



PLANT HEALTH CHALLENGE NEWSLETTER

On Twitter @Air_Tractor, #PlantHealthChallenge

WELCOME TO OUR

2021 Plant Health Challenge Newsletter

As we kick off our fourth year of the Plant Health Challenge, we start this season with a different set of circumstances. A colder than normal April has delayed herbicide application and slowed planting. But on the upside, we have seen rallies in the commodity markets. We see the Plant Health Challenge as an opportunity to ensure we are capitalizing on every bushel.

Although margins are still tight, the premise of the Plant Health Challenge is to find ways to increase yields on your farm with treatments that have not previously been used.

For wheat, Nexicor™ Topdress applications with fertilizers and herbicides and Flagleaf applications through the airplane are the two options. Double treatments of Nexicor have proven to be beneficial as well.

This year's corn treatments include Priaxor at V5 or Pre-Tassel, Headline AMP or Veltyma at Tassel/VT, and Priaxor at Brown Silk or 3T. Like the wheat applications, many benefits have been observed from double and triple applications of fungicide and should be considered.

As for soybeans, we will have the option to apply Priaxor or Revytek fungicide and Fastac CS insecticide at



Look for this GDU indicator in each issue of our PHC newsletter.



R1, R3 (like VT corn) and R5. Double treatments in this category have shown great results and are a great experiment with the rally in the markets.

As for what to expect with the Plant Health Challenge weekly newsletter, we will have at least eight newsletters from April 30-August 6 that will feature:

- 1) Current growth stage and development for the three crops in the PHC: corn, wheat, and soybeans. This will include local observations from the growing season and any pest alerts.
- 2) Treatment highlights from previous years Plant Health Challenges.
- 3) Product showcases and recommendations related to the current environment for each crop from BASF.
- 4) A forward-looking segment designed to predict the upcoming growth stage of our crops so that we can schedule our treatments at the ideal time.

Also included with the PHC newsletter is a GDU indicator. Growing Degree Unit accumulation information

is what we consider for application timing. Crop development is correlated with air temperature. Therefore, development varies year to year, which means calendar days are not an accurate indicator. Development becomes predictable within and across growing seasons when evaluated using thermal time. The time required for corn to progress from one developmental stage to another is based on the amount of heat accumulated. Thermal time represents the length of time the crop spends within a defined temperature range considered optimum for that crop. This data will assist in predicting treatment timing.

Image delivery has already begun on wheat trials. Corn and soybean imagery will begin soon, so please be sure to contact one of us so that we can get an accurate field boundary for collection.

Follow the Plant Health Challenge on Twitter @Air_Tractor, #PlantHealthChallenge.

— Cole Lewandowski

NEBRASKALAND AVIATION

WHEAT UPDATES

2021 WHEAT UPDATE

Protect Wheat Yields Now with Nexicor™

This spring has been interesting for north-central Kansas and south-central Nebraska.

Last fall did not bode well for most of us trying to get a stand of wheat emerged. The long dry fall reached into late winter. When it decided to rain, it gave most of the region numerous rainfall events. With that being said, most farmers have spotty stands that are emerging early this spring. With that said, if you got a good stand, that wheat is looking really good at this point.

With most of the wheat being top-dressed by now, we are seeing the signs of our Nexicor™ applied 3.5 oz with herbicide and fertilizer. The field in **Photo 1** below was treated with this program. I hope to keep following numerous fields this spring that had Nexicor™ at top-dress followed by Nexicor™ vs. generic vs. non-treated test plots.

Photos 2 and 3 are of the wheat field



Photo 2: Wheat Head Above Ground



Photo 3: Post Top Dress Canopy

mentioned previously. As you can see, it is fully canopied and growing green and lush. Upon taking a few plants to the back of the pickup, we can find the head well above ground. With tales of rust blowing up in southern Kansas, it seems inevitable we could be in the path to see a blow up in our area.

With the wheat prices over \$6, now is the time to start thinking of protecting that yield. Wheat is one of the most responsive crops to foliar-applied fungicide at flag leaf. This timing is

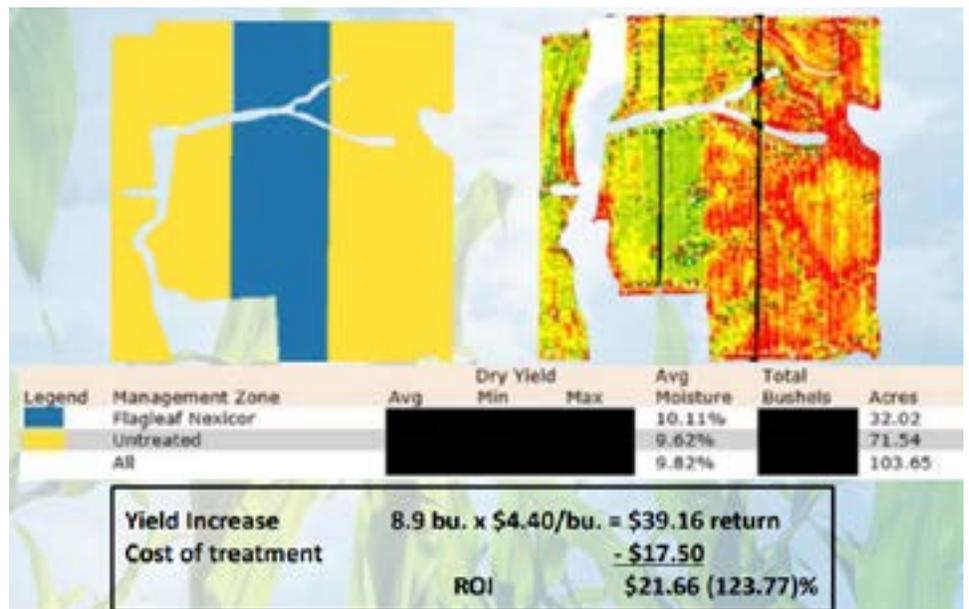
critical to gain the most return on your investment. Needing only a 3.5-bushel increase to cover the fungicide program, this looks to be the year to really get the bang for your buck.

It is not uncommon to recover an increase of 7-10 bushels with our Nexicor treatments. Please contact one of our employees to get you set up. We do plan to have a few plant health challenge plots to keep gaining valuable data.

— Craig Cole



Photo 1: Treated at Top Dress with Nexicor



NEBRASKALAND AVIATION

A SUCCESSFUL 2021 CROP

2020 WHEAT PHC SHOWCASE

Nexicor™ Outperforms Topguard in 2020 Wheat Trial

Location: Harlan County, NE

Tillage: No Till

Seed & Population: Unknown

Previous Crop: Soybeans

Treatment & Timing: 3oz. Nexicor™ at Topdress fb 7 oz. Nexicor™ at Flagleaf vs. 5 oz. Topguard® at Topdress fb 5 oz. Topguard® at Flagleaf

For our first 2020 wheat showcase, we look back on the performance of Nexicor™ fungicide competing head-to-head with another well-known wheat fungicide product, Topguard®.

With this no-till dryland wheat field, the cooperators wanted to test the performance of these two products. As disease pressure in this wheat

field did not play a significant role in the outcome of this trial, we turned our focus to fungicide as a proponent of plant health. The active ingredients only seen in Nexicor promote nitrogen assimilation, increased photosynthesis and stress tolerance.

Throughout the growing season, we monitored this field with NDVI imagery and took whiteboard pictures that consisted of side by sides of the plant leaf appearance and root structure. At the end of the season, we processed the harvest data and noticed an 8.04-bushel yield advantage and a return of \$39.04. As we take out the Cost of Treatment (COT) of \$17.84 and took the local

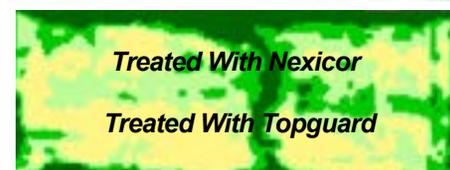
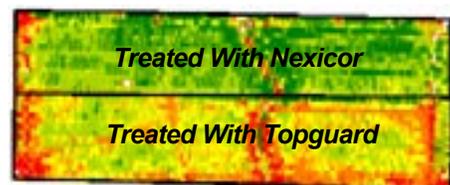


Image date: 6/16/2020

elevator harvest price, this customer saw a Return on Investment (ROI) of \$57.24 or 227.09%.

— Cole Lewandowski

WHAT TO EXPECT THIS WEEK

Sign Up and Stay Updated on 2021 Plant Health Challenge

Mother Nature has finally begun to cooperate. Springtime fieldwork may demand most of the time in our days, but it is not too late to get signed up for the 2021 Plant Health Challenge. Please reach out if you have questions, concerns, or need ideas on a treatment option you have not already tried.

As we continue to publish Plant Health Challenge Newsletters, we strive to deliver this information in the most convenient ways possible. Again, this year we will email newsletters, text message alerts, and provide as much information as possible on Twitter (@air_tractor or #PlantHealthChallenge). Read

the following yellow boxes for details on how to stay connected.

It is important to us to keep an open line of communication to assure timely treatments at optimal growth stages. This will ensure maximum ROI to all of our PHC Cooperators.

— Cole Lewandowski

1 E-Mail News

The weekly Plant Health Challenge Newsletter will be delivered each Friday at 4:30 a.m. All PHC cooperators are signed up for this newsletter, but anyone else can sign up on our website or by clicking here: [Plant Health Challenge Newsletter Sign Up](#)

2 Text Message Alert

Text alerts will share two important types of information:

1. Alerts to schedule treatments based on total GDU accumulation
2. Pest alerts that may affect crops.

All PHC cooperators are pre-enrolled for these alerts. Anyone else who would like to receive PHC text alerts can sign up by texting PHC2021 to 50597. You may opt out any time by replying "Stop."

3 Satellite Imagery

Climate Satellite Imagery will come via email with a link that allows you to view on your web browser. The Climate app is also available for free in the app store, allowing an easy way to view your imagery on any device.

This season, we will offer the True Color and NDVI Imagery. Please let us know if you need help linking your accounts to view or overlay imagery with your planting maps.