



June 9th, 2025

NW IA Dealer Agronomy Update

Summer Storms Bring Hail Damage

It has been a very eventful season already with spring storms that have produced heavy rains, winds, and hail. If your field has experienced an early hail event, both corn and soybeans, it is a good idea to give it a few days prior to assessing stands before making a decision. After giving it a few days you will want to go out and take an estimate of viable plants. With our corn crop the survival of the young corn plant is high due to the growing point being below the soil surface. The growing point typically remains protected below the soil surface until the collar of the sixth leaf (V6) is visible. When assessing soybean fields, we look at three things; leaf area reduction, plant bruising, or stand loss. For early hail events prior to flowering, the soybean has an amazing ability to compensate for damaged leaves or reduced stands. If the stem apex (growing point at the top) or axillary buds (located at the juncture of the stem and leaves) remain intact after a hail event, new branches and leaves can be produced even though the hail may have destroyed nearly all the above ground foliage. In evaluating hail damage at this point, the key factor is taking stand counts – just like we would in any potential replant situation – and using our current thresholds. **For soybeans, this would be around 75,000 but will vary based on soil type, pH, fertility, White Mold potential, etc.** With soybeans, there is the option of thickening up existing stands, but be cautious about this in fields with high fertility or White Mold potential so we don't end up with too thick a stand and promote lodging. For corn, around 18,000 would be the trigger point for replanting. As always, removing the existing stand with tillage or herbicide is the best recommendation for corn as trying to add to an existing stand will create additional problems.



Early season hail on corn can look tough, but with sun and wind, most of the dead leaf tissue will dry up, allowing the growing point to push through surprising well. There still can be stand loss though as well as uneven regrowth after hail damage.



Flooding and Saturated Soils

Some areas in Western and Central Iowa received heavy rains last week. Fortunately, with the corn and soybeans being ahead of schedule on growth stage for early June, survival should be good.

Points around survival of seedlings and young plants:

- Hybrids likely respond differently
- Cool air temperatures help survival
- Emerged corn up to 6th leaf stage - survival up to 2 days at warm temps (at or above mid 70's)
- Emerged corn up to 6th leaf stage - survival up to 4 days at cool temps (at or below mid 60's)
- Fusarium Crown Rot potential increases with saturated soils
- Sealed over soils can limit oxygen availability to the plant causing slow growth both above and below ground
- Soybeans can survive two days underwater very well. Once flooding lasts 4-6 days or more survival becomes limited and diseases start to take their toll.

Nitrogen Management Going Forward

With some of the recent heavy rains, the question of Nitrogen loss and management is always front and center. Most of this spring has seen limited heavy rains and thereby has been favorable to limit our Nitrogen loss and movement. While there is no accurate way of knowing how much N we may have denitrified into the air or leached below the root zones, the plants can tell us if they are deficient. This still may be a good year to pay close attention to the color, possibly soil or tissue sample, and be ready to take action. If soils stay wetter, rooting depth will be a concern as well making uptake of all nutrients a challenge.

N management is a very complex issue with every field situation being different. There is no perfect "rule of thumb" on managing N in a wet year but watching rainfall totals is a very good guide. **Multi-year research done by Iowa State University has shown in years where rainfall totals exceed 15" from April 1st – July 1st there is a high likelihood (76% chance) of positive yield response from additional in-season N applications.**

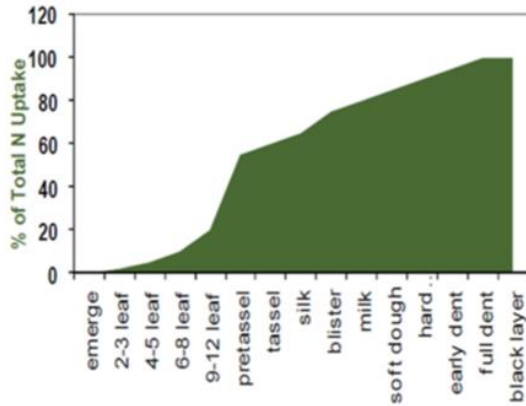


Figure 1. Percent of total nitrogen uptake for corn by growth stage. Nitrogen data adapted from "How a corn plant develops," Special Report 48, Iowa State University.

Nitrogen in Corn. Corn plants require an adequate amount of N starting at the V5 (5 collared leaves) through V8 growth stage because the number of potential ears and ear girth is determined during this growth period. The quickest N uptake occurs from about the V8 growth stage through silking providing environmental conditions are favorable for plant growth.

Table 1. Potential nitrogen loss from saturated soils, depending on air temperature and duration of saturation.

Time	Temperature	N Loss
days	degrees F	percent
5	55 – 60	10
10	55 – 60	25
3	75 – 80	60

Denitrification loss will be less with soils having less than 1% organic matter.

Evaluation of Weed Control Programs in Corn

We invest a significant amount of time during the fall and winter months developing plans to raise the best crop possible. But it's just as important to evaluate those decisions during the growing season to see if adjustments are needed.

One area where we can improve is our **post-application follow-up**. We do a great job scouting fields before making a post-emergence herbicide application, but we don't always take the time to check how effective that application was afterward. That post-check is key. Getting out in the field now helps us **identify problems early**—and while there's still time to make a **rescue treatment** if needed. It's never fun walking a field in the fall and coming across a lot of weed escapes you weren't aware of.



In our corn acres, we've leaned heavily on **Group 27 herbicides (HPPDs)** to control Waterhemp. While they've been effective, continued reliance on a single mode of action increases the risk of resistance. That's why it's so important to monitor performance closely and adapt when needed.



The Importance of Soybean Nodulation



Photo credit: Dwane Miller. Penn State

It is not often talked about, but soybean requires approximately 3.5 lbs of nitrogen (N) per bushel of grain produced. This means an 80-bushel soybean crop will uptake 280 pounds of nitrogen! We can thank Nitrogen-fixing bacteria (*Bradyrhizobium japonicum*) for covering the difference between what's available in the soil and what the crop needs. It forms a symbiotic relationship with soybeans, forming nodules on the roots. The bacteria can provide 50 to 90% of a soybean plant's N requirements by "fixing" or converting gaseous atmospheric N into a form that can be utilized by the plant.

Nodule formation normally begins within a week following emergence, but five to six weeks after soybean planting is a good time to begin evaluating nodules because they should be large and actively fixating. You can check for good nodulation when scouting soybean fields by carefully digging up as much of the root as possible with the soil still in place. Place the roots in a bucket of water and carefully rinse so nodules are not dislodged. Cut open a few nodules to check if they are active. Active nodules that fix atmospheric nitrogen will appear pink or red when cut open, white nodules may be immature and not yet fixing nitrogen, while mushy, brown nodules indicate a lack of nitrogen fixation. Healthy nodules will also have a very distinctive smell when cut or crushed.

It's important to note the location of the nodules, as those on the taproot likely result from this season's inoculation, while nodules on lateral roots originate from bacteria already present in the soil. Five to seven nodules present on the taproot two weeks after emergence is an indicator of proper nodulation. By the time flowering begins (R1 growth stage), there should be about 12 nodules per inch of taproot.

Causes of poor nodulation include:

- Residual soil N greater than 40 lb N/acre
- Flooding or very saturated soil lasting seven days or longer can create anaerobic conditions which are detrimental to Rhizobia.
- Compacted soils limiting available oxygen.
- Drought conditions have occurred. Dry soil can reduce rhizobia populations
- Very high or very low soil pH

Fields with poor nodulation should be assessed for timing of potential additional N. Otherwise planned inoculation with *Bradyrhizobium japonicum* in the future when soybeans will be planted again.



New Product Spotlight DKC109-71RIB SmartStax Pro



This week's new product spotlight is DKC109-71RIB. It adds to the SSP line up with tremendous yield in offensive environments. Available in good quantities in 2026.

- ☆ Top-end yield potential aka IT CAN HUNT!
- ☆ Very good emergence rating (2) and showed well in plots this year
- ☆ Keep population at medium to medium high
- ☆ Taller plant with medium – high ear placement
- ☆ Excellent drydown (2) for this RM
- ☆ Stalk strength is enhanced by Very Good ratings against Anthracnose Stalk Rot (2)
- ☆ Will respond well to an application of Delaro Complete when Southern Rust is present



Get Application Data Organized Now for Analysis Later

Digital Ag platforms such as Climate FieldView and others can do an incredible job at calculating yield impacts of different applications done throughout the season. The key to this though is to get the data in the account in the first place! Summer flies by at an amazing rate, so get that data rounded up NOW before we move on and forget which machine it is on or that we did it all together. Data driven decisions that are powered by on farm learnings are crucial to managing high yields AND high ROIs.

For more information, check out these support resources from Climate FieldView

- [Field Region Report \(FRR\) by Application](#)
- [Data Inbox Compatibility](#)
- [Data Inbox Step by Step](#)
- [How to create a .zip file](#)



Growing Degree Units

GDU accumulation is mixed but trending slightly ahead from the planting dates listed below. The table below shows the GDU accumulation from **April 11th – June 8th**, **April 23rd – June 8th** and **May 5th – June 8th** 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](https://mrcc.iastate.edu/).

Location	4/11/25 to 6/8/25	30 Year Average
Rock Rapids	614	582
Bancroft	569	557
Le Mars	640	623
Fort Dodge	595	595
Denison	643	609
Ames	643	616

Location	4/23/25 to 6/8/25	30 Year Average
Rock Rapids	520	517
Bancroft	489	496
Le Mars	538	550
Fort Dodge	509	525
Denison	542	537
Ames	562	543

Location	5/5/25 to 6/8/25	30 Year Average
Rock Rapids	436	432
Bancroft	412	417
Le Mars	447	458
Fort Dodge	424	441
Denison	450	452
Ames	462	456

Additional Resources:

The next DAACAT call will be Wednesday, June 11th at 8:00 AM. Link for the call: [Join the meeting now](#)

Drought monitor update <https://droughtmonitor.unl.edu/>

Sign up to receive Bayer Crop Science Agronomic Updates



/// FieldView Support:

/// [888-924-7475](tel:888-924-7475) /// [Knowledge Center](#) /// [YouTube](#) /// [Twitter](#)

Monitor Soil GDUs for Corn Rootworm Hatch

<https://mesonet.agron.iastate.edu/GIS/apps/agclimate/gplot.phtml?var=gdd52&year=2025&smoth=1&sday=1&imgsz=640x480&emonth=5&eday=15>



Picture of the Week



As HPPD resistance becomes more common, dicamba-based products are being sprayed on more corn acres post-emerge. Even safened dicamba formulations can cause leaning and floppy corn, especially when sprayed during warm and humid conditions. Typically, corn is able to grow out of this without any long-term impact or effect on yield.