OSU MG Study Group Diagnostic Show-and-Tell Highlights: October 1, 2018

Prepared and photographed by Elizabeth Price

Join our friendly OSU MG Study Group on the first Monday of each month from 1 to 3 pm for Diagnostic Show-and-Tell. Have fun while learning! We explore bugs, diseases and more. Below are a few samples of what MGs brought to our last session.

For more information contact Elizabeth Price: llgmicroeap@mindspring.com

Twin-spot centurion (*Sargus bipunctatus*)

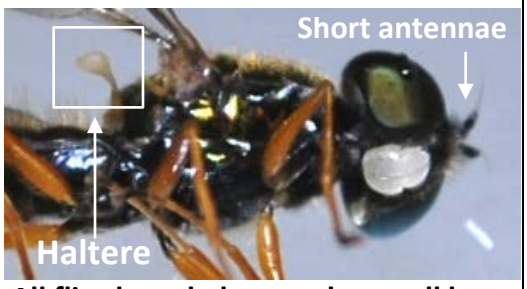
After seeing Xuan's specimen you may never think of flies the same way again. We all oohed over this handsome green and gold metallic twin-spot centurion, also called a solider fly. Though it looks quite different from the homely housefly, it has typical fly features, three of which are visible with the naked eye. One pair of wings (common to all flies) and two large eyes that meet in the middle and short antennae (common to almost all flies).

A fourth feature, halteres, requires closer inspection of a sedated or, in this case, seriously injured specimen. Halteres, found only on flies, are hind wings that have evolved into small club-shaped gyroscopic organs. Lying just beneath the forewings, they vibrate during flight typically at the same rate as the wings, allowing flies to balance and maneuvre acrobatically. And are perhaps the reason a housefly is so darn difficult to swat!

Though the twin-spot centurion is an introduced European species, it is considered beneficial. Adults are up to a ½" inch long; larvae are decomposers, feeding on fresh dung or rotting vegetation.

For more information: BugGuide Halteres on flies

All flies have 1 pair of wings.



All flies have halteres; almost all have large eyes that meet & short antennae.

Two issues with roses: cane blight and roseslugs

Linda brought in samples of rose stems with dark glossy necrotic tissue caused by *Pseudomonas* sp., a bacterium. The damaged area spreads along the cane and, if left unchecked, can affect the entire stem. The best remedy is to prune away and destroy the damaged areas.

Close-up of window

Joann's rose leaves had characteristic roseslug damage from earlier this season. (Roseslugs are actually sawfly larvae.) Found on the undersides of leaves, these pests feed between leaf veins, creating a skeletonized pattern of small transparent windows. Though enough damage makes a rose bush appear unsightly, plants typically tolerate it well. To control, remove the pests by hand and prune away damaged leaves.

For more information: OSU IPM: Roseslug PNW Handbook: Bacterial Cane Blight

Roseslugs are actually sawflies.

***Pseudomonas* rose cane blight**

A couple of stinkbugs and a bunch of hazelnuts

During the growing season brown marmorated stink bugs (*Halyomorpha halys*) damage a wide range of fruits and vegetables with their piericing mouth parts. And, as if that were't enough, come fall they mass on sunny sides of houses, following heat gradients to overwinter between the walls. Be sure to caulk cracks around windows and doors to keep them out. In Jean's specimen, notice the white bands on the antennae and the smooth shoulders that differentiate it from similar looking stink bugs. Linda's specimen, the green stink bug (*Chinavia halaris*), also feeds on crops, but its numbers are not nearly so great. Its antennae have deep red bands.

Serendipitously, Jacki brought in stinkbug-damaged hazelnuts from her family farm. Twenty percent of their 2018 crop was affected by these pests. The earlier in the nut's development the stink bug pierces the shell, the worse the damage. The corky looking nut, at right, was damaged early on. The Oregon Dept. of Agriculture is studying whether to release a parasitic wasp (*Trissolcus japonicus*) that feeds on the eggs.

For more information: Pest Alert: Brown Marmorated Stink Bug Stink Bugs of Oregon