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Brown Marmorated Stink Bug

The Brown Marmorated stink bug, an invasive introduction from Asia, is established in the lower Hudson Valley and throughout the Eastern United States. It is an agricultural pest that is also a nuisance when it enters homes, sometimes in large numbers. As the name implies, this insect may release an unpleasant odor when disturbed.

Description

Adult stink bugs are shield shaped, approximately ½ to ¾ inch in length. They are a mottled brown with dark and light bands on the antennae and abdomen. Immature bugs also have white bands on their legs. Adults are capable of flying, but are likely to colonize new areas by riding on vehicles that visit infested sites. Immature brown marmorated stink bugs are yellowish, mottled with black and red when newly hatched; as they grow older, they resemble the adults. Eggs are light green, barrel shaped and are laid on the underside of foliage in groups of 20 to 30.

Damage

Since the brown marmorated stink bug feeds on an extensive variety of plants, it has the potential to become a major agricultural pest in New York State. It feeds on a wide variety of cultivated and weedy plants. The bug feeds by inserting its mouthparts into fruit or other plant parts. This causes spots on fruit that may appear corky or water-soaked. Fruit may develop catfacing (distortions) if it is damaged during its early development. Leaves may be stippled or contain lesions up to approximately $^{1}/_{8}$ inch; these eventually may run together and become brown.

A partial list of hosts:

Fruit: Apple, Apricot, Cherry, Currant, Elderberry, Fig, Grape, Peach, Pear, Persimmon, Plum, Raspberries and others.

Shade trees and ornamental plants: a wide variety, such as Abelia, Amelanchier (Service Berry), Ash, Birch, Butterfly Bush, Catalpa, Ornamental Cherry, Crabapple, Dogwood, Elm, Euonymus, Hawthorn, Hibiscus, American Holly, Honey Locust, Honeysuckle, Japanese Cedar, Lilac, Linden, Magnolia, Maple, Mulberry, Oak, Paulownia (Empress Tree), Privet, Pyracantha, Redbud, Rose, Spiraea, Stewartia, Sumac, Sweet Gum, Sycamore, Tulip Tree, Viburnum, Walnut, Willow, Zelkova, and weeds such as Bittersweet, Buckthorn and Russian Olive.

Vegetables and small fruits: Asparagus, Beans and Peas, Beet, Corn, Cucumber and Squash, Pepper, Tomato, and others.

Herbaceous plants: Various perennials and annuals, including Celosia, Cleome, Dahlia, Nasturtium, Sunflower, and weeds such as Bur Cucumber, Burdock, and Nightshade.

Indoors, stink bugs are nuisance pests that may cause considerable distress if they congregate in large numbers. These insects seek out protected sites in late summer through late fall where they spend the winter as adults in a dormant state. In nature, a suitable wintering site might be under the bark of a tree or in a rock out-cropping. In a suburban setting, homes and other structures often substitute for these natural sites.

These insects do not bite or sting, nor do they cause damage to the home. Many will, however, give off a pungent odor or stain if you handle or crush them; this is part of the insect's defensive strategy.

Management

Traps that attract Brown Marmorated Stink Bugs are used as a monitoring tool for commercial crops and orchards. These may attract insects from a considerable distance, so it is possible that a trap will increase the number of insects on a small property. If many stink bugs have already entered a structure and are in hard to reach places, a trap with a light attachment placed indoors may help to collect them.

Vacuum, bag and discard insects that congregate on buildings. If you use a wet vacuum or a shop vac without a collection bag, you may add soapy water to the container to drown the insects. To block the bugs' entry to your home, eliminate or caulk gaps around door and window frames and soffits; tighten up loose fitting screens, windows, doors and weather stripping. Screen attic or wall vents, chimneys and fireplaces and other openings. Screen ventilation grids to keep these and other insects, such as wasps, out. Contact your local fire department for tips on safely screening or capping these structures.

Certified pesticide applicators may apply restricted use pesticides that limit the insects' access to buildings. These pesticides must be applied in late summer or early fall **before** the insects enter a structure. Repeat applications may be needed as the insecticide residue breaks down.

No insecticides are registered in New York State for homeowner use or for the management of stink bugs indoors. Once the insects have entered the structure, use of a pesticide is not helpful, as dead insects that cannot be easily removed may attract more insects that scavenge on the remains. If you already have a few insects inside the home, you may remove them by hand. Use tissue paper or wear rubber gloves to pick them up, or a plastic jar with lid to capture them, and dispose of them. Although the bugs are not known to be harmful, they do give off an unpleasant odor that may persist for some time. Sweep gently to avoid alarming the insects and causing them to discharge odors or fluids that may stain fabric and wall surfaces. A vacuum cleaner works well to remove the bugs, though this may cause them to release their scent. Any insects that survive the winter will disperse outside when warmer temperatures return in the spring. They should not be a problem inside buildings during the summer.

Management options for landscape plants are under development.

Sources: Carolyn Klass, Senior Extension Associate, Department of Entomology, Cornell University:
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