

Rose Lake Plant Materials Center



Photo courtesy of University of Illinois Extension—The Miracle of Fall

Fall Newsletter

2006

New Plant Collection Notices from Rose Lake PMC

The Rose Lake PMC has issued plant collection notices for three native plant species. American plum, common buttonbush, and broomsedge bluestem are plants on which the Center will conduct comparative evaluations and release those selections that will meet natural resource conservation objectives.

American plum (*Prunus americana* Marsh.) is a large shrub or small tree with white 5-petaled flowers and 1-inch diameter stone-seeded fruit. It is native to many parts of the United States. It is found in thickets, borders of woods, streambanks, floodplains and fencerows. The purpose of the collection is to develop a release(s) that have good vegetative characteristics for windbreaks and good food production for wildlife.

Common buttonbush (*Cephalantus occidentalis* L.) is a native wetland shrub that grows up to 12-feet tall. White flowers in spherical clusters form 1-inch diameter button-like seed heads. Common buttonbush is adapted to wetland areas such as swamps, pond borders and streambanks. Releases from this collection could be used to enhance wetlands, be used in wetland restoration, and provide wildlife habitat.

Broomsedge bluestem (*Andropogon virginicus* L.) is a native, warm season, perennial bunchgrass. It is found on the edges of forests and disturbed areas throughout its area of adaptation. It is frequently found in low fertility soil, as it requires less fertilizer and management than other species. Broomsedge bluestem releases could be used in critical area treatment plantings, especially on low fertility soils.

The field collection notices for the three species are included in this newsletter. The notices describe the plant and gives collection instructions for each species.



Broomsedge Bluestem



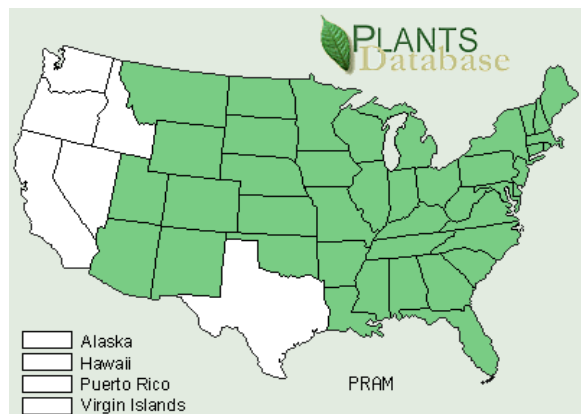
American Plum



Common Buttonbush

Field Collection of American Plum

DESCRIPTION: American Plum (*Prunus americana* Marsh.) is a large shrub or small (to 24 ft) tree with dark, shaggy bark and trunk to 1-ft diameter. White (fading to pink) 5-petaled flowers appear before leaves. Leaves are alternate, simple, 2 to 5 in long, half as wide. The yellow to red 1-in diameter stone-seeded fruit is palatable to wildlife and humans. *Prunus Americana* is closely related to *P.nigra*, Canadian Plum.



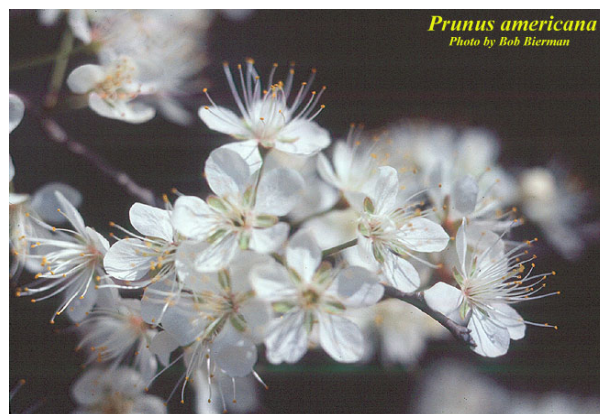
WHAT TO COLLECT: Collect 100 to 500 mature fruit, representing the entire stand.

WHEN TO COLLECT: Collect fruit in late summer when it is mature.

HOW TO HANDLE COLLECTION: To minimize spoilage, ship fruit immediately after harvest. Use paper or cloth bag (not plastic) with enough absorbent material to contain potential leakage. Send material and completed collection form to:

Rose Lake Plant Materials Center
7472 Stoll Road
East Lansing, MI 48823
Telephone (517) 641-6300
Fax (517) 641-4421

WHERE USUALLY FOUND: American Plum is native to and may be found in all states served by the Michigan, Missouri, New Jersey, North Dakota, and West Virginia Plant Materials Centers and beyond. It is found in thickets, borders of woods, streambanks, floodplains, and fencerows.



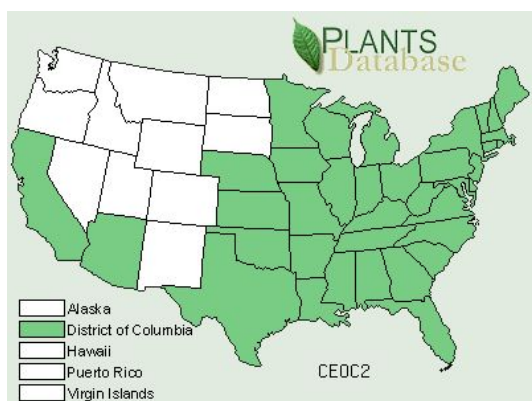
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USDA-NRCS PLANTS Database / Britton, N.L., and A. Brown. 1913. Illustrated flora of the northern states and Canada. Vol. 2: 323.

Field Collection of Common Buttonbush (Cephalanthus occidentalis L.)

DESCRIPTION: Common Buttonbush is a native, multi-stemmed wetland shrub. Mature plant is up to 12 ft tall. White flowers in spherical clusters form one-inch diameter button-like seed heads. Dark green, glossy, deciduous foliage is opposite or whorled.



WHERE USUALLY FOUND: Common Buttonbush is best adapted to swamps, pond borders, and stream banks with saturated soil and full sunlight. Naturally it ranges from Florida to Mexico and north to Nova Scotia and Ontario. While it will tolerate water depths up to three feet, it also grows in some upland conditions. Seed collected from

WHAT TO COLLECT: Collect 25 to 50 mature seed heads representing the population you are sampling.

WHEN TO COLLECT: Collect seed heads in late summer when they are mature.

HOW TO HANDLE COLLECTION: Ship seed heads immediately after harvest in paper or cloth bag (not plastic), along with completed collection form, to:

Rose Lake Plant Materials Center
7472 Stoll Road
East Lansing, MI 48823
Telephone (517) 641-6300
Fax (517) 641-4421



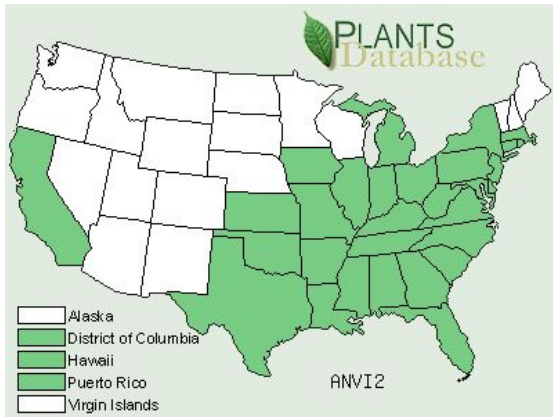
Robert H. Mohlenbrock. USDA SCS. 1989. *Midwest wetland flora: Field office illustrated guide to plant species*. Midwest National Technical Center, Lincoln, NE



USDA-NRCS PLANTS Database / Britton, N.L., and A. Brown. 1913. *Illustrated flora of the northern states and Canada*. Vol. 3: 255.

Field Collection of Broomsedge Bluestem (Andropogon virginicus L.)

DESCRIPTION: Broomsedge Bluestem is a native, warm-season, herbaceous, perennial bunch-grass. The slender, erect culms are up to 4 feet tall. Broomsedge Bluestem is propagated by seeds or by plant division.



WHERE USUALLY FOUND: Broomsedge Bluestem is found on the edges of forests and disturbed areas throughout the eastern United States. It is frequently found in low fertility soil, as it requires less fertilizer and management than other species.



Robert H. Mohlenbrock @ USDA-NRCS PLANTS Database / USDA SCS. 1991. *Southern wetland flora: Field office guide to plant species*. South National Technical Center, Fort Worth, TX

WHAT TO COLLECT: Collect seed heads from a minimum of 25 plants for each collection site.

WHEN TO COLLECT: Seed typically ripens about 6 weeks after flowering. A good time to harvest is when seed is at the hard dough stage in early mid fall.

HOW TO HANDLE COLLECTION: Collect seed in a paper bag. Allow seed to dry in the open bag for about 1 week prior to shipping to the Plant Materials Center. Send collected seed heads to:

Rose Lake Plant Materials Center
7472 Stoll Road
East Lansing, MI 48823
Telephone (517) 641-6300



USDA-NRCS PLANTS Database / Hitchcock, A.S. (rev. A. Chase). 1950. *Manual of the grasses of the United States*. USDA Misc. Publ. No. 200. Washington, DC



Plant Collection Information

(seed or vegetative)

PLANT INFORMATION	COLLECTION INFORMATION
Scientific Name _____ _____	Date Collected _____
Common Name _____	Collector's Name _____ _____
Cultivar/Release _____	Collector's Headquarters _____ _____
Plant type: _____	
Number of Plants from which collected _____ (minimum population of 30 plants is preferred)	
<input type="checkbox"/> Seed <input type="checkbox"/> Vegetative Material	

COLLECTION SITE INFORMATION			
State	Section	N. Latitude	
County	Range	W. Longitude	
Township	Site Location (ie. landmarks, roads, etc.)		MLRA
Elevation (ft or m)	Slope (%)	Exposure (N,S,E,W)	Precipitation (in or mm)
Plants Growing in Association _____ _____			

Soils Information		
Soil Series & Texture	Soil Survey Sheet #	Soils Mapping Unit Symbol

Remarks

Please complete the above form as completely as possible, following the instructions below for collecting and handling seed and vegetative material.

Watch for superior plants that display unusual characteristics and record observations. Seed or cuttings from an individual plant or from several plants in the same colony can constitute a collection if warranted. Make separate collections of the same species if the growing site or location is different.

Use the back of this sheet to sketch the collection area or record additional information.

Be sure to label each collection as it is made so collections do not get mixed up. Send seed to the Plant Materials Center serving the state, unless other specific instructions are provided.

Seed Collection: Check each collection for filled seed and then attempt to get the equivalent of one-fourth pound of seed. Collection should be from a minimum population of 30-50 plants if possible. Mature seed is typically dry and hard and has separated from the rachis (grasses) or loosens easily from the pods, capsules, or flower heads. Do not collect unripe seed. Fleshy seed from woody species should be enclosed in a plastic bag and kept in a cool place out of direct light.

Vegetative Material Collection: Collect only good healthy material. Use a sharp knife, scissors or pruners for cutting vegetative material. Root cuttings should be a minimum of 6" in length. Stem cuttings should be 6-8 or longer and have a minimum of 2 nodes. Wrap roots or cuttings with moist paper or cloth. Place material in a plastic bag with a few small holes in it. Refrigerate or keep cool until shipped. Material should be shipped or delivered as soon as possible so that it does not dry out.

Little River Band of Ottawa Indians Receives 150 Year Old Tobacco Seed

This spring, the Little River Band of Ottawa Indians' Natural Resource Department staff set out to see if they could make a miracle happen; their mission was to attempt to plant Sema, (Tobacco) from seeds that had been stored at the Smithsonian for over 150 years.

Several years back, Jimmie Mitchell was given the guardianship of these ancient seeds by his Uncle who had obtained them through contacts at the Smithsonian Institute. As explained to Jimmie, when the European people first arrived on our lands, seeds from the local plants had been collected by their botanists, who cataloged and stored them away so very long ago. In the case of the Sema, it wasn't even known if the tiny ancient seeds would germinate since they were so old. This project has proven to be successful and many new tobacco plants are now growing.

The Rose Lake Plant Materials Center is helping supplement the efforts of the Little River Band of Ottawa Indians by providing a greenhouse environment to grow these plants and to obtain new seed.



Information and photos courtesy of Emily Drouin in collaboration with Jimmie Mitchell

Sergio Perez's work in the NRCS Outreach Program

The Michigan State NRCS office, recently held their First Hispanic Cultural Awareness Conference . Sergio Perez, the biological technician at the Rose Lake PMC was one of the presenters, introducing Juan Gomez, a local Hispanic farmer that he has been working with. Juan Gomez operates a fruit farm in mid Michigan and is interested in utilizing NRCS programs.



Sergio Perez and Juan Garza



Juan Manuel Garza, Sergio Perez and Juan Garza

Icy Blue Registration Published

Icy Blue Canada Wildrye germplasm was recently registered with the Crop Science Society of America. The registration notice appeared in the September-October 2006 issue of Crop Science. Reprints are available from the Rose Lake Plant Materials Center.

The Crop Science Society of America Crop Registration program serves scientists worldwide by publishing information on recently released germplasm, cultivars, parental lines, etc. These materials are available to other scientists for use as source materials for research and breeding programs. Publication provides a readily accessible name and information concerning characteristics and availability and facilitates utilization. As part of the registration process, a seed sample is deposited with the National Center for Genetic Resources Preservation.

Icy Blue Canada Wildrye is a native cool-season grass, released in 2004 by USDA-NRCS, the Indiana Association of Soil and Water Conservation Districts, and Indiana Department of Natural Resources. Its intended use is in prairie restoration, erosion control, and wildlife habitat enhancement. Icy Blue has a whitish, waxy bloom on the leaf surface and the stems, giving it a distinctive "icy blue" color.

Michigan State University Students Tour Rose Lake PMC

Two classes from Michigan State University toured the Rose Lake Plant Materials Center in October. The first class, taught by Dr. Richard Leep, focused on grasses used for forages and livestock production. Twenty five students attended the tour. The tour concentrated on warm season grasses used for forages and conservation practices, with special emphasis on big bluestem and eastern gamagrass. The class also visited the Southlow Michigan germplasm switchgrass production field to give them an idea of what is involved in warm season grass seed production.

Dr. Gerhardus Schultink, Professor of International Resources Development, brought twenty class members to the PMC to discuss native plant production for wildlife habitat enhancement and general conservation applications. Dave Burgdorf, NRCS Plant Materials Specialist, and Lynn Sampson, NRCS State Biologist, provided insights on the uses of plants to enhance soil and water quality through soil bioengineering and the selection of different plant species to provide season long wildlife habitat. The class also asked many questions about NRCS programs including CRP, EQUIP, and WHIP.



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