June 30th, 2025

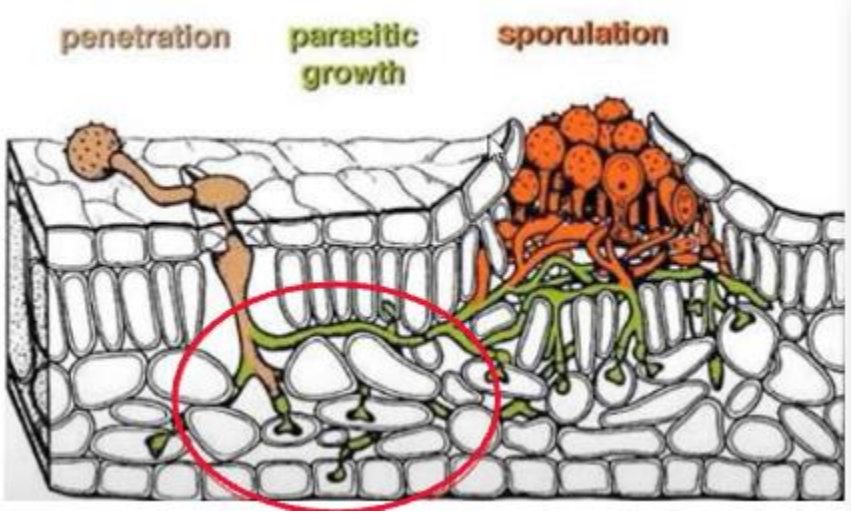
NW IA Dealer Agronomy Update

Fungicide Active Ingredients – Why Do We Need Them All?

We have advocated for the use of fungicides with multiple modes of action for many years because it brings us multiple benefits. These include reducing the risk of resistance development, effectively managing a wider range of pathogens, improving efficacy, and overall leading to increased yields and higher economic returns. For these reasons, Delaro Complete includes 3 active ingredients from 3 different chemical families (otherwise known as FRAC groups). Let's dig into each so that when talking to growers you can really dig into the details

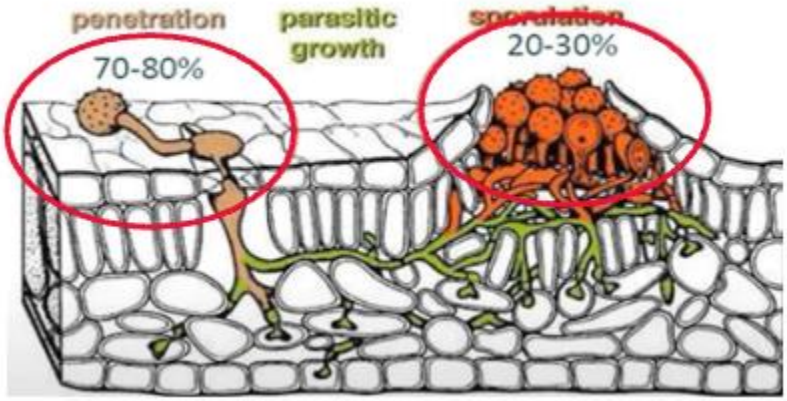
Triazole GROUP 3 - **Prothioconazole**

- Family of broad-spectrum cell membrane disruptors
- Systemic movement in the xylem
- Preventative action as well as slight curative action. This curative action works on very early infection that the human eye cannot yet detect. It will NOT heal lesions already present.
- Yield increase is directly tied to disease control, little to no plant health benefits
- Lower risk of resistance development



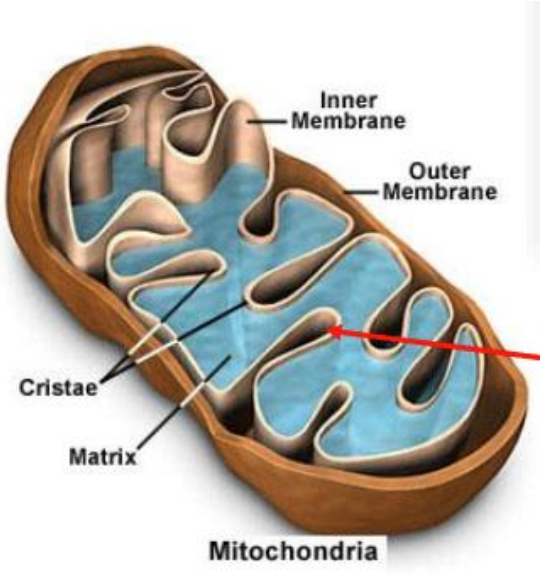
Strobilurin GROUP 11 - **Trifloxystrobin**

- Family of broad-spectrum actives that inhibit spore germination and respiration
- Active in reducing mitochondrial respiration
- Trigger physiological reactions in the plant such as slowing stress reactions, reduced ethylene gas production to slow senescence, improved lignification of cell walls
- "Greening Effect"
- Improved utilization of limited resources
- Preventive only and prone to resistance development



SDHI GROUP 7 - Fluopyram

- Highly specific activity on select pathogens
- Active in blocking mitochondrial electron transport
- Primarily preventative
- Locally systemic (translaminar which means it can move from one side of the leaf to the other)
- Also triggers ‘Greening effect’
- Also prone to resistance development



Japanese Beetles in Corn and Soybeans

Identification and Life Cycle

The damage from Japanese beetle feeding on corn and soybean can be eye-catching, especially on field edges. Japanese beetles have a large host range and can feed on corn silks potentially reducing pollination and kernel set and cause defoliation in soybean. Mild winters and early planting generally contribute to higher Japanese beetle populations. Adult Japanese beetles (*Popillia japonica*) are about 5/16 inch long, have a metallic green head and neck region, reddish to bronze wing covers, a row of six white bristle bunches along each side of their abdomen, and live about 30 to 60 days. The adults emerge from the soil starting in late May and early June with peak emergence occurring four to five weeks later. Mating, which occurs soon after emergence, causes the females to burrow two to four inches into the soil to lay four to six eggs every three to four days for several weeks. Eggs take roughly two weeks to hatch into small grubs (larva). The grubs are 0.5 - 1.2 inches in length depending on the instar, typical white, and C-shaped and similar in appearance to other commonly found white grubs. Larvae are easily identified by a V-shaped arrangement of hairs (raster) adjacent to the anus. Japanese beetle grubs may heavily infest an area, however, a heavy white grub infestation is not always an indicator of potential severe injury from adult beetles, as the beetles are very mobile and can move large distances to locate a preferred food source.

Corn Scouting and Thresholds

The adults feed on pollen, tassels, silks, and leaves. Corn leaves may appear skeletonized or “lacy,” but leaf feeding is rarely of economic importance. Economic damage can occur when beetles prevent pollination by early silk clipping. It is important to protect silks during the first five silking days. Silk clipping after pollination does not affect yield potential. When silks are clipped during pollination, this can interfere with pollination and the ears may be only partially pollinated. A representative portion of the field should be evaluated when scouting corn for Japanese beetles as populations could be overestimated if sampling is only conducted near field edges where Japanese beetles can congregate. An insecticidal treatment should be considered during the corn silking stage if:

- There are 3 or more Japanese beetle adults per ear
- Silks have been clipped to less than a 1/2-inch
- Pollination is less than 50% complete
- Japanese beetles are still present and actively feeding

Soybean Scouting and Thresholds

Although Japanese beetle feeding can cause major defoliation, soybean plants can compensate for the damage, and defoliation is unlikely to affect yield potential. Flowering fields should be scouted for Japanese beetles and the extent of defoliation. The percent defoliation should be estimated on randomly selected leaves in at least five different areas of the field. An insecticide application should be considered if:

- 30% defoliation occurs prior to bloom
- 20% defoliation occurs after bloom
- Japanese beetles are present and actively feeding

Japanese Beetles in Corn and Soybeans

What is Going on With Our Soybeans???

As we move through the growing season, several notable issues are surfacing in soybean fields across the territory. Timely scouting and understanding the "why" behind these symptoms can help drive better in-season management and set the stage for future decision-making. Here's a quick roundup of current field concerns:

Phytophthora Root Rot

We're seeing classic symptoms of Phytophthora root rot showing up in areas with heavier soils and recent saturated conditions. Watch for wilting plants, root discoloration, and chocolate-brown lesions extending up the stem. Fields with a history of this disease and less-than-ideal drainage are showing the most pressure. Consider reviewing seed treatment packages and varietal resistance scores for future management.

Oil Burn from Post Applications

We're noticing more instances of foliar burn tied to high oil loads in post-emerge tank mixes—especially where multiple products are being stacked. Warmer temperatures and crop growth stage are adding to the sensitivity. If your herbicide tank mix has a multitude of products i.e. glyphosate, a group 15, clethodim, etc., be cautious with adjuvant loads, especially MSOs or crop oil concentrates. If spraying when temperature and humidity are high, we could see more crop response from the oil load in our tank mixtures.

This response is usually only cosmetic and should not affect yield in most circumstances.

Group 15 Draw stringing

Group 15 herbicides (Warrant, Dual, Zidua, etc.) continue to be key for residual grass and small-seed broadleaf control in soybeans, but we observe “draw stringing” injury in some post applications. This leaf cupping and strapping is typically cosmetic, but it can raise some concerns. Keep application timing and environmental conditions in mind and communicate that injury usually has minimal impact on yield.

Carbon Penalty in No-Till Beans

Soybeans planted into heavy residue—particularly in no-till or high corn-stalk load scenarios-these beans often look pale, slow-growing, or stagnant. This “carbon penalty” occurs as soil microbes break down carbon-rich residue, temporarily immobilizing nutrients. Soybean nodulation begins around V2, early growth can stall as the crop struggles to find available nutrients. Many factors can reduce nodulation: excessive moisture, compaction, soil pH and soil temperature are just some of the reasons we can see poor nodulation. One management approach that has seen some success is a spring application of ammonium thiosulfate (ATS). This can help supply sulfur and a small amount of nitrogen during those early stages when beans are not yet fixing their own. If your soybeans are looking pale or stagnant in high trash zones, this may be something to consider in future seasons.

CRW Adult Emergence

Corn rootworm larvae have hatched and are actively feeding as we speak. The next stage in the life cycle is pupation and then adult emergence. A few facts about adult emergence as we prepare for combatting this key pest.

- Larvae feed on corn roots for 4-6 weeks and then pupate for 5-10 days to emerge and feed on silks
- Males emerge first, roughly spanning118-505 GDUs after the very first beetle is observed in an area
- Females follow with emergence running in-between 245 – 629 GDUs after first beetle is observed
- There are two different thresholds for managing adult CRW one for silk clipping damage and one for managing egg laying for future season populations. Those details can be found **HERE**

Figure 5. Gravid female western corn rootworm with distended abdomen. Photo courtesy of Joe Spencer, Illinois Natural History Survey.

Figure 6. Gravid females release eggs when squeezed (left) while non-gravid females release a gelatinous or 'slimy' substance (right). Photos courtesy of Kevin Black, GROWMARK.

New Product Spotlight DKC117-89RIB SmartStax Pro

This week's new product spotlight is a full-season hybrid - DKC117-89RIB - a new SSPRO that will be available in low volumes for 2026

- Attractive plant type with consistent ear placement – "Eye Candy" appearance
- **Strong emergence and vigor enables early planting coupled with excellent SLIM (Stalk Lodging Induction Machine) profile for late harvest.**
- Flowers late but will drydown quickly
- **Nice late season health and intactness**
- Strong disease profile with excellent Southern Rust (3), Goss Wilt (4) and Tar Spot tolerance

This plethora of green biomass was at eye level as of last Friday 6/27. Picture taken from an O'Brien County Ag Plot by Primghar.

Growing Degree Units

GDU accumulation continues to be running ahead for all the planting dates listed below. The table below shows the GDU accumulation from **April 11th – June 29th, April 23rd – June 29th and May 5th – June 29th** at different locations in Northwest and Central Iowa. These GDUs can be found on the following website – plug in your location and planting dates for GDUs specific to you. MRCC.

Location	4/11/25 to 6/29/25	30 Year Average
Rock Rapids	1083	1014
Bancroft	1061	979
Le Mars	1126	1064
Fort Dodge	1089	1038
Denison	1151	1058
Ames	1183	1049

Location	4/23/25 to 6/2925	30 Year Average
Rock Rapids	985	947
Bancroft	976	918
Le Mars	1022	991
Fort Dodge	1001	968
Denison	1053	985
Ames	1096	978

Location	5/5/25 to 6/29/25	30 Year Average
Rock Rapids	882	855
Bancroft	886	832
Le Mars	921	891
Fort Dodge	904	873
Denison	949	889
Ames	982	882

Additional Resources:

Summer always has us thinking about the drought monitor https://droughtmonitor.unl.edu/

Track + submit progression of key diseases like Tar Spot and Southern Rust https://corn.ipmpipe.org/

Get alerts for insect migration and emergence with https://www.insectforecast.com/

Track GDUs https://mrcc.purdue.edu/tools/corngdd

Sign up to receive Bayer Crop Science Agronomic Updates

/// FieldView Support:
/// 888-924-7475 /// Knowledge Center /// YouTube /// Twitter

Picture of the Week

Predicting corn's transition into the reproductive stages can be done through GDU predictions as well as pulling the whorl of the plant and counting the developed but not yet emerged leaves.
DKC108-17RIB planted 4/16.
4 leaves x 2.7 days per leaf to emerge = 11 days from 6/27 = 7/8
GDUs needed 1320 = predicted window of 7/7-7/13

Follow Jim McDermott @jfmcde on Twitter