



THE PULSE AGRONOMY NETWORK  
PARTNERSHIP WITH INDUSTRY

## PAN ALL PULSE BULLETIN #16 – JUNE 22, 2005 – GRASSHOPPERS IN LENTILS, TOUR DATES

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### IN THIS ISSUE...

Tour Dates - if your tour is not listed, please forward details so we can let others know.

### Grasshoppers in Your Lentil Crops



By Scott Hartley – Insect Pest Specialist – Saskatchewan Agriculture and Food - Regina

The Saskatchewan Agriculture and Food 2005 Grasshopper Forecast indicates that overall, most of the grasshopper populations have returned to the pre-outbreak levels similar to 2000. However, as with most years in the province the survey showed that pockets of severe infestations could still represent a problem. Even lower grasshopper populations could require control in some of the lentil growing areas. However, the actual severity of the infestation will be largely dependent on environmental conditions experienced this spring and early summer.

It is important to note that the areas of risk identified on the map as very light, light, moderate and severe, correspond to grasshopper densities in cereal crops. The risk will vary depending on the crop. The economic threshold (ET) or the level of grasshopper infestation at which control measures become practical, will also vary depending on the crop. For example, in cereal crops, the economic threshold generally ranges from 8 to 12 grasshoppers per square metre. The ET will depend on cost of control and the market value of the crop. Grasshoppers tend to devour most cereals but prefer wheat and rye with less preference for oats. Peas are also less preferred and research has shown that grasshopper egg-laying is reduced when oats or peas are the prime food source.

Lentil crops are less tolerant to grasshopper feeding. Research conducted by Agriculture and Agri-Food Canada at Saskatoon indicates that **2 grasshoppers per square metre feeding on lentil flowers or pods will reduce yields enough to warrant insecticide application.** Grasshoppers can be a threat to many crops from seedling emergence until the plants start to senesce near harvest. In lentil, grasshoppers pose the greatest threat from the bud stage through to early pod development. Grasshoppers do not readily consume lentil foliage so damage on is usually not highly visible and prior to flowering and pod development the crop is at less risk to damage. But grasshoppers will consume flower buds and especially early developing pods of lentil plants. This can result in yield loss and a delay in maturity due to delayed pod set. Slight damage to the pods may result in shattering, seed

loss and can predispose the seeds to disease and staining. At harvest, grasshopper parts can contaminate lentil seed lots and reduce lentil quality.

Lentil growers are encouraged to scout fields from the early bud stage through to pod development for the presence of grasshoppers. Often grasshoppers will be more prevalent in field margins and a thick lentil crop will deter the insects from moving further into the field as they prefer more open and bare areas of lower humidity to accumulate heat. If grasshopper populations exceed the economic threshold in the field margins only, an edge treatment with an appropriate insecticide can save time and reduce costs while providing adequate control.

For information on scouting and insecticide selection, consult the Insect Control section of the *SAF Guide to Crop Protection 2005*. Always read the product label prior to applying a pesticide and follow the manufacturer's recommendations. Also, be sure to observe the pre-harvest intervals associated with the application of insecticides. Pre-harvest restriction times can range from seven to 60 days depending on the product and the crop.

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## TOURS NEXT WEEK

### Alberta

**June 28, 2005 – Westlock, AB**

**Field Proofing A Disease Prediction System for Ascochyta of Field Pea**

Location – Wes Latimer's farm – 2 miles west of Westlock on north side of highway

Tuesday, June 28 – rain or shine – 1:30 – 3:30 pm

Discussing Field Pea Ascochyta blight, symptoms and a field walk. Discussing a disease prediction system, the scouting requirements including fungicide control options, economics and impact on yield, standability and seed quality.

For more info please contact

Wes Latimer 780-349-5286

Richard Krikke 780-674-3967

## Diagnostic Field School - July 4 - 8 - SPACE IS LIMITED

July 5 is **FULL**

July 6&7 – **very limited space**

July 4 & 8 **spots available**

If your thinking of attending – contact Mary @ (403) 381-5929 to register.

More info below

### Saskatchewan

**June 28, July 13, July 19, July 27**

Saskatchewan Conservation Learning Centre Field Days

Prince Albert , Saskatchewan

Jody McConnell, M.Sc.

Crop Development Branch SAF 306.964.1510

<http://www.agr.gov.sk.ca/agriarm/default.asp>

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## Upcoming Tours

### Alberta

**July 4-8, 2005**

Diagnostic Field School (DFS)

The one day school will be held from July 4th through 8th.

(the course is one day long available everyday from July 4-8)

The school begins at 8:00 AM and runs until 4:00 PM.

Contact Mary Rempel at (403) 381-5929 to register.  
Cost is \$125.00 per person for one day, SARA members get a reduced rate.  
CCA credits, 1 NM, 3 PM and 2 CM are available.  
Three pesticide applicator credits have been applied for.  
For more information contact Elizabeth Tokariuk at (403) 328-0059  
or E-Mail at [conservation@telus.net](mailto:conservation@telus.net)

**July 6, 2005**

Soil Quality Field Day  
Battle River Research Group Cover Crop Site  
1:00 - 4:00 pm  
Viking, AB  
For more information contact BRRG at 1-866-828-6774 or [brrg@telus.net](mailto:brrg@telus.net)  
[Click here](#) for event poster

**July 7, 2005**

Soil Quality Field Day  
Battle River Research Group Long Term Rotational Plots  
1:00 - 4:00 pm  
Daysland, AB  
For more information contact [Rick Taillieu](mailto:Rick.Taillieu) at 780-679-5174  
[Click here](#) for event poster

**July 12, 2005**

Battle River Research Group  
Ryley site tour  
1:00-4:00 pm  
Ryley, AB  
for more information contact BRRG at 1-866-828-6774 or [brrg@telus.net](mailto:brrg@telus.net)

**July 13, 2005**

Battle River Research Group  
Castor site tour  
1:00-4:00 pm  
Castor, AB  
for more information contact BRRG at 1-866-828-6774 or [brrg@telus.net](mailto:brrg@telus.net)

**July 14, 2005**

Scott Research Farm Annual Field Day  
9:00 am Registration & Coffee  
NOTE: for group interest, travel arrangements by bus for this event are being planned.  
Contact - [Ron Heller](mailto:Ron.Heller), RTL

**July 18, 2005**

Battle River Research Group  
Stettler site tour  
1:00-4:00 pm  
Stettler, AB  
for more information contact BRRG at 1-866-828-6774 or [brrg@telus.net](mailto:brrg@telus.net)

**July 19, 2005**

Chinook Applied Research Association Annual Summer Tour  
For more information contact the Chinook Applied Research Association at  
403-664-3777

**July 19, 2005**

Zero Till Crop Management Field Day

IHARF - Indian Head Agricultural Research Foundation  
Indian Head, SK

brochure and registration form at [http://paridss.usask.ca/specialcrop/spoke/indian\\_head/IHARFZeroTillBrch\\_4.pdf](http://paridss.usask.ca/specialcrop/spoke/indian_head/IHARFZeroTillBrch_4.pdf)

**July 20, 2005**

Soil Quality Field Day & Long Term Rotational Plot Tours  
Three Hills, Alberta

For more information contact [Rick Taillieu](#) at 780-679-5174

**July 21, 2005**

Battle River Research Group  
Killam site tour

9:00 am-4:00 pm

Killam, AB

for more information contact BRRG at 1-866-828-6774 or [brrg@telus.net](mailto:brrg@telus.net)

**July 25, 2005**

Long-Term Rotation Site Tour  
Hanna, AB

For more information contact the Chinook Applied Research Association at  
403-664-3777

**July 25 & 26, 2005**

Ellerslie Soils and Crops Field Day  
Ellerslie Research Farm, Edmonton

Contact Trevor Wallace for more information 403 340-5339

**July 26, 2005**

Smoky Applied Research & Demonstration Association (SARDA) Tour  
High Prairie, AB area

Contact Jean Beaudoin 780-837-2900 or Nick Underwood 780-814-1232

**July 27, 2005**

Pulses N' Pork Field Day  
9:00 am -4:00 pm

Lacombe, Alberta

Day includes field scale pea trials, lupin and fababean research plots, pork-on-a-fork lunch, and liquid hog manure injection demonstration.

For more information contact call [Rick Taillieu](#) at 780-679-5174

**July 28, 2005**

Lacombe Field Day 2005  
Lacombe, AB

Tours of Ag. Canada & Alberta Ag. Research Plots

For more information contact [Rick Taillieu](#) at 780-679-5174

**July 28, 2005**

Smoky Applied Research & Demonstration Association (SARDA) Tour  
Falher Nampa, AB area

Contact Jean Beaudoin 780-837-2900 or Nick Underwood 780-814-1232

**August 4, 2005**

Fort Vermilion Tour

Contact NPARA at 780-927-3776 or Nick Underwood at 780-814-1232

**August 11, 2005**

Camrose County Annual Crop Tour

Camrose, AB  
For more information contact Dave Trautman at 780-672-4765

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## **SASKATCHEWAN TOURS**

### **July 19, 2005**

Zero Till Crop Management Field Day  
IHARF - Indian Head Agricultural Research Foundation  
Indian Head, SK  
brochure and registration form at [http://paridss.usask.ca/specialcrop/spoke/indian\\_head/IHARFZeroTillBrch\\_4.pdf](http://paridss.usask.ca/specialcrop/spoke/indian_head/IHARFZeroTillBrch_4.pdf)

**For more details on the following tours, please contact**

**Jody McConnell, M.Sc.**

**Crop Development Branch SAF 306.964.1510**

<http://www.agr.gov.sk.ca/agriarm/default.asp>

### **June 28, July 13, July 19, July 27**

Saskatchewan Conservation Learning Centre Field Days  
Prince Albert , Saskatchewan -

### **July 7**

Wheatland Conservation Area – Swift Current -

### **July 7**

Seager Wheeler National Historic Farm – Rosthern -

### **July 12**

Melfort Research Centre AAFC, Melfort -

### **July 14, July 15**

Western Applied Research Corporation/AAFC Field Days - Scott

### **July 19**

Indian Head Agricultural Research Foundation, Indian Head-

### **July 20**

South East Research Farm – Redvers -

### **July 21**

East Central Research Foundation – Canora –

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