

# Tech Talk

# A Newsletter for the Plant Materials Program Biological Technicians

# Chemical Weed Control in Slender White Prairieclover by Mark Majerus

The most difficult part of growing seed of native forbs is the control of broadleaf weeds. In an attempt to get cleaner Foundation seed of 'Antelope' slender white prairieclover, without hours of hand rouging, the Bridger PMC established a chemical trial on a two year old stand. The targeted weeds were primarily kochia, pigweed, wild buckwheat, lambsquarters, purslane, and prickly lettuce. There were 11 annual broadleaf weeds and two perennial broadleaf weeds identified in the study area. There was very little annual grassy weeds (green foxtail, barnyard grass, witchgrass) probably because grassy weeds were controlled the previous year with Poast Plus®.

Pre-emergent chemicals (Karmex-2.5#/A, Sencor1#/A, Treflan-2 pt/A, and Velpar-1.5#/A) were applied on March 25, 2001, while post-emergent chemicals (Buctril-1.5 pt/A, Butyrac-3 pt/A, Pursuit-3 oz/A, and Plateau-4 oz/A,) were applied on May 23, 2001. All plots were rotary-hoed to incorporate the chemicals. The remaining portion of the field was treated with a tank mix of Buctril-1.5 pt/A and Pursuit-3 oz/A. This combination proved to have better broadleaf weed control than any of the straight chemical treatments in the study.

The preliminary results indicate that pregreenup (either fall or early spring) treatment with Sencor (1#/A) or post-greenup (4-6" growth) with Buctril/Pursuit will give the best results. None of the chemicals had any significant impact on perennial broadleaf

Broadleaf Weed Control Ranking	
Sencor <sup>®</sup>	1
Velpar <sup>®</sup>	2
Buctril <sup>®</sup>	3
Karmex <sup>®</sup>	4
Treflan <sup>TM</sup>	5
Pursuit <sup>®</sup>	6
Plateau <sup>®</sup>	7
Butyrac <sup>®</sup>	8

weeds (Canada thistle and field bindweed). Follow-up studies will be done to evaluate different rates and combinations of the top performers. For more information, please contact the Bridger PMC.

# Bismarck Seed Production by Earl Aune

It has been an interesting season. Spring started out just about perfect. We got our burning, fertilizing, and chemical application done all in a timely fashion, but then the rain started. In the months of June and July, we had record rainfall. On June 9, we had a horrific hailstorm in Bismarck, that wiped out our cool season production for the year. The warm season grasses came back and we were able to get a fair seed harvest. So ALL was not lost.

We had a lot of trouble with our Massey Ferguson 17 combine. It was eating up variable speed drive belts. If any of you are having similar problems, I have the cure. Look at your shafts and pulley sheaves on the variable device, we had to replace all of

continued on page 2

United States Department of Agriculture

Natural Resources Conservation Service

Plant Materials Program

Newsletter No. 2 December 3, 2001



### Wildfire Restoration Seeding and Planting

Many of our PMC are involved in wildfire related projects, from developing burned-site rehabilitation strategies to evaluating species for fire-resistant plantings. To find more information about the PM Program efforts visit our website at: http://Plant-Materials.



ours. We are now over lubricating the sheaves to prevent the wear that happened to ours. We thought we were doing a good job of lubricating before. Just make sure you don't over do it to the extent that you get grease on the drive belts.

## Coffeeville PMC Finds a Genie! by James Pomerlee

The PMC has purchased a new flail pickup mower called the Lawn Genie. This piece of equipment deserves its name because it really makes the work disappear! The spinning shanks of the flail create a vacuum that pushes the grass clippings into a storage hopper. We have a hydraulic dump hopper that runs off the PTO. This has saved a tremendous amount of time cleaning research plots. For example, we have a biofuel study that has forty-four 10 by 25-ft switchgrass plots. We only take a 3-ft swath to estimate yield. Last year it took three people a day and half to clip, rake, and haul the remaining grass off the field in 98-degree heat with 167% relative humidity. This year with the Lawn Genie it took one person 2 hours and he never left the cab of the tractor. The only bad thing about the Lawn Genie is that the manager has twenty new studies he wants to add. In other news, the first 3500 feet of irrigation pipe has been successfully installed. Thanks again to Eddie and Dale at the Booneville PMC for the trencher.

### Weed Control for Knox City PMC by Ronald L. Curd

Here at Knox City, we are rather new at using herbicides for weed control. In the past, there had been enough WAE's to handle the enormous job of weed control. But since 1995, help has been in short supply. We had a hoe hand for only 20 days this year.

What we need is a good substitute. Herbicides? Thought we would pass along what we are using, and the other plant centers would respond with your experiences with these herbicides or others that we have not tried. Knox City has Miles fine sandy loam soils and a rainfall in normal years of 24 inches. Production fields are irrigated based on crop needs.

We are rotating, every 3 years between Prowl and Treflan as our main weed control. Spray 1 1/2 pt./ac. in April; on all grasses, legumes, and forbs. Control lasts until about June or July. Glean(.3oz./ac), Ally(.1oz./ac) or 2,4D(1 pt./ac.) are used for spot spraying our grasses. However, 2,4-D is only used until April 16<sup>th</sup> as Knox county is a controlled cotton county and 2,4-D cannot be used, after cotton has emerged. We would like to hear from anybody who has used 2,4-DB as we have heard that it can be used on legumes without harm. We tried Plateau (12oz./ac.) on several legumes and forbs, but results were: severe damage on all fields. Our Showy menodora died, and the others failed to produce seed. We will try again this year, but will spray in February before there is any greeenup. If you have any suggestions, please e-mail me at ronald.curd@tx.usda.gov.

# Booneville PMC Benefits from Excess Military Equipment by Eddie Pratt

Excess military equipment may be obtained at no cost to NRCS and provide resources to PMC's that may otherwise not be available. In 1995, the Booneville PMC acquired a D7F Caterpillar dozer. In 1996, with help from the Booneville PMC, Agriculture Research Service also acquired two D7E Caterpillar dozers. Due to increasing irrigation demands and a need for a more dependable source of water we decided to construct an irrigation reservoir. In 1999, with the use of all three dozers an 18,000 yard pond was built at an estimated cost of \$10,000. Contractor estimates were approximately \$40,000. Two 20-yard dump trucks and a 2 1/2-yard Case loader were also obtained enabling us to build and maintain our farm roads.

On-line screening is available to all government agencies at www.drms.dla.mil/index.html. If you have any questions feel free to contact me at 501-675-5182 or e-mail me at lance.tharel@ar.usda.gov.



The United States Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or familial status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326W, Whitten Building, 14th and Independence Ave., SW, Washington, D.C., 20250-9410, or call (202) 720-5964 (voice) or (202) 720-1127 (TDD). USDA is an equal opportunity provider and employer.