

# The Multicolored Asian Lady Beetle

## Introduction

Lady beetles (ladybugs) are normally considered beneficial insects because they feed on pest insects such as aphids in gardens and landscapes. However, the multicolored Asian lady beetle, *Harmonia axyridis*, can become a serious household pest. These beetles have been reported to congregate on the sides of buildings by the thousands. They will move inside if given the opportunity, and will stain carpeting, wallpaper, and bedding when crushed or disturbed. These beetles are not poisonous, do not bite or sting, are not carriers of disease, and do not eat wood.

The Asian lady beetle was originally released as a biological control agent for pecan aphids as early as 1916 in California. They have been used throughout the United States and in Canada. Asian lady beetles have a wide host range and can feed on rose, apple, poplar, conifer, and crape myrtle aphids.

## Biology And Habits

Like all other beetles, the Asian lady beetle has complete metamorphosis having an egg, larval, pupal, and adult stage. The multicolored Asian lady beetle can be distinguished from other lady beetles by the dark "M"-shaped marking on the area behind the head (pronotum) (Figure 1).

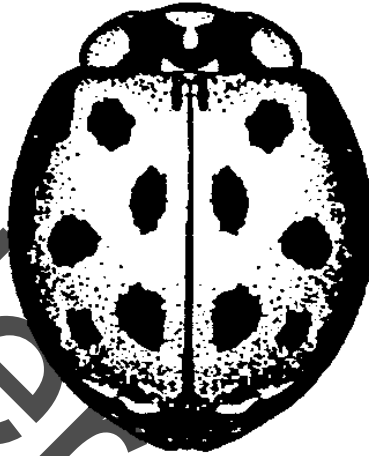


Figure 1. Adult *H. axyridis*. Note the small, dark "M"-shaped marking behind the head. (Drawing courtesy of the University of Kentucky).

The number and kind of spots on the wings of the multicolored Asian lady beetles are variable, but like all other lady beetles, their body is oval and convex. They measure about 1/4 inch long.

The beetles seem to be attracted to light, reflective surfaces such as large windows, or light-colored walls and trim. Beetles usually are found on the sunniest areas of buildings. Homes in forested areas are prone to infestation because this beetle normally lives on trees.

In Japan, Asian lady beetles overwinter in the cracks and crevices of mountain rocks. In the United States, they use buildings as protection from winter. The beetles begin to invade homes through cracks and crevices during the fall (around October or November in Alabama). People with log homes may find this beetle particularly troublesome due to the beetles' preference to dwell in cracks and crevices. Common overwintering sites include door and window frames, porches, underneath siding, roof shingles, wall voids, attics, and soffits.

During the spring, as the temperature increases, so will beetle activity. Beetles overwintering in homes will now look for a way out. As they try to escape, beetles can be found along large glass windows and in light fixtures because they are attracted to light, and around doors, baseboards, and dropped ceilings.

## Control

In general, the best solution is to use an Integrated Pest Management (IPM) approach. IPM incorporates all available control methods into a pest management program. Control methods include exclusion, sanitation, and chemical techniques.

## Exclusion

Prevention is the key to keeping this lady beetle from getting into homes. A space less than 1/8 inch will allow lady beetles entry. To prevent entry:

- Caulk cracks along windows, doors, or other portals of entry.
- Seal and screen attic vents.
- Install tight fitting door sweeps. Gaps under glass sliding doors may be sealed with foam weather stripping.
- Seal utility openings (pipes, dryer vents, cable TV wiring ports, etc.) with caulk, steel wool, or other mesh.

## Sanitation

Vacuuming or sweeping is the first line of defense once they are in a home. Don't forget to discard the vacuum bag outside when you are finished. Do not crush the beetles as they can stain wallpaper and upholstery.

## Chemicals

### Indoors

Chemicals are generally not recommended. The beetles have to be sprayed directly or walk over treated surfaces to obtain a toxic dose. A vacuum cleaner eliminates beetles indoors without leaving pesticide residues on indoor walls and countertops.

Fogging for overwintering beetles is ineffective. The insecticide will probably not come into contact with beetles hiding in cracks and crevices. Killing large numbers of beetles trapped indoors may cause problems such as an unpleasant odor, or an influx of ants and carpet beetles to feed on the dead lady beetles.

A limited use of insecticides indoors may be warranted in local areas of heavy infestation. Be specific in your treatment and always follow the directions on the label.

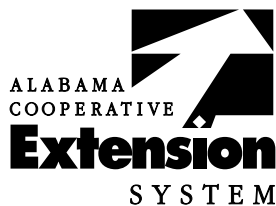
## Outdoors

If necessary to treat outdoors, do so around late September before the beetles enter buildings. Treat around window sills, doorways, and the sides of buildings.

Insecticide effectiveness is affected by:

- Surface type (insecticides formulated as emulsifiable concentrates are less effective on brick or unfinished wood surfaces).
- Temperature.
- Sunlight.
- Moisture.
- The active ingredient. Insecticides containing synthetic pyrethroids such as permethrin, lambda-cyhalothrin, cypermethrin, cyfluthrin, or deltamethrin are fast knock-down insecticides.
- The formulation. In general, wettable powders (WP) and microencapsulated (ME) formulations will last longer than emulsifiable concentrates (EC).

Outdoor treatments are best done by a professional pest control operator who has the training, equipment, and access to chemicals that homeowners do not.



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