PLANT MATERIALS BRIEFS

The latest news on plant materials from the Georgia plant materials team

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PRIORITY I - NATIVE PLANTS FOR GRAZING LANDS THAT SUPPORT SUSTAINABLE AGRICULTURE

ROTATIONAL GRAZING OF EASTERN GAMAGRASS

The PMC personnel are working with Sid Brantley (Regional Grazing Land Specialist), Don Surrency, Dr. Glenwood Hill (FVSU) and the Kennedy's from Cobbtown, Georgia. The Kennedy's provided 25 stocker cattle this year for the Eastern gamagrass rotational grazing demonstration. After initial feed balancing, the cattle produced a ADG of approximately 1.3 pounds. September 8, the PMC hosted a meeting concerning the project. Attendees were Dr. Glenwood Hill, FVSU, Sid Brantley, Holli Kuykendall, the Kennedy's, Dr. Getz, (FVSU), and the grazing lands specialists from MS and FL. Sid discussed nutritional balancing and the nutbal program. In April, 1999 12 stockers from the Lamar County S&WCD were delivered to the PMCfor the rotational grazing. The cattle began grazing the eastern gamagrass in May, 1999.

BIG BLUESTEM EVALUATION

Valerie Pickard has planted and begun evaluation of selected big bluestem ecotypes for urban landscapes in Atlanta Metro area. Results will appear in the next PM briefs.

PRIORITY II - NATIVE PLANTS FOR WATER QUALITY (RIPARIAN AREAS, FILTER STRIPS, AND CONSTRUCTED WETLANDS

EVALUATION OF TREES FOR FOREST BUFFERS IN RIPARIAN AREAS

In 1994 a project to evaluate 10 woody species for riparian forest buffers was initiated. Dr. Richard Lowrance of ARS and the PMC staff collected soil and tissue (leaf/stem) samples this summer. These samples will be sent off for N & P analysis. This information will provide baseline information concerning each

tree species in the test. In May 1999, this project was fertilized with N and P. Samples will again be taken in late/June 1999, to compare tree species ability to uptake N and P.

PRIORITY III - PLANTS FOR CONSERVATION TILLAGE

PMC plans to conduct a little barley evaluation this year. This test will involve assistance from the regional NRCS agronomists in each state the center serves. Little barley appear to have potential as a cover crop for conservation tillage.

RECENT RELEASE

The exclusive release rights to'AU Sunrise' crimson clover, released cooperatively by Jimmy Carter PMC and Auburn University, was given to Great Southern Seed Company of Union Springs, Alabama. AU Sunrise crimson clover in an early blooming variety for conservation tillage.

FUTURE RELEASES

Virginia wildrye (a cool season perennial native grass) is being grown for USFS and Ft. Gordon. The PMC program in Texas plans to release this plant for erosion control, and beautification and permanent cover for logging roads and loading decks.

"Americus" indiangrass is a native warm season perennial grass. The JCPMC continues to study this grass in a grazing trial. Also tests of "Americus " indiangrass are being conducted by researchers in Quincy, Florida and Auburn University. Sid Brantley, Reg. Grazing Specialist is assisting with the site location and field evaluations. A 5 acre planting in Barnesville, Georgia, is being grazed this year.

"AU EarlyCover" hairy vetch and "AU Sunrise" crimson clover associated germplasm may be released in the future according to Dr. Jorge Mosjidis of Auburn University.

U.S. FOREST SERVICE

The PMC staff and Don Surrency met with Dennis Law to outline the PMC role in revegetating Forest Service land in South Carolina. The PMC is establishing increase areas of several native plant species for future use in South Carolina. We are also cleaning and processing seed collected from South Carolina National Forests.

FORT GORDON

The PMC is starting to produce plants and seed for Fort Gordon in GA. This project is very extensive. It involves erosion control, constructed wetlands, storm-water runoff, streambank stabilization and other conservation practices. The PMC is utilizing 2 wae's for this critical work.

OUTREACH AND FARM BILL WORK

The JCPMC has been:

- involved in wetland plant ID training for the Jonesboro FO in support of the Clayton Co.Water Authority;

- in upland grass training to the Jonesboro FO and the McDonough FO;
- assisting Henry Co. and NRCS F.O. identify plant communities for "Land between the Lakes" project;
- making presentations at conservation field days in Randolph and Calhoun County;
- made fifteen presentations at "Outdoor Classroom" in Early County;
- assisted the Kennedys in Tatnall Co. with perennial peanut planting;
- assisting Golden Triangle RC&D with Eco-Forestry nature trail at Miller Co. H.S.;
- JCPMC manager is assisting Area 3 FO compile and construct mini-herbariums for wetland plant identification. This effort has begun in the Colquitt and Sylvester FO;
- Helped train eight FVSU students (Dr. Mark Latimore) in forage plant identification and cultural practices;
- Presented PMC forage work to several groups/tours;
- Trained 44 NRCS employees from area 1 and area 3 in wetland plant identification;
- Continued to provide Miller County High School nature trail information to RC&D coordinator, Jerome Brown;
- GA PM team will conduct a field day in June 1999;
- Don Surrency has drafted a letter outlining a JCPMC Environmental Studies Center. This would involve schools, government and other groups;

NATIVE GRASS/GRAZING DEMONSTRATION AT PMC

To develop the technology needed to promote the use of native grasses for grazing, three fields at the Jimmy Carter PMC have been planted to native grasses. Five acres each of Alamo switchgrass, "Pete" eastern gamagrass, and Americus indiangrass performed better than the commercial indiangrass varieties adapted to the Southeast Grazing trials will begin this year with eastern gamagrass. The electric fencing, paddocks and watering troughs have been installed.

In 1998, Stockers for the project were provided by the Kennedy Farm, an outreach small farm project located in Metter, Georgia. We hope to develop data on forage quality, production, and persistence under actual rotational grazing conditions. This information will be used to build the data bases for GLA. The performance data will be used to complete the databases for GLA. The Lamar County Soil and Water Conservation District is providing stockers to graze the ALAMO switchgrass pastures.

CONSERVATION TILLAGE

An early blooming crimson clover was released in 1997 for conservation tillage in the Southeast. The plant was selected from the cool season legume study that was initiated in 1983. The plant breeding work to develop this early blooming cultivar was done by Mike Owsley, Jimmy Carter PMC, and Dr. Jorge Mosjidis, Auburn University.

The following plant releases that support conservation tillage are being produced by commercial sources.

* Americus hairy vetch
* AU-Early Cover hairy vetch
* AU-Ground Cover caley pea

AU-Early Cover hairy vetch seed should be commercially available in the Fall 1999.

A NEW COVER CROP - AU SUNRISE CRIMSON CLOVER

In 1997, the NRCS Jimmy Carter Plant Materials Center and the Auburn University, Alabama Experiment Stations released an early developing crimson clover called AU Sunrise. Results from two years of testing have shown AU Sunrise is a cultivar that flowers 5 to 18 days earlier than AU Robins and 12 to 28 days earlier than Tibbee crimson clover.

The exclusive release rights to 'AU Sunrise' crimson clover, released cooperatively by Jimmy Carter PMC and Auburn University, was given to Great Southern Seed Company of Union Springs, Alabama.

DEMO FARM PROJECT CONTINUES

Handy Kennedy, a black farmer in Cobbtown (near Metter), GA, has been farming for most of his 75 years. He and his wife raised twelve children, seven of which completed college. Together with three of his sons, Kennedy has been shifting from row crops to cattle and he's looking at other alternative enterprises. Last year he offered his farm as a demonstration site. The first event took place in November 1997. The on-site lectures and field visits were attended by about 70 people, approximately half of them minority farmers from Tattnall and six or seven surrounding counties. Letters, phone calls, radio and newspaper were used to publicize the event.

This month a meeting was held in Metter to begin planning the second demo day. In attendance were two members of the Kennedy family; Dr. Glenwood Hill, extension program manager at Fort Valley State University; and representatives of the NRCS, RC&D, ES, SWD, and the state soil and water conservation commission. The next demo event is planned for September 1999. The working theme is "A Small Farm Expo." Two RC&D grants totaling approximately $30,000 will help fund the effort.

Demonstrations, plots, lectures and vendors will teach attending farmers about improved grazing; rotational grazing, adding legumes, perennial peanuts; native grasses, switchgrass buffers; liming, soil fertility; catfish operations; and more. A rotational grazing system will be installed on the Kennedy farm and a solar watering system. Winter grasses and cool-season legumes were no-tilled into bahia grass stands to provide higher quality forage.

This past June 1998 through September, 25 steers from the Kennedy farm were transported to the NRCS Plant Materials Center in Americus to be part of the first rotational grazing study on native grasses in Georgia. The objective was to demonstrate animal health and nutrition. Data on methods and weight gains will be shared with small farmers. The results were very promising, and the study will continue for two more years.

AMERICUS INDIANGRASS -- NATIVE WARM SEASON GRASS

The Jimmy Carter PMC plans to release a native indiangrass that has an origin from the southeast (Alabama and Georgia). The final test plots will be planted this year in Quincy, Florida and Camp Hill, Alabama. We have provided 222 pounds of seed to establish a 10 acre planting at the Piedmont Sub-Station in Camp Hill, Alabama. The planting will be evaluated under a rotational grazing demonstration.

In addition, a small quantity of indiangrass seed was provided to Dr. Ann Blount at the North Florida Research and Education Center in Quincy, Florida to establish several plots. Sid Brantley, Grazing Specialist will assist with followup and evaluations.

A five acre indiangrass rotational grazing demonstration will be grazed next year to develop important information on managing indiangrass under southeastern conditions. This information will be included in the FOTG.

TECHNOLOGY TRANSFER from GA PM TEAM

- Plant Materials Homepage in developmental stages
- WHIP document
- Tech note Eastern Gamagrass Report
- 1998 JC PMC ATR
- 1998 JC PMC Popular Report
- Plant Materials Specialist Report-98
- Native Warm Season Grass Establishment Document (in progress)
- Cover Crop Article (in progress)
- Riparian Forest Buffer Report (in progress)
- AU Sunrise Crimson Clover Tech Note
- AU Sunrise Crimson Clover Planting Guide
- Small Farm Outreach Program (in progress)
- Erosion Control on Military Reservations (in progress)
- Quarterly SRC-PM teleconference Last held Sept. 29, 1998
- 1998 ATR
- Plant Materials Specialist Report for Alabama

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