May 19th, 2025

NW IA Dealer Agronomy Update

Early Growth Stages on Corn

Our corn and soybean crops are off to a very good start. We know there can be plenty of challenges ahead, but overall our stands, planting dates and soil conditions give an excellent chance at top end yields. With corn, we also know that it can go through an ugly stage as the plants transition from living off the seed and the early roots, to living off the moisture and nutrients that the nodal roots will provide. If there is any sidewall compaction, cool soils or a lack of available nutrients, this stage can be extended and really make corn look tough for even several weeks. Hopefully that will not be the case this year.

VE	**Can occur four to five days after planting under ideal conditions, but up to two weeks or longer under cool or dry conditions.**
V1-V5	**At V1, round-tipped leaf on first collar appears, nodal roots elongate. By V2, plant is 2 to 4 inches tall and relies on the energy in the seed. V3 begins two to four weeks after VE, and plant switches from kernel reserves to photosynthesis and nodal roots begin to take over. Around V4, broadleaf weeds should be controlled to avoid loss. By V5, the number of potential leaf and ear shoots are determined. Plant is 8 to 12 inches tall and growing point remains below soil surface.**
V6-V8	**Beginning four to six weeks after VE, the growing point grows above the soil surface, increasing susceptibility to hail, frost, or wind damage. The nodal root system is dominant. At V7, rapid growth phase and stem elongation begin. Number of kernel rows is determined and potential kernels per row begins and continues through V15/16. By V8, the plant reaches 60 cm (24 inches) tall.**
V9-V11	**Around six to eight weeks after VE, corn begins steady and rapid period of growth and dry matter accumulation. At V9, tassel is developing rapidly, but is not yet visible. New leaves appear every two to three days and ear shoots are developing.**
V12-Vnth	**By V12, the plant is about 4 feet tall or more. Nutrients and water are in high demand to meet growth needs. All leaves are full size and roughly half are exposed to sunlight. Brace roots are developing and the potential number of kernels per ear and size of the ear are still being determined. Insect and hail injury can reduce the number of kernels that develop. The plant is about two weeks away from silking at V15. The tassel is near full size, but not visible. Moisture and nutrient deficiencies at this time can reduce the number of potential kernels per row resulting in shorter ears and lower yield potential.**
VT	**Beginning around nine to ten weeks after emergence, corn enters a critical period where successful pollination is required to convert potential kernels into viable, developing kernels. The plant has reached full size. Tassels are fully visible, and silks will emerge in two to three days. Pollen shed begins and continues for one to two weeks. Hail can be very damaging at this stage.**

With the transition at V3 of living off the seed to feeding off the nodal roots – there is usually an "ugly corn" phase. With warmer temperatures earlier this year, especially warmer nights, this stage should be minimal or moved through rather quickly. Many times, this transition is marked by temporary nutrient deficiencies, like this plant showing Sulfur deficiency with yellow striping in the new growth. Unless there is compaction, other issues holding back nodal root growth or lack of nutrients in the top 6-12" of soil, uptake of Sulfur and Nitrogen should kick in quickly.

Nitrogen Response by Hybrid

It may seem early to talk about side-dress or adding additional Nitrogen but with **very good stands and favorable planting dates, this may be the year to push yields as high as possible.** In-season or side-dress Nitrogen applications can be a key management strategy to optimize the N efficiency, yield potential and even late season standability. N uptake increases quickly after the V6 stake as the stalk starts to elongate and rows around on the ear are being formed. This is a critical stage to make sure the plant has N available for uptake. While all hybrids will respond favorable to N, DEKALB conducts both internal and external research on response to N by hybrid. Refer to the list below if on the fence for deciding on whether a field should receive additional N. These hybrids have shown response to higher levels of N or have shown more of a penalty on yield or standability when N is deficient.

**New Product Preliminary Data*

DKC096-21RIB
DKC101-33/35RIB
DKC102-13RIB
DKC52-99RIB
DKC55-53/54RIB
DKC56-65RIB
DKC107-33RIB
DKC108-17RIB*
DKC59-81/82RIB
DKC110-41RIB
DKC111-33/35RIB
DKC112-12RIB*
DKC62-69/70RIB
DKC63-90/91RIB
DKC114-42/43RIB*

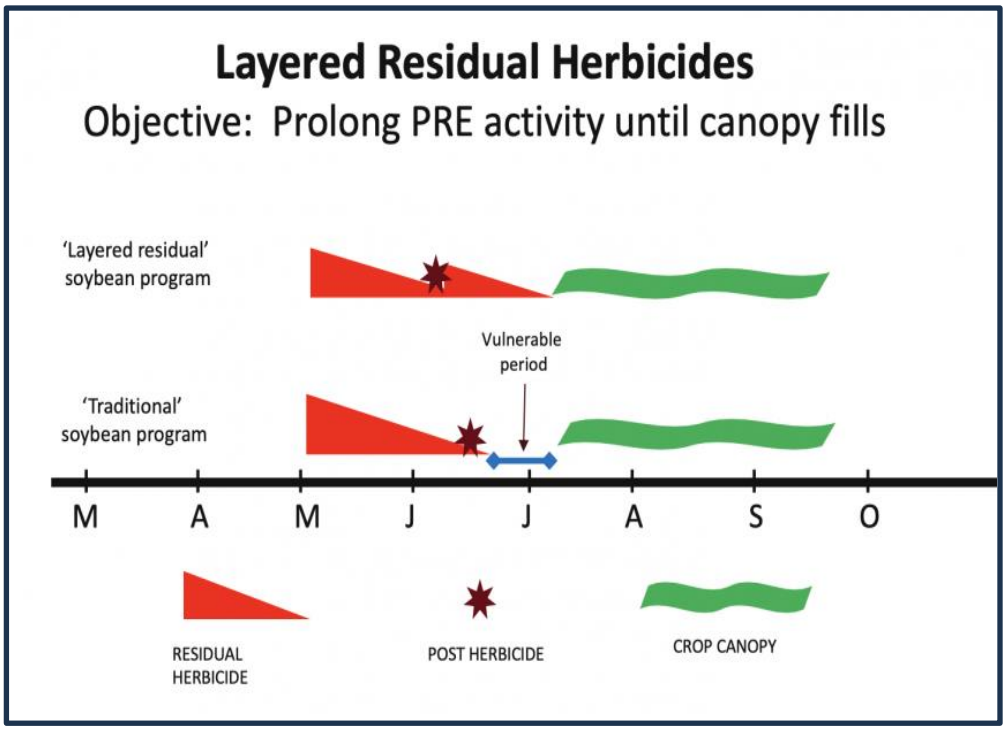
A few hybrids that have shown to be very efficient on N use are DKC098-88RIB, DKC102-28RIB, DKC54-38/40RIB, DKC106-98RIB and DKC108-64RIB.

Corn Rootworm – Early Hatch?

Even with the cool down late last week, we have been running well ahead on GDUs. This affects crop growth, weeds and especially insect development. Soil GDUs measured from January 1st are also running well ahead of normal. This may mean an early Corn Rootworm hatch. The mild winter and dry spring may have allowed this pest to have high survival. Typically, we start to see the Corn Rootworm hatch around the second week of June. A more accurate measurement is looking when we get between 684-767 GDUs – where 50% egg hatch will occur. If you are curious where your area is at with soil GDUs (Base 52°F) accumulation find that below.

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

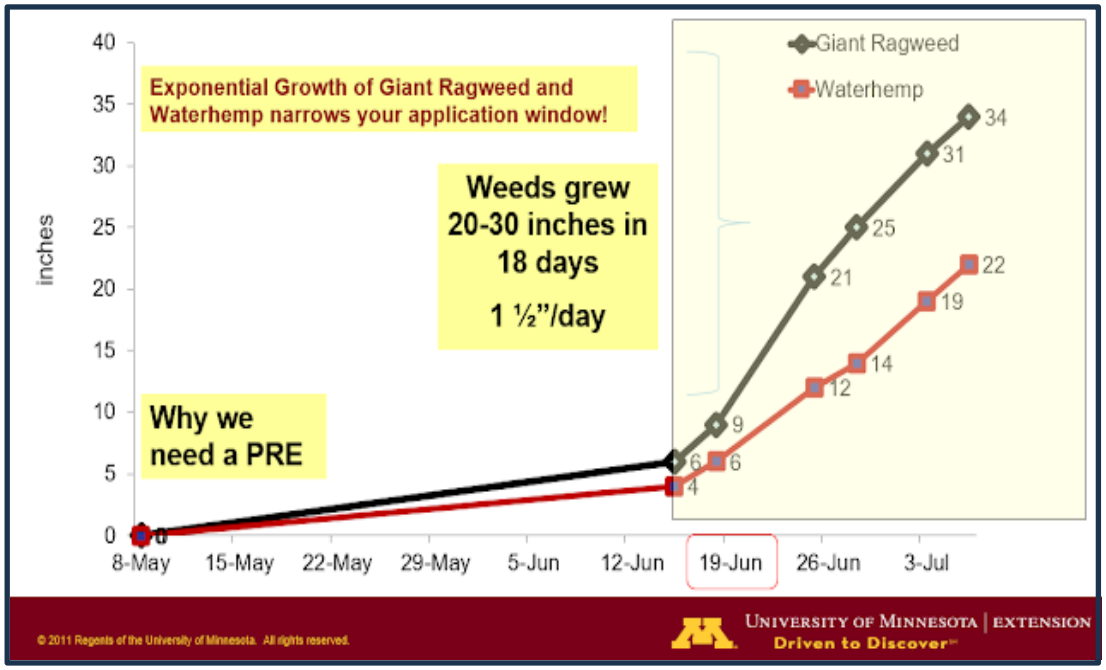
Post Emerge Herbicide Spraying



Overlapping residuals is a key part of our battle against tough weeds, especially waterhemp. This visual is from Bob Hartzler at ISU and while it is labeled 'soybean', the theory transitions to corn just the same.

Residual herbicides work by preventing the germination of weed seeds. By applying overlapping residuals, we can maintain effective control of waterhemp throughout the critical early growth period of corn, reducing competition for resources.

Using a program that includes herbicides with different modes of action can also help mitigate the risk of developing resistance, making it more difficult for waterhemp to adapt and survive.



This chart shows why making recommendations to growers that include overlapping residuals is important. Once waterhemp germinates it can grow at an amazing rate. Over 1.5" per day according to this data from the University of Minnesota. A few windy and rainy days and we are likely to see some woolly fields.

Keep Calm and Read the Label

As we work through the post spraying season, we know that herbicide plans may need to be tweaked or changed due to wind, rain, crop size, or weed size. When making these adjustments it is crucial that the label is still followed. It can be a pain to find the information on the go sometimes, which is where the CDMS Database can help. By following that link on mobile (or desktop) you can easily search for any herbicide label currently registered. You can zoom in and make it easier to read and also use the 'Find' tool on your web browser to quickly navigate to the information you need.

To learn how to save the CDMS site (Or any of the webpages shared in the newsletters) to the home page of your phone, follow these links. IPHONE ANDROID.

New Product Spotlight DKC103-63RIB SmartStax Pro

This week's new product spotlight is **DKC103-63RIB**

- ☆ NEW DKC103-63RIB SSP available in good volumes in the North for 2026
- ☆ **Very good agronomics with stalk and roots both a (2)**
- ☆ Very good plant health and late season intactness
- ☆ Excellent disease tolerance especially with Goss' Wilt (3) and Tar Spot
- ☆ Top-end yield potential is outstanding – best placement in offensive high yield environments
- ☆ Emergence and early season vigor both very good (2)
- ☆ Medium – Tall plant height with medium ear placement

DKC103-63RIB shown here on 5/15 – planted 4/30. This hybrid has the potential to be a cornerstone in the lineup for a long time to come.

Growing Degree Units

GDU accumulation continues to average well above normal for all locations from the planting dates listed below. The table below shows the GDU accumulation from **April 11th – May 17th and April 23rd – May 17th** 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 5/17/25	30 Year Average
Rock Rapids	365	282
Bancroft	314	266
Le Mars	374	294
Fort Dodge	325	290
Denison	353	297
Ames	353	298

Location	4/23/25 to 5/17/25	30 Year Average
Rock Rapids	272	202
Bancroft	232	192
Le Mars	272	221
Fort Dodge	238	220
Denison	254	225
Ames	271	226

Additional Resources:

Link to the last DAACAT call held on May 14th https://youtu.be/a8KxNrQKbLQ

Dry weather has us thinking about the drought monitor https://droughtmonitor.unl.edu/

Soil Temperature Future Cast – https://mesonet.agron.iastate.edu/agclimate/soilt.php

Also check the LIVE soil temperatures for a few locations around the state: https://mesonet.agron.iastate.edu/agclimate/#soil04t

Assessing Corn and Soybean Stands https://www.cropscience.bayer.us/articles/bayer/assessing-corn-and-soybean-stands

Sign up to receive Bayer Crop Science Agronomic Updates

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

Picture of the Week

Not many years that we see V4 corn by the middle of May. This corn has been in the ground just a little more than five weeks!

Follow Jim McDermott @jfmcde on Twitter