Pioneer Agronomy Update 5-08-2024

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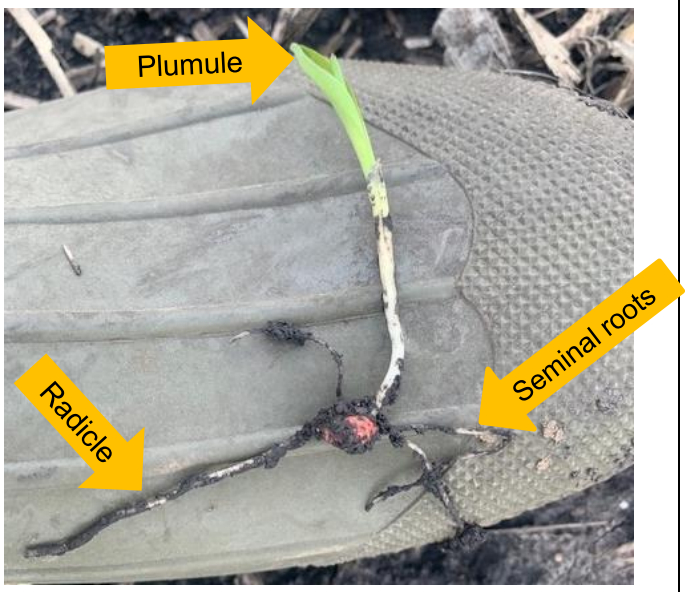
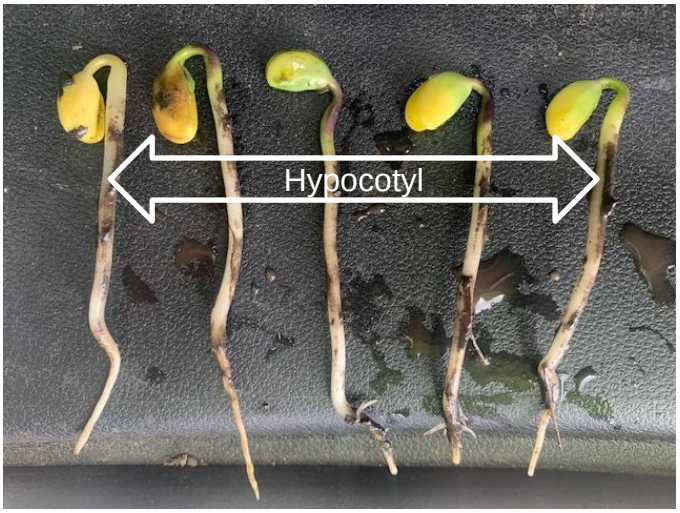
Area Update … From the Field - Early planted corn near Mankato, MN planted April 13. Growth and development on corn all looks normal and healthy. Corn on corn is a little slower to emerge due to cooler soil temperatures and some hair pinning of corn residue



Soybeans near Mankato, planted April 15 - Some recently emerged with yellow cotyledons, no cause for alarm as once exposed to sunlight will turn green. Un-emerged soybeans in foreground show no signs of distress (swollen hypocotyls) & should emerge soon.

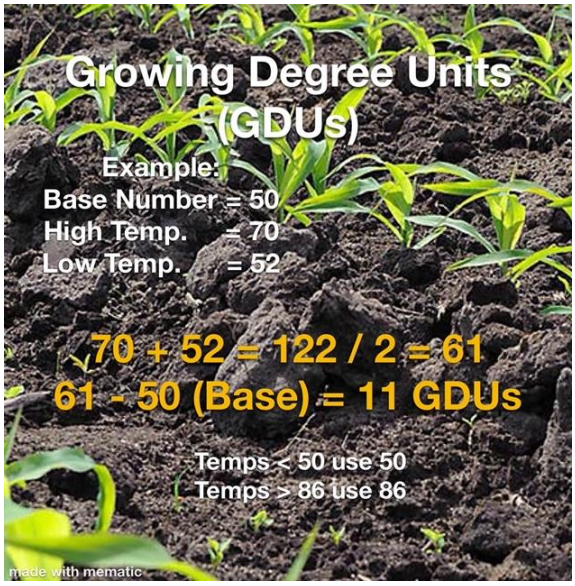


Un-emerged soybeans under stress would show swollen hypocotyls. These do not.

2024 Growing Degree Units
1st & 2nd Planting Windows

Location	4/13 – 5/6	4/24 – 5/6
Glencoe	121	60
LeSueur	134	66
Mankato	143	71
Mapleton	148	80
Waseca	125	60

GDU's To Emergence – Corn & Soybeans. GDUs can be used the predict corn and soybean emergence. Calculating GDUs is a helpful BUT not 100% accurate tool to track crop development. Especially early in the season when nighttime low temperatures often dip below 50 degrees. When it comes to emergence of corn and soybeans technically it **is soil temperature GDUs** not air temperature GDUs. We have to settle for the best tools we have and that is GDUs based on air temps.
The numbers I like to use are: **100-120 GDUS for corn emergence and slightly more for soybeans closer to 120-130 GDUs or more**.



Delayed Planting Impact on GDUs to Maturity - While we're on the subject of GDUs … later planted corn requires fewer GDUs. I know what you're thinking: *"Yeah it's a sneaky way for seed guys to get farmers not to switch to early hybrids."* The reality is that as planting is delayed corn adjusts and requires fewer GDUs than earlier planted corn. Quoting Dr. Bob Nielsen of Purdue University:

"Hybrids planted later than May 1 mature approximately 6.8 fewer GDUs for every day of delay beyond May 1, through at least the 2nd week of June."

Many of you experienced that very thing in 2023 either with delayed planting OR replanted corn. In fact, in some cases late planted yield better than early planted corn. That was a rarity I admit however, as a former colleague of mine so aptly put it: ***"Don't go to early (maturing hybrids) too early!"*** Sage advice from a seasoned agronomist.

Black Cutworm UPDATE – As mentioned is my last update: strong southerly winds have brought visitors from the south into southern Minnesota. And I'm NOT talking 'snowbirds' ☺ I'm referring to black cutworm moths captured in Minnesota's 'Black Cutworm Trapping Network'.
Based on the fact that significant moth captures have occurred and utilizing GDU predictions we could see damage in the form of cut plants sometime around May 20 -24th.
Black cutworm moths are often attracted to sheltered and low-lying areas of fields. Particularly un-tilled fields, fields with fine residue such as soybean or small grain straw, weedy fields or cover crops.

Fully traited corn products with above ground insect protection are less prone to black cutworm damage. However, **conventional corn hybrids and sweet corn will be particularly vulnerable.**
The good news is when scouted and treated early black cutworm damage can be controlled through the use of many of the common pyrethroid insecticides used in corn.
SCOUTING IS THE KEY!!! Young corn experiencing 2% cut plants is sufficiently to justify treatment as black cutworms have a voracious appetite and can quickly decimate stands of young corn plants

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Have an UNBELIEVABLE Week!!!