OSU MG Tri-County Study Group
Diagnostic Show-and-Tell Highlights: June 6, 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

Red flowering currant (*Ribes sanguineum*) with aphids (*Cryptomyzus ribis*)

Michael discovered green aphids on his red flowering currant shrub. The aphids, appearing in spring when the plant is flush with succulent new growth, pierce the leaves and suck up the phloem with their straw-like mouth parts, causing the leaves to distort and cup around the aphids hidden within—you must pull open the leaves to observe the aphids.

You might also see farmer ants harvesting aphid honey dew, a euphemism for aphid excrement, which is sticky and sweet. The ants act out of self-interest when they guard the aphids from predators, as well as when they bite off the aphids' wings to keep them "on the farm."

Hand-removal or spraying the aphids away with water is typically a sufficient remedy for the home gardener. Interestingly, the *PNW Insect Management Handbook* suggests depriving ants access to the aphids as a means of control.

Image by Michael Collins Click here to learn more.

Goldenrod crab spider (*Misumena vatia*)

Rhonda presented the chameleon of spiders, the goldenrod crab spider, which assumes the color of its surroundings, such as a flower. It lays in wait and ambushes prey, preferring bumblebees, but can disable much larger prey like butterflies with its venom. To deepen its color, the spider produces pigments, a process requiring as long as a few weeks; to lighten its color, it reabsorbs and excretes pigments, a shorter process occurring over several days.

This spider's common name acknowledges both its flower preference and its enlarged front legs, like those of a crab, used to wield large prey, as well as to walk sideways and backwards.

Image by Rhonda Frick-Wright Click here to learn more.

Redstem filaree (*Erodium cicurtarium*) at a pioneer cemetery

Introduced to California in the early 1700s, this species of weed that Jacki collected at a pioneer cemetery in Dundee could predate the graves it grows among. An annual in the Geranium family, it's not surprising that this weed is found in every state and province but Florida; the seeds of a number of weed species in this family, including redstem filaree, erupt out of the seed capsule. But what makes the seeds of redstem filaree the subject of scientific inquiry, is that the seed uses its corkscrew-like appendage to bury itself in the ground, twisting in one direction and then another with fluctuating humidity levels.

Images by Jacki Dougan

Click here to learn more. Click here for a video of a seed burying itself.

Glyphosate damage on *Clematis rooguchi*

Margaret chastised herself for not being more careful with the wand of the herbicide dispenser when spraying weeds around her clematis. The interveinal chlorosis on the leaves is typical of glyphosate exposure, as is cupping, strapping and witches' broom-like stunted growth. Often resembling and mistaken for a plant virus, unintentional herbicide damage can be difficult to diagnose, particularly when the herbicide drifts in from a neighboring yard. Certain plants, like tomatoes and grapes, are especially susceptible. Fortunately, Margaret's clematis suffered sub-lethal exposure.

Image by Margaret Bayne Click here to learn more.

Damage from herbicide drift