

## Foliar Fungicides on Soft Red Winter Wheat (Bruce SCIA 2008 Major Grant)

### Purpose:

Evaluate effectiveness of Stratego applied alone and sequentially with Folicur and Proline fungicide on disease, yield, and quality of soft red winter wheat.

### Methods:

5 Bruce County farmers growing soft red winter wheat conducted two replicate strip trials evaluating foliar fungicides. Treatments included

1. Check – no fungicide.
2. Stratego at growth stage 31 (first node)
3. Stratego, followed by Proline at heading (close to day 2 as possible)
4. Stratego, followed by Folicur and Proline (applied sequentially within 1 day)

Stands were assessed prior to fungicide application for growth stage and disease. Disease ratings (scale 1-10) were assessed at 5-10 locations within each treatment. At flowering, disease ratings were collected in the top, middle, and bottom of wheat canopy. Grain samples following harvest were graded and visually assessed for Fusarium damaged kernels. Grain samples from the check treatments were analyzed for DON by Ridgetown Campus of University of Guelph.

### Results (table 1):

Stratego increased yield at 3 out of 5 plots by an average of 5 bushels over no treatment (check). Powdery mildew was present in most stands prior to Stratego application at low to moderate levels. There did not appear to be a relationship between level of disease and yield response to Stratego. Weather during heading was wet/high humidity with high risk of Fusarium infection. Stratego + Proline treatment increased yields at 4 of 5 trials by average of 6 bushels over Stratego alone (barely economic). The Stratego + Proline + Folicur treatment did not improve yields. None of the samples of wheat were downgraded due to Fusarium. Grain samples from the check treatments tested < 0.5 for DON (very low).

Table 1		Winter wheat yield bu./ac			
Location	Variety	Check	Stratego	Stratego + Proline	Stratego + Proline + Folicur
Ripley	Emmit	102	110	120	125
Chesley	25W41	129	128	132	132
Port Elgin	25R47	99	113	126	125
Formosa	Emmit	113	117	120	119
Walkerton	25R47	88	86	85	82
Average		106	111	117	117
Cost/acre (product +appl.)			\$ 8.50	\$ 41.00	\$ 43.05
\$ Return over check			\$ 11.50	\$ 3.00	0

## Crop Advances: OMAFRA Field Crop Project Reports

### **Summary:**

In 2008, this project demonstrated an increase in yield and dollar return from the application of Stratego, or Stratego followed by Proline treatment. Further assessment of disease data is to be completed.

### **Next Steps:**

It is interesting to note that 3 of the 5 sites applied split nitrogen application were the same sites to demonstrate an increase yield from the Stratego + Proline treatment. Plans are to continue the project and include another treatment of split nitrogen application.

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### **Project Contacts:**

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