

Northern Ohio Field Notes

May 9, 2024 John Schoenhals, Pioneer Field Agronomist

Wheat Fungicide Applications

Wheat development is progressing well ahead of “normal”, due to warm weather. Wheat is heading out in many areas, and will soon be heading in the rest of the area. Wheat flowering (ideal head scab fungicide timing) begins about 3-5 days after heading. Head scab fungicide timing may occur aprx. 7 days earlier than recent years. **A wheat head scab fungicide application is highly recommended this year for 3 reasons.**

1. Head Scab can reduce yield and quality, and lead to significant dockage at the elevator due to vomitoxin. Scab is favored by humid/wet, warm conditions, and can infect wheat heads up to 2 weeks after flowering.
2. Wet, warm weather through the spring has lead to an increase in foliar diseases found in the lower leaf canopy. A Head Scab fungicide application provides a secondary benefit of protecting the flag leaf and upper leaves from disease development.
3. Even in the absence of significant scab or disease, a well-timed scab fungicide application has shown consistent yield benefits.

Miravis Ace, Sphaerex, Prosaro, or Caramba are the preferred head scab products (DO NOT use products like Aproach Prima at this time). Applications are ideally timed for at or soon after pollination begins. The presence of yellow anthers on 50% of heads throughout the field is a good time to aim for. (Miravis Ace can be applied earlier than the other products, but is still best at the normal timing).



Corn and Soybean Emergence and Stand Assessment

Corn

- Corn will typically emerge after accumulation of aprx. 120 GDUs after planting.

Soybeans

- Soybeans will emerge somewhere between 90 and 120 GDUs (depending on soil type) after planting

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	Row Width	Row length for 1/10,000th of an acre
26	11,800	7.5"	84"
28	10,000	10"	63"
30	8,900	15"	42"
32	7,800	20"	31"
34	6,900	30"	21"
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.

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

More Details: <https://corteva.showpad.com/share/E5fO5triCANwL7utifW2W>



Soybean Burndown Options

-The addition of Crop oil, MSO, and/or other surfactants will heat up many tankmixes

Enlist E3 Soybeans

- Use full rates of Enlist One (2pt/A) + glyphosate
- No plant-back restrictions

Plenish or Non-GMO Soybeans

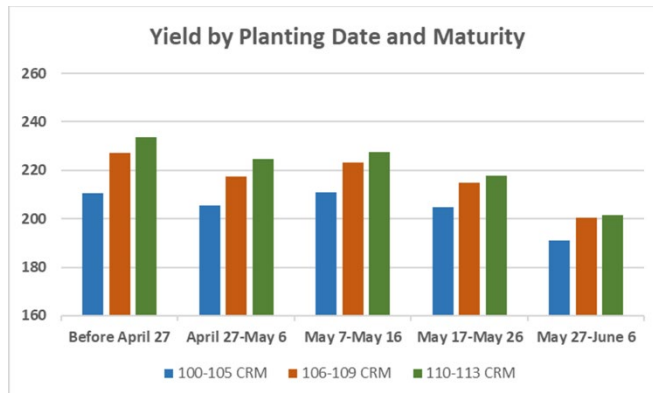
- full rates of 2,4-D require 14 day plant back interval
- half rates of 2,4-D require 7 day plant back interval
- Liberty (glufosinate) + glyphosate = no plant back interval**
 - performance is maximized with high rates of dry AMS, 20gpa water, and warm/sunny weather
- Gramoxone + metribuzin + COC = no plant back interval

Delayed Planting Considerations

- Sticking with the hybrid package plans developed this winter through at least May is recommended to maintain maximum yield potential even when planting is delayed.

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.



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

Yield, Harvest Moisture, and Revenue Summary by Planting Date and CRM							
Yield by Planting Date & Maturity				Harvest Moisture by Planting Date & Maturity			
	100-105 CRM	106-109 CRM	110-113 CRM		100-105 CRM	106-109 CRM	110-113 CRM
Before April 27	210.5	227.1	233.5	Before April 27	18.5%	19.5%	20.6%
April 27-May 6	205.6	217.6	224.5	April 27-May 6	18.5%	19.1%	19.9%
May 7-May 16	211.0	223.1	227.5	May 7-May 16	18.9%	19.8%	20.7%
May 17-May 26	204.7	214.8	217.7	May 17-May 26	18.7%	19.6%	20.5%
May 27-June 6	190.9	200.6	201.4	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

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

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](#)

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

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 hybrid 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 average 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