



November 6, 2001

To: **Field Offices**
Plant Materials Centers
Plant Materials Specialists

**PULLMAN
PLANT
MATERIALS
CENTER**

Subj.: **Update of Pullman PMC activities for July 1 – Sept 30, 2001.**

United States
Department of
Agriculture

The Pullman PMC quarterly update is intended to provide field staff with a short description of PMC current activities. Please take a few minutes to read it, if you make a hard copy, pass it along to others in your office, and when fully routed, feel free to file it in your recycle bin. If you wish to join our e-mail list, please contact us. Thanks!

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PLANT DEVELOPMENT

The Pullman PMCs completed documentation for the release of 2 accessions of **Mockorange** (*Philadelphus Lewisii*). The **St. Maries Germplasm** was collected near St. Maries, Idaho and is primarily intended for riparian area rehabilitation projects in MLRA E-43 (Rocky Mountains). The **Colfax Germplasm** was collected in Whitman County and is primarily intended for use in MLRA B-9 (Palouse Prairie). Mockorange, also known as **Syringa**, is a very showy riparian shrub that occurs throughout much of the inland PNW. The first documented collection of Mockorange was made on May 6, 1806 at the mouth of the Potlatch River by Meriwether Lewis (hence its namesake).

A seed production block of **Blue Wildrye** (*Elymus glaucus*) was seeded at the PMC in September. The accession originates from the Little Naches River (elev. 4100') and was collected by Duward Massey. This particular accession exhibits excellent seed production, large basal area and low incidence of diseases. It was one of 225 accessions evaluated at the PMC by Walt Edelen in 1995-1997. It should bear seed in 2002 and be ready for release next fall. It will be released as "Selected Class" germplasm, which means that it is natural germplasm (no purposeful genetic manipulation), and selected out of a common garden planting of many accessions.

Three subpopulations of '**Umatilla**' **snow buckwheat** were seeded near Moses Lake. The Pullman PMC identified differences in seed maturity in 'Umatilla' and harvested seed on 3 dates last year. This planting will determine if separating the early, mid and late maturing plants into adjacent blocks can maximize harvest of 'Umatilla'. 'Umatilla' was released by the Pullman PMC several years ago and is an outstanding revegetation plant on highly disturbed droughty soils such as mine spoils.

The Pullman PMC provided 50 pounds of '**Alkar**' **Tall Wheatgrass** to scientists at the Inner Mongolia Grassland Institute. Plant Materials Staff throughout the West have worked closely with the Asian scientists for several years to collect and evaluate forage germplasm. 'Alkar' is being compared with other forage species in large plantings in Inner Mongolia.

PLANT DEVELOPMENT CONT'D

The **Douglas Fir** drought stress study in eastern Whitman County is yielding some interesting preliminary results. The Lind Experiment Station Douglas Firs exhibited very good survival compared to the commercially available Douglas fir. Most trees, regardless of type, were lost on steep hillsides where the existing grass cover was killed with glyphosate. Survival was much better in blocks that were tilled

The Pullman PMC provided Dr. Steve Monsen, USDA Forest Service Shrub Lab, information on the origins of 'Goldar' Bluebunch Wheatgrass and 'Whitmar' Beardless Wheatgrass. Monsen is preparing to release '**Anatone Germplasm**' **Bluebunch Wheatgrass**. 'Anatone germplasm' originates from a droughty hillside north of Anatone, WA. Seed should be commercially available in the next few years. On a related note, the ARS Forage and Range Research Lab is preparing to release '**P-7**' **Bluebunch Wheatgrass**. 'P-7' is a polycross of several populations of superior strains of bluebunch wheatgrass. It would be very worthwhile to test 'P-7' in Washington and Oregon.

The ARS Forage and Range Research Lab is preparing to release a couple more **Bottlebrush Squirreltails**. '**Sand Hollow**' is their first release and is included in the Ephrata FO Demo planting. This short-lived species provides excellent cover in extremely harsh conditions. It should be an excellent species to include in our dryland mixes.

TECHNOLOGY TRANSFER

The Pullman PMC visited the Ritzville field office in July and provided training on identification of some of the more prominent CRP plants. Live potted plants and several plant identification documents were also provided to the office. The Ritzville FO Plant Materials Technical Notes binder was examined and missing Tech Notes were replaced.

The Colfax FO had the PMC visit a CRP field in Whitman County. The grower encountered a problem with very poor forb establishment. Soil samples were taken at 2 depths (0-1/2", 1/2-1"), placed in a germination chamber, and washed after 14 days to collect any ungerminated seed. Very few forbs emerged or were identified in the wash, which indicated that the forbs emerged this spring then died. A couple factors could have caused the loss – herbicide carryover and/or heavy grass competition.

Wayne Crowder seeded 15 species in a Reed Canarygrass suppression study. Earlier this spring Wayne sprayed out the Canarygrass and transplanted the 15 species to one-half of the area. The seeding portion was done this fall to take advantage of fall rains.

Temperature readings were taken on a couple very hot days to determine the effect of plastic tree tubes. These tubes are commonly placed around small trees and shrubs to reduce predation. The white tubes showed no increased temperature, tan-colored tubes increased temperatures 2-3 degrees F, and light-blue tubes increased temperatures 2-4 degrees F. Consequently, the tubes are not causing the "easy bake oven" effect that has been suggested. The leaf injury/death is probably more likely due to sun scalding.

MISCELLEANEOUS

Corey Pickelsimer, Office Automation Clerk, resigned in August to fully devote his time to his MS degree. Corey was working part-time at the PMC while attending graduate school at WSU. As planned, he was provided a WSU assistantship his second year. He is sorely missed.

Reminder---- The Pullman PMC will be providing a training course for NRCS/CD employees in FY2002. We met with Ross Lahren and reviewed the training-needs suggestions that were sent by specialists and field staff. It was decided that the training should focus on two subjects: riparian area reclamation and direct seeding. Some topics that will be addressed include: demonstration of tools for installing riparian plantings, rooting comparisons, procedures for determining woody stem counts, and demonstration of drills & openers. We have tentatively set the training for May 22 & 23, 2002. The first day will take place in Asotin County with the Asotin County CD assisting, and the second day will take place at the USDA Conservation Farm in Pullman.

Mark Stannard
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