OSU MG Tri-County Study Group
Diagnostic Show-and-Tell Highlights: August 1, 2022

Prepared by Elizabeth Price

Join our friendly Study Group on the first Monday of each month from 1 to 3 pm for Diagnostic Show-and-Tell. We explore bugs, diseases and more. Below are a few samples of what MGs presented at our last session. For more information contact Margaret Bayne: tricountymgstudygroup@gmail.com

Mating white-crossed seed bugs (*Neacoryphus bicrucis*)

Rhonda caught these two colorful white-crossed seed bugs in the act of mating, which isn't so difficult as it sounds. Mating for this and many other true bug species is a marathon sport that can take up to 15 hours! Though copulation begins with the traditional male-on-top-of-the-female position, the male quickly flips into an end-to-end orientation for the long haul to guard his sperm, as the last male to mate with the female is rewarded with the highest rate of egg fertilization. Look for this strange arrangement of true bugs in your yard—and smile. **Image by Rhonda Frick-Wright** Click here to learn more.

Bold jumping spider with prey (*Phidippus audax*)

If the MG Study Group were to adopt an insect as its mascot, it would certainly be the jumping spider. Up to ¾" long, the bold jumping spider is shown clasping prey (a) that it subdued with its iridescent turquoise fangs, called chelicerae. This spider's cuteness factor is in large part due to its pair of big, bulgy front-facing eyes that lend it a stunned child-like appearance (b). The happy-face markings on the dorsal side of the abdomen lighten as the spider ages (a, c). **Image (a) by Rhonda Frick-Wright; images (b) and (c) from Study Group archives by Elizabeth Price**. Click here to learn more.

Spruce Cooley adelgid (*Adelges* spp.): alternates between two hosts

In the PNW, the spruce Cooley adelgid—a tiny aphid-like insect generally too small to see with the naked eye—alternates between two conifer species to complete its life cycle: a spruce and Douglas-fir. With their piercing-sucking mouthparts, newly hatched nymphs feed at the base of spruce needles, stimulating the tree to construct a gall around the insects that serves as both food source and protection. The pink, deep-red or purple galls age to a dull brown by summer's end. Exits form as the gall dries out, giving egress to the adult adelgids who fly off in pursuit of a Douglas-fir.

While walking her dog, Elizabeth noticed splotchy Douglas-fir foliage, and was delighted later when she discovered it was due to this adelgid in residence on its alternate host, something she had read about but had never before seen. Though adelgid feeding does not provoke a gall-making response in Douglas-fir, the insects employ a second protective strategy by secreting a woolly substance beneath which they feed and lay their eggs. The yellow splotches are a result of the adelgids feeding at the leaf surface. In parts of the country like the East Coast that lack Douglas-firs, this adelgid is apparently able to complete its life cycle on spruce trees alone.

Images by Elizabeth Price Click here to learn more.