

## Red-Headed Flea Beetles (Coleoptera: Chrysomelidae)

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### Hosts

Red-headed flea beetles have a wide host range including chrysanthemums, forsythia, hibiscus, lamb's-quarter, pigweed, zinnia, sedum, asters, *Salvia*, roses, hollies among many others.



### Identification

The adults are shiny black with a reddish head, oval, 3.0-6.25 mm long, and have antennae nearly half as long as the body. Their hind legs are enlarged and they are capable of jumping, hence the name flea beetle. Adults frequently will feed on tender new shoots or growth.



**Figure 1:** Red Headed Flea Beetle Larvae; **A.** Laboratory image, **B.** Larvae found in root ball

### Growing Degree Days and Plant Phenological Indicators



**Figure 2:** Plants in Full Bloom; **A.** Black Locust in bloom, **B.** Chinese Fringetree in bloom

Larval activity (**Figure 1**) of the first generation of flea beetles was seen around **257 – 481 GDD<sub>50</sub>**. Trees in full bloom at this time were Chinese Fringetree (**Figure 2B**) and Black locust (**Figure 2A**). Larvae do not appear to significantly damage host plants while feeding on the roots.

## Growing Degree Days and Insect Phenology



**Figure 3:** Emergence of Adults: **A.** *Magnolia grandiflora* in bloom; **B.** *Ilex verticillata* in bloom, **C.** *Ilex verticillata* flower close up.

Emergence of first generation adults was seen around **590 – 785 GDD<sub>50</sub>**. Plants in full bloom at this time were *Magnolia grandiflora* (**Figure 3A**) and *Ilex verticillata* (**Figure 3B**).



**Figure 4:** Second generation flea beetle larvae; **A.** *Hosta* in bloom, **B.** Crape Myrtle in bloom

Larval activity of the second generation of flea beetles occurred around **1818-1860 GDD<sub>50</sub>**. Plants in bloom at this time are *Hosta* (**Figure 4A**) and Crape Myrtle (**Figure 4B**).

Emergence of second generation adults occurred around **2100-2240 GDD<sub>50</sub>**. Woody plants with easily observed phenological indicators were not present at this time.

### Control

Insecticide trials found thiamethoxam, dinotefuran and bifenthrin provided >90% control when adults fed on 1 d residues. Only thiamethoxam provided >80% control at 7 d after treatment. *Steinernema carpocapsae* (EPNs) has potential as a biological control agent but requires further investigation.

