



THE PULSE AGRONOMY NETWORK
PARTNERSHIP WITH INDUSTRY

PAN ALL PULSE BULLETIN #11 – JUNE 30, 2006

What's in the PAN

- **Disease Prediction System for Ascochyta in Field Pea (Scorecard attached)**
 - **Tour Listing (attached)**
 - **Wheat Stem Sawfly – Chinook, AB**
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Ascochyta in Field Pea

Now is the time to be scouting for Ascochyta in field pea. Ken Lopetinsky, Pulse Research Agronomist with AAFRD is working with a prediction system. This is now the second year of field proofing the system. In 2005, final yields revealed a significant yield increase from Headline application at all 5 locations with a range of yield increase of 14-35%. The average yield increase from Headline application over the 5 locations in 2005 was 26%. (For details on 2005 results, click on the following link)

<http://www.pulse.ab.ca/agro/2005-06%20PAN%20Reports/PAN%20All%20Pulse%20Bulletin2March12006.pdf>

There are 4 key criteria to be assessed: (Ascochyta Scoring System attached)

1. Crop canopy
2. Leaf wetness / humidity / dew at noon
3. Percent of plants (crop), showing symptoms
4. 5 day weather forecast

Fungicide application is geared towards protecting the yield potential that is currently there in the field. Other criteria to consider:

- Plant density - Field selection for the 2005 and 2006 trials were based on a minimum of 75 plants/m². Higher plant population = denser canopy = better environment for disease.
- Good weed control
- Good nodulation and nitrogen fixation. Healthy, actively growing crop = better environment for disease.

Ken suggests picking 4 locations in a field to scout using a NON-DESTRUCTIVE scouting technique. Why NON-DESTRUCTIVE? You need to look at the same plants twice weekly and determine if the disease is spreading to other plants and to see if it moving up the plants.

Disturbing the canopy CAN change the microclimate and this may influence the disease development at this location. At each location, you need to gently inspect 10 plants for the presence of Ascochyta and note how many plants have the disease and how far up it is on the plant. Mark this on the scorecard (attached) and refer to it when you come back to this location next time to determine if the disease is spreading.

Average the score from 4 locations. If the estimated risk value is less than a score of 65, no fungicide application is deemed necessary, but field inspection should continue on a bi-weekly basis. If the estimated risk value is greater than 65, a fungicide application is recommended.

Please note - there may be instances when a score may be over 65 and fungicide application may not be justified. IE – Heavy Crop Canopy scores 30 and Leaf Wetness at noon is high scores 40. If disease is not present (scores 0) and/or the 5 day forecast is dry (scores 0). Here the total score is 70. This should indicate that the potential is present and continued monitoring is needed should the forecast change and disease appear.

Note on Water Volume – this point needs to be stressed – 20 gallons per acre.

If you use this system, leave a check strip! As well, we would appreciate feedback on the results.

Brent Tarasoff, Field Quest Consulting reports there were 1-2 Sawfly per 2-3 plants on all the wheat in the **Chinook, AB** area this week.
