

IDAHO CEREAL LEAF BEETLE (*Oulema melanopus*) (CLB) BIOCONTROL PROJECT
UPDATE

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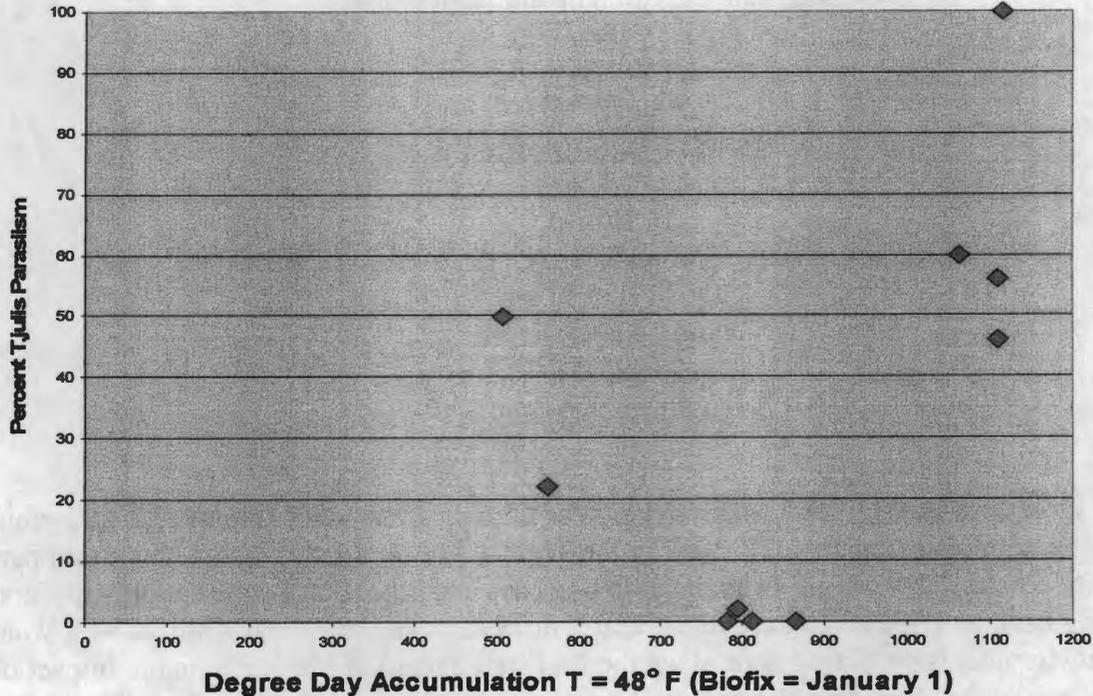
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Sweep net surveys detected a new county record for CLB in Clearwater County. Several grain fields were found infested on June 21, 2007 in the Weippe Prairie area of the southwestern part of the county. As of 2007, 43 of 44 Idaho counties have records of CLB infestations; the first record dating back to Franklin County in SE Idaho in 1992. The species has spread to a wide variety of environments within the state since the first state record in 1992. Economic impact of the species has varied over the diverse small grain production environments found in Idaho. Generally CLB has the status of an occasional pest problem in most counties where it occurs, with declining crop damage or economic impact being reported in recent years. Recent record high wheat prices has been a factor in the practice of SW Idaho growers applying prophylactic insecticide treatments tanked mixed with a broadleaf herbicide in early to mid spring. Insecticide applications targeting CLB and aphids are in some cases applied to sub economic populations of CLB.

ISDA cooperating with University of Idaho has had a multi-year effort of biological control agent releases and recovery surveys. In 2007, CLB larval parasite (*Tetrastichus julis*) surveys were conducted in grain fields at the University of Idaho, Parma Experiment Station on May 29 and on June 13. On each date 25 larvae were collected and dissected. *T. julis* parasite levels were 0% on May 29 and 60% on June 13. W.S.U. extension educator, Diana Roberts dissected a sample of CLB larvae collected June 18, 2007, from an oat field near Princeton, ID in Latah County. The sample was found to have a 72% *T. julis* parasitism level. This was a new county record for this biological control agent and is a result of a natural migration of *T. julis* to this area

of the state. Recent research conducted by Evans, E. et al. documented seasonal patterns of larval parasitism in Utah*. CLB larval dissections over three years in SW Idaho show a similar seasonal pattern of *T. julis* parasite levels as observed in Utah.

Percent % *T. julis* Parasitism SW IDAHO 2005-2007



A field insectary for the egg parasite, *Anaphes flavipes*, was initiated in the spring of 2004 at the University of Idaho, Southwest Idaho Research and Extension Center in Parma, ID. Several egg parasite releases have been made during the 2004 to 2006 field seasons in cooperation with USDA, Plant Protection and Quarantine and Colorado Department of Agriculture Insectary in Palisades CO. *Anaphes flavipes* egg parasite recovery surveys were conducted on April 26, May 3, May 17, and May 29 in 2007. A total of 310 CLB eggs were collected and rear out. No *A. flavipes* were recovered and no evidence of overwintering and establishment of this biological control agent have been observed after three years of releases and follow up recovery surveys. ISDA plans to discontinue efforts to release the egg parasite *A. flavipes* within the state.

*Evans, E. W., J.B Karren and C. E. Israelsen. 2006. Interactions over time between cereal leaf beetle (Coleoptera: Chrysomelidae) and larval parasitoid *Tetrastichus julis* (Hymenoptera: Eulophidae) in Utah. J. Economic Entomology 99(6) 1967-1973.