



UGA1445002

STOP THE LILY LEAF BEETLE

Introduction

The lily leaf beetle (LLB), *Lilioceris lili*, is a bright red beetle in the Chrysomelid family native to Europe and Eurasia. It has been found in the eastern U.S. and has now been detected in Wisconsin as well.

Distribution

The lily leaf beetle was first found in the United States in 1992. It has spread through New England into New York State, with one infestation in Ohio. The insect is native to Europe and Asia, and is believed to have arrived in the U.S. in a shipment of lily bulbs from Europe. It has no effective natural enemies in North America. It was first detected in Wisconsin in the summer of 2014. How it arrived or how long it's been here is uncertain, but to date, its distribution seems to be limited to Marathon County.

Identification and Life Cycle

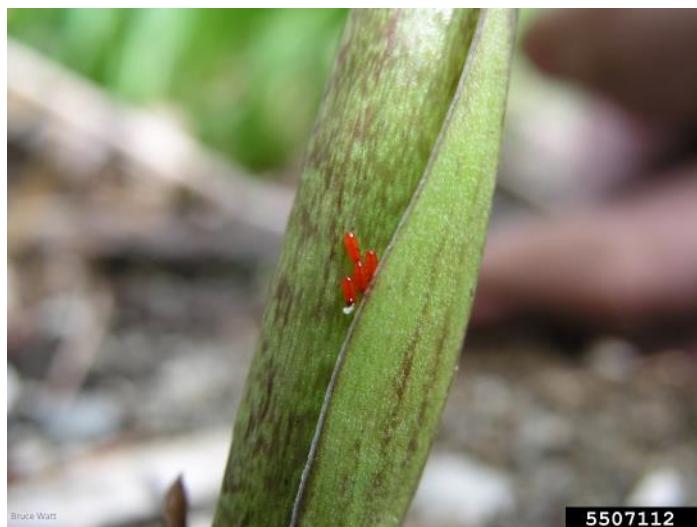
The adult lily leaf beetle is scarlet with a black head, antennae, legs and underside, and is $\frac{1}{4}$ to $\frac{1}{2}$ inch long (Figure 1). It overwinters in the soil and emerges in very early spring through June. The females lay irregular strings of eggs on the undersides of lily or fritillaria leaves, up to 450 in one season (Figure 2). The eggs hatch in one to two weeks into orange to light green slug-like larvae (Figure 3) that wrap themselves in their own black excrement to repel predators (Figure 4). After feeding for 16-24 days, they burrow into the soil and become fluorescent orange pupae that emerge in 16-22 days as red adults. There is one generation per year.

Adult females lay eggs primarily on two members of the lily family: true lilies (genus *Lilium*) and fritillaries (genus *Fritillaria*). True lilies include Asiatic, Oriental, Easter, Turk's cap and tiger lilies, as well as native lilies such as the wood lily. True lilies do not include canna lilies, calla lilies, or daylilies, either hybrids or the common orange daylilies found in so many gardens.



UGA9000004

Figure 1. Adult lily leaf beetle (photo: Lisa Tewksbury, University of Rhode Island, Bugwood.org)



5507112

Figure 2. Lily leaf beetle eggs (photo: Bruce Watt, University of Maine, Bugwood.org)

Pest Damage

The larval stage causes most of the damage, although both adults and larvae will feed on leaves, stems, flower buds and flowers from lilies and other plants such as Solomon's seal and flowering tobacco. Asiatic lily hybrids appear to be most susceptible to LLB, while some Oriental varieties are resistant. Daylilies are not a host plant for this pest.

Pest Management

Contact insecticide gardening sprays labeled for Ornamental Plants (permethrin, cyhalothrin, deltamethrin, pyrethrins, etc.) should control LLB; azadirachtin (neem oil) or insecticidal soap would also provide some control.

Handpick and physically discard adult beetles, eggs and developing larvae. Handpicking beetles can greatly reduce the amount of damage caused by this pest. When handpicking LLB lifestages, drop them into a bucket of soapy water. Continue to monitor lilies and fritillaria for the red beetles, their eggs and their larvae often and throughout the season.

Spread the Word

Help spread the word about lily leaf beetle (LLB). This insect is highly invasive and destructive to native and cultivate lilies. Because LLB has only been detected in Marathon County, you have a rare opportunity to help prevent LLB from spreading to other parts of the state.

For more information

WI Department of Agriculture Nursery Program
Liz Meils (608) 224-4572
DATCPNursery@wisconsin.gov
<http://datcp.wi.gov/>

UW Extension Marathon County Home Horticulture Advisor
Heather Schlessor (715) 261-1239
Heather.schlessor@ces.uwex.edu
<http://marathon.uwex.edu/>



Figure 3. Orange Lily Leaf Beetle larva, excrement removed (Photo: Tim Allen, DATCP Nursery Inspector)



Figure 4. Lily Leaf Beetle larvae covered in excrement, feeding on lily (Photo: Tim Allen, DATCP Nursery Inspector)

**-STOP THE SPREAD-
INSPECT LILIES, DESTROY THE PEST**

Header photo of lily leaf beetle courtesy of Richard A. Casagrande, University of Rhode Island, Bugwood.org

Use pesticides with care. Always read the label first and apply as directed. It is a violation of the law to disregard label directions. Store pesticides in their original containers and keep them out of the reach of children, pets and livestock.

Published May 2015