Clover Mites

Fact Sheet No. 3
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Identification

Clover mites, Bryobia praetiosa Koch, are not insects but are more closely related to chiggers, ticks, and spiders. They belong to the spider mite family Tetranychidae. These mites are found throughout the world on trees, shrubs, flowers, grasses, and agricultural crops.

Clover mites are tiny, eight-legged, reddish or brown creatures, smaller than a pinhead. The best distinguishing feature is the pair of front legs that are no longer than the body and about twice the length of the three pairs of other legs.

Life Cycle

Clover mites hatch in late summer and fall from bright red eggs that laid dormant through the heat of summer in cracks and crevices of buildings and on tree bark. When temperatures fall below 80-85 degrees in late summer, the eggs hatch, the young mites feed and mature, mate, and lay eggs for successive generations.

After hatching, the mites pay pass through four stages of development--larvae, two nymphal stages, and adult. Each of these stages lasts 2 to 6 days. One month is ordinarily required to complete a generation outdoors. Two or more generations are produced each year.

Damage and Habits

Clover mites feed and live in clovers, grasses, trees, shrubs, lawns, and other plants around buildings. Heavy feeding results in leaves having a silvered appearance. Severe damage may result in patches of lawn dying back and may be mistaken for drought damage. Damage to lawns from clover mites generally occurs from February to May. Such damage nearly always occurs within about 10 feet of a building, tree, or other vertical object.

Clover mites climb vertical surfaces to molt and to lay eggs. The young mites may sometimes be seen in such numbers on the bark of trees, rocks, and cracks and crevices of foundation walls as to give the appearance of brick dust. It is at this time that some of the mites may invade homes and will continue to do so until stopped by freezing temperatures. On warm, sunny days during the winter, the feeding and hatching may resume, especially on

the east and south sides of dwellings and trees. In the spring and summer before temperatures again reach the 80-85 degree range, feeding and egg-laying resume with continued migration into homes. During the hotter portion of the summer, the mites die, leaving their last batch of eggs to carry on when temperatures cool off again.

When clover mites invade a building, they can cover the floors, walkway, furniture, windowpanes. In homes, they can get into beds, clothing, and food supplies. They do not bite people, transmit diseases, or feed on household furnishings or pantry supplies. They are simply a nuisance. These mites can invade a home in such numbers as to give infested surfaces a reddish appearance. When crushed, they leave a reddish stain that is especially noticeable on white surfaces.

Household invasion by the mites may occur when (1) Their host plants have been removed (adjacent fields cuts or plants dried up), or (2) Approaching cold weather drives then indoors to seek protection. Infestations are usually most severe at new home sites where grass and weeds are allowed to grow adjacent to the building. Older lawns that are heavily fertilized are also favored by this mite. In these sites, if populations of natural enemies are allowed to become established, the mites become less of a problem.

In late fall (October and November), thousands of mites may gather on vegetation around a home and on foundation walls. When the weather turns cold, they seek protection in cracks, behind shingles, or sliding. While in hiding, they are inactive. In the spring (February through May), they become active again and crawl from their hiding places in search of food. At both of these times of year, clover mites often find their way inside the home.

Control

Grass and weeds growing next to foundations provide favorable conditions for clover mite development and migration into structures. If landscape plans permit, a strip 18-24 inches wide around the foundation can be cleared and covered with pea gravel or planted to flowers and shrubs that are not attractive to the clover mites. Sometimes this is all that is required to prevent future problems.

Flowers such as chrysanthemum, marigold, petunia, rose, salvia, and zinnia are not attractive to the mites and may be used for this purpose as can shrubs such as juniper, spruce, arborvitae, and yew. It should be noted that while these plants are not attractive to clover mites, they all have problems of their own with other species of mites, insects, and/or disease and could cause additional problems for the homeowner that might be considered more severe than clover mites.

Clover mites tend to be abundant in dry, sunny areas. Watering of dry or damaged areas of the lawn (especially along foundations) will help reduce the number of clover mites and also encourage regrowth in the lawn.

To obtain an immediate reduction of clover mites on the exterior of structures, you can use the following materials and rates: diazinon 25% EC (emulsifiable concentrate) at 8 ounces (16 tablespoons) per 3 gallons of water per 500 square feet or kelthane 18% EC at 1 ounce (2 tablespoons) per 3 gallons per 1000 square feet. The foundation and the side of the house (usually up to the first floor windows is sufficient) should be sprayed along with a 15-20 foot

wide strip from the foundation out into the lawn. To obtain effective control, the foliage should be thoroughly wetted with the spray. Of the two products, kelthane is probably the more effective and certainly the cheaper at the recommended rates. Repeat applications may be required to maintain control with either of these products.

Numerous insecticide products containing bifenthrin, chlorpyrifos, cyfluthrin, lambda-cyhalothrin, malathion, permethrin, propoxur, synergized pyrethrins, or tralomethrin are labeled for clover mite control. Products containing cyfluthrin and lambda-cyhalothrin are mostly intended for professional use. Not all products containing these active ingredients are suitable for a given use. Before purchasing or applying any insecticide, check the label to be sure the site you want to treat is listed. any

Caulking holes or cracks in the foundation, around doors and windows, and weather stripping will greatly cut down on the number of clover mites that gain entry into the home. Clover mites that have entered the structure can be controlled by using household aerosol or pump insecticide formulations containing bifenthrin, diazinon, chlorpyrifos, permethrin, propoxur, synergized pyrethrins, or tralomethrin. Repeated applications may be required as only the mites that are contacted will generally be killed. Mites can also be picked up in a vacuum cleaner, and the dust bag discarded outdoors after collection.

Note: Some spray materials (both indoors and out) may stain, discolor, or partially dissolve various paints, fabrics, and plastics. Use only products registered for application to the individual sites and treat small areas first to observe any potential adverse reaction that may occur before treating the entire area.

Precautionary Statement

All pesticides have both benefits and risks. Benefits can be maximized and risks minimized by reading and following the labeling. Pay close attention to the directions for use and the precautionary statements. The information on pesticide labels contains both instructions and limitations. Pesticide labels are legal documents, and it is a violation of both federal and state laws to use a pesticide inconsistent with its labeling. The pesticide applicator is legally responsible for proper use. Always read and follow the label.