

Manhattan Plant Materials Center

Manhattan, Kansas



A newsletter in support of the Plant Materials Program for Colorado, Kansas, Oklahoma, and Nebraska

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T and E Propagation Study

Personnel from the Manhattan PMC, Kansas NRCS State Office, and the Kansas Biological Survey (KBS) met on September 2 at the Center to discuss the propagation study of threatened plant species. The Center received four Mead's milkweed pods in December of 1996 and no seed from the western prairie fringed orchid. The four pods contained approximately 200 total seed units after being processed. Seeds from each pod were kept distinct and separate during the study. Findings from the study include:

- 1) This species requires a period of cold moist stratification to promote germination. Probably a stratification period shorter than 6 weeks would be sufficient.
- 2) Germination of seed units proceeded the quickest at an alternating temperature of 20/24°C. An alternating temperature regime of 10/30°C provided considerably slower germination of the milkweed seed.
- 3) Seedlings from the germination study have been transplanted successfully to cone-tainers.
- 4) A few seedlings have been transplanted to a native grass plot located on the Center.

Discussions with KBS officials provided guidance on determining the future activities of the study and utilization of the seedlings. Apparently no seed were produced this year from the orchid plants and very little flowering and seed production of the milkweed. An alternative source of seed may be available from land owned by The Nature Conservancy (TNC). Thus, additional germination studies might be possible with this alternate source of seed.

Tours!

The Manhattan Center hosted a number of tours and meetings this past summer. A delegation from the University of Arkansas at Pine Bluff spent the morning at the Plant Center in connection with a sustainable Agriculture Tour arranged by the NRCS Watershed Science Institute (WSI) at Lincoln, NE. Stefanie Aschmann, Agroecologist at the WSI, arranged the tour and the rest of the program for the UAPB Personnel. Later that same day the Center hosted approximately 65 individuals from the Wind Erosion International Symposium and Workshop hosted by Wind Erosion Research Unit (WERU) of the Agriculture Research Service (ARS). The meeting commemorated the 50th anniversary of the USDA's Wind Erosion Research at Kansas State University.

Participants of the North Central Region Professional Development Program visited the Center on July 8th. The goal of the North Central Sustainable Agriculture Training Program (NCSATP) was to

acquaint participants with ecological principles that could be utilized with practical farming system designs. The meeting also demonstrated the application of ecological management strategies in production agriculture.

Two staff members from Botanica The Wichita Gardens visited the Center on July 21st. They were shown the Center's video (Plants With A Purpose) and given a tour of facilities and fields.

Dickinson County producers and NRCS personnel toured the Plant Center on July 22nd. The group was interested in the forage utilization aspects of many of the grasses and forbs produced at the Center. They were also curious about interseeding and wildlife benefits provided by certain forb and legume species.

Student trainee engineers Shawna McDonald and Kevin Stamm toured the Center along with Phillip Woodford, Fort Riley Integrated Training Area Management (ITAM) coordinator. The trio viewed the Center's video and then toured the facilities, nurseries, and foundation production fields on August 14th.

The Kansas State University Retired Agronomy Professors toured the PMC on September 11th. Frank Barnett, retired grass breeder, arranged the tour for his group. Many of the individuals had not been to the Center since retirement and were surprised by the many changes.

Visitors are always welcome at the Manhattan PMC. Public awareness and support are important to the success of the Plant Materials Program. Please call in order to arrange a tour for your group.
(785)539-8761

Reminder-Partial Source List Of Plant Materials

With CRP Sign-up 15 and the anticipated Sign-up 16, I have received calls inquiring about the availability and source of various types of plant materials, particularly native legumes and forbs. A partial source list of vendors that supply grasses, legumes, native forbs, and wetland species was previously provided in the form of Plant Materials Technical Notes; for Oklahoma, PM Tech Note 16, dated May 20, 1997; for Kansas, PM Tech Note 19 (Rev-1), dated May 19, 1997; and for Nebraska, PM Tech Note 50, dated June 18, 1997.

If additional copies are needed or if you have any questions, give me a call at 785-823-4541. Thanks.

Terry Conway

New PMC Projects

At our Plant Materials State Conservationist Advisory Committee meeting, several new project proposals were reviewed and approval for implementation. These were: Evaluation of Plant Materials for Use in Soil Bioengineering Techniques; Initial Evaluation of False Indigo, *Amorpha fruticosa*, for Use in Streambank Stabilization, Shoreline Protection, and Wetland Restoration and Enhancement; the Evaluation of PMK-1 and other *Fraxinus pennsylvanica* Germ Plasm for Resistance to Ash Borers; and the Evaluation of Siberian Elm, *Ulmus pumila*, for Use in Shelterbelt and Windbreak Conservation Practices. These projects will help provide the technology and/or plant materials needed to address those resource concerns identified in the state's long range plant materials plan.

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