Switchgrass for Bioenergy

About the Crop Management Diagnostic Clinics

The goal of University of Nebraska–Lincoln Extension’s Crop Management and Diagnostic Clinics (CMDC) is to assist Nebraska producers in adopting research-based best management practices to increase crop production and increase profitability while protecting our soil and water resources.

The CMDC curriculum focuses on the latest research in four areas:

* Crop Production
* Nutrient Management
* Pest Management
* Soil and Water Management

Held at a site developed exclusively for the clinics, the expertise of University researchers and industry agricultural professionals come together to provide the latest, most up-to-date information. Presentations include hands-on activities or field demonstrations in small groups to encourage interaction between presenters and participants.

Switchgrass for Bioenergy training session was conducted during the UNL Extension Late Season Crop Management Diagnostic Clinic on August 30, 2012.

Topics and presenters included:

- Status of perennial grasses for bioenergy
- Principles for rapid establishment
- Management practices for optimum biomass production
- An alternative for marginally productive cropland?

Ken Vogel, USDA-ARS Research Geneticist; Rob Mitchell, USDA-ARS Research Agronomist; and John Hay, UNL Extension Educator
Knowledge Gained
Participants were asked to note the level of which their knowledge improved on the following:

- Potential ethanol yields from perennial grasses (gal/ton) - 83% noted major or significant improvement
- Switchgrass basic agronomic practices - 72% noted major or significant improvement
- Land types on which switchgrass and other perennial grasses have economic potential as bioenergy crops - 72% noted major or significant improvement
- Potential for genetic improvements in switchgrass for bioenergy - 62% noted major or significant improvement
- Biomass storage requirements - 66% noted major or significant improvement
- Environmental benefits of growing perennial grasses as bioenergy crops - 59% noted major or significant improvement

Expected Behavior Changes
Participants were asked to note how likely they were to adopt practices that improved or enhance on the following:

- Consider recommending switchgrass and other perennial grasses as bioenergy crops if a biomass biorefinery is built in my area. - 45% noted they would expand/modify what they are already recommending or start in the future
- Consider recommending perennial warm-season grasses for hay or in pastures to spread production risks - 48% noted they would expand/modify what they are already recommending or start in the future

This project is supported by Agriculture and Food Research Initiative Competitive Grant No. 2011-68005-30411 from the National Institute of Food and Agriculture.

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