

## Mealybug Invasion

By Susan Camp

A Gloucester friend asked recently, “What is the white blight- like a fluffy yeast- on the top of some stems of my flowers and plants?” My husband had noticed the white, cottony stuff on several plants, including hostas and herbs. I had seen it in years past, but never to this degree; it seemed to be everywhere. I have to admit that I don’t always pay a lot of attention to critters on plants. I accept that some leaves and flowers will be eaten. The “fluffy yeast” was a mystery and it seemed to be everywhere.

Those fluffy, white clusters aren’t yeast. They are adult female mealybugs, tiny, wingless, soft-bodied insects that congregate into colonies on stems and leaves. The females are covered in whitish, cottony wax filaments that stick to plant surfaces. Adult males have wings and can fly. Mealybugs are common throughout North America. They feed on a variety of plants, including flowers, vegetables, shrubs, and groundcovers. They also feed on houseplants and are found in nurseries and garden centers. Mealybugs can carry pathogens that cause plant diseases.

Most species of female mealybugs lay several hundred eggs at a time. In one to two weeks, the immature larvae, called crawlers, emerge. Crawlers feed on stems and leaves by inserting a mouthpart, called a stylet, into a plant and sucking out its sugary fluid. Mealybug saliva is toxic and coupled with mechanical damage caused by the stylet, plant distortion and leaf drop occur.

The larvae secrete a sweet waste product called honeydew, which sticks to leaves and stems, providing a growth medium for sooty mold fungi. Sooty mold does not penetrate the plant, but can block sunlight, thus interfering with photosynthesis, resulting in chlorosis, or yellowing of the leaves. Virginia Cooperative Extension (VCE) Publication 450-618 provides information on sooty mold on hardwoods and evergreens.

If you find mealybugs on your plants, what can you do? The best choices are insecticidal soaps and horticultural oils. These products do not affect plants systemically, so they must come into direct contact with the insects. Follow package directions to avoiding damaging your plants. Spray when you first notice crawlers. Water plants well the day before and do not apply if the weather is hot, as soaps and oils can burn the leaves and stems. Try to avoid spraying beneficial insects. See VCE publication “Organic Controls for Insect Pests of Floral Crops” 5-35 and Table 4-10 of “Insects of Foliage and Houseplants” 4-88 for recommended treatment of mealybugs.

Beneficial insects that feed on mealybugs and other soft-bodied pests provide another option. The VCE pamphlet “Integrated Pest Management Ideas for Vegetable Gardens” suggests the lady beetle (*Hippodamia convergens*), which feeds on mealybugs, aphids, and other soft-bodied insects. Other predators include the larvae of the green lacewing (*Chrysoperla rufilabris*), and the mealybug destroyer (*Cryptolaemus montrouzieri*). Beneficial insects are available through websites online.

The VCE document “Home Ornamentals: Insects of Foliage and Houseplants” states that prevention is the best way to protect plants from insect invasion. Stepwise instructions for cultural, mechanical, and chemical controls are included in the publication.

Our plants are looking better, although my husband is not convinced of the effectiveness of insecticidal soap. Still, we haven’t lost any plants, and the leaves aren’t turning yellow, so we have had a positive outcome.

I am pleased to report that the damage to our daylilies caused by munching deer is far less than in the past three years. We had some initial bud damage earlier in the season, but once we took action, the deer moved on to more palatable feasts elsewhere. We used non-toxic deer repellent spray and hung little bags of deer deterrent soap around the garden. One or both products helped. Next year we will try the motion-activated sprinkler. If nothing else, the raccoons will enjoy playing in the spray.

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