Mission Statement

Sustainable crop production is based on agro-ecological principles which promote economic, environmental, and social sustainability. With the growing interest in sustainable crop production including organic, locally grown food, and community supported agriculture (CSA), there is an increasing need for educating and training existing and new generation farmers about these production systems. The sustainable crop production program addresses the educational needs of the producers and extension educators involved in various aspects of sustainable crop production.

Current Activities

Recent presentations and publications have focused on the following areas:

- Designing sustainable cropping systems.
- Crop rotations for small scale farms
- Organic chile production.
- Peanut production in compost amended soils.
- Soil quality under organic crop production systems.
- Long-term cropping system effects on soil quality indicators.
- Nitrogen management in legume-oilseed crop based systems.
- Spatial variability of soil nitrogen in manure corn-alfalfa systems.

Accomplishments and Impacts

Several growers, educators and other stakeholders have been reached through the activities of the sustainable crop production extension program. Dissemination of information on sustainable crop production systems is helping new and existing farmers in the State understand and implement management practices to achieve their sustainability goals. Sustainable crop production extension program has enabled farmers to design systems for achieving optimum crop productivity and profitability, while reducing reliance on off-farm and synthetic inputs.

An applied research trial was initiated in Portales, NM to help peanut producers manage their soil fertility using organic amendments.

Teaching

Several undergraduate/graduate courses related to plant science and sustainable crop production are taught including:

Introductory Plant Sciences (AGRO/ HORT 100): Introduction to the physical, biological, and chemical principles underlying plant growth and development in managed ecosystems.

Principles of Crop Production (AGRO/ HORT 365): Basic principles of crop production including environmental and physiological factors limiting production, plant nutrition and soil science, soil-water management, cropping systems and management, pest management, and economic factors influencing crop production.

Sustainable Production of Agronomic Crops (AGRO 483): Characteristics and objectives of sustainable agricultural systems with application to the production, utilization, and improvement of cereal grain, fiber, forage and oilseed crops.

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Sustainable Crop Production

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