

Community IPM

Clover Mites: Tiny Dots on the Move

Clover mites are tiny arthropods related to spiders and ticks. They neither bite humans nor transmit disease, but become a problem when they enter human structures in large numbers in early spring and late summer. Crushing them risks staining items with the mites' red pigment. Infestations in homes typically end when mites desiccate or dry out. Outdoors they feed on plant juices from clover, grasses, and herbs.

Did you know... ?

- **Ladies Night:** Clover mites reproduce via parthenogenesis: unfertilized eggs develop into female mites. In fact, no males are known for this species in the United States. Because mating is not needed to reproduce, populations of clover mites are entirely female and can build quickly.
- **A Mite of a Different Color:** The red color characteristic of clover mites is a pigment capable of staining walls and other surfaces where mites are crushed. It is not mite blood.
- **Suckers:** Large numbers of feeding mites can turn grass brown by draining plant juices.

Identification

Clover mites are red-pigmented arthropods smaller than a pinhead. Like other mite species, larval clover mites have six legs, while nymphs and adults have eight legs. Unlike other mites, they have a set of long front legs that are held forward. After heavy rains, excessive heat, or changes in the season, large numbers of these mites may enter buildings where they become a nuisance.

Biology

Overwintered clover mite females lay eggs in cracks and crevices of dry, protected areas in the spring. Eggs are deposited in concrete foundations, under siding and beneath bark at the base of a tree. Eggs will hatch between 40°F and 75°F, but may remain dormant outside of this range to avoid death due to temperature extremes. No males are known in this species, and all eggs are therefore unfertilized.

After eggs hatch, the newly emerged immature clover mites move to feed on plant juices, molt, and pass through two nymphal stages. Approximately one month is needed to complete one generation



Clover Mite on garden impatiens. Photo: Rayanne Lehman, Pennsylvania Department of Agriculture, Bugwood.org

outdoors. Most of the eggs deposited by this generation will remain dormant until the fall, when cooler weather prevails. Both the egg and adult stages can overwinter. Clover mites move indoors when environmental conditions outside become unfavorable, or when populations are very large and resources are limited.

Management

An integrated pest management plan for clover mites begins with source reduction. Clover mite populations have been linked to over-fertilized or over-watered lawns. Managing for a healthy lawn as opposed to a lush lawn will reduce the potential population of mites that enter the home, plus conserve water, protect natural resources, and save money. For more information on healthy lawns, visit [Cornell Garden-based Learning](http://blogs.cornell.edu/horticulture/), <http://blogs.cornell.edu/horticulture/>.

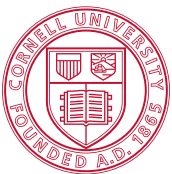
A vegetation free zone of 18 to 36 inches around the perimeter of a building can reduce the number of

invading mites, especially if they are maintained with pea gravel, masonry or other crushed stone. Stone ground covers avoid the moisture problems associated with mulch planting beds or grass in direct contact with a structure.

Exclusion of clover mites is difficult because of their small size. Special attention to cracks and crevices in the foundation or gaps around windows and doors can reduce invasion by these pests. If mites enter the building, a vacuum can be used to remove large numbers efficiently. The vacuum bag should be discarded after use to avoid escape by the mites into another room. Caution is needed to avoid crushing these mites due to the risk of staining surfaces.

If mite problems persist, consider consulting a pest management professional. Appropriately timed applications of a residual acaricides to entry points such as baseboards, windows and the foundation can reduce the number of invading mites.

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