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#### Cereal leaf beetle

- Order: Coleoptera (beetles)
- Family: Chrysomelidae
  - Includes fleabeetles, colorado potato beetle
- Genus: Oulema
- Species: *Oulema melanopus*



#### Where is the Cereal leaf beetle?



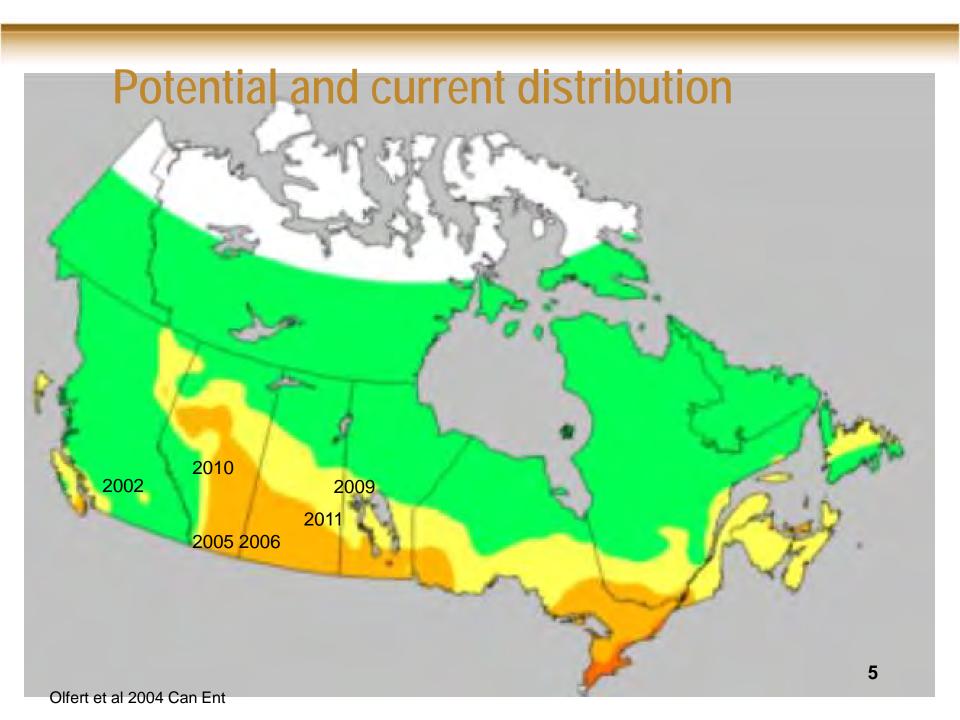


#### Cereal leaf beetle look alikes





- Collops species (beneficial) and Cereal Leaf beetle (centre)
- http://www.spokanecounty.wsu.edu/smallfarms/integrated%20pest%20management/Cereal%20Leaf%20Beetle%20Information/CLB%20Manage ment%20Bulletin%202008%20PDF.pdf



# CLB Hosts – any grass cultivated or not!

**Oats** 

Wheat

**Barley** 

**Brome** 

Rice

**Orchard grass** 

Ryegrass

**Foxtail** 

**Bluegrass** 

**Quack grasses** 

Reed canary grass

Corn

Sorghum

Millet

**Fescue** 

Wild Oat

# **CLB Adult Damage**





## **Cereal Leaf Beetle Larva**





Resembling small slugs, the larvae drop to the soil to pupate in earthen cells



# **CLB Larval Feeding Damage**





## **CLB Damage**



# O. melanopus Life Cycle in Canada

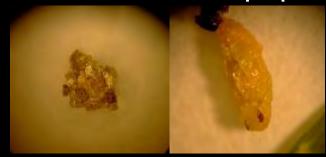
Adult emergence in late April - early Oviposition - Spring Ideal Temp.: 12 - 32° C

Feeding on leaves but no mating



Larval stage: 3
weeks, 4 instars
8 - 32° C

Prepupal



Pupal stage: 2 - 3 weeks Site of Pupation: Soil

Courtesy of S. Kher

Overwintering stage

## CLB larval parasitoid Tetrastichus julis



## Parasitized CLB from Creston, June 2007



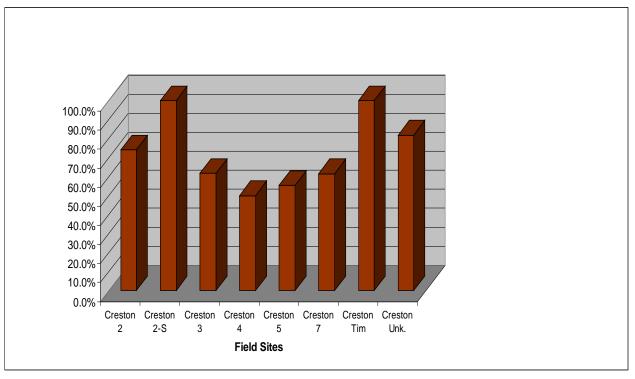


## Parasitized CLB from Creston, June 2007





### Larval parasitism near Creston, BC



Take home message:
Parasitoid being relocated to attack pest
No need to spray, let the parasitoid do its job.

# T. julis in action video by Swaroop Kher, U of Alberta



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