

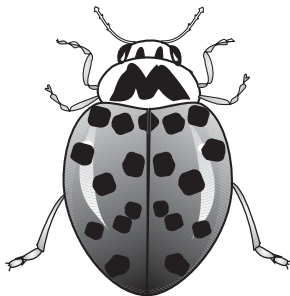
# Insects

## Lady Beetles Invading Homes

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In Tennessee, the invasion often starts around the third week in October. Multicolored Asian lady beetles, orange-red with a variable number of spots, often invade homes in the search of a protected overwintering spot. These beetles may congregate on the sunny sides of buildings by the thousands and, if given the opportunity, will often move inside. In Japan, they seek protected sites such as cracks and crevices in rocks on mountains. In the U.S., they use buildings as overwintering sites. This can be a particular problem in log homes because of their many cracks and crevices.

Multicolored Asian lady beetles were first introduced into the U.S. to control aphids, and so are considered a beneficial insect. Black spots that form an “m” or “w” on the pronotum (area behind the head) and the square-shaped spots ranging in number from none to 19 (Figure 1) help distinguish this species from other lady beetles.



**Figure 1.** Note black “m” on pronotum of the multicolored Asian lady beetle. Square-shaped dots may range from none to nineteen.

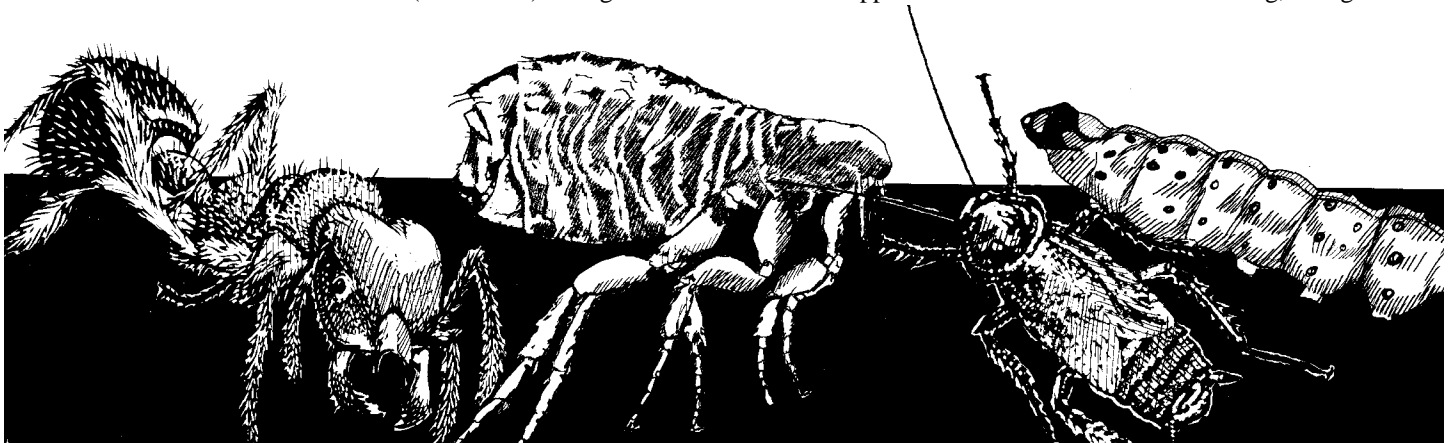
These beetles were released as beneficial insects as early as 1916 in California and several times (1978-1982) throughout the

U.S. and Canada. A large number of these beetles were released in Georgia, Louisiana, Mississippi and Washington. Initially, these beetles were released for pecan aphid control, but they will also feed on other aphid species such as rose, apple, poplar, conifer and crepe myrtle aphids.

Multicolored Asian lady beetles are considered extremely beneficial. These beetles do not sting, do not carry diseases and do not consume or excavate wood. However, they can stain wallpaper and upholstery yellow when crushed. When the multicolored Asian lady beetle is present in large numbers, some individuals with insect allergies have been irritated.

What attracts these insects to your home? The beetles seem to be attracted to light-colored walls, but this is not always the case. Dark-colored buildings are still invaded. Large windows or other reflective surfaces may also attract them.

What can be done to prevent this beetle from entering your home? Exclude them! Don't give them the chance to enter! Exclusion practices should be performed each year by September. The first step to prevent entry into a home is to seal cracks and crevices where insects may enter the structure. (Gaps 1/8 inch or so will allow entry into a home). This includes caulking around window frames, fitting all outside doors with door sweeps, adding rubber bottom seals to garage doors and using foam weatherstripping under and around sliding glass and other doors (Figure 2). Utility openings into the structure, such as the gaps around outdoor faucets, gas meters, dryer vents, wires, etc. should be sealed. Holes can be filled with caulking, cement, steel wool or copper mesh. An easy way to seal openings around pipes is to stuff steel wool or copper mesh into the opening and seal with expandable foam. Caulk should be applied around cracks in window framing, siding and



other areas. Damaged window screens should be repaired. Insect screening may need to be installed behind attic and crawl space vents. See Extension PB1303, **Managing Pests Around the Home**, for additional information on excluding pests. Areas where the beetles have been seen congregating on the outside of homes should be cleaned with a mild detergent to remove any material which may attract other beetles to the site. If beetles still find a way into the home, place glue boards or pieces of double-sided, sticky tape near suspected beetle entry points. Once the entry point is located, it can be sealed. The beetles can be removed from the interior of the building using a vacuum and placed outdoors in a protected site.



**Figure 2.** Gaps around edges of doors may be sealed with weatherstripping to exclude lady beetles.

Once the beetles have found a crack and crevice to overwinter, they may remain inactive on cool days. On warm days when the sun is shining, activity is often seen on the western or southern side of the house. Take notice of the direction from which the beetles are coming and try to locate their resting spot. Locate this resting spot on a cool day, when the beetles will be clustered and can easily be removed with a vacuum. Unfortunately, these resting spots may be in wall voids or other inaccessible spaces.

Traps are available to attract Multicolored Asian lady beetles found in homes. Our experience with these traps has been variable. It is important to place traps where they will not be competing with natural light. For further information see **Comments on the Lady Beetle Traps** (<http://web.utk.edu/~extepp/whats/wh2001/wh-10-5-01.htm>) and **Instructions for Multicolored Asian Lady Beetle Trap Use** (<http://eppserver.ag.utk.edu/Ladybugs.htm>).

It does not make sense to use an insecticide to kill the beetles after they have entered the home. After all, they will still have to be vacuumed. "Fogging" for Asian lady beetles indoors is highly discouraged for several reasons. Fogging only kills the beetles contacted by the spray, while those in cracks and crevices are unaffected. Many dead insects, in inaccessible spaces, may attract carpet beetles and other pests of food and fiber.

If you have experienced Asian lady beetle infestations in the past and if sealing outdoor entry sites is impractical, you may want to contact a pest control professional. The professionals may apply fast-acting, residual insecticides containing active ingredients such as cypermethrin, cyfluthrin, deltamethrin, lambda cyhalothrin, permethrin or tralomethrin around possible entry points, as for other occasional invaders. This only works as a preventive treatment. It must be initiated before the beetles enter the structure (at the end of September) and it still may not be effective.

Remember, these beetles are providing a service for us (killing pest aphids) and should not be killed whenever possible. Eventually, the beetle's population will exceed its food supply or natural enemies may become more abundant, and the populations will crash or reach a lower level without our interference.

**Sources:**

Lyon, W.F. 1991. Multicolored Asian Lady Beetle. Ohio State University Extension Factsheet. HYG-2158-95

Potter, M.F., R.T. Bessin and L.H. Townsend. 1995. Asian Lady Beetle Infestation of Structures. University of Kentucky Cooperative Extension Service. ENT-64.

Oi, F and W. Foshee. 1995. The Asian Ladybug, *Harmonia axyridis*. Auburn University

**Collecting and Releasing Lady Beetles**

Lady beetles can be collected, placed on a piece of cardboard in a jar with air holes in the lid and stored in the refrigerator. Once a week, take the jar out of the refrigerator and sprinkle a little water into the jar. As the beetles warm, they become active and drink the water. After they are finished drinking (about 30 minutes), place the jar back in the refrigerator. Do not place the jar in direct sunlight or other warm areas for very long. In spring, when the aphids are plentiful or pollen is available from herbs or other plants and daytime temperatures remain above 55 degrees F, these predators may be released outdoors in a protected site near the garden.

**Precautionary Statement**

To protect people and the environment, pesticides should be used safely. This is everyone's responsibility, especially the user. Read and follow label directions carefully before you buy, mix, apply, store, or dispose of a pesticide. According to laws regulating pesticides, they must be used only as directed by the label. Persons who do not obey the law will be subject to penalties.

**Disclaimer Statement**

Pesticides recommended in this publication were registered for the prescribed uses when printed. Pesticide registrations are continuously reviewed. Should registration of a recommended pesticide be canceled, it would no longer be recommended by the University of Tennessee. Use of trade or brand names in this publication is for clarity and information; it does not imply approval of the product to the exclusion of others which may be of similar, suitable composition, nor does it guarantee or warrant the standard of the product.

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