CROP FOCUS

DUPONT PIONEER

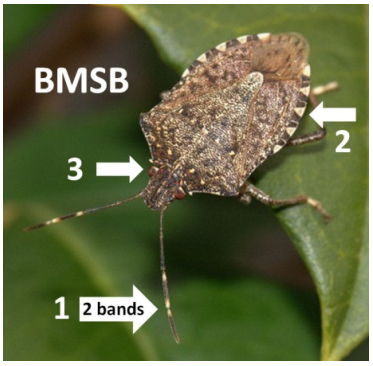
Brown Marmorated Stink Bug

Pest Facts

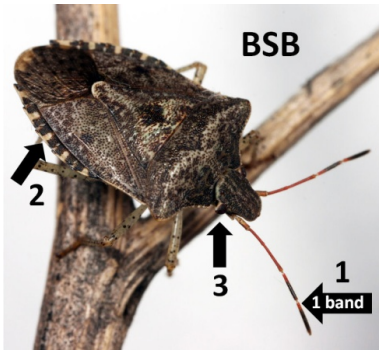
- Scientific name is *Halyomorpha halys*
- Introduced to mid-Atlantic region of the U.S. in the late 1990s from Asia
- Is a strong flyer, allowing it to disperse broadly across the U.S. Has been found in all states east of the Mississippi and also MN, IA, NE, AZ, CA, OR and WA
- May not develop as a significant pest until five or more years after detection in a region
- Hosts include over 20 tree, shrub and small fruit species, and many vegetables and field crops, including corn and soybeans. May be highly destructive to crops
- Typical of other stink bugs, brown marmorated stink bug (BMSB) emits a pungent odor when disturbed
- Few natural enemies exist in North America; insect is distasteful to predators

Identification

1. BMSB has distinct doubled white band on antennae. On brown stink bug, (BSB), white band is single or nonexistent
2. BMSB has a broad white pattern on abdomen. Pattern is narrow on BSB
3. BMSB has red compound and simple eyes. BSB has brown or black eyes



Brown marmorated stink bug – *Halyomorpha halys*



Brown stink bug – *Euschistus* sp.

Symptoms


Damage to fruit


Damage to soybeans

- BMSB cause damage by injecting saliva and then ingesting the liquified plant material during fruit and seed development and maturation

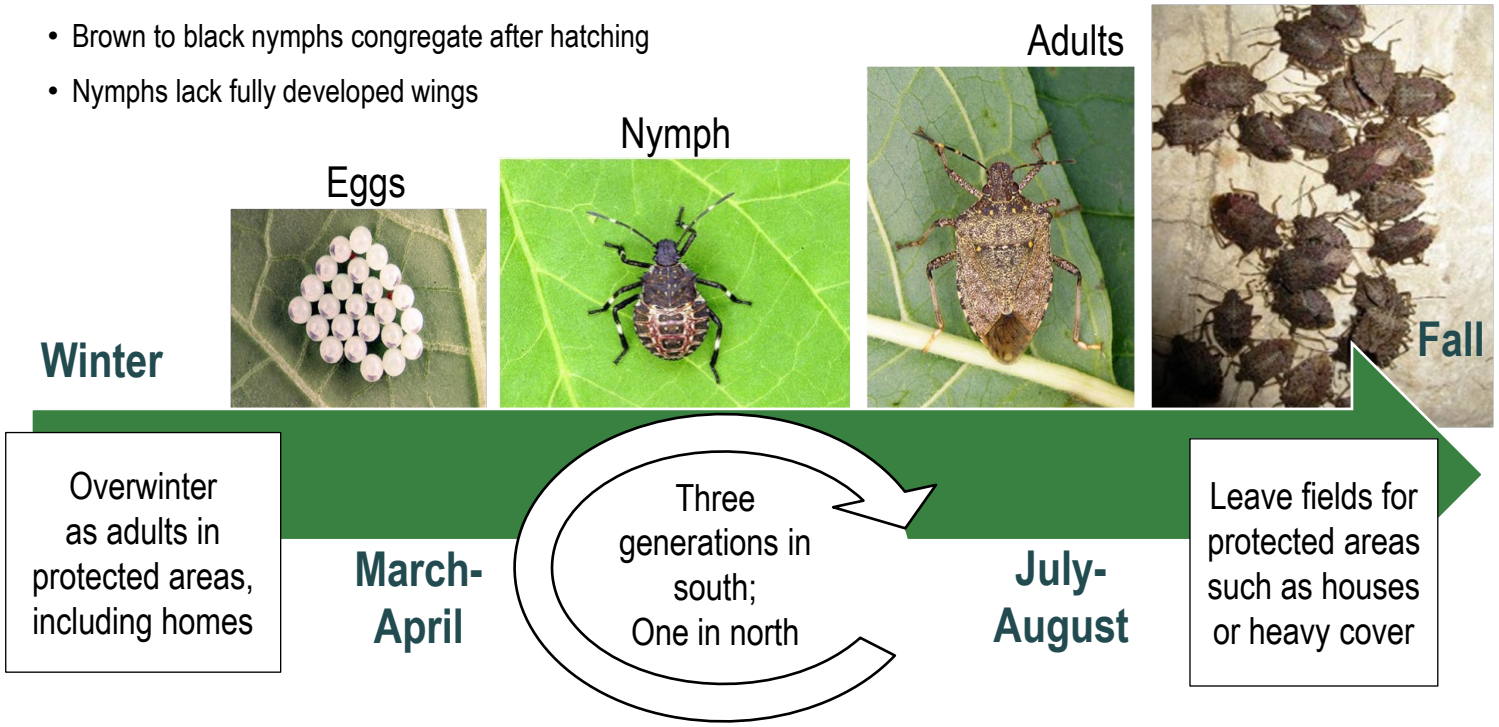

Damage to corn

Impact on Crops

- Soybeans are vulnerable to yield loss after R3 and may develop green stems and mature improperly. Seed quality can be negatively impacted
- Insect is a threat to sweet corn industry but also feeds and can reproduce on field corn
- Stinkbug presence may make silage unpalatable to cattle
- Feeding injury on corn ears may increase potential for ear molds and can impact grain quality

Brown Marmorated Stink Bug Lifecycle

- Develop with incomplete metamorphosis – egg, five instars and adult stage
- Eggs are “beer-barrel” shaped, laid in clusters
- Brown to black nymphs congregate after hatching
- Nymphs lack fully developed wings



Management Considerations

- Scout soybeans from R2 till mid-August
- Scout especially field edges and treat them separately if warranted (see photo at bottom right)
- In soybean the threshold is 2.5 to 3.5 brown marmorated stink bugs every 15 sweeps
- Populations will be highest at dusk and dawn, and reinvasion is possible after a pesticide treatment
- Many insecticides are labeled for stink bug control, however, BMSB may be more tolerant of many pesticides than other stinkbugs
- Nymphs are more sensitive to insecticides than adults
- Check local control recommendations and always read and follow label instructions

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Dr. Marlin Rice, Pioneer Hi-Bred
Dr. Doug Inkley, NWF

Further References

- http://stream.ucanr.org/fps_stinkbug/index.html
- http://extension.usu.edu/files/publications/factsheet/bmsb-5-11.pdf
- http://www.grapesandfruit.umd.edu/Pages/EffectiveInsecticidesBMSB_02072011.pdf

Green soybeans along field edge showing delayed maturity (green stem syndrome) due to BSMB feeding.