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PLANT HEALTH CHALLENGE NEWSLETTER

On Twitter @Air_Tractor, #PlantHealthChallenge

2019 CORN UPDATE

Xanthion© Protects Against Disease, Cool Soil

As we move into the 2019 growing season, it is safe to say that it has been stressful for Nebraska farmers. March through early April was cool and wet, which made field work nearly impossible.

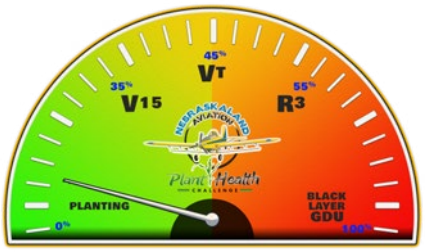
In the last couple of weeks, fields have dried out, and fertilizing started along with burndown and pre-emergence treatments. Planting started in full force April 15-20. However, with a cooler forecast this week, it's important to monitor soil temperatures, which have varied anywhere from the upper 40s to 50s. Those soil temperatures could decrease with cooler air temps.

The forecast for the week of April 29 predicted highs in the 50s and lows into the mid-30s with chances of moisture almost every day, which will make planting and herbicide applications difficult. With these cold and wet conditions, it is important to protect your seed and keep it healthy.

Xanthion© in-furrow fungicide will protect your seed from soil-born diseases and provide tolerance from cold and wet soil. Xanthion© also helps to form a better root system for taking in nutrients that will, in turn, benefit the corn plant later in the season.

April 25, 2019: Pioneer 1366 being planted in a Plant Health Challenge field in Webster County.

As herbicide treatments continue in corn before and after planting, be sure to look at label restrictions and pre-plant intervals on certain burndown products, such as, 2-4D and Dicamba products. We are seeing large amounts of kochia starting to come up in many fields, therefore, it is important to apply a Dicamba product with your pre-emergence herbicide program. Palmer Amaranth has not yet emerged, but be sure keep your eyes open for it starting in late May. As always, full rates of residual products will be needed to control palmer before emergence.



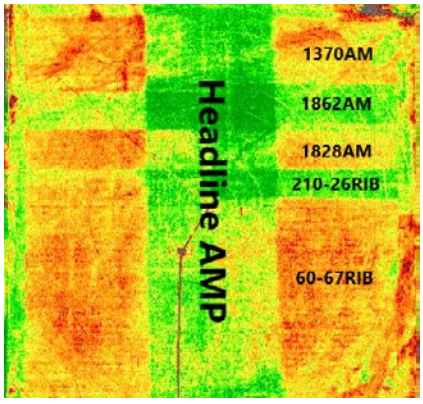
This Week's GDU Indicator

There are plant health challenge plots being planted throughout the area. Please provide us with the hybrid/variety, planting date and the population so we can follow your investment throughout the season. We wish you a safe planting season and look forward to working alongside you as Plant Health Challenge 2019 takes off.

— Travis VanEperen

2018 CORN PHC SHOWCASE

Headline Amp™ Corn Treatment Leads to 60 Percent ROI



Field Location: Webster County

Plant Date: 5/4/2018

Seed: Pioneer 1370AM, Pioneer 1828AM, Pioneer 1862AM, Channel 210-26STX-RIB, Dekalb 60-67SS-RIB

An aerial application using 10 ounces of Headline Amp™ was applied to this field on July 13, 2018, at the tassel (VT) growth stage, with approximately 1,499 GDU accumulation. The rows ran east-west and the fungicide was applied going north-south, covering every hybrid that was planted. It is evident from the NDVI image that each and every hybrid on this farm responded to the fungicide treatment. When we average the yield-difference treated vs. untreated for every hybrid, the treated portion of this field was 9.85 bushels better than the untreated. This resulted in a 59.79% return on investment, which equates to an additional $13.45/acre in total dollars returned using a grain price of $3.65.

— Tony Marquardt

NEBRASKALAND AVIATION

WHEAT UPDATE/SOYBEAN REPORT

2019 WHEAT UPDATE

Cool Weather Increases Disease Potential in Wheat

As many of you know, this spring made it difficult for any progress to be made with field conditions varying day by day. That was the same story last fall with harvest being the first priority on everyone's mind to the last thing they thought of before they went to sleep.

Good days to drill wheat were put on the backburner as farmers worked to get a few more acres of a current crop across the scales.

Early spring conditions so far this year have been wet and cool, making the potential for disease a major threat to the yield potential of any crop, especially wheat.

Topdress applications of Nexicor™ have been made to wheat in the local areas and are showing great signs of protection on diseases such as leaf rust as well as promoting plant vigor and overall health.

Wheat from a field west of Alma.

Most of the wheat in the area has currently reached the Feekes 6 stage or beyond, the first visible node on the base of the shoot. Also, this is when the developing head starts to become apparent.

At this point, applications of nitrogen and herbicide are not recommended as they will cause severe injury to the crop.

Continue to monitor weather and field conditions as the plant progresses to flag leaf stage (last leaf) of plant growth. These are the concerning factors in determining if a second application of Nexicor™ and/or insecticide are necessary to prevent potential devastation and yield loss.

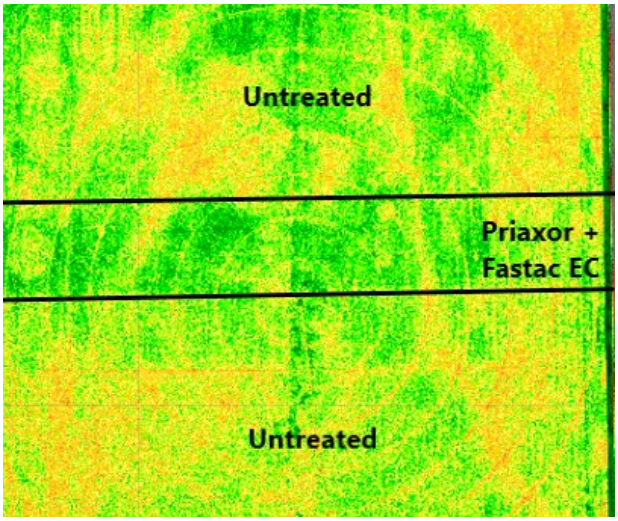
We will continue scouting and aerial imagery to update you on our recommendations of fungicide and insecticide as crops reach the critical stages of their growing points.

We would like to wish you a safe and successful 2019 production season.

— Ethan Dake

2018 SOYBEAN PHC SHOWCASE

Priaxor® & Fastac™ EC Boosted Yields in Gosper Soybeans



Field Location: Gosper County

This Gosper County soybean field was treated on July 14, 2018, using 4 ounces of Priaxor® in combination with 3.8 ounces of Fastac™ EC insecticide.

Although this field never met disease or insect threshold levels, we still saw a response within the Plant Health Challenge strip.

The treated portion of this field yielded 3.67 bushels better than the untreated. Using a grain price of $8.95/bushel, this treatment resulted in a 14.4% return on investment.

In terms of total dollars returned, the 20-acre PHC strip added $4.14/acre in profit to this cooperator's bottom line.

— Tony Marquardt

NEBRASKALAND AVIATION

A SUCCESSFUL 2019 CROP

BASF PRODUCT UPDATE

Plan Now for Nexicor™ Wheat Treatment To Maximize Yields

This past week, we evaluated several of our PHC Fields and have planned for wheat flag leaf applications. Our goal was to evaluate several fields that have received top-dress fungicide applications and to get a good idea of timing for the flag leaf applications.

Our scouting efforts revealed a big difference in growth stages and some minor disease pressures. Tan Spot was observed in a few of our PHC fields that did not receive top-dress fungicides. Although the instances were low, it is worth continuing to monitor, especially for stripe rust as it has been confirmed through central Kansas.

Our furthest along growth stages were in north-central Kansas and along the Nebraska border. These fields were well past joint and had two nodes above the soil line (Feekes 7). This would leave these fields 5-10 days away from flag leaf emergence. These fields were scouted on April 25, so that would put us around May 1. Fields that were planted into summer fallow and fields planted early will see flag leaf emergence earliest in that area. We will be evaluating mid-week to time applications.

For any field that is not enrolled in the PHC, please check by weeks end and schedule preventative applications of Nexicor™, as our optimal timing will be within 10 days.

The wheat crops in the majority of Nebraska were considerably behind in timing and most were just getting to the joint stage with first node becoming visible at the soil surface (Feekes 6). These fields will need to be scouted in the next 10 days as they will catch up rather quickly in maturity. Flag leaf emergence will start on some of these early planted fields next week, May 5-12.

Please contact us if you have any questions or need help determining application timings.

Figure 9. Wheat plants at Feekes 9/flag leaf growth stage.

Photo: University of Kentucky Extension

— Dusty Knuth
BASF Business Representative
Kansas State Wheat Report

WHAT TO EXPECT THIS WEEK

Critical Treatment Timings Near For Wheat, Alfalfa, Corn

WHEAT: Looking ahead at next week, the most important plant health treatment of the season for wheat growers is quickly approaching. Flag leaf emergence will begin in northern Kansas quickly followed by Nebraska wheat fields. This 2019 wheat crop has great potential. A flag leaf treatment of Nexicor will provide plant health benefits important to maximizing yields. And, as a secondary benefit, you will protect your wheat from diseases like common rust and stripe rust.

It is important to think of fungicide treatments in the same way you would pre-emerge weed control. Fungicides used in a rescue situation similar to Status + Liberty treatments in corn are never as effective as those applied before the disease is present similar to FulTime ® or Resicore® pre-emerge treatments.

Leaf disease observed in June can be prevented with timely applications now. After damage is visible on the leaf, yield has been lost and ROI from your fungicide investment is lowered. Proactive planned applications are the best defense against yield loss due to disease. Now is the time to schedule your flag leaf Nexicor treatment.

ALFALFA: Alfalfa weevil treatments in Kansas have already been made. Nebraska alfalfa fields should be scouted ASAP for treatment over the next seven days.

CORN: We expect to have corn emerging next week, and post emerge herbicide treatments are on deck. Try to have your next layer of residual products applied to your fields before corn is 8 inches tall. At these early growth stages, corn is very resilient and can withstand high dose treatment much better than in later growth stages when yield is being determined. Palmer Amaranth will begin to emerge in 14 to 21 days. Have your next layer of herbicide in place and incorporated by the last week in May.

— Tye Marquardt