Pioneer Agronomy Update 5-23-2024



Area Update ... 'Everything All at Once' – As the spring of 2024 gets stretched out it seems that everything is coming together all at once: planting, replanting, and post emerge weed control. Where stands are thin evaluations should be made for possible replant once fields dry out. In my last update I shared several charts to assist you as you take stand counts and consider the possibility of replanting corn or soybeans. Warmer temperatures and ample moisture have provided ideal conditions for rapid early weed growth. It's time to get the jump on weeds get at post emerge herbicide applications in corn. As I said earlier: "It's everything all at once!

Get After Weed Escapes in Corn - Recent strong winds, rainy weather and wet field conditions have delayed applications of some post emergence herbicides in corn. Corn is sensitive to early season weed competition and once weeds are bigger than 3 inches in height they begin to impact corn yield, and 2 inches under heavy weed pressure The 'Corn Year' is your best opportunity to get a jump on tall waterhemp populations and lessen the pressure on your soybean weed control program. Be sure to prioritize fields with heavy waterhemp pressure and consider going to higher rates of HPPD actives and/or spiking with atrazine where appropriate. Just a few escapes in corn can lead to real headaches in the soybean year.

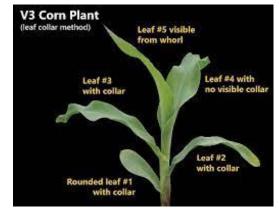


'Goose Up' the Glyphosate in Corn — The past several I have heard and observed more reports of Woolly Cupgrass & Yellow Foxtail escaping post herbicide applications in corn that have include glyphosate. Especially on end-rows and headlands. My theory is that these weeds tiller profusely at very early growth stages. Each tiller is yet another growing point that the herbicide must concentrate in to kill the weed. Just as numerous growing points make tall waterhemp difficult to control. Therefore I encourage you to consider increasing the amount of glyphosate in the mix where cupgrass and yellow foxtail are present in corn.

2024 Growing Degree Units April & May Planting Windows

Location	4/13 – 5/14	4/24 – 5/14	5/12 – 5-14
Glencoe	324	262	140
LeSueur	350	282	148
Mankato	362	290	132
Mapleton	365	297	133
Waseca	326	262	121

Corn Growth & Development V3 – The V3 growth stage typically coincides with approximately 280 GDUs. At V3 (3 exposed leaf collars) the corn plant is transitioning from relying on the seed, radicle and seminal roots to the nodal roots that will be the primary root system for the remainder of the growing season.



Black Cutworm Update - earlier this spring the University of Minnesota Extension Black Cutworm Trapping Network recorded several heavy black cutworm moth flights. Highest moth capture numbers were recorded on several nights in: Brown, Nicollet, Redwood and Renville counties. Although heavy flights don't always translate to heavy feeding depending on egg survival and other factors. However, beginning this week and continuing over the next three weeks high risk fields should be scouted for signs of cut plants with cutworms present. Priority fields are those planted to corn without above ground insect traits. Additional 'fine residue' such as follows soybeans or small grains are particularly attractive for moths to lay their eggs as are sheltered areas, low lying soils and peat. Small corn is particularly vulnerable, and cutworms can quickly decimate a field. 1-2% cut plants is sufficient to justify treatment on small corn.



Black Cutworm Feeding Symptoms – Black cutworms are nocturnal feeders that spend daytime hours just beneath the soil surface, coming out to feed at night.

- •Small larvae chew holes in leaves
- Fourth stage or older larvae exceed the width of a dime in length, and can begin cutting V1 to V5 stage plants
- Drilling into V6-V8 stage plants can kill growing point
- •Cutting mostly above ground in wet soil, mostly below ground in dry soil.

Corn Rootworm GDUs to Egg Hatch - Last year's resurgence in rootworm populations has many anxious to see what lies ahead for 2024. As of May 22 there have been 580 Corn Rootworm GDUs. Rootworm GDU's are calculated slightly different than for corn as the base temperature used is 52 degrees. Entomologists believe that 50% egg hatch occurs at 680 - 750 GDUs. We're likely to reach those numbers sometime over the next 10 -14 days. As with anything in nature rootworms may not adhere exactly to the 'rules'. (photo rootworm eggs North Dakota State University)



Soybean Planting Delays - As rainy days and wet field conditions mount soybean planting has been delayed. The delays are making some farmers nervous about delayed harvest, as well as whether it is time to adjust maturities.

- Planting Delays & Impact on Harvest A good rule of thumb is: "Harvest is delayed one day for every 3-5 days delay in planting. Locally, my friend Tom Hoverstad of the Southern Research & Outreach Center at Waseca has said in the past that harvest is delayed 1 day for every 5 day delay in planting.
- Is it time To Adjust Soybean Maturities? A good guideline is to stick with early group II maturities through the 10th of June, and mid-late group I beans through the 20th.

Therefore, there is plenty of time yet before one begins switching soybean maturities in south central Minnesota.

Questions or Concerns? – Feel free to call, text or email me at anytime.

