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**CAES Insect Alert**

## **BROWN MARMORATED STINK BUG (BMSB)**

The Brown Marmorated Stink Bug (BMSB) *Halyomorpha halys* Stål, an invasive insect from Asia, was first detected in Connecticut in 2008. In the fall of 2013, the number of reports of this insect has exceeded the number recorded in previous years. This bug has the potential to become a significant pest of fruits, vegetables, nuts, and other crops in Connecticut. We ask the public to report sightings and/or to bring samples to the Insect Inquiry Office of The Connecticut Experiment Station, which is located at 123 Huntington St., New Haven, CT 06504 (Phone: 203-974-8600). Reports also may be filed at the Station's Valley Laboratory, 153 Cook Hill Rd., Windsor, CT 06095 (Phone: 860-683-4977).

### **Description**

The winged adult of the BMSB is shield-shaped, speckled brown and about 5/8" long (Fig. 1). Its head has a beak that houses its piercing-sucking mouthparts. Two features that distinguish it from most native species are its two pale-colored stripes on the antennae (see arrows, figure 1) and its dark and light contrasting markings on the outer edge of the abdomen. When disturbed or crushed, the insect can release a pungent, unpleasant odor.



Figure 1. Adult, Brown Marmorated Stink Bug. Note stripes on antennae and the markings at the edges of the abdomen. Photo Rose Hiskes, CAES.



Figure 2. Nymph, Brown Marmorated Stink Bug

### **Life Cycle**

The BMSB has one to two generations per year in Connecticut. The adults overwinter in protected locations, such as buildings. During the fall, the adults of the BMSB can aggregate, and they sometimes enter homes. Adults do not feed or reproduce during cool weather. In spring or on warm winter days, they become active and often try to leave buildings. Once outdoors, adults feed on one of their many host plants. After feeding and mating, the females lay light colored, barrel-shaped eggs in clusters on the undersides of foliage. After a few days, orange and black spikey nymphs (Figs. 2 and 3) hatch. They molt five times before becoming winged adults. The adults of

the new generation that appears in late summer feed, until they seek their their winter shelters.

### Hosts

Adult and nymphs damage many fruits, vegetables, nuts, and ornamentals by piercing plant tissue and sucking partially digested material. In Connecticut, many inquiries have been associated with apple or crabapple trees, and tree of heaven. Vegetables, such as sweet corn, field corn, tomatoes, peppers, green beans, and soy beans, may be attacked. Peaches, pears, apples, grapes, and raspberries also have been damaged in some states, resulting in substantial crop losses. Ornamentals such as butterfly bush, catalpa, honeysuckle, and sunflower are also vulnerable.



Figure 3. Nymph, Brown Marmorated Stink Bug

### Management

**Homeowners:** To reduce entrance into homes, property owners should caulk cracks and crevices. Vacuuming adults and then freezing the vacuum bag is also a good technique for management. Insecticidal control in homes in late summer, fall, and winter is not suggested, and probably will be ineffective.

**Commercial growers:** Commercial growers may use properly labeled commercially available pyrethroids on crops, but they need to keep rotating these materials. Frequent applications are necessary to provide adequate control. Biological controls currently is being researched, but as yet nothing is available.

### Mistaken identity

The Western conifer seed bug, *Leptoglossus occidentalis*, L. has been mistaken for the BMSB. It too enters buildings to over winter and is often found in upper floors and attics. See figure 4.



Fig. 4. Western conifer seed bug, *Leptoglossus occidentalis*

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