



Research & Education

Western SARE

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FARMER COLLABORATION MODEL

Objectives

- Pilot a participatory approach to learning and adaptation of novel farming systems strategies
- Evaluate nutrient (N) and pest management (flea beetle, wireworm, late blight) strategies

Research & Education Grant

Title: Integrated Soil and Crop Management for Organic Potato Production (*This handout shows the participatory process and impacts of the project.*)

Project Number: SW05-091

Principal Investigators: Lane Selman OSU Research Associate (541) 737-3483 Selman@hort.oregonstate.edu

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Mario Ambrosino, OSU Integrated Plant Protection Ctr. (541) 737-2638 ambrisim@science.oregonstate.edu

Farm Collaborators:

Gathering Together Farm Foundhorn Gardens Persephone Farm Sauvie Island Organics Fields Farm Ralph's Greenhouse Fry Family Farm Wintergreen Farm Blue Fox Farm 47th Avenue Farm Springhill Farm **Amount Funded:** \$196,067 Extend project findings to a larger audience of farmers

Methods

The project team included researchers, farmers and extension personnel. Farmers were involved in

all decision-making aspects of the project. Meeting facilitation was shared by all participants, and an open forum atmosphere encouraged information exchange. Throughout the project, farmers contributed information about how they grew potatoes, from varieties to hilling to enterprise budgets.

During winter meetings, the project team collaboratively:

- identified and prioritized the issues reducing potato production sustainability
- identified and discussed any known solutions
- generated hypotheses to be tested during the first



growing season in onfarm trials

- identified who would participate in on-farm trials
- developed the annual budget

During the two production seasons, on-farm and research station trials evaluated pest and nutrient management strategies.

During the second and final year winter meetings, the season's field data were shared and discussed.

Outcomes

At the project end, a detailed evaluation was sent to farmers asking them about 1)

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Western SARE, a USDA organization, funds grants for research and education that develop or promote some aspect of agricultural sustainability, which embraces

- profitable farms and ranches
- a healthy environment
- *strong families and communities.*

The Western Region, one of four SARE regions nationwide, is administered through Utah State University.

Western SARE: http://wsare.usu.edu

National SARE www.sare.org

FARMER COLLABORATION MODEL

their experiences as project participants, 2) the impact of the project on their knowledge of potato production and 3) how the project changed their potato production practices.

Half of the farmer collaborators had participated on a research project with the university and half had collaborated with other farmers in

the past. Participants noted that Ospud differed from these other projects in several ways: (1) more knowledge gained, (2) more collaborative, (3) less responsibility on the growers, (4) broader in scope, (5) longer period of time, (6) wide variety of university re-

sources, (7) more in depth, (8) more solid research, and (9) better organized and planned.

Farmers described their role in Ospud as a collaborator by providing directions, information and feedback to university researchers and fellow farmers as well as a facilitator and active member at planning meetings.

All farmer collaborators indicated that they agreed with the following statements:

- They would conduct an on-farm experiment with assistance from OSU.
- They would encourage another grower to participate in a project with OSU.
- Being part of the Ospud project made them a better manager of their potato crop.
- Interacting with other farmers helped them better understand their farm.
- An important factor in

the success of Ospud was bringing together farmer-derived and science-derived information.

- Science-based information is essential to improving organic systems.
- Interacting with researchers helped them better understand their farm.



When asked about their increase in knowledge directly resulting from this project, these practices surfaced as the **Top 13 positive changes:**

- 1. Ability to diagnose late blight in the field
- 2. Management of late blight through irrigation management
- Adjusting within- and between-row spacing based on seed size & type (cut or whole)
- 4. Storing seed at temperatures favoring rapid



emergence

- 5. Warming seed before cutting
- 6. Adjusting pre-plant application rates of broiler litter or high-N specialty products (seed meals, blood meal, fish fertilizer etc) to reflect their soil N mineralization potential & crop need
- 7. Accurately diagnosing flea beetle damage
- 8. Monitoring flea beetle damage in tubers
- Adjusting rotation to reduce flea beetle populations
- 10. Using cultural methods to manage flea beetle populations
- 11. Accurately diagnosing wireworm damage on potato tubers
- 12. Monitoring tuber wireworm damage
- Adapting rotation to reduce wireworm populations

Farmers overwhelmingly responded that the most valuable aspects of Ospud were (1) the relationship building with other growers and researchers, (2) the interaction and collaboration with university specialists, and (3) the broad, multi-discipline approach & detail on a single crop.

Outreach

Website: www.ospud.org eOrganic project workspace: eOrganic.info, Ospud Group

October 2006. Potato evaluation and tasting held at an Ospud farm in collaboration with the OSU potato breeding program. Fifty organic farmers, retailers, chefs, processors, and researchers drafted organic potato germplasm selection criteria and evaluated 25 potato cones for appearance, flavor, and texture.