



Saskatchewan  
Ministry of  
Agriculture

# Saskatchewan: Present Clubroot Situation



**Clubroot Summit  
March 7, 2012**

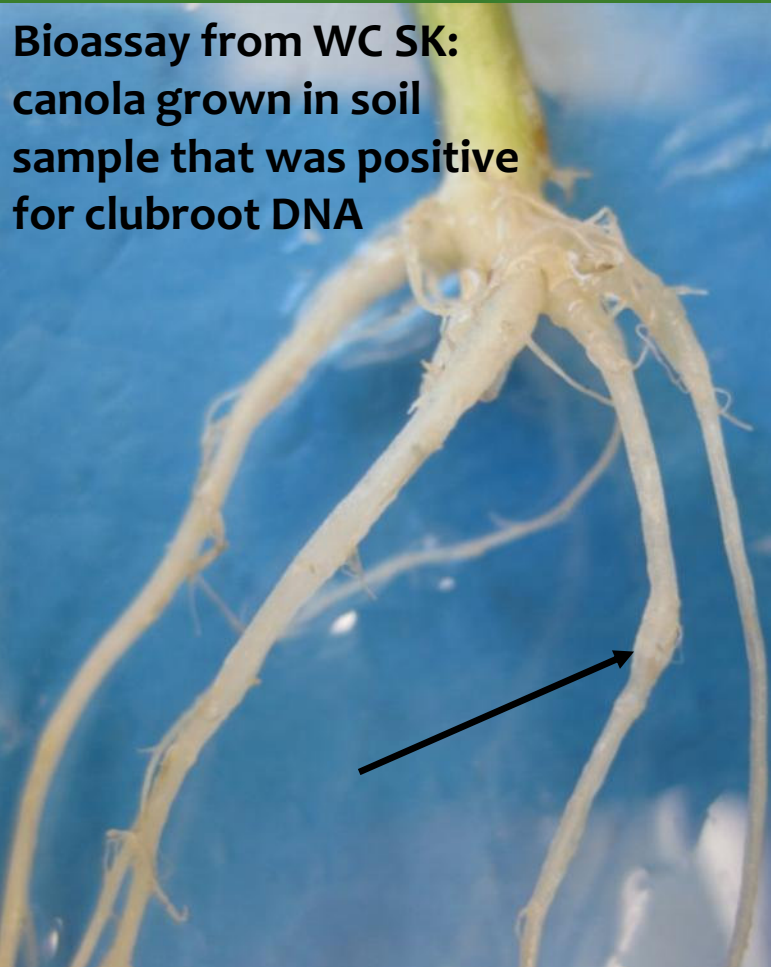
**Faye Dokken-Bouchard  
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# Clubroot in SK?

**Bioassay from WC SK:  
canola grown in soil  
sample that was positive  
for clubroot DNA**



- **Pathogen in soil:**

- *P. brassicae* was detected in a soil sample from one field surveyed in west central SK in 2008.
- We continue to collect soil samples in our survey (AAFC project) . No positives in 2009-10.
- Currently awaiting results of 100 samples from 2011 survey (any positives will be confidential until growers/RMs are informed of results).

- **Root symptoms:**

- While evaluating plants at two locations in north central SK in 2011, Cargill researchers observed and reported symptoms on canola roots that tested positive for *P. brassicae*.
- We also check roots in our canola disease survey but have not observed any clubroot symptoms.

- **Above-ground symptoms:**

- We have not observed any clubroot-related wilting, stunting, yellowing, etc. on canola crops in SK, during our annual canola disease surveys.

# Clubroot in SK: How to go from Unknown to Known?

## Provincial Survey

2012 provincial canola disease survey: target 100-200 random fields (growers are welcome to provide locations to survey) and 100 soil samples for the AAFC project (permission required).

## RM Monitoring

Pest Control Officers can conduct sampling at the RM level.

Permission is not required (under *The Pest Control Act*), but is useful.

## Growers

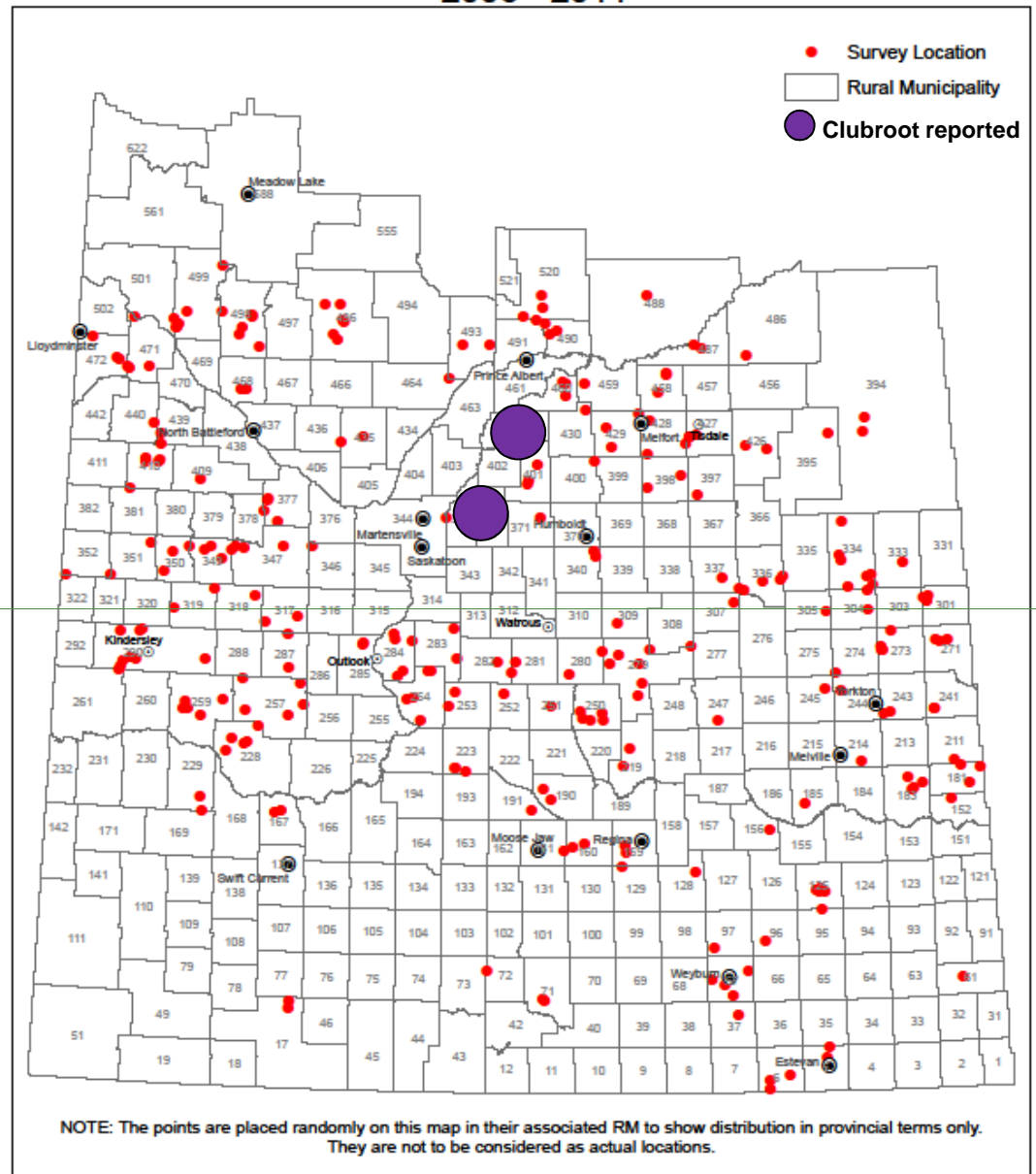
Scout canola crops!

Collect samples for testing (plant or soil).

Provide permission to include fields in RM monitoring or provincial surveys.

Inform those who need to know.

## Soil Sample Locations for Clubroot Survey 2008 - 2011





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# Saskatchewan Clubroot Initiative

- The Saskatchewan Clubroot Initiative (SCI) includes stakeholders in agriculture, transportation, and service industries that may be impacted or impact upon clubroot.
- SCI meets regularly to discuss clubroot research, surveys, policy, prevention, and management issues.
- SCI developed and regularly updates the *Saskatchewan Clubroot Management Plan*, as well as extension materials, research recommendations, etc.
- SCI has a communication plan that includes informing the local RM of any positive clubroot findings discovered in surveys and reported by growers/companies, so they can fulfill their duty under *The Pest Control Act*.



# Clubroot Risk

		Level of Risk for Clubroot		
		Low		High
Importance of Risk Factor	Very Important	Good crop rotation with canola no more than once every 4 years.	Sometimes grow canola every 2 to 3 years.	Have grown canola 2 or more years in a row.
	↑ Important	Sanitation procedures are regularly followed.	Some sanitation procedures in place.	No sanitation procedures.
		You scout crops regularly for disease and have not seen clubroot symptoms.	You sometimes scout crops and investigate unusual symptoms.	You rarely scout crops or investigate unusual symptoms.
		Regardless of soil conditions, clubroot risk will be lowered with sanitation and good crop rotations.	Dry years may reduce disease High soil pH will not prevent clubroot.	Wet years may increase disease Low soil pH may increase clubroot.



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# Thank you!

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**Faye Dokken-Bouchard, Provincial Specialist, Plant Disease**

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