810+ T25 N=33
Mon810+Mon863+ Nk603 N=285
Advantage of “Herculex I” (TC1507) to non-transgenic corn hybrids (All hybrids or Top 20% of hybrids)

Grain yield (bu/A) advantage

-20 -15 -10 -5 0 5 10 15

0 5 10 15


Favors Non-Transgenic

TC1507 N=73

TC1507 + T25 N=140

TC1507 + DAS591227 N=3

TC1507 + Nk603 N=6

TC1507 + DAS591227 + Nk603 N=5

Favors Transgenic

-2 -3 -4 -5 -17 6 7 5

http://corn.agronomy.wisc.edu

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Advantage of “YieldGard CRW” (Mon863) to non-transgenic corn hybrids (All hybrids or Top 20% of hybrids)

Grain yield (bu/A) advantage

Favors Non-Transgenic

Favors Transgenic

Mon863 N=36
-22
-10
-1

Mon810+ Mon863 N=77
-11
-8

Mon863+ Nk603 N=80
-8

Mon810+ Mon863+ Nk603 N=285
-4

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Hybrid Selection Decisions Involving Transgenic Traits

- Select hybrids using multi-location performance data
- Evaluate consistency
- “Buy the traits you need”
- “Every hybrid must stand on its own for performance”

✓ DO NOT buy based upon “family” performance, base genetics, etc.
Guidelines for Continuous Corn Tillage * Rotation and the importance of Nitrogen
Corn Yield Response Following Five Years of Soybean
(Arlington, WI; 1987 to 2005; Control Treatments)

Yield (bushels/acre)

<table>
<thead>
<tr>
<th>Cropping Sequence</th>
<th>Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-SB</td>
<td>175</td>
</tr>
<tr>
<td>1st-yr</td>
<td>176</td>
</tr>
<tr>
<td>2nd-yr</td>
<td>159</td>
</tr>
<tr>
<td>3rd-yr</td>
<td>152</td>
</tr>
<tr>
<td>4th-yr</td>
<td>153</td>
</tr>
<tr>
<td>5th-yr</td>
<td>152</td>
</tr>
<tr>
<td>Cont</td>
<td>148</td>
</tr>
</tbody>
</table>

A: 18%
B: 19%
C: 7%
D: 2%
E: 2%
F: 3%
G: 3%
H: 3%
I: 3%
J: 3%
Corn Yield Response Following Five Years of Soybean
(Arlington, WI; 1987 to 2005; Control Treatments)

![Chart showing corn yield responses to different cropping sequences and tillage methods. The chart includes bars for each year from 1st to 5th year and a control (Cont) treatment. The yield values are indicated for each year and sequence, with letters A to F representing comparisons between treatment groups. The chart highlights the benefits of fall chisel plow and no tillage methods on yield improvements.]
Guidelines for Second Year Corn - Soil Fertility

- **Additional nitrogen is needed with continuous corn**
  - Recommended N rates are at least 15 - 45 lb/A higher for corn following corn than for corn following soybean (Laboski et al., 2006).

- **Optimum N rate may need to be adjusted due to N cost: corn price ratios**

- **P & K fertility**
  - One bushel of corn removes 0.38 and 0.29 lbs P2O5 and K20, while one bushel of soybean removes 0.80 and 1.40 lbs of P2O5 and K20. Thus, 150 bu of corn removes 57 and 44 lb/A, while 50 bu soybean removes 40 and 70 lb/A.
    - A one-time switch to second year corn will have negligible effects.
    - With many years of continuous corn, growers should monitor P & K levels and fertilize accordingly.
Corn Yield Response to N Following Five Years of Soybean (Arlington, WI; 1987 to 1994; Average of Tillage Treatments)

- Low N
- Rec N

Yield (bushels/acre)

<table>
<thead>
<tr>
<th>Cropping Sequence</th>
<th>Low N</th>
<th>Rec N</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-SB</td>
<td>143</td>
<td>159</td>
</tr>
<tr>
<td>1st-yr</td>
<td>149</td>
<td>160</td>
</tr>
<tr>
<td>2nd-yr</td>
<td>119</td>
<td>145</td>
</tr>
<tr>
<td>3rd-yr</td>
<td>108</td>
<td>137</td>
</tr>
<tr>
<td>4th-yr</td>
<td>106</td>
<td>139</td>
</tr>
<tr>
<td>5th-yr</td>
<td>106</td>
<td>139</td>
</tr>
<tr>
<td>Cont</td>
<td>104</td>
<td>133</td>
</tr>
</tbody>
</table>

C-SB 1st-yr 2nd-yr 3rd-yr 4th-yr 5th-yr Cont

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The Lancaster Rotation Experiment
A Long-Term Cropping System Study

- A multiple crop rotation experiment established in 1966
- **Objective:** To compare the benefits of growing corn continuously and in rotation using commercial nitrogen fertilizer.
- RCB in a split-plot arrangement with two replications.
  - ✔ Main-plots = 21 rotations
  - ✔ Split-plots = four N levels in corn

http://corn.agronomy.wisc.edu
# Rotation History of the Lancaster Rotation Experiment

<table>
<thead>
<tr>
<th>Year of change</th>
<th>Rotations</th>
<th>Corn N rates (lbs N A⁻¹)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1966</td>
<td>CC CSCOaA CCCOaA CCOaAA COaAAA</td>
<td>0, 75, 150, &amp; 300</td>
</tr>
<tr>
<td>1977</td>
<td>CC CSCOaA CCCAA CCOaAA CCAA AA</td>
<td>0, 50, 100, &amp; 200</td>
</tr>
<tr>
<td>1987</td>
<td>CC CSCOaA CCCAA CCOaAA CS CA AA</td>
<td>0, 50, 100, &amp; 200</td>
</tr>
<tr>
<td>2005</td>
<td>CC CSCOaA CCCAA CCOaAA CS CSW</td>
<td>0, 50, 100, &amp; 200</td>
</tr>
</tbody>
</table>

- C, Corn; S, Soybean; Oa, Oat with alfalfa seeding; A, Alfalfa; W, Wheat
- C, first phase; C, second phase; C, third phase

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Corn Yields in the Lancaster Rotation Experiment
(Analysis over time: 1970-2004)
## Analysis over Time and Space
### (2-yr and 5-yr Cycles)

<table>
<thead>
<tr>
<th>Cycle</th>
<th>CC</th>
<th>Cycle</th>
<th>CS</th>
<th>Cycle</th>
<th>CSCOoA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>C</td>
<td>1</td>
<td>S</td>
<td>1</td>
<td>C</td>
</tr>
<tr>
<td>2</td>
<td>C</td>
<td>1</td>
<td>S</td>
<td>1</td>
<td>C</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>2</td>
<td>S</td>
<td>1</td>
<td>C</td>
</tr>
<tr>
<td>4</td>
<td>C</td>
<td>2</td>
<td>S</td>
<td>1</td>
<td>C</td>
</tr>
<tr>
<td>5</td>
<td>C</td>
<td>3</td>
<td>S</td>
<td>1</td>
<td>S</td>
</tr>
</tbody>
</table>
What are we looking for?
How can we tell whether a cropping system is changing?

- No change (NS)
- Deteriorating (-)
- Improving (+)

Yield vs. Time

http://corn.agronomy.wisc.edu

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Corn grain yield response over time to N rate in a continuous corn (CC) rotation at Lancaster, WI.

- 0 lb N/A
- 50 lb N/A
- 100 lb N/A
- 200 lb N/A (P < 0.10)

Grain yield (bu/A)

Cycle (5-yr between 1970-2004)
Is Corn Grain Yield Changing? (Is there a slope?)

First Corn Phase in 5-yr Cycles (1970 - 2004; 7 Cycles)

<table>
<thead>
<tr>
<th>Rotation</th>
<th>N rate (lb N A⁻¹)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>bu A⁻¹ yr⁻¹</td>
</tr>
<tr>
<td>CC</td>
<td>NS</td>
</tr>
<tr>
<td>C CCAA</td>
<td>1.2**</td>
</tr>
<tr>
<td>C COaAA</td>
<td>1.3**</td>
</tr>
<tr>
<td>C SCOaA</td>
<td>1.2**</td>
</tr>
</tbody>
</table>

†, *, **, *** Significant at the 0.10, 0.05, 0.01, and 0.001 levels
Corn grain yield response over time to N rate in a continuous corn (CC) rotation at Lancaster, WI.

- 0 lb N/A
- 50 lb N/A
- 100 lb N/A
- 200 lb N/A

Grain yield (bu/A)

Cycle (2-yr between 1989-2004)
<table>
<thead>
<tr>
<th>Rotation</th>
<th>N rate (lb N A(^{-1}))</th>
<th>bu A(^{-1}) yr(^{-1})</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>CC</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>CA</td>
<td>†</td>
<td>NS</td>
</tr>
<tr>
<td>CS</td>
<td>-3.0*</td>
<td>NS</td>
</tr>
</tbody>
</table>

†, *, **, *** Significant at the 0.10, 0.05, 0.01, and 0.001 levels
Corn grain yield response over time to crop rotation for N rates on corn of 0 lb N/A at Lancaster, WI.

<table>
<thead>
<tr>
<th>Cycle (5-yr between 1990-2004)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grain yield (bu/ A)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CC</th>
<th>CS</th>
<th>CA</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS</td>
<td>-</td>
<td>NS</td>
</tr>
<tr>
<td>CA</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>CCCAA</td>
<td>NS</td>
<td>+</td>
</tr>
<tr>
<td>CCOaAA</td>
<td>NS</td>
<td>+</td>
</tr>
<tr>
<td>CSCOaA</td>
<td>NS</td>
<td>+</td>
</tr>
</tbody>
</table>

http://corn.agronomy.wisc.edu
Corn grain yield response over time to crop rotation for N rates on corn of 200 lb N/A at Lancaster, WI.

<table>
<thead>
<tr>
<th>Cycle (5-yr between 1990-2004)</th>
<th>CC</th>
<th>CS</th>
<th>CA</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>CA</td>
<td>NS</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>CCCAA</td>
<td>+</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>CCOaAA</td>
<td>+</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>CSCOaA</td>
<td>+</td>
<td>NS</td>
<td>NS</td>
</tr>
</tbody>
</table>
### Are Rotations Improving or Deteriorating?
(Do slopes diverge or converge?)

5-yr vs. 2-yr Rotations in 5-yr Cycles (1990 - 2004; 3 Cycles)

<table>
<thead>
<tr>
<th>Rotation</th>
<th>N rate (lb N A⁻¹)</th>
<th>bu A⁻¹ yr⁻¹</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>CC vs. CA</td>
<td>-3.8***</td>
<td>NS</td>
</tr>
<tr>
<td>CC vs. CS</td>
<td>-4.1***</td>
<td>NS</td>
</tr>
<tr>
<td>CC vs. C CCAA</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>CC vs. C COaAA</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>CC vs. C SCOaA</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>CA vs. CS</td>
<td>NS</td>
<td>NS</td>
</tr>
<tr>
<td>CA vs. C CCAA</td>
<td>3.0***</td>
<td>NS</td>
</tr>
<tr>
<td>CA vs. C COaAA</td>
<td>2.7*</td>
<td>†</td>
</tr>
<tr>
<td>CA vs. C SCOaA</td>
<td>2.7*</td>
<td>NS</td>
</tr>
<tr>
<td>CS vs. C CCAA</td>
<td>3.3***</td>
<td>2.5*</td>
</tr>
<tr>
<td>CS vs. C COaAA</td>
<td>3.0***</td>
<td>2.7*</td>
</tr>
<tr>
<td>CS vs. C SCOaA</td>
<td>2.9***</td>
<td>NS</td>
</tr>
</tbody>
</table>

†, *, **, *** Significant at the 0.10, 0.05, 0.01, and 0.001 levels
Conclusions

• Corn grain yield of extended (5-yr) rotations increase at a greater rate over time than 2-yr rotations and CC.

• Nitrogen plays a major role in maintaining and improving corn grain yields in the absence of crop rotation.

• Extended rotations involving forage crops may be more sustainable than current short-term agricultural practices, because time (>2 yr) along with rotation and nitrogen were required to improve corn grain yields.
## Input Production Costs for the Lancaster Rotation Experiment (derived from Duffy, 1990-2004)

<table>
<thead>
<tr>
<th>Input</th>
<th>Corn (lb N/ A)</th>
<th>Oat</th>
<th>Soybean</th>
<th>Alfalfa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input</td>
<td>0</td>
<td>50</td>
<td>100</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td>----------------</td>
<td>-----</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td></td>
<td>$\text{A}^{-1}$</td>
<td>-----</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>Machinery</td>
<td>64</td>
<td>72</td>
<td>75</td>
<td>77</td>
</tr>
<tr>
<td>Seed</td>
<td>38</td>
<td>38</td>
<td>38</td>
<td>38</td>
</tr>
<tr>
<td>Fertilizer</td>
<td>19</td>
<td>28</td>
<td>37</td>
<td>55</td>
</tr>
<tr>
<td>Chemical</td>
<td>49</td>
<td>49</td>
<td>49</td>
<td>49</td>
</tr>
<tr>
<td>Misc.</td>
<td>42</td>
<td>42</td>
<td>43</td>
<td>45</td>
</tr>
<tr>
<td>Total</td>
<td>211</td>
<td>230</td>
<td>243</td>
<td>264</td>
</tr>
</tbody>
</table>

*Sources: Lauer © 1994-2007 University of Wisconsin – Agronomy
http://corn.agronomy.wisc.edu*
Cumulative Distributions of Profit
First & Second Degree Stochastic Dominance

Most people prefer more to less
Most people prefer to avoid low value outcomes

Source: Lambert and Lowenberg-DeBoer, 2003
## Profitability and Risk

<table>
<thead>
<tr>
<th>Rotation</th>
<th>lb N A⁻¹</th>
<th>$ A⁻¹ Yr⁻¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS</td>
<td>100</td>
<td>125ᵃ</td>
</tr>
<tr>
<td>CS</td>
<td>200</td>
<td>111ᵇᶜ</td>
</tr>
<tr>
<td>CS</td>
<td>50</td>
<td>109ᵃᵇᶜ</td>
</tr>
<tr>
<td>CSCOaA</td>
<td>100</td>
<td>92ᵇᶜᵈ</td>
</tr>
<tr>
<td>CSCOaA</td>
<td>50</td>
<td>90ᵇᶜᵈ</td>
</tr>
<tr>
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<tr>
<td>CC</td>
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<td>59ᶠ⁻ⁱ</td>
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</table>

### Most profitable rotations
- CS – 50, 100, 200 lbs N/A
- CSCOaA – 50, 100, 200 lbs N/A
- CC – 200 lbs N/A

### Remaining cropping systems were less profitable and risk inefficient:
- CCCAA – 0 & 50 lbs N/A
- CA – 0, 50, 100, & 200 lbs N/A
- AA – 0, 100, & 200 lbs N/A
- CC – 0, 50, & 100 lbs N/A

### FDSD analysis failed

### SDSD efficient
Conclusions

• Yield comparisons do not provide the appropriate basis for economic decision-making regarding cropping systems.

• Profitability was greatest for:
  ✓ 100 and 200 lbs N/A treatments.
  ✓ CS followed by CSCOaA, CCOaAA, CCCAA, AA, CA, and CC.

• Under SDSD, the stochastically efficient treatments were CS at all N rates and CC at 200 lbs N A-1.
  ✓ The most profitable systems (CS) remain the most efficient.
  ✓ When 200 lbs N/A is added, risk can be reduced for CC.

• All other cropping systems were inefficient relative to these five treatments and would not be chosen by a risk-averse decision maker.
  ✓ Note: This study did not include government programs, environmental stewardship, or resource conservation.
Strip-Tillage Treatments into Corn Residue
Materials and Methods

• Fall zone tillage into corn residue
  ✓ Control: None
  ✓ "Zone-builder"

• N placement
  ✓ 2" x 2"
  ✓ 2" x 15"

• Spring residue clearing
  ✓ 1 coulter
  ✓ 2 coulters; fall chisel
  ✓ 3 coulters

• P & K application timing
  ✓ Fall injected
  ✓ Spring
  ✓ None
Corn grain yield performance of tillage systems at four locations in Wisconsin (1994-1996)

<table>
<thead>
<tr>
<th>Zone builder</th>
<th>Fall Tillage</th>
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<td>Fall- Chisel plow</td>
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<tr>
<td>Spring- Three colters</td>
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<tr>
<td>Spring- One colter</td>
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<td>131</td>
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</table>

Grain yield (bu/A)

- Fall- Chisel plow
- Spring- Three colters
- Spring- One colter

http://corn.agronomy.wisc.edu

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Corn grain yield performance of tillage systems at four locations in Wisconsin (1994-1996)

Grain yield (bu/A)

N Placement

2 x 2 A
2 x 15 A
Fall A
Spring A
None A

P&K Timing

20 40 60

Grain yield (bu/A)
Thanks for your attention!
Questions?

2007 Corn Conferences

- Baldwin
  January 24

- Kimberly
  January 25

- Belmont
  January 23

February 1-2, 2007
Kalahari Resort
Wisconsin Dells, WI