

Section IX.

Extension & Consulting: Updates/Notes from the Field

***CHAETOCNEMA CONCINNA*: A "NEW" FLEA BEETLE IN OREGON**

J. G. Todd
Willamette Agricultural Consulting, Inc.
7555 Conifer Street NE
Salem, OR 97317
(503) 378-7003
toddwac@q.com

Flea beetles were observed feeding on strawberry leaves in a field near Mt. Angel, OR, in Sept. 2003. Flea beetles had not been recorded on strawberry during our previous 25 years monitoring this crop throughout the Willamette Valley. Flea beetle numbers and leaf injury had increased in this field by Sept. 2004. Specimens were collected and submitted to Rick Westcott at ODA; and they were subsequently identified as *Chaetocnema concinna* (Marsham) by the USNM. This is a Palearctic species that was first identified in North America from specimens collected in Massachusetts in 1979. At present it is known to occurring in eastern Canada, the northeastern U.S., Texas and Oregon; though with this distribution it is probably present in other locations, as well. In Europe, this insect is known as the mangold flea beetle. It has been recorded from hosts in 10 plant families and is considered a pest of sugar beet and spinach.

Over the past six years adults of this insect have been recorded from strawberry in numerous locations in Clackamas, Marion and Yamhill counties in the central Willamette Valley. However, numbers remained relatively low and only minor amounts of leaf injury were observed. Larvae were not collected.

The original collection site was rotated out of strawberry in 2004. It was planted to cauliflower and then perennial ryegrass seed before being replanted to strawberry in 2007 and 2008. By 2009, *C. concinna* had reinfested this site and increased to very high population levels. In September, defoliation was so severe that it seemed possible that the pest might affect strawberry yield the following spring. Brigade WSB @ 0.1 lb ai/ac was applied to the field on 9/16/09, and an untreated check was left so that growth and yield can be compared next spring.

At present this is the only strawberry field that has high densities of *C. concinna*. The species has not been observed in sugar beets which are grown for seed in the Willamette Valley.