

Elsberry Plant Materials Center
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Plants for Conservation

Spring 2009

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Vol. 10 No. 1 Elsberry PMC Serving Programs for Iowa, Illinois, and Missouri

Elsberry PMC Plans Spring Training/Tour

The USDA NRCS Elsberry Plant Materials Center (PMC) invites you to attend our Spring Field Day on Wednesday, June 17, 2009 from 10:00 a.m. to 2:30 p.m. The open house begins at 10:00 a.m. with a welcome and introduction to the Elsberry Center.

A wagon tour will provide an overview of the facilities, specialized equipment, foundation seed processing, harvesting, cleaning, and storage requirements for native seed. The tour will also view the Center's production fields that can be observed at the peak of the harvest season.

The Center has 19 active studies that directly relate to finding plant solutions to help respond to our natural resources challenges in the three states of Iowa, Illinois and Missouri that the Center serves.

So schedule June 17 to come and spend a beautiful spring day at the Elsberry Plant Materials Center. Please bring a sack lunch for our 1/2 hour break for lunch.

Call the Center at 573-898-2012 or contact steve.bruckerhoff@mo.usda.gov PMC, Mgr, or contact jerry.kaiser@mo.usda.gov, PM Specialist, to confirm your attendance.

Drawing prizes will be awarded to some lucky winners that attend the field day.

Switchgrass for Biomass Production by Variety Selection for Missouri, Iowa and Illinois.

Jerry Kaiser, Plant Materials Specialist

An Agronomy Technical Note was developed to address which varieties of switchgrass are adapted to the three states. The technical note contains potential production yields on tonnage/acre of each variety, along with key establishment and management considerations for the production of switchgrass. Check out the new Agronomy technical note in your individual state or click on the following line for the web link

http://plant-materials.nrcs.usda.gov/mopmc/pubs/Agronomy%20Technical%20note%2037_109.pdf

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2009 Spring Field Plantings Needed

Jerry Kaiser, Plant Materials Specialist

The Elsberry Plant Materials Program depends on field offices working with landowner participation in field plantings of new selections of grasses, forbs and woody plants. This is a working relationship with local conservation districts and NRCS field offices that are in contact with cooperators that show interest in taking advantage of field planting opportunities. This relationship allows us to field test new plant materials in a real world setting on farms and ranches in Illinois, Iowa and Missouri. Please review your 2009 NRCS State Bulletins for Iowa (190-9-2), Missouri (190-9-2), Illinois (190-9-1) for available plant materials in 2009. Thanks to all field offices that participated in 2008.

Examples of Field Plantings reviewed 2008:



High water flow on Stream bank site using False Indigobush for bank protection in Rock Island County Illinois.



Covey Headquarters using False Indigobush in Washington County Iowa. Planted bare root stock in 2007 Average 5 ft in 2008 83% survival.



Covey Headquarters using False Indigobush from drilled seed. Four years to establish plants of over 6 feet. Location Osage County Missouri.

Advanced Field Testing Program to Start for Little Bluestem Selection

Steve Bruckerhoff, PMC Manager

Little Bluestem is a widely utilized species in the service area but cultivars presently being used are from Kansas and Western Oklahoma. Collections taken from Missouri, Iowa, and Illinois have been evaluated at the PMC and selections have been made for a Northern Region Source and a Southern Region Source.

Primary uses have been conservation cover and wildlife habitat but this multiple use species can also be used for landscaping and forage. The selection criteria included forage quality, forage production, seedling vigor, summer regrowth potential and late maturity.

Little Bluestem is not typically thought of as a forage species and will usually be used in mixtures with other native warm season grasses, forbs, and legumes when incorporated into a grazing system.

The Southern selection is available to field offices for field planting testing purposes. It will be compared with a release cultivar Little Bluestem in mixture with OZ-70 Big Bluestem species for evaluation with grazing and wildlife field buffers.



Southern Selection Little Bluestem

Sedges

Ron Cordsiemon, PMC Soil Conservationist



The Elsberry PMC has been working with selected sedge species for the past 5 years. The different species of sedges could potentially provide conservation uses to a few different practices. Thinscale sedge, fox sedge, and Franks sedge are some of the sedges that might have a use in filter strips. Other species could provide vegetation in riparian buffers and wildlife habitat, especially nesting habitat for shorebirds and other wetland species.

The goal for the staff at the Elsberry PMC is to find the sedge species' that perform the best in establishment and maintain the desired characteristics. Thinscale, fox, Franks, crested, ravenfoot and hop sedge, along with green bulrush, have been the selected species at the Elsberry PMC that have germinated well in the greenhouse and evaluated in the field. Off center plantings have been made for further evaluation to evaluate ease of establishment.

Fox Sedge (*Carex vulpinoidea*)

Website Reference Locations

Click on the following line web link to access Elsberry PMC Homepage

<http://plant-materials.nrcs.usda.gov/mopmc/>

Click on the following line for the 2009 Updated Growers List if you are looking for native grasses, legumes, forbs or woody plant materials.

[Seed and Woody Growers of Elsberry Releases](#)

Click on the following line for the 2009 Updated Foundation Seed Prices.

[2009 Foundation Seed Prices](#)

Click on the following line for the 2007 Annual Technical Report for current study updates from the Elsberry PMC*

<http://www.plant-materials.nrcs.usda.gov/pubs/mopmctr7815.pdf>

Use the bookmarks on the left side to review a study of interest.

* Why is the 2007 Annual Technical Report (ATR) the most current in 2009?

We collect the data during that growing season year; after the growing season the data is analyzed, compiled and documented to be in the Annual Technical Report that is available the following year. Look for the 2008 ATR coming soon to the website.

Update Critical Area Study Roadside Vegetation Establishment

Jerry Kaiser, Plant Materials Specialist

2007 Establishment year



2008 Switchgrass developing with erosion blankets.



The objective of this study is to test an establishment technique for permanent vegetation on critical area sites of constructed right-of-ways to control soil erosion.

Lack of permanent vegetation on roadside excavated slopes along Missouri State Highway 60 in southern Missouri has left large areas of the right-of-way unprotected from soil erosion. There is erosion occurring on large areas of slope that range from slight to severe. The silt from this erosion is leaving deposition in the drainage systems and moving off site to areas that are within the national scenic river watershed.

Plant materials evaluation processes were conducted by the USDA NRCS, Elsberry Plant Materials Program, the Big Spring RC&D Program, and assistance from MODOT. Evaluation of species data was collected in Fall 2007, Spring and Fall 2008 to analyze plant performance over the time of the study. Results of the study to date documents switchgrass as the predominant cover persisting in the plots, with erosion control blankets installed for erosion protection. Cool season species such as Tall Fescue and Perennial ryegrass developed the first year, but did not persist on the site by the 2nd year.

The details of the study performance of the plant species will be referenced in the 2008 Annual Technical Report that will be available this Summer

Training Workshops for the Field Offices

Do you need training in plant identification ? Or the proper way to calibrate a drill for correct seeding rates for native grasses and forbs?

The Elsberry Plant Materials Program along with State and Area Specialists have been offering this type of training at the area level for field office personnel participation.

If the field office personnel is interested in this type of training to come to your area this can be scheduled by contacting your Area Resource Conservationist with approval from the Area Conservationist to conduct these workshops at the area level.



2008
Plant ID workshop for Area 2 Missouri at Williamsburg MO.



2008
Drill Calibration training Area 2 Missouri at Linneus MO.