

Rose Lake Plant Materials Center



Winter Newsletter 2007

New Desmodium Releases from the PMC

The Rose Lake Plant Materials Center released two new Tick-Trefoil species in 2006. Alcona germplasm Dillenius' tick-trefoil (*Desmodium glabellum*) and Grant germplasm panicleleaf tick-trefoil (*Desmodium paniculatum*) were made available to commercial seed growers as tested class releases through the Plant Materials Program. The two tick-trefoil species are native perennial legumes that serve as a food source to several upland game birds and songbirds, as well as excellent deer browse.

Alcona germplasm and Grant germplasm tick-trefoil were selected from a collection of 49 accessions assembled by the Plant Materials Program in 1989. Of those 49 accessions five, including Alcona and Grant, were selected for further evaluation based on early and late season ranking summaries. Alcona germplasm and Grant germplasm were selected from those advanced evaluation trials for increase and release because of their superior survival, emergence, vigor, and foliage abundance.

Generation 2 (G2) seed is maintained by the Rose Lake PMC and made available to commercial growers. Contact the Michigan NRCS Plant Materials Specialist for further information on requesting seed of these releases.

Alcona Germplasm



Grant Germplasm

National Technical Note

David W. Burgdorf, Michigan NRCS Plant Materials Specialist, has submitted a publication for review. The National Technical Note is titled ***Plant Species with Rooting Ability from Live Hardwood Materials for use in Soil Bioengineering Techniques***. The Technical Note provides guidance in choosing the best plants for soil bioengineering techniques. This technical note supports *Engineering Field Manual– Chapters 16 and 18*; *The Stream Corridor Restoration Handbook*; and the National Employee Development Center's Soil Bioengineering course.

The list of species is intended to assist with selecting plants for use in the installation of soil bioengineering techniques. The list may also function as a tool to indicate the performance of a species in a specific soil bioengineering technique in a specific region of the country.

Input was sought from throughout the United States and Puerto Rico. Each contributor to this Technical Note assisted with the preparation of the Species List and has extensive experience with soil bioengineering techniques and plant species performance in each of the techniques.

This document was recently released and is available on the NRCS web page.

National Parks Service

The Rose Lake Plant Materials Center has partnered with the National Parks Service since the mid-1990's. In 2006 the PMC provided over 5300 plants for restoration projects on the Apostle Islands National Lakeshore in Wisconsin. In addition to plant production, the Michigan NRCS Plant Materials Specialist has provided technical assistance for slope stabilization on Outer and Raspberry islands involving several soil bioengineering techniques.



Outer Island Lighthouse



Eroding slope in front of Lighthouse



Plug planting with native plants



Planted and mulched slope



Newly seeded and mulched slope



Establishing slope grid and vegetative cribwalls

Ash Seed Interview on Public Radio

John Leif, PMC Manager and Dave Burgdorf, PM Specialist were interviewed by Rebecca Williams from **The Environment Report** on the Ash Seed Collection project. Her interview started airing nationwide the week of January 29th on public radio and gives additional exposure to the Ash Seed Collection project that is ongoing at the PMC. You can view a transcript of the interview at http://www.gjrc.org/story.php3?story_id=3299



Emerald Ash Borer



Ash seed ID chart



Emerald Ash Borer damage to ash tree



NCGRP in Ft. Collins, CO where ash seed will be stored

New Spring Field Plantings

Call for Field Plantings

A hallmark of the Plant Materials Program is the testing and evaluation of plant materials for their effectiveness in conservation practices. The selection and testing process starts with comparative evaluations of collected materials, usually in small plots on the Center and off-Center locations. When candidates for release have been identified, seed and plants are provided to other PMC's and Field Offices for further evaluation. An important part of that evaluation process is conservation field plantings – evaluating plant materials under conditions similar to their intended use. Data from those plantings are used to further define the utility of a plant release and provide support for including those releases in States' respective eFOTG's.

The Rose Lake PMC is requesting conservation field plantings in Indiana, Michigan, Ohio, and Wisconsin. The first group of plantings include Icy Blue germplasm Canada wildrye and a riverbank wildrye. These plants are cool season bunch grasses that germinate quickly in the spring and are intended to provide ground cover and stabilization of disturbed soil. The plantings of each species should be 20' X 20' in areas that would be appropriate for Conservation Cover or Critical Area Planting practices. The PMC is asking for at least one planting in each NRCS administrative area in the four States.

In addition to the cool season grasses the PMC is requesting field plantings of Koch germplasm prairie sandreed, which is scheduled for release in 2007. Prairie sandreed is a warm season bunch grass that is used for stabilizing sandy soils near lakeshores or dunes. The plantings of this species should be 20' X 20' in areas that would be appropriate for Conservation Cover or Critical Area Planting practices near lakeshores or dunes. The PMC is asking for at least four plantings in each of the four States.

Please contact Dave Burgdorf, Plant Materials Specialist for further information on planning and installing the conservation field plantings.



Koch Germplasm Prairie Sandreed



Icy Blue Germplasm Canada Wildrye



Riverbank wildrye

Conservation Plants, Proven Performance

In 1991 NRCS Resource Conservationist Tom Cogger used conservation plants with proven performance when planning a new fruit orchard. Eric Carlson was the young landowner who was starting his new orchard and requested assistance in planning windbreaks. Located just a few miles from Bayfield, WI atop a high hill with a view of Lake Superior, Eric and Tom laid out several windbreak lines in conjunction with establishing the new fruit orchard. Two PM Program released cultivars of crabapple were selected for the windbreaks: ‘Midwest’ Manchurian crabapple and ‘Magenta’ crabapple.

In the summer of 2006, Sergio Perez, Biological Science Technician, Tom Cogger, and Dave Burgdorf, NRCS Plant Materials Specialist, visited with Eric and checked on the windbreaks. Eric said, “windbreaks are excellent in his location and one of the best things he did starting out his farm.” He said they provide good cover for birds. Cedar wax wings are in them all winter and they eat and clean up all the fruit. There are also some snow distribution benefits. But the most important benefit is the reduced wind speeds during bloom resulting in enhanced fruit pollination. Flower production on the crabapples is outstanding. The crabapples are great pollinator attractors for his apple blossoms. There has been no evidence of apple scab, fire blight or other pests on the crabapples that might affect his apple orchard. One thing that should have been done differently is the first rows of fruit should have been placed 30 feet from the windbreak instead of 20 feet. There seems to be a moderate impact on fruit production in the first rows. The crabapples do not compete for moisture and some volunteer plants occur, but are not a problem.

Eric’s satisfaction with the performance of his windbreaks didn’t just happen. It was the result of good planning by an experienced Resource Conservationist who recognized the importance of recommending the Plant Materials Program’s released Conservation Plants with proven performance. The Midwest and Magenta crabapple cultivars had been through many years of testing and evaluations before being named and released by the NRCS Plant Materials Program.

Conservation plants evaluated through the Plant Materials program should be the first plant alternatives recommended to landowners. These plants have proven performance.



Blueberries and crabapple windbreak



Raspberries and Midwest windbreak



Magenta windbreak and raspberries



Blueberries and Midwest Manchurian Crabapple windbreak



Magenta windbreak and blueberries



Eric Carlson, Magenta crabapple fruit

Technical Assistance with Sweetgrass Propagation

The Rose Lake Plant Materials Program has enjoyed a good working relationship with the Native American tribes in the service area. Through a Memorandum of Agreement, the March-E-Be-Nash-She-Wish Band of Pottawatomie Indians, a.k.a. Gun Lake Tribe requested the Program's assistance in training their members on sweetgrass propagation. In August the tribe collected sweetgrass from their tribal property and brought it to the Rose Lake PMC. The PMC staff provided training to the tribal members present on separation and vegetative propagation. The PMC staff has managed those plantings in the greenhouse and will return them to the tribe in the spring of 2007.



L-R John Leif, RLPMC Manager, Robert Olivarri (head veteran for the tribe) and Amanda Grigar,, RLPMC



L-R Monte Davis, Robert Olivarri, John Leif, Gail Bischoff, RLPMC



Monte Davis, Gun Lake Tribe



L-R Amanda Grigar, Gail Bischoff and Monte Davis



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