

OSU MG Study Group Diagnostic Show-and-Tell Highlights: September 2017

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

Mud dauber wasp nests with pupae and exit holes

Valerie found these mud dauber wasp nests in the shed in her backyard. Mud daubers are solitary wasps with long narrow waists and lanky legs that droop in flight. Each female builds multi-chambered nests with dirt, water and saliva. She provisions each chamber with insects and spiders she has paralyzed with her sting, lays an egg on the provisions and then seals up the cell. You can see mud dauber pupae exposed in the image at near right; the nest at far right bears exit holes made by adults after they emerged from the pupae. Like all solitary wasps, mud daubers are not aggressive and rarely sting humans. There are many species of mud daubers with nests of different designs. For example, some build pottery-shaped nests; others build organ-pipe-shaped nests.

For more information:

https://s3.wp.wsu.edu/uploads/sites/415/2014/12/PNW_PPCCommonWasps.pdf



Mud dauber nest with pupae exposed



Mud dauber nest with exit holes

Tansy ragwort (*Senecio jacobaea*), biennial weed

Jean brought in samples of tansy ragwort in the form this biennial weed takes in its first year, when it grows in a rosette of leaves close to the ground; in its second year it assumes an upright form, flowers, sets seed, then dies. This weed from Europe is poisonous to people, pets and livestock. In the 1960s, the Oregon Department of Agriculture introduced three of the weed's predators: the cinnabar moth, the tansy ragwort flea beetle and a seed head fly. The striking cinnabar moth caterpillar feeds on the leaves and is the predator one is most likely to encounter. The flea beetle larvae feed on roots. (NOTE: Images of the larva and 2nd-year form are from the Study Group archives.)

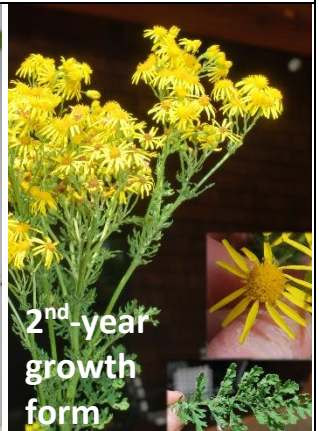
For more information: <http://oregonstate.edu/ua/ncs/archives/2011/aug/after-three-decades-control-invasive-tansy-ragwort-once-again-threatening-oregon>



Natural enemy
Cinnabar moth caterpillar



1st-year growth form
Rosette of ruffled leaves grows close to the ground



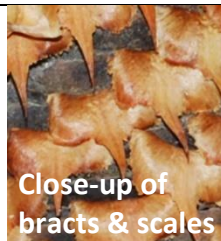
2nd-year growth form
Upright with masses of daisy-like flowers
(Image taken in late July)

Noble fir (*Abies procera*) cones from sick tree

Elizabeth brought in mature noble fir cones from a young, very stressed tree. True firs set cones high in the crown on the branch tops, usually when the tree is much older and so tall that the cones can't be reached from the ground. The cones disintegrate in place and drop piece by piece. (The one pictured here was discovered just in time.) So, getting your hands on intact cones, especially in the landscape, is rare. These amazing cones are sometimes accessible on older, stunted specimens at tree line in the Cascades. Noble fir cones (6-10") have distinctive lighter-colored, exerted bracts that conceal dark purple scales. This tree is magnificent when it thrives in the landscape; unfortunately, it seldom does.

For more information:

https://oregonstate.edu/trees/conifer_genera/spp/true_fir_spp.html



Close-up of bracts & scales



Noble fir cone



Cone high in tree on branch top

Stressed 7' noble fir tree