

Milan No-Till Field Day Presents The Economics Of Switchgrass Production

Tour D To Focus On UT Energy Crop Research

MILAN, TENN.

The nation seems poised to turn to alternative energy sources, so research into the production economics of biobased energy is vital to ensure sustainable cropping systems.

Since 2004 economists with the University of Tennessee have been engaged in what is known as the UT Switchgrass Project, the goal of which was to generate basic knowledge about switchgrass production in Tennessee; investigate best management practices; determine least-cost, sustainable production practices; and develop producer recommendations. Dr. Burton English, a professor in the Department of Agricultural and Resource Economics, says the effort has included evaluating production costs, farm-level production risks, and storage economics.

The switchgrass was grown on research plots at the UT AgResearch and Education Center in Milan.

Varietal performance, optimal seeding and nitrogen fertilization rates, and dry matter storage losses were measured.

"The cost to establish, maintain, and harvest switchgrass under a five-year contract ranged from \$50 to \$75 per ton," said Dr. English. However, the economist predicted that lower production costs, more like \$5 to \$9 per ton, could be achieved if stand establishment costs can be spread over a ten-year period. "On av-

erage, harvest represented the largest cost component, 50 percent, followed by land, which was 25 percent," he said.

Dr. English's data show that storage losses for rectangular bales exceeded that of round bales, with the majority of losses occurring within the first 150 days. "A protective tarp is effective in reducing these losses," he said, "but in evaluating storage surfaces for round bales, no differences were found between pallet, gravel, and well-drained ground storage surfaces." His work further showed that rectangular bales are cost effective when delivered directly after harvest; however, round bales are recommended for on-farm storage. At biomass prices above \$50 per ton a protective tarp is also recommended, as the value of storage loss would exceed the cost of the tarp and installation.

Tour D at the UT Milan No-Till Field Day will include a presentation by Dr. English that will cover these topics as well as other on-farm production risks. Other switchgrass production experts will also be featured. As always, the field day will be held at the AgResearch and Education Center at Milan. The Field Day begins at 7:00 a.m. on Thursday, July 22. Admission is free and open to the public. For more information, including directions, visit the website: <http://milan.tennessee.edu> or call 731-686-7362. Δ