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This is a quarterly field office newsletter to transfer plant materials technology, services, and needs. The plant materials personnel will be featuring short articles on project results, new cultivar releases and establishment techniques, seed collection, and field planting needs, etc. All offices are encouraged to submit articles about plant material-related activities relative to plant performance, adaptation, cultural and management techniques, etc. Direct inquiries to USDA NRCS, Plant Materials Center, RR2 Box1189, Bridger, MT 59014, Phone 406-662-3579, Fax 406-662-3428; or Larry Holzworth, Plant Materials Specialist, USDA NRCS Montana State Office, Federal Bldg., Rm 443, 10 East Babcock Street, Bozeman, MT 59715-4704, Phone 406-587-6838, Fax 406-587-6761.

## Field Office 2005 Seed Collection List

The Plant Materials (PM) Program is requesting seed collections of eight species in Montana and Wyoming. In the 2005, continued collection is requested of fuzzytongue penstemon *Penstemon eriantherus* ssp. *eriantherus*, silverleaf phacelia *Phacelia hastata*, scarlet globemallow *Sphaeralcea coccinea*, and American vetch *Vicia americana*. There are six new legumes species added to address emerging conservation concerns. These include milkvetch species *Astragalus*, groundplum milkvetch *Astragalus crassicaarpus*, silverleaf Indian breadroot *Pediomelum argophyllum* (synonym *Psoralea argophylla*), large Indian breadroot *Pediomelum esculentum* (synonym *Psoralea esculenta*), slimflower scurfpea *Psoralidium tenuiflorum* (synonym *psoralea tenuiflora*), and prairie thermopsis *Thermopsis rhombifolia*.

The bulletin will be distributed electronically to every field office in Montana and Wyoming and will provide guidance on accessing the seed collection instructions via each state's homepage. Seed is subsequently planted in evaluation studies to test performance and utility for solving conservation problems outlined in the Long-Range Plans for Montana and Wyoming.

By Larry Holzworth, Plant Materials Specialist.

## New Release

### *Trapper Germplasm Western Snowberry*

Trapper Germplasm western snowberry *Symphoricarpos occidentalis* was formally released in 2004 as a shrub component in various conservation practices. This native shrub is recommended for living snowfences, windbreaks, shelterbelts, wildlife plantings, and other conservation applications in parts of Montana, Wyoming, Colorado, North and South Dakota, and Nebraska. The Selected Class release is a bulk of 14 parent plants from five seed sources collected in Montana and Wyoming.

Testing and selection was made at the Montana Conservation Seedling Nursery in Missoula, Montana.

Trapper can reach heights of 5 feet under ideal growing conditions and produces a consistent and prolific fruit and seed crop each year upon maturity. Fully hardy to USDA Winter Hardiness Zone 4a (probably hardy to Zone 3b and some 3a); tolerant of soil pH ranging from 6.6 to 8.0; salt tolerant to 4 to 6 dS/m; and drought tolerant to 12-inch annual precipitation zones, this selection should provide good performance over a range of site conditions.

Seedlings are available through the Montana Conservation Seedling Nursery at Missoula. Foundation equivalent seed (G<sub>1</sub>) is available through the Seed Stocks Program at Montana State University-Bozeman and the University of Wyoming Foundation Seed Service at Powell, Wyoming. Contact the Montana Plant Materials Specialist or Bridger PMC for more information. A limited number of color brochures are available by contacting the Bridger PMC.

By Joe Scianna, PMC Horticulturist.

## New Publications

### *Sage Grouse Brochure*

Larry Holzworth, Montana Plant Materials Specialist, has prepared a regional brochure entitled "Improving Sage Grouse Habitat through Revegetation and Rangeland Management." The brochure summarizes the current range and status of the sage grouse as well as revegetation and grazing management options available for habitat enhancement and protection. The brochure provides information valuable to NRCS conservation planners and private landowners interested in sage grouse habitat management. NRCS state offices in the 11 sage grouse states received a supply of the brochure for their distribution to FO's and outside partners. Additional copies can be obtained from Lori Valadez, PAS, Bozeman, MT 406-587-6842.

### *Pollinator Brochure Soon to Be Released*

Montana NRCS will soon be publishing a brochure entitled "Montana Native Plants for Pollinator-Friendly Plantings." Pollinators, such as insects, hummingbirds, and some bats, are critical components in human food production and their habitat serves many other important conservation functions as well. The brochure presents options for vegetative plantings that provide pollinators with a continuously blooming nectar supply throughout the growing season as well as roosting habitat and a succulent feeding substrate for insect larvae. Contact your local NRCS Service Center for more information.

*By Peter Husby, NRCS-MT Biologist.*

### **Center for Invasive Plant Management**

The Center for Invasive Plant Management (CIPM) was founded in 2000 and is located at Montana State University (MSU) in Bozeman. CIPM is a regional program that cooperates with researchers, educators, and land managers to promote ecologically-based management of invasive plants in the western United States. It provides valuable services through educational outreach, restoration research, grant funding, and dissemination of web-based and written materials.

The Bridger PMC teamed up with CIPM and MSU in the fall of 2004, to coordinate the development of a new study, "The Effect of Five Pre-Emergent Herbicides on the Emergence and Establishment of Seven Native Wildflowers." The goal is twofold: 1. to gain a better understanding of the effects of pre-emergent herbicides on the establishment of native wildflowers; and 2. to provide herbicide recommendations for control of undesirable broadleaf species in plantings of native wildflowers.

The initial testing is currently being performed at MSU's Plant Growth Center, with hopes of follow-up field tests to be conducted at the Bridger PMC, and at a variety of sites in Montana. For more information on CIPM, visit their website at <http://www.weedcenter.org>.

*By Susan R. Winslow, PMC Agronomist.*

### **Plant Profile: Basin Wildrye**

Basin wildrye *Leymus cinereus* is a native bunchgrass that tolerates a wide range of climatic and soil conditions. It can be found in heavy, subirrigated soils,

as well as on dry coarse soils. It also exhibits tolerances of moderate salinity to moderate acidity. The primary factor that affects stand longevity is its vulnerability to grazing or haying during the active growing season. Repeated damage to the elevated growth point will severely stress or kill the plant, but once dormant, the plant can endure all forms of biomass removal (grazing, haying, burning). With good soil moisture, this plant will attain a height of 6-7 feet. There are numerous uses for this grass as a dormant, high-stature plant. Top on the list is wildlife cover. Stands of basin wildrye, left untouched until fall/winter/spring, are ideal for wildlife wintering areas (elk, deer, bighorn sheep, etc), nesting cover (pheasants, other upland games birds, ducks), or for hunting reserves (both game birds and big game). Fields of basin wildrye can also be used as calving/lambing pastures for domestic livestock--offering cover, bedding, and a food source. In native, low-maintenance landscaping, clumps of basin wildrye can provide an attractive backdrop for other, shorter-statured landscaping plants or utilized as borders and barriers.

Basin wildrye seedlings are relatively slow to establish, so should not be planted in a mix with other, more aggressive natives such as western wheatgrass and thickspike wheatgrass, or any of the introduced grasses. Basin wildrye can be planted with other bunchgrasses such as Indian ricegrass, switchgrass, bluebunch wheatgrass, and slender wheatgrass; but monocultures are probably best, with other species planted around the perimeter of the stand or in small blocks within the stand. Basin wildrye has approximately 130,000 seeds per pound, which equates to an average seeding rate of about 7 lb pure-live-seed/acre. It can be seeded as an early spring or dormant fall (after Oct. 15) planting, utilizing row spacing of at least 18".

There are two cultivar releases of this species: 'Trailhead' (green leaves, tetraploid 2n=28) originating from Mussellshell County, Montana, and 'Magnar' (blue-green leaves, octaploid 2n=56) originating from near Saskatoon, Saskatchewan. Trailhead (released by Bridger, MT PMC) has been found to perform better on dry prairie sites, while Magnar (released by Aberdeen, ID PMC) does best in the mountain valleys and foothills. Seed of these two cultivars is commonly available in the commercial seed industry.

*By Mark Majerus, PMC Manager.*

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