

PROCEEDINGS OF THE 26TH SOUTHERN CONSERVATION TILLAGE CONFERENCE FOR SUSTAINABLE AGRICULTURE

RALEIGH, NORTH CAROLINA, JUNE 8-9, 2004

INTRODUCTION

Conservation tillage systems have evolved considerably since the *First Annual Southeastern No-Till Systems Conference* held in 1978. A portion of the 2004 conference focuses on reduced tillage production in North Carolina Agriculture. North Carolina is a very diverse state not only agriculturally but geographically as well. The organizing committee has taken this opportunity to develop a program that explores changes in tillage practices in various cropping systems throughout the state that have distinctly different soils. For example, a wide range of row crops are grown in the Blackland or high organic soil region, and there are distinct challenges when comparing this region to the northern or southwestern Piedmont or the traditional sandy soils found in the Coastal Plain. Several papers will discuss recent findings associated with nutrient movement in reduced tillage systems. Our keynote speaker will address the larger issue of conservation incentives and how they have been successful in the state of North Carolina. These papers, along with the volunteered oral and poster presentations, should lead to a greater understanding of reduced tillage production systems and methods as research and extension efforts continue to define the benefits of conservation tillage production in the southern United States.

ORGANIZING COMMITTEE

David Jordan, Department of Crop Science, North Carolina State University
Michael Waggoner, Department of Soil Science, North Carolina State University
Bobby Brock, Natural Resources and Conservation Service
Roger Crickenberger, North Carolina Agricultural Research Service
Phil Rzewnicki, Department of Horticulture, North Carolina State University
Cecil Yancy, Southeast Farm Press

ORGANIZING SPONSORS

North Carolina State University-College of Agriculture and Life Sciences
North Carolina Cooperative Extension Service
North Carolina Agricultural Research Service
USDA-Natural Resources and Conservation Service
Southern Association of Agricultural Experiment Station Directors
Association of Southern Region Extension Directors

FINANCIAL SPONSORS

Monsanto
North Carolina Division of Soil and Water Conservation
North Carolina Peanut Growers Association
North Carolina Soybean Producers Association
Syngenta Crop Protection
Pioneer, A DuPont Company
Precision Application Systems (Clifton Dixon, owner/developer)

TECHNICAL SPONSOR

Southeast Farm Press

ABSTRACT AND PROCEEDINGS EDITORS

David Jordan and Dave Caldwell

SUGGESTED CITATION DESIGNATION

Authors. 2004. Title of article. Pages _ _ in D.L. Jordan and D.F. Caldwell, eds. Proceedings of the 26th Southern Conservation Tillage Conference for Sustainable Agriculture. June 8-9, 2004, Raleigh, North Carolina. North Carolina Agricultural Research Service Technical Bulletin No. TB-321. Available at <http://www.ag.auburn.edu/nsdl/sctcsa/>

ABOUT SERA-IEG-20

The Southern Conservation Tillage Conference for Sustainable Agriculture (SCTCSA) is the main activity of the Southern Extension/Research Activities – Information Exchange Group 20 (SERA-IEG –20). This Information Exchange Group is sponsored by the Southern Association of Agricultural Experiment Station Directors (SAAESD), the Association of Southern Region Extension Directors (ASRED), as well as Cooperative State Research, Education and Extension (CSREES), and the participating state universities and federal agencies. The primary mission of the SCTCSA is to provide a medium for exchanging information about conservation tillage and related technology among researchers, extension personnel, NRCS personnel, crop consultants, agribusiness, and farmers. The primary goal of most conservation tillage research is to develop improved technology to increase yields and/or profitability of agricultural crops and livestock while maintaining or improving the quality of soil and water resources available for agricultural, domestic and recreational uses. The overall objective of the SCTCSA is to expand the conservation tillage systems in the South for the purpose of controlling erosion and reducing environmental degradation.

[ASSOCIATION OF SOUTHERN REGION EXTENSION DIRECTORS \(ASRED\)](#)

[SOUTHERN ASSOCIATION OF AGRICULTURAL EXPERIMENT STATION DIRECTORS \(SAAESD\)](#)

PREVIOUS CONFERENCES

Year	Location	Contact
1978	Griffin, Georgia	J.T. Touchton
1979	Lexington, Kentucky	S. Phillips
1980	Gainseville, Florida	R.N. Galaher
1981	Raleigh, North Carolina	A.D. Worsham
1982	Florence, South Carolina	J.H. Palmer
1983	Milan, Tennessee	E.L. Ashburn and T. McCutchen
1984	Headland, Alabama	J.T. Touchton
1985	Griffin, Georgia	W.L. Hargrove
1896	Lexington, Kentucky	R.E. Phillips and K.L. Wells
1987	College Station, Texas	T.J. Gerik and B.L. Harris
1988	Tupelo, Mississippi	N.W. Buehring and J.E. Harrison
1989	Tallahassee, Florida	D.L. Wright and I.D. Teare
1990	Raleigh, North Carolina	M.G. Waggoner
1991	North Little Rock, Arkansas	S.L. Chapman and T.C. Keisling
1992	Jackson, Tennessee	J.F. Bradley and M.D. Mullen
1993	Monroe, Louisiana	P.K. Bollich
1994	Columbia, South Carolina	W.J. Busscher and P.J. Bauer
1995	Jackson, Mississippi	N.W. Buehring and W.L. Kingery
1996	Jackson, Tennessee	P. Denton, J.H. Hodges, III, and D. Tyler
1997	Gainseville, Florida	R.N. Gallaher and D.L. Wright
1998	North Little Rock, Arkansas	S.L. Chapman and T.C. Keisling
1999	Tifton, Georgia	J.E. Hook
2000	Monroe, Louisiana	P.K. Bollich
2001	Oklahoma City, Oklahoma	J.H. Steigler
2002	Auburn, Alabama	D.W. Reeves, R.L. Raper, and K. Iversen
2004	Raleigh, North Carolina	D.L. Jordan, B. Brock, and M.G. Waggoner

Source: Gallaher, R.N. 2002. History and future challenges and opportunities in conservation tillage for sustainable agriculture: research and extension perspective. Pages 2-11 IN E. van Santen (ed.) 2002. Making Conservation Tillage Conventional: Building a Future on 25 Years of research. Proc. 25th Annual Southern Conservation Tillage Conference for Sustainable Agriculture. Auburn, AL 24-26 June. Special Report No. 1. Alabama Agric. Exp. Stn. And Auburn University, AL 36849. USA