Northern Ohio Field Notes

May 17, 2024 John Schoenhals, Pioneer Field Agronomist

Managing Delayed Planting

- Sticking with the corn and soybean package plans developed this winter through at least the end of May continues to be recommended to maintain maximum yield potential even when planting is delayed.
- Decisions to change maturities will depend on harvest and drying capabilities, as well as other factors
- Both corn and soybean crops are able to adapt to later planting dates to reach maturity in less days.

When is too late to plant certain hybrids and still allow time for natural blacklayer (before a killing freeze) and some drydown?

- Corn Hybrids Adjust to a Shorter Growing Season when Planting is Delayed. Corn requires about 6.8 fewer GDUs per day of delayed planting after May 1
  - P1136AM requires **2680** GDUs on May 1, requires estimated **2510** on May 25
  - P0720AM requires **2630** GDUs on May 1, requires estimated **2460** on May 25
- More details: Purdue Resources

Planting Date Suitability and Expected GDUs to maturity at various planting dates

	Planting Date							
	May 1	May 20	May 25	June 1	June 5	June 10	June 15	June 20
P1380AM	2810	2681	2647	2599	2572	2538	2504	2470
P10477Q	2780	2651	2617	2569	2542	2508	2474	2440
P1383AM	2760	2631	2597	2549	2522	2488	2454	2420
P1197AM	2730	2601	2567	2519	2492	2458	2424	2390
P10811AM	2760	2631	2597	2549	2522	2488	2454	2420
P1136AM	2680	2551	2517	2469	2442	2408	2374	2340
P0935AM	2700	2571	2537	2489	2462	2428	2394	2360
P0924Q	2700	2571	2537	2489	2462	2428	2394	2360
P0720AM	2630	2501	2467	2419	2392	2358	2324	2290
P0859AM	2680	2551	2517	2469	2442	2408	2374	2340
P0843AM	2680	2551	2517	2469	2442	2408	2374	2340
P0732Q	2680	2551	2517	2469	2442	2408	2374	2340
P0995AM	2580	2451	2417	2369	2342	2308	2274	2240
P05737AM	2550	2421	2387	2339	2312	2278	2244	2210
P0506AM	2530	2401	2367	2319	2292	2258	2224	2190
P0487Q	2530	2401	2367	2319	2292	2258	2224	2190
P0688AM	2500	2371	2337	2289	2262	2228	2194	2160
P04922Q	2500	2371	2337	2289	2262	2228	2194	2160
P0306AM	2500	2371	2337	2289	2262	2228	2194	2160
P0075AM	2500	2371	2337	2289	2262	2228	2194	2160
P04511AM	2420	2291	2257	2209	2182	2148	2114	2080
P0035AM	2420	2291	2257	2209	2182	2148	2114	2080
P9955AM	2400	2271	2237	2189	2162	2128	2094	2060
P9845AM	2370	2241	2207	2159	2132	2098	2064	2030

Comfortable planting this hyrid on/around this date
OK to plant this hybrid on/around this date- but minimize acres
Avoid planting this hybrid on/after this date

based on Fulton Co. Ohio location, average seasonal GDU accumulation, and maturity prior to avergae killing freeze date to allow some drydown. Locations to the south of Fulton Co can have more flexibility, while locations to the north will have less flexibility

Corn adjusts to later planting by requiring fewer GDUs to maturity at later dates. Corn requires about 6.8 fewer GDUs per day of delayed planting after May 1

How does planting date impact Yield Potential of different corn maturities?

- Regardless of planting date, mid- and full-season hybrids have higher yield potential than early options
- In many cases, even at later planting dates, the potential yield advantage of mid- and full-season corn hybrids more than offsets drying charges.

Yield, Harvest Moisture, and Revenue Summary by Planting Date and CRM

Yield by Planting Date & Maturity

	100-105 CRM	106-109 CRM	110-113 CRM
Before April 27	210.5	227.1	233.5
April 27-May 6	205.6	217.6	224.5
May 7-May 16	211.0	223.1	227.5
May 17-May 26	204.7	214.8	217.7
May 27-June 6	190.9	200.6	201.4

Harvest Moisture by Planting Date & Maturity

	100-105 CRM	106-109 CRM	110-113 CRM
Before April 27	18.5%	19.5%	20.6%
April 27-May 6	18.5%	19.1%	19.9%
May 7-May 16	18.9%	19.8%	20.7%
May 17-May 26	18.7%	19.6%	20.5%
May 27-June 6	20.4%	21.8%	22.6%

Revenue by Planting Date & Maturity ($4.50/bu, $0.06/pt)

	100-105 CRM	106-109 CRM	110-113 CRM
Before April 27	$902	$961	$971
April 27-May 6	$882	$926	$942
May 7-May 16	$900	$939	$946
May 17-May 26	$875	$906	$907
May 27-June 6	$798	$821	$814

Data from PKP plots in far NE Indiana, far SE Michigan, N Ohio from 2016-2023
Remember, planting date data based on PKP plots is somewhat skewed, since high productivity soils are usually planted earlier than lower productivity soils

Full Season Maturities maintain a yield advantage regardless of planting date, but moisture and maturity becomes a higher concern moving into June.

Soybeans:

If necessary, we will have a detailed explanation of management considerations in weeks to come, but for now, some key points:

- No need to change maturity until mid-June
- If planting is delayed into June, **narrow row widths** (15" or less) and **increased populations** (increase aprx. 10% per week after June 1) are needed

Corn Stand Counts

Row Width	Length of Rows
38 inches	13 ft 9 in
36 inches	14 ft 6 in
30 inches	17 ft 5 in
22 inches	23 ft 9 in
20 inches	26 ft 2 in
15 inches	34 ft 10 in

Row length to equal 1/1000th of an acre
Count plants and multiply by 1,000

Soybean Stand Counts

Hoop Size	Multiplication Factor
26	11,800
28	10,000
30	8,900
32	7,800
34	6,900
36	6,200

Hula Hoop preferred for drilled beans. Count plants in hoop and multiply by factor for estimated plants per acre. Repeat in several areas for an average.

Row Width	Row length for 1/10,000th of an acre
7.5"	84"
10"	63"
15"	42"
20"	31"
30"	21"

Count plants in length of row
Multiply by 10,000
Repeat in several areas for an average

Corn and Soybean Emergence and Stand Assessment

Details: https://corteva.showpad.com/share/E5fO5triCAnwL7utifW2W

Early Season Insect Pests

As a result of a warm winter and warm/wet spring, several pests are becoming apparent in some early planted fields.

Seedcorn maggot: It seems that pressure increases every year on soybeans in the first couple rounds of planting. Lumiderm seed treatment insecticide offers large advantages over standard insecticides.

Asiatic Garden Beetle Grubs: Damage can occur on corn, soybeans, and wheat. Feeding activity started earlier than normal this year, and will hopefully conclude earlier also. Planter-applied insecticide is the best management tactic today. Consider a late June insecticide application to beans that will rotate to corn next year to manage adults before eggs are laid.

Black Cutworm: Only a few reports so far, but keep an eye out for this pest. Treatment thresholds vary from 2-5% plants cut, depending on growth stages. Consider adding an insecticide with burndown herbicide applications where heavy weed pressure exists on ground being planted to corn.

Slugs: Slug activity can be found in many fields. Management options are limited, but good growing conditions will hopefully allow crops to outgrow the damage.