Growing populations of brown marmorated stink bug could harm late-season crops

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Oregon State University researchers warn of an increased risk of damage to late-ripening crops this year after discovering record levels of the brown marmorated stink bug, a newly established invasive pest in Oregon.

The alert comes at a critical time with harvest looming for many crops, including blueberries, raspberries, apples, pears, hazelnuts, grapes, sweet corn, peppers, and edible beans. The pest has shown an appetite for more than 100 different crops.

Late-season feeding and contamination by adult stink bugs and nymphs can result in discoloration of fruit, vegetables and nuts – ultimately sullying the crops' value at the marketplace. While no economic damage from the pest has been documented thus far in Oregon, OSU researchers worry that could change after this summer.

"Even low levels of infestation can result in crop losses," said Vaughn Walton, an entomologist at OSU. "Stink bugs in commercial crops can lead to increased management costs, pesticide use and outbreaks of secondary pests. There's no question stink bugs could be an economic issue."

A native of southeast Asia, the brown marmorated stink bug arrived in the eastern United States in the late 1990s and has since spread to more than 30 states, reaching Oregon in 2004. The pest has damaged millions of dollars of crops on the East Coast.

OSU's statewide survey for the bug is ongoing and early returns this year show higher population densities in nearly every area of Oregon. While the stink bug been established in urban counties near Portland and the Willamette Valley for years – and in Hood River and Wasco County since 2012 – its range has recently expanded to more rural environments, including farms of all sizes. Most recently, the pest established a significant presence in the Columbia Gorge and southern Oregon.

Last year's mild winter in Oregon, coupled with this summer's heat, has driven the stink bug's population growth, said Nik Wiman, an OSU research entomologist. Populations are increasing faster than anticipated and tend to peak in late summer, he added.

"Pre-harvest is a time when stink bugs are more likely infest crops and lay eggs because late-stage crops are an attractive food source," said Wiman. "The adults and nymphs cause blemishes when they feed on ripening fruit, nuts and vegetables, rendering them unmarketable."

Farmers and growers are encouraged to look for the pest on their property or near crops as they ripen. The bugs are most easily found on indicator plants, like English holly, maples, lilacs or fruit trees.

If the pest is found, researchers recommend working with an OSU Extension Service entomologist or crop consultant to decide the best plan of action. For more information on managing the brown marmorated stink bug, Walton advises farmers and growers to use the Pacific Northwest Insect Management Handbook, which is available for free online at pnwhandbooks.org/insect.

OSU's latest information and research on the pest can be found at BMSB.hort.oregonstate.edu.

In the meantime, OSU researchers are testing specific insecticide

controls for the brown marmorated stink bug, as none are registered for the insect. Herbicides and fungicides are not known to be effective.

The public can report sightings of the bug to bmsb@hort.oregonstate.edu to assist researchers in tracking its dispersal through the state. OSU Extension has published a free guide for distinguishing the brown marmorated stink bug from look-alike insects in both English and Spanish at horticulture.oregonstate.edu/c … y-and-identification.

Provided by Oregon State University

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