## Headline AMP®

Fungicide

# How does Headline AMP® Fungicide Impact Corn Yield at High Planting Density?

## Headline AMP Fungicide Provides the Benefits of Plant Health

- Disease control
- Growth efficiency
- Stress tolerance

Reducing stress during grain fill is critical to maximizing yields and protecting a season worth of investment.

#### **Impact of Density Stress**

- From 1990 to 2016, corn growers have increased planting densities by approximately 30% to drive yield increases
- As density increases, competition for resources and disease pressure also increase, resulting in density stress
- Density stress minimizes yield potential

#### **Trial Objectives**

- **1.** Can fungicide application help mitigate the yield impact of high density stress?
- **2.** What corn yield components respond to fungicide treatment under high planting density?

#### **Trial Design**

- BASF small-plot corn trial, Iowa, 2016
- RCB design, 4 replicates
- Two hybrids (not commercially available)
- 38,000 plants/acre
- 10 fl oz/A Headline AMP Fungicide at VT
- Yield and trait phenotyping

#### **Best Use Recommendations**

- Use Rate: 10 to 14.4 fl oz/A
- Labeled Crops: Corn (all types)
- Aerial: 2 GPA minimum; Ground: 10 GPA minimum
- PHI: 20-days for field and popcorn grain;
  7-days for seed and sweet corn
- REI: 12 hours
- Adjuvant flexible; however, see label for adjuvant restrictions after the V8 stage and prior to the VT stage of corn growth

#### **Target Diseases**

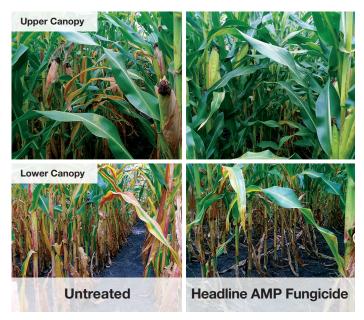
 Anthracnose, Eyespot, Gray leaf spot, Northern corn leaf blight, Northern corn leaf spot, Physoderma brown spot, Rust: Southern and common, Southern corn leaf blight and Yellow leaf blight



Trial results show that Headline AMP fungicide can minimize the impact of density stress on yield.



#### **Headline AMP® Fungicide Improved Canopy Health**



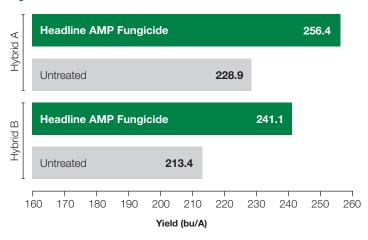
BASF small-plot corn trial, lowa, 2016 (RCB design, 4 replicates). Headline AMP fungicide applied at VT at 10 fl oz/A. Canopy photos taken 50 DAT. All photos and data found on this page were generated from this trial.

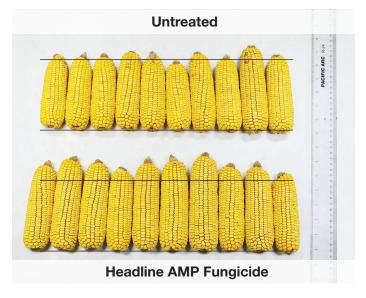
## Headline AMP Fungicide Positively Impacted Multiple Corn Yield Components

Trait	Hybrid A	Hybrid B
Canopy health		
Stay green		
Ears per acre		
Ear length & width		
Rows per ear		
Kernels per row		
Total kernel number		
Total kernel weight		
Headline AMP fungicide had no impact on the listed trait		

- Headline AMP fungicide had no impact on the listed trait
- Headline AMP fungicide had a strong, positive impact on the listed trait

## Headline AMP Fungicide Increased Yield by over 10%





### **Trial Summary**

- Headline AMP fungicide can improve yield by helping mitigate stress from high planting density
- Headline AMP fungicide increased yield by increasing multiple yield components, including ear and kernel number



To learn more about crop protection products from BASF, visit www.agproducts.basf.us



