Community IPM

Lots of Little Beetles Could Mean a Big Mold Problem!

Fungus and Plaster Beetles represent a variety of different species that all feed on the same thing: fungi. In nature, these beetles live under tree bark, in leaf piles or under stones. In buildings, fungus beetles are indicators of a moisture problem, and can be a nuisance pest when dozens of beetles are observed. Controlling fungus beetles requires elimination of excess moisture.

Flat Bark Beetle: *Silvanus bidentatus.* Photo: G. Alpert.

Identification

Fungus and plaster beetles range in color from reddish-brown to yellow-brown to black, and are very small (less than 4 mm in length). Under magnification, the head and thorax can be seen from above, and the body is covered with tiny punctures, giving the insect a roughened appearance. The antennae are bead-like and end in a club. The pronotom, the plate-like structure that covers all or part of the thorax, may have two distinctive teeth located just behind the eyes.

Biology

Larvae and adult beetles consume mold that forms on food or structures in moist areas. Food items, including grains that are stored or accidentally spilled in damp areas, can be host to several species of fungus beetles, as well as other mold-feeding insects like springtails and booklice/psocids. In addition to food items, structures such as new and old homes are susceptible to fungus beetle populations, although infestations in new homes are most common. This occurs when mold grows on wet plaster, insulation products or even structural beams that were exposed to rain during construction and did not dry out. In older homes, fungus beetle problems result from plumbing leaks, ventilation issues with shower stalls, refrigerators, clothes dryers, and dampness in basements that promotes mold growth.

After completing development, adult beetles emerge and are attracted to light. Beetles may be found inside ceiling light fixtures or at windows, causing concern for homeowners. Adult emergence occurs indoors year round, although populations tend to be highest in the warmer summer months. Standard window screening is not sufficient to exclude these tiny insects, which can enter homes in summer months and appear near lights or television screens in otherwise dark rooms. If conditions are right, adults can start the cycle again, with females laying eggs on moldy items.

Management

Conducive Conditions

Fungus or plaster beetles themselves are harmless and considered a nuisance pest under normal conditions. They can, however, be thought of as canaries in a coal mine, since their presence alerts you to a significant problem: moisture and mold. Regular emergence of adult beetles throughout the year suggests a chronic moisture issue, whereas a sudden outbreak of beetles can indicate the presence of a hidden leak. Therefore, an inspection is needed to identify the source of the problem.

Source Identification

Begin by having the pest species identified by a qualified professional, such as a county extension agent. Identification information can provide insight about food preferences of the pest, and give you some direction in conducting your inspection. For example, finding foreign grain beetles *(Ahasversus advena)* in the kitchen, you might look to the bag of birdseed kept under the sink. However, because beetles are attracted to lights, they may appear in a room different from the one experiencing a moisture problem. Therefore, it is important to consider other moisture sources such as a leak in the gutters, skylights, or attics. Some pest management companies might offer the use of sophisticated inspection equipment, including moisture meters, to identify breeding sources. Sticky traps placed throughout the home might also inform you about infestations sites.

Population Reduction

Once the source has been identified, steps should be taken to eliminate moisture conditions. This is the best method to effectively manage fungus and plaster beetle populations over the long term. Chemical treatments are generally ineffective and not recommended because they do not treat the source. Dehumidifiers in damp basements, repair of leaks, proper ventilation in attics, bathrooms, and laundry rooms, and use of home heating in winter months can dry out moisture and eliminate mold.

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