ISSUE NO. 14 | JULY 19, 2019

PLANT HEALTH CHALLENGE NEWSLETTER

On Twitter @Air_Tractor, #PlantHealthChallenge

2019 CORN UPDATE

Fungicide Benefits More Than Just Yield

Recent rains and hot summer days have caused area cornfields to grow vigorously. With many much needed GDUs in the forecast, it is important to take into consideration timing on fungicide applications. Growth stages in Harlan County vary anywhere from V10 to fully tasseled fields. Every field is situational, and it is crucial to know that Headline Amp® treatments made at the correct time will give you the most ROI.

The possibility of insect damage and disease is high after recent flooding, hail and wind events. These factors are going to have a major impact on plant health. Disease, such as stalk rot, will be troublesome in areas that had standing water. Look for Grey Leaf Spot and carefully observe field conditions and monitor overall plant health.

Applications of Headline Amp® can pay off in more ways than just yield itself as harvestability of the crop plays an important role in everyone's operation. Downed corn can double the cost of harvest inputs rapidly and lead to a long and stressful harvest. Many of our plant health challenge trials last year that received applications at tassel time had overall better stalk quality, root mass, and standability compared to our untreated acres that were vulnerable to environmental hazards that come in the fall, such as heavy rain and wind.

Recent rains could cause stalk rot.

This week's GDU indicator

With corn prices trending upward, a fungicide treatment can protect your investment and give your fields a strong finish to the growing year. Please let us know if there is any way we can help your operation.

— Ethan Dake

2018 CORN PHC SHOWCASE

Dryland Field Sees $93 Advantage with Headline Amp®

Location: Kearney County

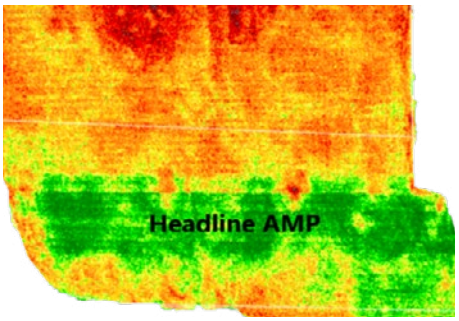
Plant Date: 05/10/18

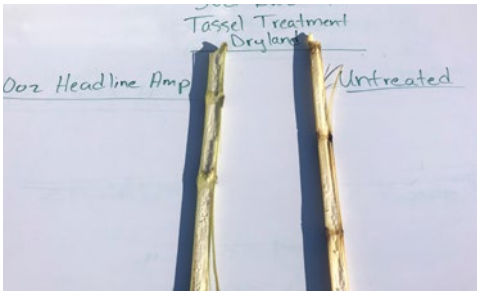
Seed: Pioneer 0805 AM

Treatment & Timing: Headline AMP™ 10 oz. @ VT (1,464 GDU)

Dryland corn looks phenomenal thanks to an abundance of moisture this season. The 2018 PHC featured many dryland corn treatments that provided great ROIs. Featured this week is one of those treatments.

This Kearney County field was treated on July 13, 2018, as soon as yellow silks were visible. Adequate rain coupled with protection from the environmental stresses that Mother Nature provides year in and year out allowed this Pioneer 0805 AM to reach its full genetic potential. What we witnessed was a 27.68-bushel difference in treated vs. untreated at harvest time. Using a current December cash price of $4.19, this PHC led to a 415% ROI or $93.48/acre in TDR after recovering the cost of treatment. Despite the large yield difference, moisture content was within 1 point.





Treated Corn (left) vs. Untreated Corn

— Tony Marquardt

NEBRASKALAND AVIATION

SOYBEAN UPDATES

2019 SOYBEAN UPDATE

Area Soybeans Reach Flowering Stage

The majority of soybeans are now at the R1-R3 growth stage. This means plants have begun to bloom, and the early planted soybeans are approaching full flowering. The flowering period for soybeans typically lasts 3 to 4 weeks. During this time, nitrogen fixation is high and the plant's vertical roots are developing rapidly.

The second generation of thistle caterpillars have been reported across Central Nebraska over the past 10 days. These young thistle caterpillars have dark bodies often with a small yellow stripe on the top of the body and spiny hairs. These insects can cause significant defoliation, so it's important to scout often.

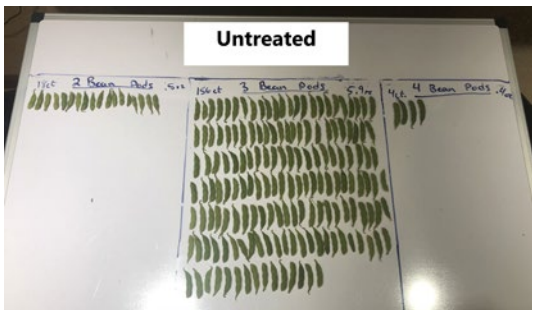
One of the most destructive stresses to a soybean plant during R2 is defoliation, and with the lack of canopy in some soybean fields, this becomes even more important. Consider treatment if defoliation will exceed 20 percent, but this may depend on growth stage and size and condition of canopy. As always, please contact us if you need help scouting or would like to discuss treatment options.

The second generation of thistle caterpillars have invaded area soybean fields.

— Ryan Hellriegel

2018 SOYBEAN PHC SHOWCASE

Treatment Boosts Soybean Yield by 10 Bushels



Location: Kearney County
Plant Date: 05/13/18
Seed: Pioneer 28T71X
Treatment & Timing: Priaxor 4 oz. + Fastac EC 3.8 oz. @ R3 (beginning pod set)

This week's soybean showcase takes us to a Kearney County PHC that was treated on July 17, 2018. The product mix contained Priaxor® fungicide in combination with Fastac EC™ insecticide, providing plant health benefits as well as insect protection. This seemed to be a great combination in our 2018 trials, and this particular case is a great example of what these treatments are capable of. Pod counts revealed 156 three-bean pods in the untreated portion of the field compared to 137 three-bean pods in the treated.

Although there were less beans in the treated area, they still weighed more, coming in at 7.5 oz. as compared to 5.9 oz. in the untreated. The yield difference was impressive, as the treated area was 10.14 bushels better than the untreated.

Using a current October cash price of $8.15, this PHC provided a 188% ROI or $53.94/acre in total dollars returned after recovering the cost of treatment.

— Tony Marquardt

NEBRASKALAND AVIATION

A SUCCESSFUL 2019 CROP

WHAT TO EXPECT THIS WEEK

VT Treatment Sets Course For Higher Yields

When tassels and silks emerge on a corn plant, we have accumulated roughly 50 percent of GDU required to reach black layer. Today, 8 weeks prior to maturity, it is impossible to predict what environmental stress this crop may encounter in the last half of the growing season.

As witnessed in the 2018 Plant Health Challenge, VT Headline Amp® treatments change the trajectory of your crop and set it on a course for higher yields by mitigating environmental stress and preserving yield. These treatments help to maximize returns on all previous crop production investments made to date including land, fertilizer and seed by allowing your crop to achieve maximum yield.

At this growth stage, the maximum number of kernels have been determined. Environmental stress from here forward will have a negative, irreversible impact on yield. VT treatments will help prevent kernel loss as well as improve kernel depth and test weight. VT stage of growth in corn has been achieved when the last branch of the tassel is completely visible and it signals the beginning of a 7-10 day application window. We have been actively tracking crop progress and staging fields, but please help us out by letting us know when you are ready to have your Headline Amp applied.

VT treatments prevent kernel loss and improve kernel depth and test weight.

— Tye Marquardt

This is highest kernel count possible for the year. Any environmental stress over the coming weeks can only reduce kernel count. We cannot add to it.

BASF PRODUCT UPDATE

Majority Rules When Treating Fields With Uneven Stands

Fields with plants at various stages can be tricky to time for treatments. Avoid spot spraying and target a majority of field.

Uneven corn stands are more common this year due to the wild spring and subsequent replants we had. In fields that look like the photos at left, the question that often arises is: "At what stage do I spray those fields where there are spots that are behind and won't tassel for another 7–10 days?"

Spot spraying is not a reasonable solution, but we can make some educated decisions on our timing. The correct philosophy is to do what is best for the majority of the field, not the little spots here and there. Using the information below about optimum timing, it is possible to have a 7-10 day delay in tassel emergence and still be inside that VT-R2 window. So in some cases, if you know tassel emergence is imminent, then you can wait.

However, if you know it will be longer, due to a replant situation or other delay, you still want to target a majority of the field.

— Brady Kappler,
BASF Technical Services Rep