

Elm Leaf Beetle

TREE DOCTOR TIPS

Elm Leaf Beetle

(Xanthogaleruca luteola)

DESCRIPTION:

When populations are large, elm leaf beetle larvae and adults can completely defoliate elms. Adults chew small, circular holes. Infested trees appear drought-stricken and brown or scorched. After the beetles feed, only the lacy vein structure of the leaf remains. Leaves quickly turn brown, curl and detach.

HOSTS:

This leaf beetle prefers Siberian elm, (*Ulmus pumila*), and American elm, (*Ulmus americana*), and will feed, to some degree, on the foliage of Japanese zelkova, (*Zelkova serrata*.)

BIOLOGY AND SYMPTOMS:

In early spring, these yellow and black beetles emerge from protected areas, such as your attic or home, and start feeding on new leaves. Females deposit clusters of about 25 oval, pointed, yellowish eggs on the undersides of leaves. Damage escalates rapidly as the larvae hatch and begin feeding. Larvae feed for about three weeks and then emigrate in large numbers, crawl down tree trunks and pupate in bark crevices and at the bases of trees. New adults emerge and start another generation of larvae, with about 30 to 45 days between population peaks. There are usually two generations in the Midwest, but there may be as many as four further south, and five generations have been reported in parts of California.

MANAGEMENT:

The first foliar applications should be made when egg hatch is complete, which is sometime in late spring, when the black locusts are in flower. A second application may be needed in mid-summer. In areas where there are multiple generations, monitor elms every 30 days between peak larval occurrence. If beetles have been a nuisance indoors, a late-season foliar treatment in early fall may reduce the adult numbers.

Consider a soil application treatment of a systemic insecticide in the fall before the beetles arrive in the spring. This type of product moves slowly in the tree, but provides season-long protection with one application. It can also help elms replace lost foliage, if you fertilize with a slow-release fertilizer.



FIGURE A. ADULT ELM LEAF BEETLE

*The scientists at **The Davey Institute** laboratory and research facility support our arborists and technicians in diagnosing and prescribing based on the latest arboricultural science. For specific treatment and application details, your arborist may consult *The Davey Institute PHC Handbook*.*

