



Common Name: **Lady beetle, lady bug or ladybird beetle**
Scientific Name: **Family Coccinellidae**

LADY BEETLES / LADY BUGS



Adults



Larva

Introduction. Since lady is defined as “a woman of good family, social position, breeding, etc.,” the name may refer to the fact that most species of this beetle family are highly beneficial insects; only 3 of 475 United States species are not beneficial. Alternatively, the name ladybug may simply reflect the colorful dress-like adornment on these beetles’ elytra (hardened front wings or wing covers). Some species have a habit of overwintering in structures and are therefore nuisance pests. Lady beetles are found worldwide with about 475 species occurring in the United States and Canada.

Recognition. Lady beetles range 1/16 to 3/8 inch long and are broadly oval to nearly round, from above. They may be red, orange or yellow with white markings and black spots. Some species are black with yellow, orange, or red markings. The head is partly to completely concealed from above.

Larvae look like tiny flat alligators, often with numerous spines or wart-like structures and are blackish with red, orange, or yellow spots or bands.

Similar Beetles. Tortoise beetles (Chrysomelidae) have a glassy or metallic sheen to the elytra (hardened front wings).



Residential Services ✧ Commercial Services ✧ Bird Solutions

Representative Species.

1. The **multicolored Asian lady beetle**, *Harmonia axyridis*, is 1/4 to 3/8 inch long and has a black pronotum (front, upper thorax) with wide ivory side margins and a dark M-shaped pattern on top. The elytra are mustard yellow to dark reddish orange, each usually with several black spots. However, the spots may be indistinct or absent. This lady beetle is found throughout most of United States and parts of Canada and has become the highest profile autumn invader in Ohio. It was released at numerous locations across the U.S., on several occasions, by the United States Department of Agriculture to help reduce populations of aphid, scale insect and mealybug crop and fruit pests. Due to the multicolored Asian lady beetle's multiplication as a result of preying on soybean aphids and related insects, this species has become the most abundant lady beetle in Ohio (see top left photo).
2. The convergent lady beetle, *Hippodamia convergens*, is 1/8 to 1/4 inch long with the head, pronotum, and legs black, and the pronotum with a whitish margin and centrally marked with 2 convergent whitish lines. The elytra are red, each with 6 black marks, the front 3 being smaller than the rear 3. This species is found throughout the United States and southern western Canada (see top right photo).
3. The twicestabbed lady beetle, *Chilocorus stigma*, is small 1/8 to 3/16 inch long and is mostly for red or yellow front and side margins on the pronotum and a red spot on each elytron (hardened front wing). It is found east of the Rocky Mountains and adjacent in southern Canada.

Biology. Overwintering adult lady beetles emerge from hibernation and deposit their orange colored eggs in single or multiple groups of 12 on plants infested by aphids, mealybugs and scale insects. The larvae pass through 4 molts. Mature larvae attach to leaves by the tip of their abdomens and pupate without forming a cocoon.

Habits. Larvae and adults are predaceous on aphids, mealybugs, mites, scale insects, other tiny soft-bodied insects, and their eggs, making them very beneficial insects. A few species are leaf feeders and are important plant pests, such as the Mexican bean beetle, *Epilachna varivestis*.

In the autumn, adults seek protected places in which to overwinter. These may include under leaves, rocks, and landscape timbers, but also inhabited structures. Unfortunately, the release and use of lady beetles for biological control by organic gardeners, the USDA (especially the multicolored Asian lady beetle for control of aphids on pecan trees, soybeans and fruit crops), has greatly increased the incidence of their entering structures to overwinter by artificially increasing their numbers.

www.varmentguard.com (800) 793-8169



Residential Services ✧ Commercial Services ✧ Bird Solutions

Cultural Control & Preventative Measures. Although lady beetles are basically beneficial, the multicolored Asian lady beetle is exceptional in its capacity to damage fruit via chewing, bite humans and produce secretions to which sensitive individuals are allergic. Hand removal of lady beetles from walls, furniture and clothing may result in staining as a result of a yellow liquid being secreted from the leg joints (reflex bleeding) as a defense response. The best solution to invasive lady beetles is the use of preventative physical barriers aimed at adults before they congregate and attempt to enter structures.

Physical barriers involve exclusion. Although total exclusion of the exterior structure is probably not possible, all vents (roof, gable, soffit / eave), weep holes and similar sites should be screened with at least 16-mesh screening. Silicone sealer should be applied around cable penetrations, window frames, doors, overhangs, fascia boards, vent stacks and utility penetrations. Installation of remotely closable chimney caps (spring-loaded with a cable running through the flue pipe and a lock-catch in the fireplace) may be advisable. These steps should be taken in June or July.

Temporary but immediate indoor relief can be achieved by vacuuming up beetles. To prevent the entry of more adults indoors, obvious routes of entry should be sealed with paintable silicone caulk. Entry points include around window pulleys (seal with tape or steel wool), window frames, doorframes and baseboards. For electrical outlets, switch boxes and heating duct and return-air vents, remove the cover plate, seal, and replace. For light fixtures and ceiling fans, remove the fixture to its base plate, seal, and replace.

Professional Control. A Varmant Guard pest management professional will perform a strategic treatment of structural junctures and other potential entry points around the building exterior using a residual insecticide spray. This application should be made no later than early September in order to intercept lady beetles as they seek crevices in which to overwinter. The technician will discourage insecticide injections that will kill these beetles in wall voids because dead insect bodies attract dermestid beetles (larder beetles, carpet beetles, etc.). Dermestid larvae wander and readily enter living spaces, causing numerous complaints. Most species of lady beetles can be harvested with insect light traps from problem areas such as attics and false-ceiling voids. These devices can be provided and installed by a Varmant Guard technician.



VARMINT GUARD®

ENVIRONMENTAL
SERVICES INC.



Residential Services ✧ Commercial Services ✧ Bird Solutions



Multicolored Asian lady beetles can be recognized by the black “M” pattern on the white pronotum, which covers the head (see arrows above).