

Final Report to the Oregon Department of Agriculture
Groundwater Research and Development Grant Program
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**Project Title Farm Management Options to Protect Groundwater
Resources: An Educational Outreach Program**

Project Leaders

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Results

**Emerging Soil Management Options for Oregon Vegetable Production
Workshop**

In Salem on February 24, 1999 we conducted a workshop, "Emerging Soil Management Options for Oregon Vegetable Production." The focus of this educational program was how to adapt successful conservation tillage, cover crop and reduced input farming practices for use in Oregon to improve soil quality, reduce contamination of ground and surface waters, and improve farm profitability. The speakers included growers and researchers from around the country and there was a panel of local growers to talk about their experiences with cover crops and conservation tillage in western Oregon. The presenters included:

Aref Abdul-Baki is a plant physiologist at USDA ARS in Maryland. He received the USDA's award for his environmental conservation in 1996 for his work on surface organic mulch vegetable production systems.

Mike Dickman is co-owner of Dickman Farms in Silverton. The Dickmans are progressive vegetable, grain and grass seed growers who have reduced pesticide inputs in their strip tillage vegetables. The Oregon Wheat League awarded Dickman Farms the "Conservation Farm of the Year" in 1997.

Steve Groff is a no-till vegetable and grain farmer from Lancaster County, Pennsylvania. He has pioneered no-till, reduced input vegetable farming resulting in significant reductions in inorganic fertilizer and pesticide use on his farm.

Rob Heater is the farm manager for Stahlbush Island Farms in Corvallis and has moved the farm to herbicide-free vegetable production. Stahlbush Island Farms is a 2,000-acre vegetable and fruit production and processing operation that markets its frozen and pureed foods worldwide.

Clifford Horning owns and operates a farm south of Corvallis and has developed his own one-pass strip tillage system. In 1999 he planted over 500 acres of strip tilled vegetables.

Peter Kenagy is manager of Kenagy Family Farms in Albany and is an innovative vegetable, grain and grass seed grower who has pioneered no-till and strip-till vegetable farming in the Willamette Valley. He uses strip tillage for all of his corn acreage and no-tills his squash.

John Luna is a professor of Horticulture at Oregon State University. His work has focused on cover crops, conservation tillage and enhancing biological control of insect pests.

Jeff Mitchell is a Cooperative Extension Specialist in the Department of Vegetable Crops at the University of California Davis. He is a founding participant in the West Side On-Farm Demonstration Project and a principal investigator on the Sustainable Agriculture Farming Systems (SAFS) Project.

Ron Morse is a professor of horticulture at Virginia Polytechnic Institute and State University. He has developed the Subsurface Tiller Transplanter implement that enables no-till mulch vegetable transplant production.

Mary Staben is the on-farm research coordinator for the strip-tillage vegetable project for John Luna, Dept. of Horticulture at OSU. She is a co-chair of the Western Region SARE conference on sustainable agriculture in Portland in March 2000.

All attendees received a copy of the workshop proceedings. Ninety-five people attended the workshop, 78 were growers and others directly involved with farming operations. A survey was given to all attendees and 66 were returned. This was one of the highest grower turnouts and survey response rates we have had at an educational event. All 66 respondents rated the workshop as good or excellent. On a scale of 1 (poor) to 5 (excellent) eighty-eight percent rated the field tour 4 or 5 for meeting their expectations as an educational program. The question "Do you expect to use what you have gained in this course in your work?" generated 47 responses of 4 or 5. Fifty-eight responses indicated that there was adequate opportunity for discussion between presenters and attendees (marked 4 or 5). The following are quotes from the workshop evaluation survey:

- *"Please duplicate this workshop often! I go to many of these events and this has been the best."*

- *"Very interesting. Please have more workshops on sustainable ag subjects."*

- *"Outstanding groups of presenters. Very interactive and receptive farmer group."*

- *"Speakers were very well prepared. Energetic speakers. Very good sharing of knowledge and information and questions."*

- *"Good information. Good discussion, A real landmark meeting."*

- *"Great to talk with in the field practitioners that have tracked their trials and successes and also to introduce appropriate technologies, tools and sources."*

- *"Not immediately suited for "my type" of farming, but the thought process has now started for me."*

- *"Very commendable job. Outstanding group of presenters. Very interactive and receptive farmer group. Congratulations to Mary and John for a job very well done."*

Conservation Farming Twilight Tour

On June 15, 1999 we co-hosted (with the North Santiam Watershed Council and the Willamette Farm Improvement Association) a "Conservation Farming Twilight Tour," near Stayton. The evening field tour was used to showcase the latest strip-tillage vegetable production techniques. The new strip-tillage equipment was on site for a demonstration as well as other equipment. Carl Hendricks, a grower who is a member of the Willamette Farm Improvement Association, hosted the tour at his two of his fields and spoke on how strip-tillage has worked on his farm. John Luna discussed management practices for cover crops and strip-tillage. Dan McGrath discussed sampling methods to predict pesticide use need for corn, beans and brassica crops.

Sixty-four people attended the farm tour, 44 of the attendees were producers or others directly involved in farming. A survey was conducted to gather feedback and 22 were returned. All 22 respondents rated the workshop as good or excellent. Thirteen attendees rated the field tour 4 or 5 on a scale of 1 (poor) to 5 (excellent) for meeting their expectations as an educational program. The question "Do you expect to use what you have gained in this course in your work?" generated 11 responses of good or excellent (marked 4 or 5). Of the 22 responses 19 rated the question regarding the opportunity for discussion between presenters and attendees good or excellent (marked 4 or 5). One attendee wrote: "It was great to see the tillage tools in action. Both [field] locations had a lot to observe," was written by one attendee.

Information Dissemination

Cascade Pacific Resource Conservation and Development sponsored a workshop, "Building the Watershed Movement" in October, 1999 in Corvallis. We created a large poster display to promote the use and benefits of cover crops, strip tillage and conservation farming on water quality. There were numerous printed materials available to the attendees.