

# California Seed Association Fact Sheet Series



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## What is Bagrada bug?

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The Bagrada bug, *Bagrada hilarus*, is an invasive stink bug that can cause severe economic loss in cruciferous crops.

### References

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John Palumbo. July 2015. Evaluation of Clothianidin Seed Treatments for Bagrada Bug Control in Broccoli. The University of Arizona Cooperative Extension Veg IPM Update <http://cals.arizona.edu/crops/vegetables/advisories/more/insect137.html> [Accessed July 30, 2015]

## Background

The Bagrada bug is an invasive stink bug pest native to southern Africa, Middle East and Asia and was first reported in North America in Los Angeles County California in 2008 (Joseph 2014). As of September 2014, it was known to be present throughout Southern California, stretching as far north as Yolo County, and is likely to be present in additional counties (Dara 2014). In addition, Bagrada bug has spread outside of California, being reported in Nevada, Arizona, Utah, New Mexico and Texas (Dara 2014).

Bagrada bugs prefer cruciferous hosts including broccoli, cauliflower, cabbage, kale, arugula, and collards (Joseph 2014), using their mouthparts to pierce and feed on plants. Damage can include leaf spotting, wilting, stunting, central stem tip death causing multiple branches or crowns, and death of the whole plant. With high numbers of Bagrada bugs, young plants left unprotected for as few as 2 to 3 days can be significantly damaged (Natwick et al, 2015). Severe economic loss can occur when feeding takes place during early developmental stages from cotyledon emergence up to 4 leaf stage (Joseph 2014).

Early detection of Bagrada bug is important and requires regular field scouting. Look for feeding damage on cotyledons and young leaves. Adults are most active during the warmer times of the day (near or above 80°F) and can be found on the undersides of cotyledons and leaves. It is also important to inspect the soil underneath plants for Bagrada bug (Natwick et al, 2015). Limited information exists to develop an economic threshold for pest management decisions but research is ongoing to develop a trap to facilitate monitoring (Joseph, 2014).

Because bagrada bug can cause significant crop damage in a short period of time, an effective treatment needs to be fast acting. Growers in California and Arizona have relied on frequent foliar applications of pyrethroid and neonicotinoid insecticides to control infestations (Palumbo, 2015). For seed ling broccoli, the clothianidin seed treatment appears to be a viable option for consistent protection against bagrada bug for 14 DAE (Palumbo, 2015).

## More Information

**National Pest Alert** (<http://www.ncipmc.org/alerts/bagradaug.pdf>)

**Pest Alert! Bagrada Bug** (<http://www.ipm.ucdavis.edu/pestalet/pabagradaug.html>)

**Bagrada Bug in Agriculture** (<http://www.ipm.ucdavis.edu/EXOTIC/bagradauginag.html>)

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