



Great Lakes Plant Solutions

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East Lansing, Michigan*

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New Manager for Rose Lake PMC



A little over a year ago we welcomed John W. Leif as our new Agronomist.

Today, we are happy to announce that John Leif has assumed the position of manager of the Rose Lake Plant Materials Center

John Rissler, the former manager, left in April of this year to become a program liaison for NRCS in Hallettsville, Texas.

Please join us in congratulating John Leif on his new position as manager.

New Studies at Rose Lake PMC for 2004

*Eastern gamagrass (*Tripsacum dactyloides*) for forage production*

Eastern gamagrass is a warm season perennial bunchgrass that has shown promise as a forage grass in many areas of the United States. Data for eastern gamagrass production in Michigan is limited. The objective of the project is to determine the productivity of eastern gamagrass in Michigan. This project is being conducted in cooperation with Kevin Ogles, Michigan's GLCI coordinator.

Two experiments are in place at the Rose Lake Plant Materials Center. The first experiment is designed to evaluate the effect of harvest height and row spacing on forage yield and quality. Nutrient analysis will be conducted by Michigan State University and funded, in part, by Michigan Grazing Lands Conservation Initiative committee. The second experiment is designed to compare two commercially available eastern gamagrass varieties to two accessions selected through the Plant Materials Program at Big Flats, NY. Plant survival, plant height, and biomass production will be evaluated during this study. Both projects will run through 2005.

Seed treatments for protection of warm season grasses against herbicide injury.

Warm season grasses, such as switchgrass and big bluestem, are affected by grass weed competition during seeding and early establishment. There are few herbicides available for newly seeded warm season grasses that will selectively control annual grass weeds. A chemical seed coating product is available to protect grain sorghum from injury to several pre-emergence grass herbicides. The Michigan NRCS State Conservationist entered into a testing agreement with Syngenta Crop Protection Company to evaluate the effectiveness of a chemical seed coating to protect warm season grasses from pre-emergence grass herbicide injury.

Syngenta Crop Protection Company, the manufacturer of Concep III® seed treatment, applied the seed coating to switchgrass and big bluestem seed. The Rose Lake PMC is conducting greenhouse and field experiments to determine the effectiveness of that seed treatment for preventing injury from Dual II Magnum® and Outlook® herbicides.

Direct seeding vs. bare root transplanting of northern red oak.

Labor and plant material costs for transplanting trees and shrubs can be a deterrent to establishing them on large acreages. In 2003 the Rose Lake PMC initiated an experiment to determine the effectiveness of direct seeding tree and shrub species. Initial data indicates that large seeded species, such as oak, walnut, and hickory species can be successfully established by direct seeding.

Forest-land owners and professional foresters in Michigan expressed an interest in using northern red oak to re-forest areas that have been devastated by beech bark disease. The Rose Lake PMC, in cooperation with the Michigan NRCS State Forester and NRCS field offices, established four field experiments across Michigan to compare direct seeding of northern red oak acorns to transplanting bare-root northern red oak plants.

Fort Custer Military Training Center

Fort Custer Training Center, near Battle Creek, MI., and the Rose Lake Plant Materials Center have entered into an Agreement for the enhancement of native plant materials at Fort Custer. Fort Custer has several remnant colonies of native plant materials and the PMC has the knowledge and facilities to assist the Training Center in collection, propagation, harvesting and establishment of these plants. The PMC will be working with the Natural Resources staff at Fort Custer to establish a 200 acre tall grass prairie as well as evaluating potential species for establishment on ammunition bunkers and firing ranges. Vegetative collections of poverty oatgrass, deer tongue, and bush clover have been made and established at the Plant Materials Center for increase purposes. Production fields of selected species will be established on the 200 acre area and the seed from these areas will be used to reestablish the remaining acres. It is anticipated that some new plant technology information will be developed and several native plant releases are possible.

Indiana NRCS– Native Crabapples

Indiana State Plant Materials Committee through the leadership of Kenneth Collins, State Forester, initiated a cooperative relationship with the Indiana State Tree Nursery in Vilonia, Indiana for the collection and increase of an Indiana native crabapple. The crabapple study involves the collection of native crabapples and securing crabapple germplasm from the National Seed Storage Facility for evaluation. Currently crabapple plants have been propagated using grafting techniques from seed. The potential is for a new release of an Indiana native crabapple for use in conservation plantings.

Rose Lake PMC Hosts National Plant Materials Advisory Committee

Ron Williams, Michigan's former State Conservationist, hosted the National State Plant Materials Advisory Committee Meeting at the Rose Lake Plant Materials Center April 29 and 30, 2004. In attendance were: Diane Gelvurd, Director of Ecological Sciences, Washington D.C., Ed Burton, State Conservationist for Wyoming, John Englert, National PMC, Beltsville, MD, Lillian Woods, State Conservationist for West Virginia, Niles Glazon, State Conservationist for Florida, J.C. Hovangian, AIR, Florida, John Mc Lain, RCI, Nevada, Don Gohmert, State Conservationist for Louisiana, Richard Sims, State Conservationist for Idaho and Robert Escherman, National Program Leader, Beltsville, MD.

Please visit the Plant Materials website to find more information on using plants to solve conservation problems:

<http://Plant-Materials.nrcs.usda.gov>
<http://plants.usda.gov>

Contact Us:

Rose Lake Plant Materials Center
7472 Stoll Road
East Lansing, MI 48823

Phone: (517) 641-6300
Fax: (517) 641-4421

Emails:
Plant Materials Center Manager
john.leif@mi.usda.gov

Plant Materials Specialist
dave.burgdorf@mi.usda.gov

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