In This Issue

Corn Response To Sulfur In Indiana

(Jim Camberato), *(Bob Nielsen)* & *(Diana Salguero)*

Sulfur (S) deficiency has become more common in Indiana with reduction in atmospheric deposition of S arising from coal-fired power plants. Recent trials have shown consistent large corn yield increases to S fertilization at some locations, while at other locations there was no response to S. Sulfur deficiency was expected and occurred on a loam soil with 1-2% organic matter, but S deficiency and large consistent yield responses also occurred on a silty clay loam soil with 2-3% organic matter. Where S was needed, the lowest amount of S sidedressed (7.5 to 15 pounds per acre) was sufficient to maximize yield. Read the details at https://ag.purdue.edu/agry/documents/CornSulfur.pdf.

Sulfur deficient corn in the foreground and corn sidedressed with 10 pounds of S per acre in the background. (*Photo Credit: R. L. Nielsen, 2019*)

Requirements For Uniform Germination And Emergence Of Corn

(Bob Nielsen)

Rapid, uniform germination and emergence of corn help set the stage for maximum grain yield at the end of the season. Without a successful start to the season, the crop is behind the proverbial "eight-ball" right from the beginning. The good news is that there are only four simple requirements for achieving uniform germination and emergence of corn. The bad news is that one or more of the them are often absent in one field or another.

Adequate and Uniform Soil Moisture in the Seed Zone

The practical definition of "adequate" soil moisture is simply soil that is not too dry and not too wet. Some agronomists say that the optimum soil moisture for ideal germination is field capacity. Soils at field capacity moisture, however, are too wet for planting without creating furrow compaction problems with the seed disc openers or closing wheels. A compromise definition of "adequate" soil moisture for germination is probably about 50% available water capacity. Most growers know what ""adequate" looks and feels like. Guidelines are also available from USDA-NRCS (1998) for "Estimating Soil Moisture by Feel and Appearance".

Uneven soil moisture at seed depth is the most frequent cause of uneven emergence, the results of which can easily be yield losses of 8 to 10 percent (Carter et al., 1989). Uneven soil moisture in the seed zone can be caused by variable soil characteristics, tillage patterns, unusual weather conditions and uneven seeding depth. Remember that uneven seedbed soil moisture can be defined as "adequate' versus "too wet" (Fig. 1) as well as "adequate" versus "too dry".

Useful Tip: *When seedbed conditions are dry, make sure you choose a seeding depth that ensures uniformly adequate soil moisture for germination and emergence. Even though a 1.5 to 2 inch seeding depth is a good choice for many conditions, do not hesitate to increase seeding depth to 2.5 or 3 inches if that is the depth where uniform soil moisture is located. Planting shallower than 1.5 inches increases the risk of poor or uneven germination if rapid soil drying occurs after planting due to warm, sunny, windy days.*

Adequate and Uniform Soil Temperature in the Seed Zone

Based on multiple years of plot data collected by yours truly at Purdue's Crop Diagnostic Training & Research Center in westcentral Indiana, the thermal time after planting required for corn to emerge is relatively consistent at about 120 Growing Degree Days (Fahrenheit) when calculated using 4-inch depth soil temperatures. Thermal time to emergence using air temperatures is more variable, especially early or late in the planting season.

Seemingly minor variability in soil temperatures throughout a field can have large effects on germination timing when soils are hovering close to 50F or cooler. Dark-colored soils will typically warm more quickly than light-colored soils. If soils dry differently across the field, the drier areas will typically warm faster than the wet areas. Uneven residue cover (surface trash or cover crops) in reduced tillage systems results in lower soil temperatures beneath heavier residue areas than in more bare spots in the field. Uneven seeding depth risks exposing slightly deeper planted seeds to slightly cooler soil temperatures than slightly shallower planted seeds.

Useful Tips: *Consider row-cleaning attachments for the planter to move aside the surface trash during planting and expose the seedbed to sunlight and its warming effects. Consider strip tillage practices in the future to better manage surface trash in a reduced tillage system.*

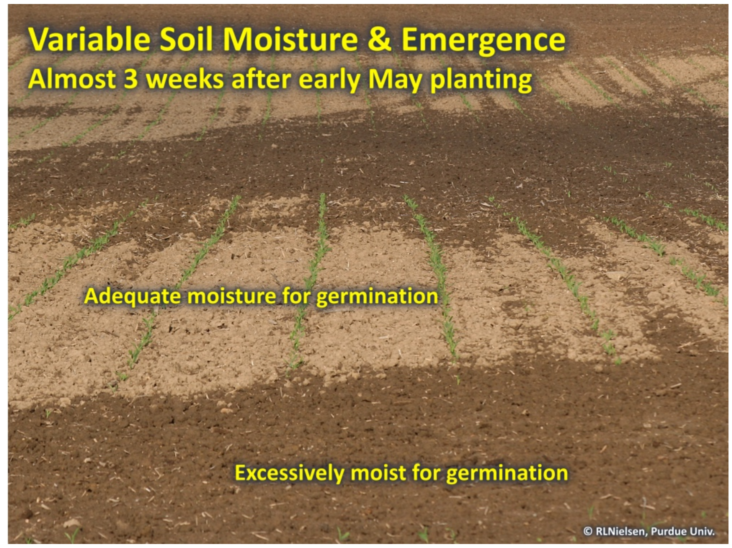

Fig. 1. Effect of variable soil moisture on corn emergence.

Adequate and Uniform Seed-to-Soil Contact

Good seed-to-soil contact is vital for the kernels to imbibe (absorb) soil moisture quickly and uniformly to begin the germination process. Seed-to-trash contact results from "hair-pinning" of surface trash into the seed furrow during no-till planting when soil and/or trash are too wet for adequate coulter cutting action. Seed-to-clod contact results from planting into cloddy fields created by working soil too wet. Seed-to-rock contact is, needless to say, not good for proper germination either. Seed-to-air contact results from open planter furrows when no-till planting into excessively wet soils. Germination of kernels lying in open planter furrows is dependent on rainfall keeping the open furrow environment moist.

Useful Tips: *Whippers, wipers, movers, fingers, and other similar trash management gadgets for the planter are most beneficial when you are challenged with rocky, cloddy, or trashy surface soil conditions. They help clear the way (literally) for the planter's double-disc openers to more easily do their job of creating an optimum seed furrow. Other planter attachments that help press the kernels into the seed furrow can improve seed-to-soil contact and seeding depth uniformity when seedbed conditions are otherwise challenging.*

Soil Surface Free From Crust

Severe surface crusting or compaction will restrict elongation of the seedling's mesocotyl and emergence of the coleoptile at the soil surface, potentially leading to underground leafing out of the seedling or outright seedling death. Severe sidewall compaction, caused by the smearing action of double-disc openers in excessively moist soils, can also restrict elongation of the mesocotyl and emergence of the coleoptile.

Useful Tip: *Avoid excessive tillage prior to planting the crop, especially if significant rainfall is forecast prior to emergence of the crop. This will help avoid the development of dense surface soil crust. Avoid excessive downpressure on the closing wheels of the planter in order to avoid compacting the surface soil on top of the seed furow. Avoid planting "on the wet side" in order to avoid smearing the furrow sidewalls with the double-disc openers.*

Related Reading

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Emergence Failure Of Corn

(Bob Nielsen)

Successful stand establishment of a corn crop relies on many factors, including the successful emergence of the seedlings in the first place. Seedling emergence occurs as a result of elongation of the mesocotyl that elevates the coleoptile or "spike" toward the soil surface. If successful, the appearance of the coleoptile at or near the soil surface is synchronized with the emergence of the first true leaf from inside the coleoptile.

The mesocotyl is the white tubular stem-like plant part located between the kernel and the base of the coleoptile. Technically, the mesocotyl is the first true stem internode of the young corn seedling. As the coleoptile nears the soil surface, exposure to the red wavelengths of solar radiation causes a change in the supply of one or more growth hormones from the coleoptile to the mesocotyl tissue and mesocotyl elongation comes to a halt (Vanderhoef & Briggs, 1978).

If mesocotyl elongation and/or coleoptile emergence are compromised, the emergence of the leaves from the coleoptile may occur underground and the leaves remain trapped by the soil. Such "leafing out underground" is obviously viewed with great consternation by growers who were hopeful for perfect emergence of their crop. Emergence failure directly reduces the productive plant population; one of the major yield components of corn, and so grain yield potential may be unacceptably decreased if the productive plant population is substantially lower than the optimum population. Uneven seedling emergence and/or development effectively also decreases the productive plant population. See Nielsen et al. (2019) for guidelines on optimum plant populations for corn in Indiana.

Failure to emerge successfully can be caused by failure of the germination process itself, failure of the mesocotyl to successfully elongate and/or by soil restrictions that hinder successful penetration of the soil by the coleoptile. In extreme cases, elongation of the mesocotyl fails miserably, resulting literally in corkscrewed fiascos. Often, more than one of the following causal factors exist in a problem field and usually interact with each other to amplify the problem.

Herbicide Injury: Certain herbicides, notably cell growth inhibitors like acetochlor, can affect seedling shoot development especially if weather or soil conditions are not conducive for rapid seedling growth. See Hartzler and Anderson (2018) for more information. However when herbicide injury is suspected to be a contributing factor, cool soils and dense soil crusting are often also contributing factors, so is difficult to pin the blame completely on the herbicide injury.

Insect Injury: Certain soil-borne insects like seedcorn maggots (*Delia platura*) and wireworms (*Agriotes*, *Limonius*, etc. spp.) occasionally feed on corn kernels in the seed furrow, destroying or injuring the embryo in the process. Kernel symptoms from this type of injury are fairly obvious. See linked sites below in the Reading List for more information.

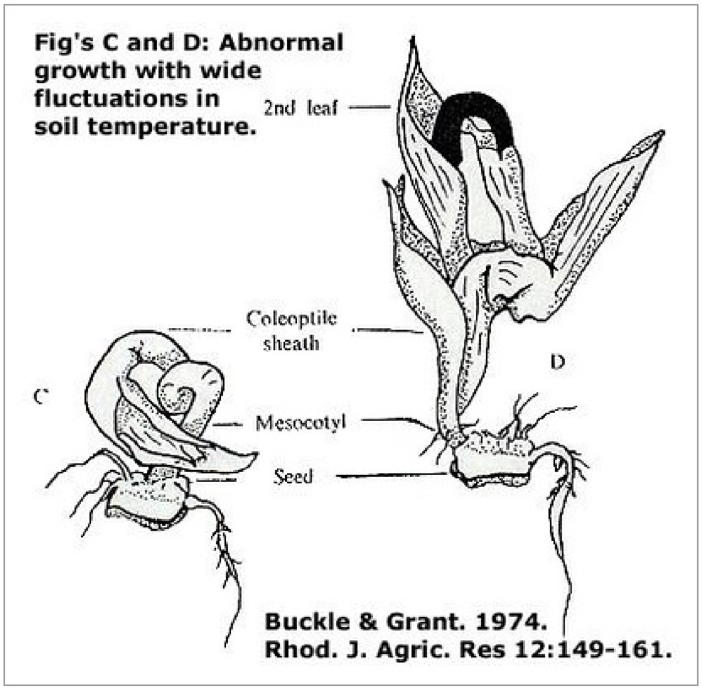
Disease Injury: Fungicidal seed treatments effectively prevent most seed rots and seedling blights for 2 to 3 weeks after planting. However, once the seed treatments deteriorate with time, fungal diseases like Pythium and Fusarium may infect the seed or young seedling, causing stunted development or outright death (Sweets, 2015). Kernel or seedling symptoms from these types of diseases are fairly easy to identify.

Kernel Position in Furrow: The coleoptile, the protective covering for the plumule leaves, emerges from the embryo side of the kernel and elongates in the direction of the dent end of the kernel by virtue of the elongation of the mesocotyl. The position of the kernel in the furrow with respect to the embryo face therefore directly influences the initial location where the coleoptile emerges. If the kernel lands with the embryo face down in the furrow, the coleoptile emerges on the bottom side of the kernel, elongates horizontally until the mesocotyl "clears" the end of the kernel, then finally begins its upward ascent. Such an "upside-down" beginning might contribute to a seedling's susceptibility to other corkscrewing causal factors.

Restricted Emergence: Corkscrewed mesocotyl/coleoptile development can occur when the coleoptile encounters resistance as the mesocotyl elongates. Severe soil crusting or otherwise dense soil surface and cloddy soil surfaces can cause such resistance. A combination of severe sidewall compaction plus press wheel compaction over the furrow can also restrict coleoptile emergence and force the mesocotyl to elongate in unusual directions.

Cold Soils: Cold soils and/or wide fluctuations in soil temperatures throughout the day during the emergence process are also thought to be major contributing factors for the development of "corkscrewed" mesocotyl development (Buckle & Grant, 1974). The nature of the cold temperature injury appears to be damage to the outer surface layers of the mesocotyl. The elasticity of the damaged tissue is less than healthy tissue. The "corkscrew" elongation of the mesocotyl occurs when the tissue damage occurs unevenly around the circumference of the mesocotyl. The exact minimum soil temperatures that can cause such corkscrewed development are not clearly documented, but clearly it is not uncommon in Indiana for daily soil temperatures to dip as low as 40F (4.5C) during April and early May. Furthermore, bright sunny days can elevate bare soil temperatures quite high but still drop quite low the following night and thus result in a wide diurnal fluctuation in soil temperatures. Dry soils would be more prone than wetter soils to wide swings in daily soil temperatures.

Imbibitional Chilling Injury: Cold temperature injury that results in corkscrewed mesocotyls is not exactly the same as that which is referred to as "imbibitional chilling" injury. The latter refers to cold injury to the seed that occurs during the first 24 to 36 hours after planting as the dry seed imbibes (aka absorbs) water. The seed naturally swells in response to the imbibition of water. Cold seed cell tissue is less elastic and subject to rupturing as the seed swells. The threshold seed tissue temperature below which imbibitional chilling injury may occur is not clearly defined in the research literature, but appears to be temperatures cooler than 50F (10C). The most common symptom of imbibitional chilling damage is often simply swollen seed with little to no evidence of sustained germination progress. In contrast, seedlings with corkscrewed mesocotyls probably germinated successfully and **subsequently** experienced cold temperature injury to the mesocotyl tissue that interfered with normal mesocotyl elongation.



Related reading

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Hartzler, Bob and Meaghan Anderson. 2018. May Maize Maladies. Integrated Crop Management, Iowa State Univ. https://crops.extension.iastate.edu/blog/bob-hartzler-meaghan-anderson/may-maize-maladies [URL accessed Apr 2020].

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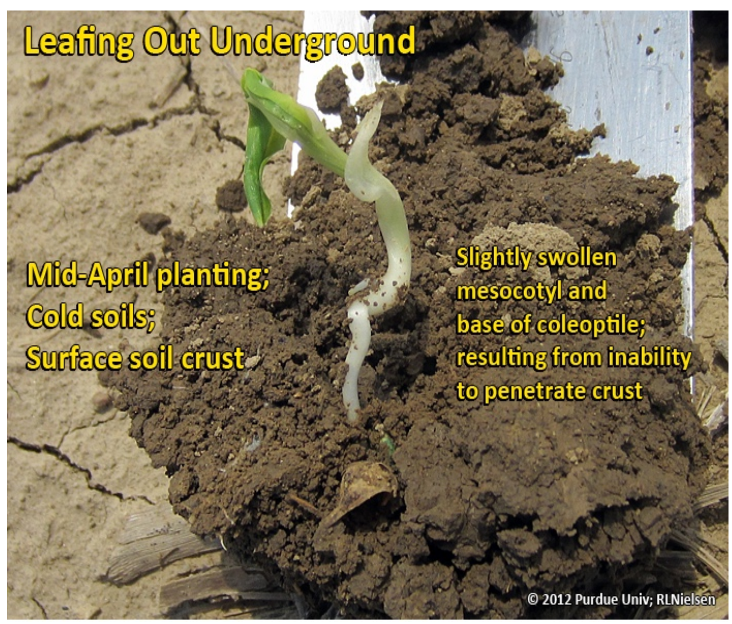
Deformed mesocotyl elongation caused primarily by seed furrow compaction.



Leafing out underground; caused primarily by dense surface soil crust.

Deformed mesocotyl elongation caused primarily by cold soil temperatures.

Purdue Crop Chat Podcast Episode 4, Are Soil Temperatures Right for Planting

(Bob Nielsen) & *(Shaun Casteel)*

There is now a new Purdue Crop Chat episode available, and this week #4 talks about the ramp up of planting across Indiana and considerations for seeds going into soil that isn't quite warm enough for establishing the best stands. Purdue Extension corn specialist Dr. Bob Nielsen says planting now certainly lines up with historical planting dates.

"Historically the majority of our corn crop tends to be planted over a 4-week window beginning roughly now and ending somewhere in the third or fourth week of May," he says. "So, from a calendar perspective it's certainly time to be out there and that's the pressure people are feeling, especially with the memories we all have of last year's near historic record low planting progress."

But the challenge now for seed going in is soil temperatures are lagging where they should be. Nielsen therefore wants growers to soon begin walking fields to check on emergence and the possible need for replant. Extension soybean specialist Dr. Shaun Casteel agrees.

"Scout early and scout often, that's the thing that we really need to look at," he said. "If we're going to think about doing a stand assessment and making a call on a field, soybeans a lot of people think V1, V2 as early as you need to get out there. And people are even V2, V3, so we need to be out there about as soon as its emerging, VE to VC to make that call."

Nielsen said the scouting should include fields planted the first part of April and through this week, "but given the forecast for cool temperatures through at least the first or second day of May, anything planted now and over the next seven days, those fields, when they begin to emerge, I think they need to be scouted pretty carefully too."

HAT chief meteorologist Ryan Martin says soil temperatures early in the week ranged from the upper 30's north, to 40's central, and some 50's in southwest Indiana at the 2" depth. Moisture is ranging from too much to dry, but he says soil moisture is averaging adequate to slightly above statewide.

You can hear much more from Nielsen and Casteel and some Ryan Martin weather, by clicking the play button below!
Audio Player

More information mentioned in the podcast can be found at Nielsen's Chat 'n Chew Cafe website.

Improving Hay Drying Rates With Mower-Conditioner Adjustments

(Keith Johnson)

Harvest of cool-season perennial grasses, perennial legumes, and winter-annual small grains will begin within three weeks in Indiana. Getting a standing forage crop that measures 75 percent moisture or more to a safe baling moisture of 18 to 20 percent moisture is "easier said than done". Changing weather fronts pass through every third or fourth day making it a challenge to quickly dry hay. Research has shown that properly conditioning forage crops is the single most effective way to reduce curing time. Making the proper settings on your mower-conditioner will ensure the best economic return.

Properly conditioning forages by checking the gap of the conditioning rolls is the single most effective way to reduce curing time. (*Photo Credit: Phil Reid, Purdue Animal Sciences*)

When conditioning a forage crop, the goal should be to have 90 percent of the crop's stems show some signs of a cracking or limpness. No more than 5 percent of the leaves should show signs of bruising or blackening from the conditioning process — this is especially important with legumes.

Remember, over conditioning forage crops will cause excessive leaf loss during the drying process and reduce the crop's overall yield and quality. At the same time, under conditioning the crop will make it more susceptible to rainfall as it will take longer to dry the crop and requires more mechanical manipulation to dry the hay.

When making the settings to your mower-conditioner, make sure to:

- Alter the conditioning roll gap properly by using the shims located on the roll stops. Refer to your owner's manual.
- Adjust the conditioning roll pressure to ensure proper conditioning.
- Check conditioning with **every** cutting or crop change. Variables such as yield, relative forage species composition, and stem diameter change from one crop to the next, or one field to the next.
- Keep the sickle bar and disk mower blades in good cutting.
- Adjust the reel position and speed for adverse conditions, such as a lodged or tangled crop.
- Alter the swath width for drying conditions. Set it wide if the soil is dry and good drying conditions are expected. Create a narrow windrow if the soil is wet. This allows the soil to dry between the windrows. Then, ted the narrow windrows onto the dry parts of the field.

Measuring Conditioning Roll Clearance

Generally, the mower-condition's roll clearance should range from 1/16 inch to 3/32 inch. If the clearance is less than this range, excessive leaf loss and roll wear can occur. If the clearance is significantly more than this range, then the crop will not be conditioned as effectively, and slower drying rates can be expected. Most mower-conditioner owner's manuals will indicate the proper clearance level and the correct procedure for making adjustments.

The following procedure can be used to determine the average roll clearance on most roll-type mower-conditioners. To conduct this procedure safely you must:

- Shut off the tractor engine.
- Disconnect the mower-conditioner power take-off (PTO) from the tractor on mechanically driven units.
- Disconnect the mower-conditioner PTO hydraulic pump from the tractor on hydraulically driven units.
- Lower the cutting platform.

The procedure's steps are:

1. Cut three pieces of typical household aluminum foil. Each piece should be 18 inches long and at least 12 inches wide.
2. Form three separate rolls from the foil strips by wrapping each one around a length of rod, pipe, or dowel that is 3/8 inch in diameter. Slide the foil roll off the rod, taking care not to crush the foil roll.
3. Place one foil roll in the approximate center of the conditioning rolls. Place the other foil rolls about 1 foot from each end of the conditioning rolls. Place the foil rolls so that they are perpendicular to the roll's longitudinal axis.
4. **Make sure the cutting platform is fully lowered.** This is the only safe way to make this measurement. Furthermore, raising the platform on some mower-conditioners will open and separate the rolls, preventing an accurate measure of the minimum roll clearance.
5. Turn the conditioning rolls by hand until the foil rolls come through completely.
6. The conditioning rolls will crush the foil. Use a digital or dial caliper to measure the thickness of the crushed foil roll to determine the minimum roll clearance. Take several thickness measurements along the length of each foil roll and determine an overall average. Take the measurement where the "crimp," or smallest clearance, occurs. The crimped foil thickness should range from 1/16 inch to 3/32 inch.

Doing this "measuring the gap" procedure should result in improved drying rates.

From: Purdue Forage Field Guide, Third Edition. ID-317.

Armyworm Pheromone Trap Report – 2020

(John Obermeyer)

County/Cooperator	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10
Dubois/SIPAC Ag Center	724	84	4							
Jennings/SEPAC Ag Center	60	75	11							
Knox/SWPAC Ag Center	1162	308	56							
LaPorte/Pinney Ag Center	115	65	0							
Lawrence/Feldun Ag Center	974	347	57							
Randolph/Davis Ag Center	117	207	16							
Tippecanoe/Meigs	225	wind dmg.	6							
Whitley/NEPAC Ag Center	–	9								

Wk 1 = 4/2/20-4/8/20; Wk 2 = 4/9/20-4/15/20; Wk 3 = 4/16/20-4/22/20; Wk 4 = 4/23/20-4/29/20; Wk 5 = 4/30/20-5/6/20; Wk 6 = 5/7/20-5/13/20; Wk 7 = 5/14/20-5/20/20; Wk 8 = 5/21/20 – 5/27/20; Wk 9 = 5/28/20-6/3/20; Wk 10 = 6/4/20-6/10/20; Wk 11 = 6/11/20-6/17/20

2020 Black Cutworm Pheromone Trap Report

(John Obermeyer)

		BCW Trapped						
County	**Cooperator**	**Wk 1 4/2/20-4/8/20**	**Wk 2 4/9/20-4/15/20**	**Wk 3 4/16/20-4/22/20**	**Wk 4 4/23/20-4/29/20**	**Wk 5 4/30/20-5/6/20**	**Wk 6 5/7/20-5/13/20**	**Wk 7 5/14/20-5/20/20**
Adams	Roe/Mercer Landmark	12	17*	15*				
Allen	Anderson/NICK	1	1	1				
Allen	Gynn/Southwind Farms	2	3	0				
Allen	Kneubuhler/G&K Concepts	6	2	4				
Bartholomew	Bush/Pioneer Hybrids	6	28*	39*				
Clay	Mace/Ceres Solutions/Brazil	2	2	4				
Clay	Fitz/Ceres Solutions/Clay City	0	4	3				
Clinton	Emanuel/Boone Co. CES	26*	18	28*				
Dubois	Eck/Dubois Co. CES	1	13	18*				
Elkhart	Kauffman/Crop Tech	7	12	5				
Fayette	Schelle/Falmouth Farm Supply Inc.	46*	23	25				
Fountain	Mroczkiewicz/Syngenta	0	8	3				
Fulton	Jenkins/Ceres Solutions/Talma	0	0	1				
Hamilton	Campbell/Beck's Hybrids	15	10	16				
Hendricks	Nicholson/Nicholson Consulting	0	8	3				
Hendricks	Tucker/Bayer		28*	15*				
Howard	Shanks/Clinton Co. CES		2	0				
Jasper	Overstreet/Jasper Co. CES	0	0	0				
Jasper	Ritter/Dairyland Seeds	12	11	12				
Jay	Boyer/Davis PAC	19*	28*	16*				
Jay	Shrack/Ran-Del Agri Services	19*	20	20*				
Jennings	Bauerle/SEPAC	16	29*	17				
Knox	Clinkenbeard/Ceres Solutions/Freelandville	0	0	0				

County	Cooperator	BCW Trapped Wk 1 4/2/20-4/8/20	Wk 2 4/9/20-4/15/20	Wk 3 4/16/20-4/22/20	Wk 4 4/23/20-4/29/20	Wk 5 4/30/20-5/6/20	Wk 6 5/7/20-5/13/20	Wk 7 5/14/20-5/20/20
Knox	Butler/Ceres Solutions/Vincennes	0	0	0				
Lake	Kleine/Rose Acre Farms	60*	35*	26*				
Lake	Moyer/Dekalb Hybrids/Shelby	4	22*	6				
Lake	Moyer/Dekalb Hybrids/Scheider	5	21*	6				
LaPorte	Rocke/Agri-Mgmt. Solutions	6	9	23*				
Marshall	Harrell/Harrell Ag Services							
Miami	Early/Pioneer Hybrids	0	7	2				
Montgomery	Delp/Nicholson Consulting	2	18*	33*				
Newton	Moyer/Dekalb Hybrids/Lake Village	0	4	4				
Porter	Tragesser/PPAC		1	0				
Posey	Schmitz/Posey Co. CES	1	5	2				
Pulaski	Capouch/M&R Ag Services			4				
Pulaski	Leman/Ceres Solutions	31*	28					
Putnam	Nicholson/Nicholson Consulting	8	9	5				
Randolph	Boyer/DPAC	13*	13	11*				
Rush	Schelle/Falmouth Farm Supply Inc.	1	3	15				
Shelby	Fisher/Shelby County Co-op		0	7				
Shelby	Simpson/Simpson Farms	0	32*	37*				
Stark	Capouch/M&R Ag Services							
St. Joseph	Carbiener, Breman	9	0					
St. Joseph	Deutscher/Helena Agri-Enterprises	2	19	1				
Sullivan	Baxley/Ceres Solutions/Sullivan	0	8					
Sullivan	McCullough/Ceres Solutions/Farmersburg	0	0	10*				
Tippecanoe	Bower/Ceres Solutions	3	6	14*				
Tippecanoe	Nagel/Ceres Solutions	36*	38*	86*				
Tippecanoe	Obermeyer/Purdue Entomology	0	0	2				
Tippecanoe	Westerfeld/Bayer Research Farm	0	2	6				
Tipton	Campbell/Beck's Hybrids	0	6	8				
Vermillion	Lynch/Ceres Solutions/Clinton	0	0	0				
White	Foley/ConAgra	5	1	4				
Whitley	Richards/NEPAC/Schrader		7					
Whitley	Richards/NEPAC/Kyler		13					

* = Intensive Capture…this occurs when 9 or more moths are caught over a 2-night period

Uncertain Climate Outlook For May

(Beth Hall)

The Climate Prediction Center's outlook for May is dominated by uncertainty regarding both temperature and precipitation (*Figure 1*). The computer models could not settle on a consistent pattern for either above- or below-normal temperatures for the month and precipitation outlooks are only slightly confident that there will be above-normal precipitation in southern Indiana. Shorter-term outlooks through mid-May are predicting increasing confidence for continued below-normal temperatures but very little guidance regarding precipitation.

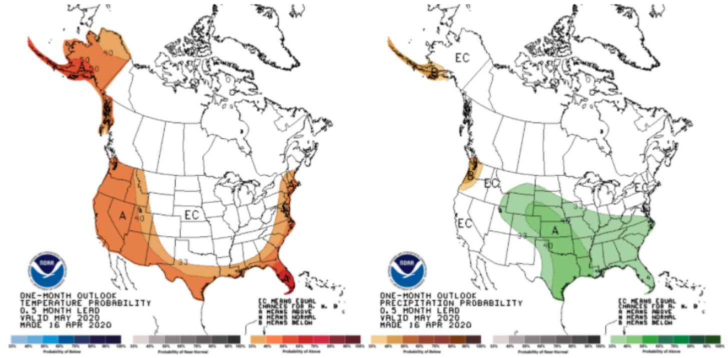


Figure 1. Climate outlook for May. Temperature (left); Precipitation (right). Shading indicates the probabilistic confidence for above- or below-normal conditions.

Climatologically speaking, there is less than a 10-percent chance that a hard freeze (at or below 28°F) is still likely to occur aside from the northeastern counties in Indiana (*Figure 2*). However, forecasts are predicting above-freezing overnight lows for this region, so the threat of any expansive, hard freeze is minimal.

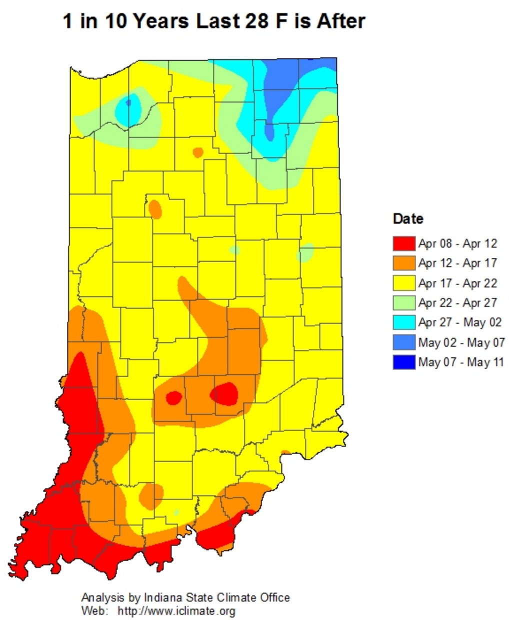
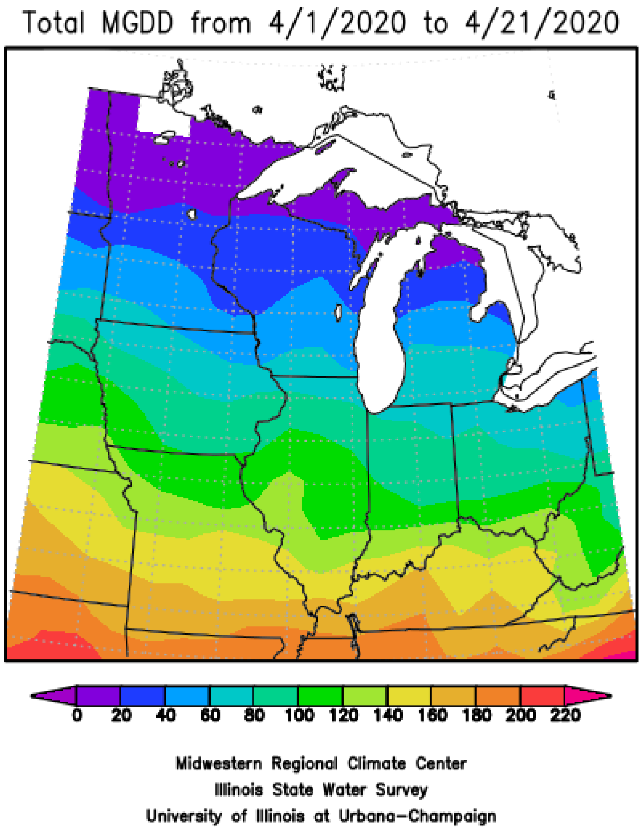
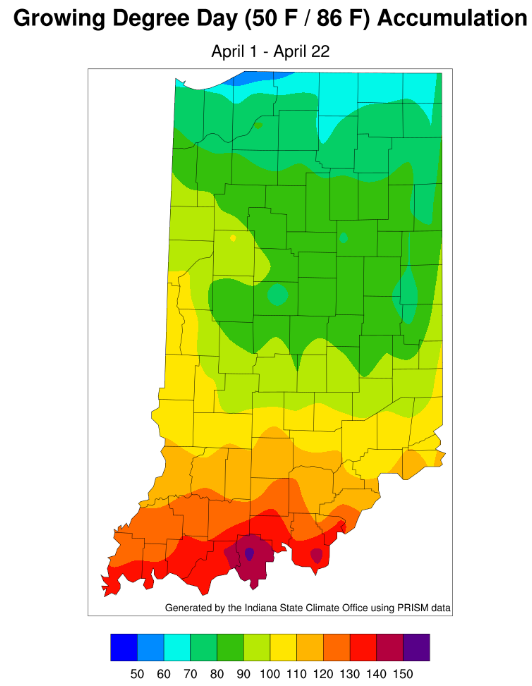


Figure 2. Map showing the approximate date when climatologically there was only a 10% chance that a hard freeze would occur later.

With the recent cold temperatures, modified growing degree-day (https://www.agry.purdue.edu/ext/corn/news/timeless/HeatUnits.html) accumulations have slowed. As of April 20, 2020, GDDs are running 20 to 45 units below normal (*Figure 3*).





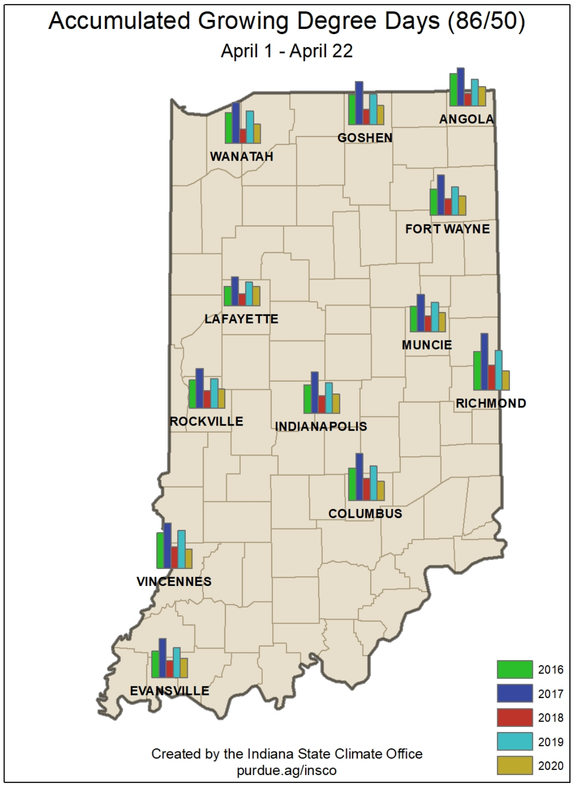


Figure 3. Average accumulated modified growing degree days since April 1, 2020.

Enjoy the warmer and drier conditions when they come. This seems like a relatively typical spring in Indiana.

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