Section III
Biological & Cultural Control

Predator and Parasitoid Management of Cereal Leaf Beetle (Oulema melanoplus) in Spring Wheat 2007

By David E Bragg WSU Extension Entomology
Patti Carr
Diana Roberts
WSU Extension
Kurt Tetrick, USDA-ARS Farm Manager

Protocol for seed treatment insecticides plus UTC:
RCBD replicates of 5 treatments of seed treatment insecticides were seeded on 5 April 2007 in the established
cereal leaf beetle insectary located at Central Ferry WA. Treatments for evaluation were UTC, Gaucho 600 FS
(5 g/chg, Gaucho 30 grams, Cruiser 5 FS 5 grams, Cruiser 30 grams. ***Hippodamia convergens*** adults a common
predator at CFRF appeared on 24 May 2007 in the spring wheat before the arrival of CLB adults from adjacent
winter wheat fields.

Surviving 3rd instar and prepupae were sampled for T. julius parasitoids on 14 June by Terry Miller, Manger of the
WSU Entomology Department Insectary. An overall mean of 93% CLB larvae surviving the predators feeding had
93% parsitoidism by *Tetrastichus julius*. Thus 40% mean predation of eggs and up to smaller 3rd instar larvae were
eaten by ladybird beetle adults occurs, followed by parasitoid attack. No seed treatment affected either predator or
parasitoid populations.

Populations of Cereal Leaf Beetle per Meter/2 on 2 dates before and after arrival of *Hippodamia convergens* adults in early June –
<u>mean Hc per meter was 4 for entire trial</u> period until CLB finished the cycle. Hc then fed on aphids and other small arthropods.