# OSU MG Study Group Diagnostic Show-and-Tell Highlights: December 3, 2018

Prepared and photographed by Elizabeth Price (Except where noted)

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: <a href="mailto:llgmicroeap@mindspring.com">llgmicroeap@mindspring.com</a>

### Oak leaf apple gall wasp (Cynipidae)

Oak trees are hosts to a number of species of tiny wasps in the Cynipidae family known as gall makers. The adults of each wasp species preferentially lay their eggs in leaves, twigs, stems or buds. The larvae feed where they hatch. Growth hormones in their saliva stimulate the tree to construct architecturally unique galls around them. Once it forms, the gall itself becomes the food source for the larvae.

Marge brought in a sample of an apple gall from this past season: a lovely speckled sphere (that seemed to defy gravity) with an exit hole, like a little skylight, at the top. Galls of different species house larvae singly or in groups. The apple gall encloses several wasps, each in a private chamber, where they pupate, emerge as adults and chew their way out. Adults overwinter in protected places near the tree. Many species' lifecyles include asexual and sexual generations; each generation lays eggs on a different part of the tree and produces a unique gall.

Typically, trees tolerate galls well, such that the damage is consdered cosmetic. So, if your oak tree has galls such as these, relax and enjoy their strange beauty.

For more information: Oregon Dept. of Forestry: Oak Galls

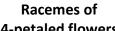
### Wallflowers (*Erisymum* sp. or a hybrid)

Wayne brought in these 4-petaled flowers typical of plants in the brassica family. He marveled over how this perennial, which began flowering in spring, is STILL flowering now in early December. Each flower sits in a long floral cup. The narrow leaves are serrated.

There are many hybrids of wallflowers in a range of colors—yellow, pink, purple—with some hybrids producing different colored flowers on a single stem.

For more information: Hiller Nursery

# Floral cup



**Exit hole** 

**Adult wasps** 



**Narrow** serrated leaves

Oak leaf

Each wasp

species' gall

is unique.

The apple gall

seems to

apple

4-petaled flowers



A native insect that looks a lot like the BMSB

BENEFICIAL



Distinct protrusions on shoulders

## Rough stink bug (Brochymena sp.): beneficial

It's important to remember there are beneficial stink bugs out there among the pests and that often a quick glance is not sufficient to tell them apart. Judy plucked this specimen from an interior wall of her house. We needed a loupe to see the jagged shoulders, which identify it as a rough stink bug—a beneficial native—and not the brown marmorated stink bug (BMSB), a pest with smooth shoulders that often masses in plague-like numbers.

Apparently, as a pest of crops, the BMSB has been much more thoroughly studied than the rough stink bug, whose foraging habits aren't well known. They are thought to feed on tree sap and may be predators.

This specimen was lucky it crawled into the home of a Master Gardener; Judy returned it to the wild instead of whacking it with a shoe.

For more information: Eric Kaufman's blog, author of Kaufman Field Guide to Insects of North America