K-STATE Research and Extension

Clover Mite

The clover mite, *Bryobia praetiosa*, is a nuisance, but not harmful pest that can enter homes, apartments, or commercial buildings in extensive numbers, causing concern about how to deal with their presence. This publication provides information about the biology, behavior, and management of the clover mite.

Biology

The clover mite life cycle takes approximately 30 days to complete, with five developmental life stages: egg, larva, protonymph, deutonymph, and adult. There are no male clover mites. Consequently, clover mite females produce eggs without mating (parthenogenesis). Clover mite females can lay up to 70 eggs during their life span. The eggs are laid in the cracks and crevices of concrete walls, foundations, inside walls, or underneath the bark at the base of trees. Larvae that emerge (eclose) from eggs are red with six legs.

Adult clover mites are 0.75 to 1.0 mm (approximately ¹/₃₂ of an inch) in length, red-brown, and have eight legs. The long pink front legs extend forward in front of the head (Figure 1). Clover mite adults can live up to seven months depending on temperature. Adults feed on more than 200 plant types, including: apple, clover, elm, freesia, grass, honeysuckle, and ivy. Clover mite populations can be extensive in well-fertilized turfgrass located near foundations, and their feeding can cause turfgrass to appear silvery or frosty. Although all life stages can overwinter,



Figure 1. Clover mite adult with front legs protruding forward (Raymond Cloyd)

clover mites primarily overwinter as eggs in protected locations such as in wall voids inside homes or other buildings. There are one to two generations per year in Kansas.

Behavior

Clover mites usually enter homes and other buildings in the early spring and fall, gathering on the south and west sides, which are warmed by the sun. In addition, wellfertilized turfgrass growing near foundations increases the likelihood of clover mites entering homes or other buildings. Clover mites enter homes and other buildings during the onset of drought or cold weather. Once inside, clover mites gather in large numbers in corners (Figure 2) and typically die from dehydration within two to three days.

Clover mites are primarily a nuisance pest. They do not bite humans or transmit diseases. Clover mites will leave a red stain when purposely or accidently crushed on walls or curtains.

Management

Clover mite management involves the following:

- 1. Remove turfgrass near home and other building foundations.
- 2. Place an 18- to 24-inch-wide band of an inorganic mulch (e.g. pea gravel) around the foundation of homes and other buildings, or in planting areas.



Figure 2. Clover mites inside the corner of a building (Raymond Cloyd)

- 3. Mow turfgrass regularly and as short as possible.
- 4. Avoid excessive watering and over-fertilization of turfgrass, especially with water-soluble, nitrogen-based fertilizers, which encourage succulent growth.
- 5. Remove weeds from around the foundation of homes or other buildings. Also remove leaves from planting areas and debris or rocks located around the foundation.
- 6. Remove or limit the growth of ivy or other host plants around the foundation.
- 7. Select plants for foundation plantings that do not attract clover mites. Examples include: arborvitae, chrysanthemum, geranium, marigold, petunia, rose, salvia, or yew.
- 8. Seal cracks or openings in the foundation and around window seals.
- 9. Ensure window screens fit tightly and there are no holes.

- 10. Use a vacuum cleaner to collect clover mites without crushing them. Discard the clover mites outdoors and clean the bag afterward.
- 11. Place sticky tape inside homes near window seals to capture clover mites that enter (Figure 3).

Pesticides that have activity on mites can be applied around the perimeter of homes or other buildings to kill clover mites, which reduces the number that enter. Pesticide applications should be made 10 feet away from the foundation and up to the bottom of windows (Figure 4). Be sure to treat cracks and crevices in concrete foundations. In addition, apply a pesticide starting from the foundation to the edge of any turfgrass. Do not apply pesticides inside homes or buildings. If necessary, consult with a pest management professional for recommendations on perimeter treatments of pesticides to prevent clover mites from entering homes or buildings.



Figure 3. Clover mites captured on sticky tape (Raymond Cloyd)



Figure 4. Apply pesticides to the foundation up to the bottom of windows (Raymond Cloyd)

Raymond A. Cloyd Horticultural Entomology and Plant Protection Specialist



Publications from Kansas State University are available at *bookstore.ksre.ksu.edu*.

Date shown is that of publication or last revision. Contents of this publication may be freely reproduced for educational purposes. All other rights reserved. In each case, credit Raymond Cloyd, *Clover Mite*, Kansas State University, November 2022.

Kansas State University Agricultural Experiment Station and Cooperative Extension Service

K-State Research and Extension is an equal opportunity provider and employer. Issued in furtherance of Cooperative Extension Work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Director of K-State Research and Extension, Kansas State University, County Extension Councils, Extension Districts.