



*MAKES SENSE.*

# Bumper<sup>®</sup>

PROPICONAZOLE FUNGICIDE

#### Key Diseases Controlled:

- Leaf Blights
- Rusts
- Gray Leaf Spot
- Eye Spot

**The best way to  
control disease and  
fungicide costs.**

**THE ROI FUNGICIDE:** Bumper<sup>®</sup> delivers the best return on your fungicide investment.

**ECONOMICAL DISEASE CONTROL:** Bumper delivers yields that are comparable to other fungicides – but at a lower rate with better cost control.

**DOCUMENTED PERFORMANCE:** Scientific, replicated independent studies across the Midwest prove:

- Propiconazole fungicide increases yield by 9.8 bushels/acre.
- Bumper at 4 oz. rate delivers yields comparable to Headline<sup>®</sup> fungicide at its 6 oz. rate.
- Bumper is an economical and reliable alternative for growers and dealers.

**DUAL ACTION PROTECTION:** Bumper has both preventative and curative properties (pre-infection and post-infection) whereas Headline has mainly preventative properties.

**IMPROVED PLANT HEALTH:** Bumper plus Headline in a tankmix maximizes protection of corn plants by inhibiting the development of fungi before infection has taken place.

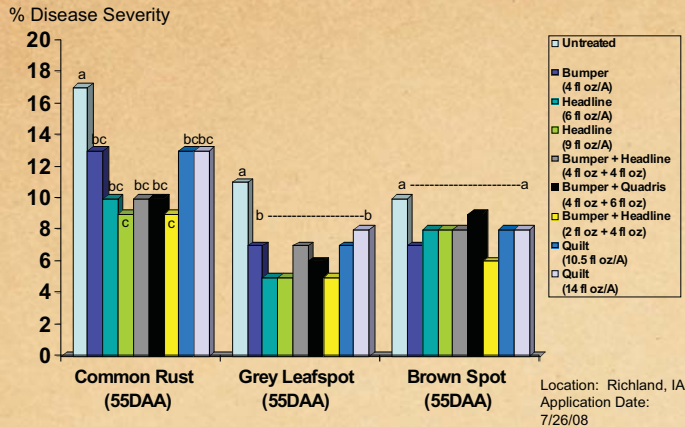
**RESISTANCE MANAGEMENT:** Lower potential for resistance development with triazoles than strobilurin chemistry.

**CONFIDENCE:** Consistent, profitable results with a trusted brand and trusted company.



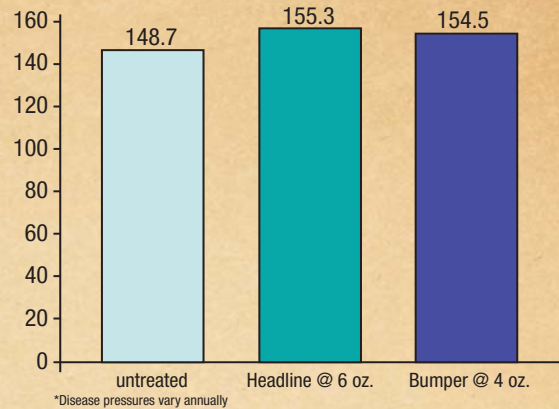
## CONTROL DISEASE

### Comparison of Bumper to Other Fungicides for Control of Foliar Corn Diseases - Efficacy



## IMPROVE YIELDS

2007 replicated independent scientific trials\* (8) documented that Bumper at 4 oz. delivered yields comparable to Headline at its 6 oz. rate.



**CORN (FIELD CORN, FIELD CORN GROWN FOR SEED, SWEET CORN, AND POPCORN)** For control of Helminthosporium leaf blights (Helminthosporium maydis, H. turcicum, and H. carbonum), rust (Puccinia spp.), gray leaf spot (Cercospora zeae-maydis), and eye spot (Kabatiella zeae), apply Bumper 41.8 EC by ground or aerial application or through irrigation equipment according to the following schedule:

**HELMINTHOSPORIUM LEAF BLIGHTS:** Apply 2-4 fl. oz. of Bumper 41.8 EC per acre when disease first appears and continue on a 7- to 14-day schedule.

**RUST:** Apply 4 fl. oz. of Bumper 41.8 EC per acre when rust pustules first appear and continue on a 7- to 14-day schedule.

**GRAY LEAF SPOT AND EYE SPOT:** Apply 4 fl. oz. of Bumper 41.8 EC per acre when disease first appears. If conditions favorable for disease persist, continue to apply on a 14-day schedule.

**CLAIMS FOR STROBILURIN-CONTAINING FUNGICIDE APPLICATIONS,** "...such as pyraclostrobin (e.g., Headline), which are being promoted as 'plant health' are not as straight forward as some might believe. There is not general agreement among university and industry scientists regarding the potential for plant health applications to result in economical benefits to producers... In addition, applications of any pesticide in the absence of a specific target pest(s) is contrary to integrated pest management principles."

Excerpted from the University of Kentucky Pest News, Number 1097.

Online at: <http://www.uky.edu/Agriculture/kpn/kpnhome.htm>

## CUT COSTS

### Bumper Value Analysis

Product	Rate/Acre	\$/Gal	\$/Acre
Bumper®	4 oz. <b>BEST VALUE</b>	\$ _____	\$ _____
Headline®	6 oz.	\$ _____	\$ _____
Quilt®	10.5 oz.	\$ _____	\$ _____
Tankmix	_____	\$ _____	\$ _____

## QUALITY PRODUCTS. COMPETITIVE PRICES.

MANA makes sense for growers, for channel partners, for agriculture. MANA offers the most comprehensive and diversified portfolio in the crop protection industry with over 60 formulations of insecticides, fungicides, herbicides, PGRs and harvest aids from more than 50 active ingredients. These proven products are efficiently manufactured to the highest standards and value priced to optimize the farm's profitability potential. As the North American arm of the world's seventh largest agrochemical company, MANA provides best-in-class formulations, regulatory capabilities, field research, and a science-based approach to defend and maintain vital active ingredients that other companies have abandoned. Our area business management team throughout the U.S. supports the distributors, retailers, crop consultants and agronomists who are part of the supply chain that farmers and farm managers rely on for localized expertise.

[www.manainc.com](http://www.manainc.com)

 **MANA**  
Crop Protection

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