

Brown marmorated stink bug

What is brown marmorated stink bug?

Brown marmorated stink bug (BMSB) (*Halyomorpha halys*) is a brown coloured, shield-shaped stink bug known to affect around 300 plants including grapevine, peach, cherry, pear, soybean, vegetables and ornamentals. BMSB pierces the skin of the fruit to feed on the juices inside causing fruit dimpling, rotting and reduced fruit quality.

This pest is native to Asia but has spread to the US and Europe where it has become a highly damaging pest. Although it is not harmful to humans, BMSB is considered a nuisance pest due to its habit of overwintering in large numbers inside buildings and producing a foul odour when disturbed.

What does it look like?

Adults are between 12 and 17 mm long with a mottled brown, shield-shaped body with a slight reddish tinge. Black and white banding around the abdomen periphery is characteristic for BMSB. The underside of the body is pale yellow and can have grey or black markings. The head is rectangular and the pronota (shoulders) are rounded. Antennae in both nymphs and adults have distinctive alternating light and dark bands across the last two segments that look like a single white band.

BMSB has five nymph (juvenile) stages that range in size from 2.4 to 12 mm in length with underdeveloped wings. The abdomen is bright orange or red when they hatch but as they mature, they develop a brown colouration similar to the adults.

Eggs are cream or white in colour, 1.6 mm long and shaped like barrels. They are found on the underside of leaves in clusters of 25 to 30.

What can it be confused with?

Adults and nymphs look very similar to other brown coloured stink bugs that are present in Australia.

The Department of Agriculture, Water and the Environment has produced a field guide to assist in the identification of this pest. See biosecurityportal.org.au/bmsb/Documents/AU%20DAWR%20guide%20identification%20BMSB.pdf for further information.



Adult BMSB with the mottled brown, shield-shaped body and characteristic white and black banding around the periphery of the abdomen

David R. Lance, USDA APHIS PPQ, Bugwood.org



A late instar with characteristic white bands on the antennae, legs and the outer edge of the abdomen

Gary Bernon, USDA APHIS, Bugwood.org



Newly hatched, reddish–orange and black BMSB nymphs (1st instar) clustering around the egg mass

David R. Lance, USDA APHIS PPQ, Bugwood.org

What should I look for?

BMSB feeding causes bruising on grapes making the fruit susceptible to secondary infections such as sour rots and botrytis. Direct damage of this pest results in fruit discolouration, necrosis and fruit drop. Look for any kind of damage on the crop and report any sightings of unusual stink bugs on your plants or unusual aggregations of stink bugs in or on buildings. Unusual sightings should be reported to the Exotic Plant Pest Hotline on 1800 084 881.

How does it spread?

Adults are strong fliers, a characteristic which allows them to easily spread and establish once within a country. BMSB are hitchhiking pests meaning that they can stowaway on a range of goods and are frequently detected by border staff on imported goods and cargo including machinery, furniture, electrical goods, bricks and cars.

Where is it now?

This pest is native to China, Japan, Korea and Taiwan and was introduced to the US in the mid-1990s and Europe in 2007.

How can I protect my vineyard from brown marmorated stink bug?

You can protect your vineyard from BMSB by checking your property frequently for the presence of any new pests. Ensure that you are familiar with the symptoms of common grapevine pests to so you can tell if you see something different and can report it in a timely manner. Be careful when opening packages or goods from overseas as they could contain the pest.

If you see anything unusual, call the **Exotic Plant Pest Hotline** on **1800 084 881**.

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CALL THE EXOTIC PLANT PEST HOTLINE**

1800 084 881



BMSB feeding on leaves. Note the necrotic or discoloured areas on the leaves as a result of feeding

Gary Bernon, USDA APHIS, Bugwood.org



BMSB feeding on grapes. Note the necrotic area on the grape as a result of BMSB feeding on the fruit

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