Calhoun Fields Laboratory: A Program for Experiential Training in Organic Farming Systems

Summary

This project was undertaken in response to a stakeholder-identified need to provide training in organic production practices to South Carolina Extension, NRCS and DNR agents. A series of five workshops was organized during 2003/2004 on various topics including soil quality and management, cover cropping, non-chemical pest management strategies, and composting and use of compost extract for disease management. Demonstration plantings/sites were established at the Clemson University Calhoun Field Laboratory to provide hands-on training in conjunction with the workshops. A total of approximately 90 agents attended the five workshops. Post-workshop surveys indicated that the trainees gained knowledge and experience with aspects of organic production that will enable them to more effectively communicate with organic producers, and also to more confidently provide assistance to conventional producers who wish to transition to organic/sustainable practices.

Introduction

The overall goal of this training project is to enhance the proficiency of Extension, NRCS and DNR staff in South Carolina in areas related to organic production, with emphasis on procedures leading to organic certification. Participants in this training program will gain the necessary knowledge, skills and confidence that will enable them to guide growers/clients through the process of a transition to organic production, including certification requirements under the USDA National Organic Program.

Objectives/Performance Targets

Specific objectives are to: 1) Develop a user-friendly training manual with topics related to organic production and certification for classroom and on-farm sessions; 2) Establish demonstration plantings/sites within the Clemson University Calhoun Field Laboratory site for on-farm training in each topic; 3) Organize and conduct the training in a series of workshops (classroom and field); and 4) Evaluate the impacts of the training program. This training will provide participants with basic knowledge of organic production and certification that will enable them to provide technical assistance to organic producers and to others interested in transitioning to organic production. Participants completing the training will also feel more comfortable advising conventional growers about transitioning to more sustainable cropping systems.

Methods

Project leaders will meet at the start of the project period to identify and prioritize topics for training and to plan for development of the training manual to be used in conjunction with the workshops. Market and cover crop plantings will be established at the Clemson University Calhoun Laboratory Sustainable Farming site (CFL) to provide a resource for experiential training and to compliment classroom instruction in each topic area. A series of five workshops on various topics related to organic production (see below) were planned for 2003 and 2004. Workshops will be part of the CU Extension In-Service Training Program and will also be available to NRCS and SC DNR personnel.

Outcomes and Impacts

Significant outcomes of this project include the establishment of the Calhoun Field Laboratory as a teaching and demonstration site for organic farming practices, and the development of an organic farming resource manual for South Carolina agriculture professionals. In addition, the training workshops provided participating agents with a solid foundation in the basics of organic production and certification, as well as a greater depth of knowledge on specific topics related to soil quality, cover cropping, pest management, and

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composting. The trainees gained hands-on experience with aspects of organic production that will enable them to more confidently recommend adoption of sustainable/organic production practices to their grower constituents. Pre-workshop survey results indicated that the majority of participants had little to moderate knowledge of organic farming practices, and were highly interested in gaining more knowledge. Follow-up surveys indicated that the majority of trainees expressed a high level of satisfaction with the workshops and they indicated that their knowledge of organic production was greatly enhanced. An unanticipated outcome of the training program was the creation of a core group of approximately ten extension agents with a strong interest in sustainable agriculture and organic farming. These agents have broadened their areas of interest to include organic farming and now serve as contacts for questions related to organic production. This SARE PDP project will serve as a template for future organic production training programs in South Carolina. Building on this project, a second series of workshops on topics related to organic production is planned for 2004 and 2005.

Accomplishments

Plantings were established at the Calhoun Field Laboratory (CFL) (www.clemson.edu/scg/sust/calhounfieldlab_main.html) to provide experiential training and to compliment classroom instruction in each topic area. The site was developed to simulate a small farm operation where fields are rotated with market and cover crops in sequence. The market crop emphasis is on vegetable and herb production using different production systems (e.g. raised beds, no-till planting into cover crop residue, seeding and/or transplanting into legume cover crop, etc.). This system provided market and cover crop plantings for hands-on demonstrations in conjunction with the workshops. Five workshops were conducted during 2003 and 2004 on the following topics: 1) Principles of Organic Farming and Overview of the National Organic Program, 2) Sustainable Soil Management, 3) Effective use of Cover Crops for Market Crop Production, 4) Insect and Disease Management for Organic Production Systems, 5) Compost Production and use of Compost Tea in Disease Management. Instructors represented a mix of university research and extension specialists, consultants, and farmer educators. A total of 90 South Carolina agriculture professionals attended the five workshops (an average of 18 attendees per workshop). Print information on each topic was gathered from various sources (ATTRA, NRCS, Extension, etc) and provided to participants who retained the material in a workbook which served as a training manual for the program. Participants completed brief evaluation surveys at the end of each workshop.

Publications/Outreach

A manual entitled “Building Farming Systems for High Value Organic and Niche Market Production” was developed for participants in the training program. The manual contains topics related to the first five training workshops and is available from the Clemson University Sustainable Agriculture Program. Project outreach was accomplished through the project workshops and the experiential training held at the Calhoun Field Laboratory in conjunction with the workshops. Furthermore, outreach will be ongoing as participants in the training are now better able to advise clients on organic production and certification.

Future Recommendations

Some participants indicated that they would prefer to attend workshops over 2-3 days to make optimum use of time away from their county offices. More comprehensive workshops to be held over 2-3 days will be organized. Extension travel budgets have been drastically reduced so additional resources will be needed to cover agent travel expenses. Participants also indicated a strong interest in learning more about farm equipment with applications for sustainable agriculture, and about the use of GPS and GIS technology for field mapping and pest management.