Breaking Ground (in Northeastern Ontario) 2012 Fungicide Evaluation on Barley

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Objectives: to evaluated the potential benefits of applying a fungicide on barley for leaf and or head disease reduction. In this demonstration the product was applied for head protection since it was plied at early heading.

Variety: Barley 6 row ' Encore'

Fungicide: Prosaro

Previous Crop: canola

Fungicide application: June 28th (9:00am no wind clear sky) at early heading Swathed: August 3rd

Harvested: August 20th 2012

No Fungicide				With fungicide "Prosaro"		
	Yield	Moisture	Bushel weight	Yield	Moisture	Bushel weight
Strip #1	4,347lbs	14.4%	44.7lbs	4,919lbs	14.6%	44.9lbs
Strip #2	4,207lbs	14.5%	44.5lbs	4,716lbs	14.5%	44.5lbs
Strip #3	4,080lbs	14.4%	44.8lbs	4,455lbs	14.6%	45.0lbs
Average of plots	4,211lbs (1.90t/ac)	14.4%	44.7lbs	4,696lbs (2.13t/ac)	14.6%	44.8%

Strip harvested: .79acres

Weighed: Crops Coalition Weigh Wagon

Yield Results:

Grain Yield

- Yield increase with the fungicide "Prosaro" is significant and consistent across all the strips
- Increase yield with fungicide by 9-13% with an average of 11%. The combine had no yield monitor therefore very difficult to observe a 485lbs yield difference without having these test strips weighed with the weigh wagon
- 11% more yield or 485lbs (10bushels) more per acre with fungicide
- Moisture at harvest was the same with or without the treatment. The barley stayed in the swath for 17days.
- Strips without the treatment had a distinct darker colour with more upper leaf (flag) diseases present (net, spot blotch and scald)

Straw Yield

- Small bales (30lbs) at 58bales per acre or 1,728lbs (.8tonne)
- No measurement were made between treated and untreated sections
- Less dust noticeable in the treated section (with fungicide)

Quality on grain:

• Samples were submitted to evaluated grain quality. Both sections treated and none treated were of good kernel quality.

Cost benefits:

• Economical benefits were achieved on yield alone. If we use a market price of \$260 per tonne per barley or .11¢ per pound x 485lbs of extra yield with the fungicide = \$53 per acre minus the product (\$16 /ac) and application rate (\$9/ac) the net gain is \$28/ac.

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