



PLANT HEALTH CHALLENGE NEWSLETTER

On Twitter @Air_Tractor, #PlantHealthChallenge

2021 CORN UPDATE

Corn Entering Rapid Growth Phase

Most cornfields in our area are around the 2-4 leaf growth stage. Forecasted temperatures look to remain in the low to mid-70s with numerous days of cloud cover and chances of precipitation. While this will slow down corn progression, the bright side is that it will also slow our weed growth.

Many fields that were treated with a pre-emerge application of residual herbicide remain fairly clean, but pigweeds are beginning to break across these acres. When we do finally collect some sunshine and warmer weather, expect the corn to enter a rapid growth phase along with the next flush of weeds.

With that in mind, it is time to begin looking at treatment options for weed control. While much planning goes into your weed control strategies throughout the winter, Mother Nature seems to always throw us a curveball. If conditions remain wet and you are unable to apply your post-emerge herbicide at the proper timing, it is important to be mindful of the label restrictions for many common products. At right is a guide that you may find helpful:

— Tony Marquardt



This week's GDU monitor.



Corn planted on May 1 now at the V3 growth stage

TREATMENT	LABEL RESTRICTION
Resicore	11" corn
Harness Max	11" corn
Acuron	12" corn
Lexar EZ	12" corn
Halex GT	30" corn or V8
Acuron Flexi	30" corn or V8
Atrazine	12" corn
Warrant	30" corn
Zidua SC	V4
Outlook	12" corn
Dual Magnum	40" corn
Status	4" (V2) up to 36" (V8) corn
DiFlexx	36" corn or V10, whichever occurs first
Liberty	24" corn or V7
Glyphosate	30" corn or V8, whichever occurs first



Pigweed emerging on no-till cornfield treated on 4/13 with 2 qt. Degree Xtra. Image taken on May 18.

NEBRASKALAND AVIATION

CROP UPDATES

2021 WHEAT UPDATE

Flag Leaf Application Shows 10-Bushel Advantage

We are just finishing flag leaf applications on our north-central Kansas and south-central Nebraska wheat crop. After a dry winter, spring has given this crop some much-needed precipitation. With wheat prices continuing to climb, many producers have taken advantage of the chance to increase the bottom line by spraying.

Year in and year out, the flag leaf application has shown that it will

consistently gain 7-10 bushels per acre. This year, most of the area was stricken with stripe rust.

In Phillipsburg, we have Plant Health Challenge plots including Nexicor™, generic Propiconazole, and generic Quilt Xcel fungicides. Some were treated with top-dress fungicide applications including Nexicor and Topguard®, and some were treated with generics. We hope to share the yield data in July.

— Craig Cole



Stripe Rust has affected most of the area wheat crop. Nexicor treatments can help prevent the rust.

2021 PASTURE UPDATE

Pasture Plant Health Challenge Kicks Off in 2021

As spring weather continues its warming trend, pasture weeds continue their rapid growth. Musk thistles are emerging out of the rosette stage, Leafy Spurge has bloomed, and buckbrush leaves have fully developed.

New for 2021, we have set out to test top-of-the-line Corteva pasture products to find the ideal application product and window to treat the broadest spectrum of pasture weeds. The two products we plan on testing are GrazonNext® HL and DuraCor™.

GrazonNext® HL, which is a combination of 2,4-D and milestone, controls more than 100 annual, biennial and perennial broadleaf weeds. DuraCor™ is a new product from Corteva Agriscience, their first new active ingredient for pastures and rangeland in nearly 15 years. DuraCor™ is powered by the new active ingredient Rinskor™, which is an ingredient that does not contain 2,4-D or dicamba, making it a safe but effective product.



Late summer Western Ragweed, Sherman Co.

Many range management programs focus primarily on fall pasture spraying for a cost-effective way to control musk thistles, mullein, and leafy spurge. While effective on these three weed species, fall applications of Tordon® 22K are not the best for controlling late-season summer annuals and woody plants like buckbrush. Some of the late summer annuals that we are focused on are marijuana, goldenrod, vervain, ironweed, fleabane, and especially western ragweed.

As part of the Pasture Plant Health

Challenge, we are asking cooperators to try at least 40 acres of a range management product, such as GrazonNext® HL or DuraCor™, that they don't normally use. Treatment products and rates will vary depending on each pasture's unique circumstances. The option to add .25 ounces or .3 ounces of metsulfuron for extra assurance on woody plants is available if needed. We will visit these pastures multiple times this summer and evaluate which products and rates are showing the best efficacy.

These trials are performed on your acres with your grazing practices, and hopefully, that brings you self-assurance as to which products bring the most value to your operation. The goal of these trials is to give us a real-life perspective on the best product rates and timing. If you are interested, please contact a Nebraskaland Aviation representative to learn how we can get one of these trials on your grazing lands this summer.

— Cole Lewandowski

NEBRASKALAND AVIATION

A SUCCESSFUL 2021 CROP

BASF PRODUCT UPDATE

Priaxor Controls Disease, Makes Plant Healthier

As soon as the sun starts to shine consistently in Nebraska, the corn crop will be headed toward the rapid vegetative growth stages, which start at V5 and can go all the way up to V14. This window is crucial as the maximum yield potential is being determined during these stages.

During this time, the corn plant is making yield decisions (rows/ear and kernels/row) while constantly still accepting input from its surrounding environment. Growing conditions thus far have left the crop open for negative yield impacts from disease, nutrient deficiencies, hail and wind.

One input you can use to protect corn from these negative yield impacts is Priaxor® fungicide pre-tassel applications. Priaxor combines the

power of Headline® fungicide with the Xemium® active ingredient to provide disease control and Plant Health benefits.

Priaxor controls the most important corn diseases including Anthracnose, Gray Leaf Spot, and Northern Corn Leaf Blight. Alongside disease control, Priaxor can contribute to increased root growth, stalk strength and stress tolerance, as well as maximizing nitrogen use and photosynthesis.

Strong root development is crucial for future nutrient and water utilization, and thicker, stronger stalks not only withstand weather-related events better, but they also make the transport of nutrients and water throughout the plant more efficient. All of these Plant Health benefits of

Priaxor occur with every application. ([See Figure 1](#))

Applications of Priaxor prior to and including V8 may include adjuvants. After V8 and before VT (last tassel branch visible), applications of Priaxor can continue, however, you need to avoid using adjuvants for these applications. ([See Figure 2](#))

All cornfields can benefit from a pre-tassel Priaxor application and from a tassel or post-tassel application of Veltyma®, which provides the same benefits of disease control and plant health during the reproductive stages.

— **Brady Kappler,**
Tech Service Rep, BASF

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2020 CORN PHC SHOWCASE

Early Priaxor Treatments Result in Favorable ROI

Location: Buffalo County, NE

Tillage: No Till

Seed & Population: Hoegemeyer & AgVenture

Type: Dryland

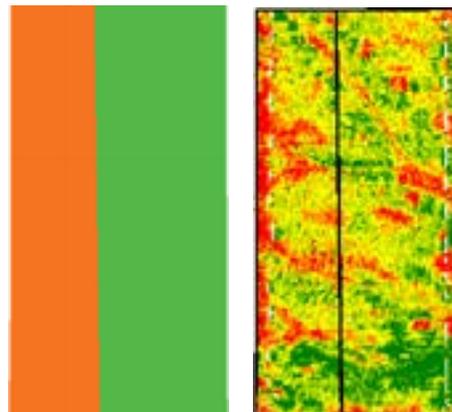
Population: 22,000

Previous Crop: Corn

Treatment & Timing: 4 oz Priaxor® at Pre-Tassel

Taking a look back on our first corn showcase from 2020, we start at a pre-tassel treatment in Buffalo County, Nebraska.

While tassel treatments continue to prevail as the most opportune time to treat corn, we took this opportunity to test a preventative treatment at pre-tassel. Pre-T treatments are roughly V10 or between 950 and 1150 GDUs. Priaxor has the preventative



ingredient Xemium®, and according to BASF, Xemium® distributes its unique chemistry throughout the leaf to help deliver the ultimate in longest-lasting disease protection. Many cornfields across the area have only reached the V2-V4 growth stages. Given the

opportunity in the market, it is not too late to consider Priaxor Pre-T applications.

As we monitored this corn crop throughout the season, the NDVI imagery showed little to no difference. This also gave us the idea that there was little disease pressure. This treatment also improved stalk quality early in the season. At harvest, we processed the harvest data and noticed an 11.59-bushel yield advantage and a return of \$46.24. When we take out the Cost of Treatment (COT) of \$19.71 and took the local elevator harvest price (\$3.99), this customer saw a Return on Investment (ROI) of \$26.53 or 134.62%.

— **Cole Lewandowski**

Priaxor®

Xemium® Brand Fungicide

Advanced Chemistry for Pre-Tassel Applications in Corn

Benefits of Priaxor® Fungicide

- Controls early season disease
- Increases root growth, photosynthesis and leaf health
- Improves stress tolerance

Priaxor Fungicide Pre-Tassel in Corn On-Farm Yield Results

Priaxor Fungicide Outyielded the Untreated in 74% of the Comparisons



2012-2014 On-farm Side by Side Trials, n = 61.
Priaxor fungicide applied at 4 fl oz/A (V5-V10 corn).

Priaxor fungicide maximizes yield potential by optimizing vegetative growth and ear development

Enhanced Root Growth from Priaxor Fungicide



Untreated Priaxor fungicide Untreated Priaxor fungicide

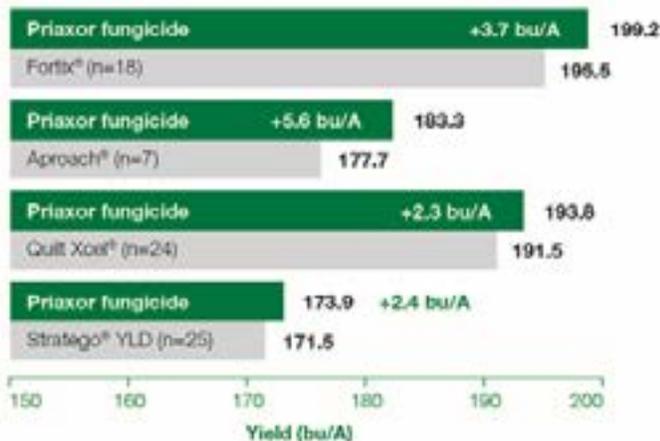
(BASF sponsored replicated trial, Murray State University, Murray, KY 2013.
Priaxor fungicide applied at V5 (4 fl oz/A).)

Technical Information Bulletin

150 years

BASF
We create chemistry

Priaxor® Fungicide Pre-Tassel in Corn Competitive Comparisons



Summary of small plot replicated trials, pairwise comparisons by product with Priaxor fungicide (4 fl oz/A). BASF locations or BASF funded or partially funded University and Consultant locations. All applications to V5-V6 corn. Fortix applied at 5 fl oz/A (2013-2014); Approach applied at 6 fl oz/A (2013); Quilt Xcel applied at 10.5 fl oz/A (2012-2014); and Stratego YLD applied at 4 fl oz/A (2012-2014).

Best Use Recommendations

- **Use Rate:** 4 fl oz/A
- **Labeled Crops:** Corn (all types)

Application Information

- Aerial: 2 GPA minimum; Ground: 10 GPA minimum
- PHI: 7 days for sweet corn; 21 days for all other types
- REI: 12 hours

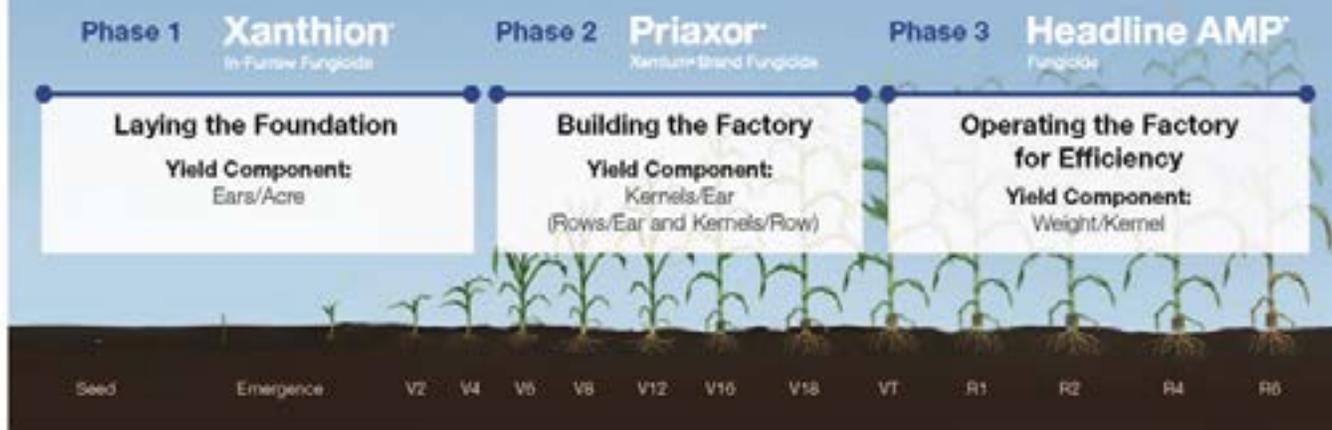
Adjuvants

- Adjuvant flexible; however, see label for adjuvant restrictions after the V8 stage and prior to the VT stage of corn growth

Target Diseases

- Anthracnose
- Eyespot
- Gray leaf spot
- Northern corn leaf blight
- Northern corn leaf spot
- Physoderma brown spot
- Rust, Southern and common
- Southern corn leaf blight
- Yellow leaf blight

Protect Yield Potential During the Critical Growth Phases of Corn



$$\text{Yield} = \text{Ears/Acre} \times \text{Kernels/Ear} \times \text{Weight/Kernel}$$

Always read and follow label directions.

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Fortix is a registered trademark of Aryta Life Science.

Approach is a registered trademark of E. I. du Pont de Nemours and Company.

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