

"What's Up With All These Ladybug Beetle Look-alikes?"



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In the *Poa trivia* section of the November/December issue of *The Grass Roots*, the question was asked by Cubby O'Brien; "What's up with all these lady bug beetle look-alikes?" Consequently, I was compelled to respond to this question by providing you with information on the history, biology, and control options for this insect.

So what is this lady beetle, where did it come from, and how can we control this "pest?" Many of you have seen or experienced the hundreds upon thousands of lady beetles that appeared in massive numbers in late-September through early November. This beetle is the multicolored Asian lady beetle, *Harmonia axyridis*. Because it is seen in large congregations on buildings around the end of October, is frequently referred to as the Halloween beetle. This beetle is a beneficial insect that is native to Asia. It was first imported from Japan and released in the United States sometime around 1916 by the USDA (United States



Multicolored Asian Lady Beetle Adult (photo by USDA-ARS)

Department of Agriculture) in an attempt to naturally (i.e., biologically) control the Chinese soybean aphid as well as other aphids and insect pests. Since 1916, numerous releases throughout the eastern U.S. by federal, state, and private researchers, as well as accidental entries of beetles on imported nursery materials have resulted in the spread and establishment throughout the Midwest and the

Southeast.

The multicolored Asian lady beetle is quite similar to lady beetles that are commonly found throughout the U.S. Like common lady beetles, the multicolored Asian lady beetle feeds on insect pests including aphids, certain scales and a few other insects. It inhabits numerous trees including maples, walnut, willow, and oak, and it can be found in orchards and forests, but may also occur in gardens and on row crops. This lady beetle is an effective predator of aphids on pecans, pine trees, ornamental shrubs, roses, and other plants. Lady beetle populations



"I JUST TIED A COUPLE OF SPOONS TO OUR WEED-WHACKER. I DON'T HAVE TO SHOVEL!"

tend to explode when prey (i.e., aphids) are abundant, often eliminating the local aphid population.

The Asian lady beetle is a yellow to orange colored beetle that is quite variable in appearance. Individuals can be any color from a pale yellow-orange to a deep orange-red, and have from zero to more than 20 black spots.

The beetle is very prolific and may live up to three years. Lady beetles have four specific life stages: egg, larva, pupa, and adult. The multicolored Asian lady beetle adult begins laying eggs on host plants in the early spring. Eggs typically hatch in about three to five days, and larvae begin searching for aphids and other soft-bodied insects on which to feed. Adults and larvae usually feed on the same prey. The larvae continue to feed, develop, grow, and eventually enter an immobile pupal (i.e., transformation) stage. After several days, an adult beetle emerges from the pupal case. Development from the egg to the adult stage typically requires about 15-25 days depending on food availability and temperature. Later in the fall, the adult multicolored Asian lady beetles seek shelter to spend the winter.

Although this lady beetle is an important biological control agent, it can become a nuisance pest when they aggregate in large numbers on homes and buildings. Homeowners frequently complain when thousands of beetles cover their homes, they have to walk across "piles" of beetles on their deck, they get into picnic food and drinks, they "swarm" like bees and land on people, and especially when the beetles "invade" their house by crawling through cracks and crevices.

Multicolored Asian lady beetles are attracted to lighter colors such as whites, grays, and yellows. They are also particularly fond of warm and sunny areas. Consequently, light-colored houses, especially on hillsides in wooded areas where the sun is present, are highly preferred sites. Once they gain entry into the walls of buildings, they typically stay in the wall spaces. During warm days of winter and early spring, overwintering beetles in wall spaces may become active. In their search for an exit, they may enter the home's living areas subsequently becoming a nuisance. Not to worry, these lady beetles are not structure-damaging pests! They do not chew or bore holes in walls or eat carpet or furniture, nor do they lay eggs in homes.

Preventing the adult multicolored Asian lady beetles from entering is the "best" control strategy to keeping them from becoming a household nuisance pest. Caulking exterior cracks and crevices, **before** the lady beetles seek overwintering sites, is the most effective way to keep them out. This approach will also keep out other unwanted pests such as wasps, as well as save money on energy costs. Replace or repair damaged screens, and install screens over roof vents. Indoor infestations of adult multicolored Asian lady beetles can effectively be removed with a vacuum cleaner or they can be swept up with a broom and dustpan. With either approach, the beetles

must be destroyed. During the winter months, when temperatures are typically below freezing, the beetles can simply be released outside whereby they will not survive. Use of insecticides, indoors or outdoors, is not typically recommended unless populations are extremely high. When stressed the lady beetles secrete a harmless, but staining, orange substance. This liquid is the blood that is excreted out of the joints of the legs of the lady beetle. This phenomenon occurs when the beetles are handled, squashed, or treated with an insecticide.

The multicolored Asian lady beetle has become a problem in certain regions of the U.S. It is likely that its introduction into new habitats in the U.S. has freed these lady beetles from some natural population checks and balances that occur within its native Asian range. Consequently, it is probable that natural controls will catch up with these lady beetles in due time. Until then, be patient and continue implementing the suggested prevention and control strategies for this nuisance pest.

More information about the multicolored Asian lady beetle is available on a downloadable University of Wisconsin Extension fact sheet at University of Wisconsin-Madison Horticulture website (www.uwex.edu/ces/wihort/). ♣

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