

Schutter Diagnostic Lab: 2015 Plant Identification Summary

Introduction: The Schutter Diagnostic Laboratory (SDL) at Montana State University (MSU) is provided through MSU Extension to provide plant pest identification. Services of the SDL include identification of weeds and other plants, mushrooms, plant diseases, insects, insect damage, and abiotic problems. The SDL accurately identifies plant pests and provides science-based integrated pest management options. We receive samples from MSU Extension agents, weed district coordinators, homeowners, farmers, ranchers, consultants, and anyone else interested in finding out more about plant issues.

Plant Identification Activities: In 2015 the SDL processed over 500 specimens for plant identification. Clients submitted plants with a variety of questions including whether a plant might be noxious or invasive, toxic, or good quality forage. Forty seven percent of specimens were exotic plants, representing 145 unique species. The most commonly submitted exotic species were field cottonrose (*Logfia arvensis*, 8), catchweed (*Asperugo procumbens*, 6), hoary alyssum (*Berteroa incana*, 6), and quackgrass (*Elytrigian repens*, 6). Native plants accounted for 34% of specimens, representing 141 unique species. The most common native species were horseweed (*Conyza canadensis*, 7), sixweeks fescue (*Vulpia octoflora*, 4), and Rocky Mountain bee plant (*Cleome serrulata*, 3). Twenty two state-listed noxious weeds were submitted representing 10 unique species (Table, left). All noxious weeds submitted were priority 2A or 2B species, meaning that they are either common or abundant in Montana. We also received specimens suspected of being high priority noxious weeds that were not. For example, two specimens suspected to be Montana's newest noxious weed, common reed (*Phragmites australis* spp. *Australis*), were submitted and both were identified as a native subspecies (*P. australis* spp. *americanus*). Two specimens were submitted that were suspected of being scotch broom (*Cytisus scoparium*), but neither specimen was.



Schutter Diagnostic Lab staff members Laurie Kerzicnik, Noelle Orloff, and Eva Grimme sort through samples received in the mail. Photo by Kelly Gorham, MSU.

Species	County	Priority
Blueweed	Ravalli	2A
Canada thistle	Gallatin	2A
Common tansy	Gallatin, Powder River	2B
Eurasian watermilfoil	Gallatin	2A
Hoary alyssum	Flathead, Gallatin, Silver Bow	2B
Houndstongue	Gallatin, Glacier	2B
Oxeye daisy	Gallatin	2B
Russian knapweed	Garfield	2B
Spotted knapweed	Silver Bow	2B
St. John's Wort	Big Horn	2B
Tall buttercup	Gallatin	2A

Sample Sources: Plant samples came from 49 of 56 Montana counties, one county in Arizona, one county in Idaho, and one Canadian province. The highest submission numbers were from Gallatin, Ravalli, and Silver Bow Counties with 140, 44, and 29 submissions, respectively. Submissions were greatest in June and July with 114 samples each of those months. Noncommercial sources (i.e. homeowners, small acreage landowners) accounted for 84% of submissions while commercial sources (i.e. farmers, ranchers, consultants) accounted for 16% of all submissions.

Additional Information: If you have a plant you would like help identifying, you can 1) take the plant to your county Extension agent (for Montana residents) or, 2) submit a sample to SDL for identification. This is a free service for Montana residents, and out-of-state clients may be charged a fee. You can find contact information, submission instructions, fee information, and forms online at www.diagnostics.montana.edu.

Weed Post Puzzle: Test your knowledge of the Schutter Diagnostic Lab

REHSEDOWE

Most commonly submitted native plant species in 2015

MTBSHOCROCO

Two suspected specimens of this noxious weed turned out to be pygmy pea shrub

EENCABSADICE

Proper identification of plant pests helps with this type of integrated management

CXIOT

Clients often submit plants because of concern whether the plants are invasive or this

SAOLMYURAH

This noxious weed was one of the most popular plant species submitted in 2015

OSINTEXNE

SDL is a service provided in part by Montana State University

UOHMSSROM

In addition to plants, SDL staff can also identify these.

Solutions are posted to the MSU Extension Invasive Rangeland Weed website:

http://msuextension.org/invasiveplants/monthly_weed_post.html

