

PEST PREVENTION TRAINING

An advanced education program for those on the front lines protecting Hawaii

Brown Marmorated Stink Bug

Halyomorpha halys

Not know to be present in Hawaii

An invasive brown stink bug that damages crops and fruit as they feed.



Adult Brown Marmorated Stink Bug



Impacts

- Agriculture:
 - o Observed feeding successfully on numerous fruit, vegetable, and field crops.
 - Susceptible crops in the USA where BMSB is present are worth >\$40 billion.
- Nuisance:
 - Congregate inside and outside of buildings; including furniture, baseboards, window and door trim.
 - They do not bite people or pets however, some people may be sensitive to allergens given off by the stink bugs.



Adult Brown Marmorated Stink Bug



Identification

- Mature adults are approximately 5/8 inch (17mm) long after progressing through 5 nymphal instars, which range from 1/10 to 1/2 inch (2.4 to 12mm) long.
- Eggs: individual eggs are about 1/25 inch (1mm) in diameter and are laid in masses that contain 28 eggs on average.
- Distinguishing whitish bands on its antennae and (in some life stages) legs. Bands on antennae are apparent in both adult and immature forms.
- Look-a-like species: http://www.stopbmsb.org/stink-bugbasics/look-alike-insects/#other



Newly hatched eggs and BMSB nymphs







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Vectors/Commodities

- Life stages and associated vectors: Most interceptions are of adults associated with inanimate objects (packaging, equipment, structural commodities) while wintering. Egg masses and nymphs are more closely associated with host plant materials.
- Vehicles, equipment, shipping containers and packing materials.
- · Agricultural commodities from infested and native ranges.
- Plants and trees from infested areas. The BMSB has a variety of hosts, highest risk being fruits and produce.



BMSB feeding damage.



Distribution

- Native Range: China, Japan, Korea and Taiwan
- Introduced Range: North America & Europe
 - Canada (4 provinces)
 - Europe: France, Germany, Italy, Switzerland.
 - USA: 47 states
 - US distribution map (StopBMSB.org): http://www.stopbmsb.org/where-is-bmsb/
 - US distribution map (USDA APHIS):
 https://pest.ceris.purdue.edu/map.php?code=IQAQQKA



Adult BMSB congregating on leaf.



Best Managment Practices

- · Consider pest distribution when sourcing plant material.
- Carefully inspect all material coming from areas where BMSB are established for damage, eggs, nymphs and adult insects.
- Report suspect BMSB to 643pest.org, or by phone to 643-PEST (7378).



Selected References:

- Stop BMSB Website: http://www.stopbmsb.org/about-us/
- List of host plants for BDSM: http://www.stopbmsb.org/where-is-bmsb/host-plants/
- BMSB_CABI: https://www.cabi.org/isc/datasheet/27377#tohistoryOfIntroductionAndSpread
- BMSB_USDA: https://www.invasivespeciesinfo.gov/terrestrial/invertebrates/brown-marmorated-stink-bug

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