

Barley response to early-season foliar fungicide, Wishek, 2007. (Greg Endres, Tim Indergaard, and Blaine Schatz) The objective of this study was to measure barley response to early-season foliar fungicide. The barley variety trial was direct seeded at 1 million PLS/A on April 23 on fallow ground (2005 sunflower) at the NDSU Carrington Research Extension Center Tri-County off-station trial site near Wishek. Headline at 3 fl oz/A + NIS at 0.125% v/v was applied on May 31 to two of four replications of the trial across 10 varieties in the 6-leaf stage using a tractor-mounted sprayer with 8002 flat-fan nozzles delivering 12 gal/A at 30 psi. The trial was harvested with a plot combine on July 29.

Barley test weight increased while seed yield and protein did not increase with fungicide compared to the untreated check (Table). Also, heading date was delayed 2 days with fungicide.

Table. Barley response to early-season fungicide, Wishek, 2007.

| Treatment ¹ | Heading date | Yield | Test weight | Protein | Plump kernel | Thin kernel |
|------------------------|--------------|-------|-------------|---------|--------------|-------------|
| | Jday | bu/A | lb/bu | % | % | % |
| fungicide | 173 | 77.5 | 47.8 | 13.1 | 83.9 | 2.2 |
| untreated check | 171 | 83.4 | 47.2 | 13.9 | 80.3 | 2.9 |
| mean | 172 | 80.4 | 47.5 | 13.5 | 82.10 | 2.5 |
| C.V. (%) | 0.6 | 10.9 | 1.9 | 3.5 | 5.7 | 44.3 |
| LSD (0.05) | 1 | 5.8 | 0.6 | 0.3 | 3.1 | NS |

¹Fungicide=Headline at 3 fl oz/A + NIS at 0.125% v/v to barley in the Feekes 7 stage.