

# National Pest Alert



## Multicolored Asian Lady Beetle

*Harmonia axyridis* (Pallas)

### Distribution in North America

The multicolored Asian lady beetle (MALB), a native Asian species, was first released in California in the early 1900s, but failed to establish in the United States. MALB populations became established as a result of numerous subsequent releases that occurred from 1978 to 1982. By the mid-1990s, the MALB had colonized most of the northeastern, southern, midwestern, and western regions of the United States and parts of Canada.

### Description of Multicolored Asian Lady Beetle

MALB adults can be distinguished from other lady beetle species by a pair of white, oval markings behind the head (on the pronotum) that form a black M-shaped pattern. Adults are approximately 1/4 inch in length, spherical or domelike, and yellowish orange to

red. Most adults have 19 black spots on their forewings that vary in darkness. The spots may be missing or faint on some beetles.

### Life Cycle

Unmated females overwinter in protected sites, including homes and other buildings. In spring, the females mate and lay clusters of bright yellow eggs on the underside of leaves. Larvae hatch in 3 to 5 days and are red-orange and black, shaped like an alligator, and covered with tiny, flexible spines. Larvae feed primarily on soft-bodied insects, such as aphids and scales, for 12 to 14 days and then pupate. The pupal stage lasts 5 to 6 days. Development is temperature sensitive, and in cool weather the life cycle may take a month or longer. Adults can live 2 to 3 years, depending on environmental conditions. Adults seek overwintering sites during the fall as temperatures cool. MALB is considered a tree-dwelling lady beetle, but it also is found in other habitats, including field crops.

### Biological Control Agent

MALB is an effective predator of aphids and scales on trees, shrubs, and agricultural crops. It is estimated that adults are capable of consuming 90 to 270 aphids per day and larvae consume 600 to 1,200 aphids during this life stage. MALB has been observed in soybean fields feeding on the recently introduced soybean aphid and is considered to be an effective biological control agent in controlling this new pest.



*Multicolored Asian lady beetle adults vary in appearance.*



## Pest in Fruit Production

Adults feed on ripening peaches, apples, grapes, and other fruit. MALB is a late-season inhabitant of vineyards. The presence of these beetles in grapes can significantly impair wine quality. The beetles are more attracted to late-ripening varieties, including Cabernet Franc, Cabernet Sauvignon, Vidal, Gignoles, and Riesling, although early ripening varieties prone to skin cracking also may be heavily infested. It is important to scout varieties several days before harvest to determine whether MALB is present. No insecticides are currently labeled for the control of MALB. Growers with heavy infestations should contact their state's Department of Agriculture or cooperative extension specialist.

## Nuisance Pest

Unlike native species, MALB prefers protected overwintering sites in and around buildings. Large hidden aggregations may hibernate in dark, secluded areas inside homes, such as attics and basements. They also may invade living areas of the home and on warm sunny days may be found flying toward windows. When disturbed, MALB responds with reflex bleeding, exuding a yellow-orange liquid that has a foul odor that can permanently stain walls, carpeting, drapes, and furniture. Do not swat or crush the MALB to reduce the likelihood of this defensive behavior. Unlike other species of lady beetles, MALB bites humans and may cause welts that last 24 to 48 hours. In extreme cases of sensitivity, humans may have an allergic reaction to the fluid the beetles secrete, resulting in dermatitis and a stinging sensation.



*Overwintering habits of the multicolored Asian lady beetle may result in aggregations inside homes and buildings.*



*Larva of the multicolored Asian lady beetle (above) and pupa (below).*

## Overwintering Management Approaches

Preventing MALB from entering your home or building by sealing cracks and other points of entry is the best approach to managing this beetle in late summer and fall. If MALB has gained entrance into your dwelling, a vacuum cleaner may be used to collect the beetles. Be sure to remove the vacuum cleaner bag and dispose of it outside once you have finished collecting the beetles to prevent them from escaping. When large, persistent infestations of MALB occur, contact your local cooperative extension agent for alternative management recommendations.

For more information on MALB and to report the presence of beetles visit our Web site at

[www.pmcenters.org/northcentral/MALB/](http://www.pmcenters.org/northcentral/MALB/)

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