



PLANT HEALTH CHALLENGE NEWSLETTER

On Twitter @Air_Tractor, #PlantHealthChallenge

2019 CORN UPDATE

VT Treatments Boost Yields on Dryland Corn

2018 was a year with low disease pressure, which gave us a great opportunity to better understand the plant health benefits from Headline Amp and how these benefits contributed to yield in an environment mostly isolated from severe disease pressure. We have discussed these benefits in our previous newsletters.

Dryland acres are often overlooked when considering VT treatments, but in 2018 some of our largest yield differences were on dryland farms. With a full profile of moisture as we enter the reproductive stages of this corn crop, we have great potential. Here is a little math to demonstrate what may be left behind



This week's GDU indicator

by not treating dryland pivot corners.

Dryland corners can represent up to 20% of the total acres on a quarter section of ground. If we can achieve a 20 bushel per acre benefit from treatment using \$4.13 per bushel, we

can provide total additional revenue of \$82.60 per acre.

$\$82.60 \text{ per acre} \times 30 \text{ acres (4 pivot corners)} = \$2,478$ minus cost of treatment = \$60.10 per acre net.

$\$60.10 \times 30 \text{ acres (4 pivot corner)} = \$1,803$

$\$1,803 / 160 \text{ acres} = \$11.26 \text{ per acre on 160 acres}$

The additional profits generated from this example equate to a net profit of \$11.26 per acre across the entire 160 acres. These profits from the dryland treatment would cover 50% of the treatment cost on the entire 160 acres.

— Tye Marquardt

2018 CORN PHC SHOWCASE

Headline Amp Earns 288% ROI in Webster Co. Field

Location: Webster County

Plant Date: 04/29/18

Seed: Pioneer 1366, Dekalb 64-34 SSRIB, Producers 7548

Treatment & Timing: Headline AMP 10 oz. @ VT (1,512 GDU)

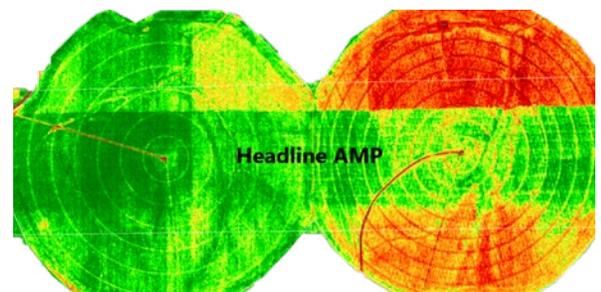
Heat and sunshine have caused corn to rapidly progress. Pre-tassel fungicide applications began last week, and tassel applications will soon follow. Now is a great time to consider the benefits of tassel applications of Headline AMP™.

In this 2018 Plant Health Challenge in Webster County, we applied a 100-acre strip of Headline AMP™ through the middle of two pivots (pictured at right) going across the rows. This was a situation where disease was an issue, as grey leaf spot was prevalent throughout the entire half-

section. By protecting the treated corn from disease, we observed bigger ears, deeper kernels, and much better overall plant integrity at harvest time. The Headline AMP treatment allowed plants to continue photosynthesizing and filling grain throughout the later part of the season. Untreated plants were consumed with disease and died prematurely, sacrificing enormous yield potential.

The results from this PHC were impressive, as the treated area had a 21.14-bushel yield advantage over the untreated. Using a current December cash price of \$4.13, this PHC was a 288% ROI on a \$22.50 treatment. That would equate to \$64.81/acre in total dollars returned.

— Tony Marquardt



Treated Corn (left) vs. Untreated Corn

NEBRASKALAND AVIATION

A SUCCESSFUL 2019 CROP

WHAT TO EXPECT THIS WEEK

Corn Reaching Critical Stage for VT Treatment

In the coming days and weeks as tassels and silks emerge, we enter the most critical stage of corn development, and VT Headline Amp treatments are the most important treatments of the year. Tassel and silk emergence are the signal that opens up the ideal application window.

At this stage of growth, the corn plant has accumulated roughly 50% of the GDUs required to reach black

layer. At just 50% maturity, no one can predict what stress this crop may face in the coming days, weeks and even months. Whether it is heat, cold, disease or a shortage of nitrogen to name a few, the environment will certainly not be kind your crop. The Plant Health benefits from Headline Amp are scientifically proven to help mitigate environmental stress and prevent disease.

When using Headline Amp in your management program, maximum ROI will be returned when planned applications are made 7-10 days following the first visible sign of tassels and silks. This is also the ideal time to control insects. Contact us soon to get your VT Headline Amp application mapped and scheduled so we can be efficient and timely with treatments.

— Tye Marquardt

Fungicide Open House Next Week!

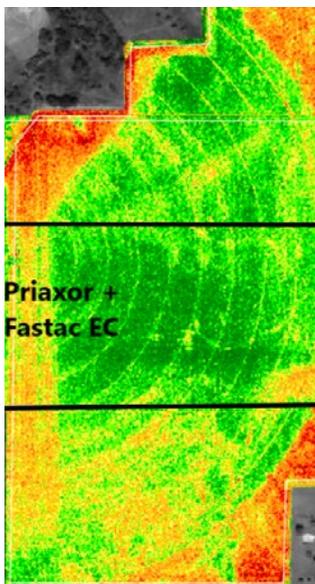
Please join us **Thursday, July 18**, at the Nebraskaland Aviation chemical warehouse (1103 Brewster Road in Holdrege) for our 2019 Fungicide kickoff and open house.

Learn about the plant health benefits of Fungicide Treatments and how they can increase profits.

Presentations: 11 a.m. and 4 p.m. **Steak Sandwiches:** 11 a.m.-1 p.m. and 5-7 p.m.

2018 SOYBEAN PHC SHOWCASE

R3 Treatment Results in More Pods, Higher Profit



Location: Buffalo County
Treatment: Priaxor 4 oz. + Fastac EC 3.8 oz.
Timing: 07/17/18 @ R3 growth stage

This 2018 soybean PHC was treated at the R3 growth stage using 4 oz. of Priaxor™ fungicide with 3.8 oz. of Fastac EC™ insecticide. By using this combination of products, we are able to minimize pod abortion by decreasing plant stress. That was very apparent in this particular case. Throughout our scouting efforts, we observed much higher pod counts in the treated portion of the field compared to the untreated. After pulling three random plants from each zone and doing pod counts, there were 220 3-bean pods in the treated area compared to only 135 3-bean



pods in the untreated check. This led to a 4.38-bushel yield advantage within our PHC zone. Using a current local October price of \$8.09, a 4.38-bushel increase delivered this cooperators a 23.4% ROI or \$6.73/acre TDR.

— Tony Marquardt

BASF PRODUCT UPDATE

Priaxor® Fungicide Protects Soybean Yields

While the main focus lately has been on corn, we must keep an eye on soybeans, too. Earlier planted soybeans may be reaching the R3-R4 stage in the coming weeks. In certain conditions, soybeans may stay/remain in early flowering stages for more than a month before beginning to set pods. When R3-R4 arrives, BASF recommends using Priaxor® fungicide to help protect yield potential in two important ways:

I. Disease control. Continuous irrigation creates a microclimate under the canopy that can foster disease development, particularly of Septoria Brown Spot. Headline® provides excellent disease control of Brown Spot and Frogeye leaf spot that can lead to premature leaf drop.

II. Plant Health. Research has shown that Headline® can reduce moderate levels of drought and heat stress. Applications of Headline have been shown to increase water use efficiency, meaning more grain is produced with a known amount of water.

Priaxor® fungicide combines F500® fungicide, the active ingredient in Headline fungicide and a new active ingredient Xemium® fungicide, making the best better by:

- Providing continuous disease protection
- Proven Plant Health benefits of F500 (Headline) PLUS a new mode of action (carboxamide) for soybeans
- More consistent performance for maximum yield potential. In 478

Priaxor® Fungicide Use Recommendations



- **Priaxor Use Rate: 4 fl oz/A**
- **Fastac Use Rate: 2.8 – 3.8 fl oz/A**
- Ground and aerial applications
- **Priaxor may be applied at all vegetative and reproductive stages of soybean development**
- **The optimal application timing is from R2 stage through R4**
- **Priaxor may be tank mixed with other products, such as Fastac® Insecticide**
- **Adjuvant Flexible**

Priaxor
Xemium Brand Fungicide
Fastac EC
Insecticide

- Advanced Plant Health
- Longer Lasting Protection
- Consistent Performance
- Broad Spectrum Insect Control with Fastac

R2 – R4 Growth Stage



Figure 1

yield trials from 2012-2013, Priaxor® provided a positive yield response 91% of the time.

- Recommendations: (See Figure 1)
- Application Timing: R3 to R4
 - Priaxor® Use Rate: 4 fl. oz./A
 - Non-ionic surfactant recommended at 1 pint/100 gal for ground applications
 - 1 pint/A of COC or 0.5pt/A HSOC recommended for aerial applications. NIS can also be used at 1 pint/100 gallons

It can be mixed with other products, such as insecticides or foliar fertilizers.

You might notice the inclusion of a

Fastac™ insecticide recommendation with the Priaxor® above. Over and over, the data supports the addition of an insecticide with fungicide applications at R3-R4 given moderate or greater insect pressure.

Remember, if you are timing a fungicide or insecticide application, you want to protect the plant in the crucial reproductive pod filling stages so R3-R4 is an ideal time for both types of applications. Too early of an application of either one and you won't get the "most bang for your buck!"

— Brady Kappler,
BASF Technical Services Rep



We Can Help Control Mosquitos!

With recent rains, mosquitos are a problem this year. We can control mosquitos around your home or during a special event. Call us at 308-995-6573 for information.