

# Early planting payoff

Farm Progress Discovery Plots highlight advantages for planting corn early. ■ By Tom J. Bechman

**B**efore 2003 goes into the books, look for lessons for next year. Here are four key questions:

- Did your earliest-planted corn yield best?
- Do you see the same trend year-in, year-out?
- How good was corn planted in mid-May?
- If early planting excels, is it worth paying for polymer-coated seed so you can plant earlier with confidence?

New Intellicoat technology from Landec Ag, Monticello, Ind., prompted those questions.

Farm Progress Companies staff selected that technology as the focus of our first Farm Progress Crop Discovery Plots.

Both 111-day and 113-day hybrids were planted three times. Landec Ag provided seed. Brand identity was not disclosed. Plots were located at the 2003 Farm Progress Show site, farmed by Larry and Pete Germand, Henning, Ill.

Using a new Kinze 12-row planter, Matt Jungmann, Farm Progress sales representative, first planted on March 27. He split the half-mile field in two, creating two replications of each treatment.

Jungmann planted again April 15. As before, he planted six rows of coated and uncoated seed of each hybrid.

He finished planting May 18, this time planting six rows of uncoated seed of each hybrid. By late May, there is no advantage for polymer-

coated seed, designed to insure even emergence.

## SEASON NOTES

Mother Nature threw in every monkey wrench imaginable. Corn planted in March and April got a quick start. Then thunderstorms pelted plots with small hail, although corn soon recovered.

Next, heavy rains fell in early July. August brought dry, warm weather, followed by 11 inches of rain on Labor Day weekend!

In between, beetles invaded, clipping corn silks. Those 12 rows of corn planted May 18 turned out to be a trap crop, attracting beetles.

Finally, 4 inches of rain fell Sept. 24, followed by an early frost. Plots

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Corn went into the ground March 27 for the Farm Progress Crop Discovery Plots.

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were harvested 10 days later.

Here are observations after harvest. Since there were only two replications and variation from one to the other was large for certain treatments, it's not fair to say the results would repeat next year.

■ Average yield of all plots planted March 27 193.3 dry bushels, vs. all plots planted April 15, 192.9, was a dead heat.

■ Corn planted March 27 with Intellicoat yielded slightly more, 196 bushels, vs. corn that was not coated, 190.6. Corn planted April 15 with Intellicoat yielded slightly less, 192, vs. uncoated corn planted April 15, 193.7. Across both March 27 and April 14 planting dates, Intellicoat-coated corn yielded 194 bushels per acre, vs 192.1 for uncoated corn.

■ Differences between the 111- and 113-day hybrids were dramatic. Coated bested uncoated 113-day corn planted March 27 by more than 10 bushels per acre. Planted April 15, coated corn yielded 3 bushels less. For 111-day corn, coated vs. uncoated was a dead heat both times.

■ Top yielding plot was 215.5 bushels for 113-day coated corn, planted March 27. In the second replication, it yielded 206.3 bushels, compared to 201.1 and 200.6 for

uncoated corn.

■ The 113-day corn excelled when planted early, averaging 205.8 bushels per acre for March, vs. 193.1 for April. For 111-day corn, the trend was reversed, at 180.7 for March, vs. 192.6 for April.

■ May-planted yields were horrific, especially for the 111-day corn.

“Rootworm and Japanese beetles were likely attracted to those 12 rows,” says John Obermeyer, Purdue University entomologist. “Later-planted fields are at higher risk, but it's obvious this strip acted as a trap crop. We wouldn't normally expect such big differences.”

■ Yield loss per day after May 10 is typically closer to a bushel per day, says Bob Nielsen, Purdue corn specialist. “We wouldn't expect that much damage in a whole field. Beetles might hit spots that hard, but likely not whole fields.”

■ Moisture content was roughly 15% for both March 27 and April 15-planted corn. It was over 30% for mid-May plots.

“I found similar differences in my plots this year,” Nielsen says. “However, it doesn't mean differences will

**Farm Progress Crop Discovery Plots 2003 - Corn Yield**

*Planting Date (Yield in Bu./Acre Dry Corn)*

Hybrid	Treatment	March 27	April 15	May 18
113-day	uncoated	200.65	194.78	69.05
113-day	coated	210.9	191.44	NA
111-day	uncoated	180.46	192.54	11.98
111-day	coated	180.99	192.6	NA

*Note: Weigh wagon provided by Trisler Seed Farms; Seed through Landec Ag.*

be that big every year. This was a cool summer. Later-planted corn never caught up.”

■ Test weights were highest for March 27-planted corn, and lowest for mid-May. “Part of it was likely due to higher moisture content,” Nielsen says.

**PARTING THOUGHTS**

When the harvest dust settles, only you can answer the key questions posed earlier for your farm. Here's how we would answer, based on Farm Progress Crop Discovery Plots.

■ *Did early-planted corn yield better than later-planted fields?* Early is relative. For late March vs. mid-April, differences were very small. For both those dates vs. May, it was no contest. One hybrid responded to March planting, while the other preferred mid-April.

■ *Would we see the same trends every year?* Since variation was large and we couldn't apply statistics with confidence, we can't answer that. Weather conditions were extremely unusual. Data from more than one year is essential.

■ *How well did mid-May planted corn perform?* Awful, terrible — take your pick. However, common sense says mid-May corn won't perform that poorly every year. Poor kernel set indicated a pollination problem, likely caused by silk clipping.

■ *Would early planting's advantage justify the cost of seed coating?*

Our goal was to determine difference in yield between early and mid-May plantings, then calculate economic gain or loss. But May yields were so poor they're not realistic. However, if you don't plant early and wet weather sets in, your last-planted field may be in late May. Bottom line: Run your own numbers! ♦



Assisting at harvest were (left to right) Scott Davis, Trisler Seed Farms, and Alan Barbre and David Burton, Landec Ag.