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## 2010 Student Organic Farm

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## 2010 Student Organic Farm

#### **Abstract**

In 2010, the ISU Student Organic Farm (SOF) completed our fifth season at the ISU Horticulture Research Station. This was an exciting yet challenging year for the SOF as we began selling Community Supported Agriculture (CSA) shares for the first time. This was done in order to address some of the perennial problems identified by SOF participants, particularly the challenges of successfully managing an acre of organic vegetables on a voluntary basis. We learned a lot in this first year and overall the CSA was a great success! We had more committed involvement from participants, more food was produced and distributed to new outlets, and several improvements to infrastructure and soil fertility were made, including purchasing and installing drip irrigation and the planting of a winter cover crop.

#### Keywords

RFR A1069

#### Disciplines

Agricultural Science | Agriculture

### 2010 Student Organic Farm

#### **RFR-A1069**

Jennifer Vazquez, graduate student Student Organic Farm, co-chair

#### Introduction

In 2010, the ISU Student Organic Farm (SOF) completed our fifth season at the ISU Horticulture Research Station. This was an exciting yet challenging year for the SOF as we began selling Community Supported Agriculture (CSA) shares for the first time. This was done in order to address some of the perennial problems identified by SOF participants, particularly the challenges of successfully managing an acre of organic vegetables on a voluntary basis. We learned a lot in this first year and overall the CSA was a great success! We had more committed involvement from participants, more food was produced and distributed to new outlets, and several improvements to infrastructure and soil fertility were made, including purchasing and installing drip irrigation and the planting of a winter cover crop.

We also added two more 15 ft × 20 ft plots to the community garden for a total of 14 plots. All of these were rented to ISU community members who otherwise would not have had garden space. This included one plot, which was turned into a perennial bed—with asparagus, strawberries, and herbs—led by Ryann and B.J. Carey, two long-time plotters.

#### **CSA Structure**

Community Supported Agriculture (CSA) is a great way to invest in local farmers and get high quality produce in return. A flat rate is paid at the beginning of the season for one box of fresh produce, or "share," which is delivered weekly to a pick-up-point. In researching CSA availability in the area, we found that more people were on waiting lists for CSA shares than there were shares

available. We saw an opportunity to try a CSA model without competing with local farmers. We sold ten shares for \$400 each in return for 15 weeks of produce deliveries. This money was used to pay Kate Solko, a SOF club cochair, to manage the CSA operation. An additional ten shares were "sold" in exchange for 2.5 hours of labor a week during the growing season and these were called "work shares."

#### **Education and Outreach**

In addition to the work shareholders and community garden participants, many new and old volunteers also made appearances throughout the season, leaving with produce from the farm. Through the Women, Food, and Agriculture Network, Jess Soulis was able to intern with Kate, the CSA manager, for part of the summer. SOF participated in several field days, including a PFI field day with the Mustard Seed Farm and the annual Horticulture Research Station field day. Many different school groups toured the farm. A group of high school students led by Chantal Roberts, ISU sustainability coordinator, came to learn about local food production. Students in Sustainable Agriculture, Agronomy, and Global Resources classes also visited the farm as part of their coursework.

#### Farm Outlets

The SOF expanded its distribution this year to include more community members through the CSA. Produce was sold to Wheatsfield Grocery and to two local restaurants, The Café and Lucullan's. Through the Farm-to-ISU program, ISU Dining bought produce from the SOF as a CSA member. Tomatoes and other vegetables were enjoyed at a local wedding reception and at other similar events. One large pantry donation was made to Food at First, a free meal program located at the First United Methodist Church in Ames.

#### **Production**

One of the goals of the CSA was to track how much produce we were providing each week in order to ensure we offered \$400 worth of produce over the season. Though we haven't done a total price analysis, feedback from shareholders indicates they were happy with the quantity and quality of produce overall. Suggestions for the future include planting less kale, collards, and tomatoes.

#### **Growing Practices**

Planting began in the greenhouse in mid-March and work continued until mid-May. The annual spring/summer flux of student schedules made planting difficult as many students who had been participating in the spring left before the frost date. But everything was planted, including 1,000 onion sets, 150 ft row of tomato transplants, 150 ft row of herbs, 375 ft row of potatoes, 150 ft row of eggplants and peppers, and a variety of direct-seeded lettuces, root crops, beans and other vegetables. Native forbs and perennial herbs were also planted in a small area to provide some pollinator habitat and herbs for sale.

Row covers were used on most of the cucurbit crops to protect them from disease and insect damage. They were removed at flowering to ensure pollination of the crop. Black plastic was used to lower weed pressure and reduce maintenance needs of peppers, eggplants, tomatoes, sweet potatoes, squash, and all cucurbits. Drip-line irrigation was installed in every row. This was a major time saver during the few dry times of the year and particularly when crops were just transplanted or seeded. At the end of the season, the field was cleared and tilled, and winter rye was planted. This was a big step in improving soil fertility and in reducing weed pressure, something the SOF contends with perennially.

There were several crop failures due to high rainfall and flooding, causing the season to end sooner than anticipated. All the eggplants and potatoes were lost after one small round of harvest. High temperatures and dry conditions early in the season damaged lettuce and caused some transplant death. However, onions did very well overall, as did okra, leafy herbs, and many of the hardy greens and winter squashes. These crops were primarily planted on the highest part of the farm with natural slope and were less affected by flooding.

Research projects included an assessment of the potential for growing buckwheat for grain under high-density plantings. Nicholas Leete, now a graduate student in Sustainable Agriculture at ISU, also conducted an experiment on reduced tillage and living mulches in tomato and broccoli production at the SOF and two other farms in the area.

#### Outlook

The first year of the CSA was challenging but successful and SOF has decided to continue the CSA next year, selecting a new CSA coordinator by February. Suggestions for next year include activities and workshops to encourage more shareholders, volunteers, and garden plotter involvement. An "a la carte" system was used for share pick up and next year a set box will be provided to make pick up and clean up easier. Planting more salad greens early and re-seeding is another goal, as well as pruning fruit trees and removing the raspberries and possibly replanting. We also have many pieces of equipment that are in need of repair and we may need to purchase a new tiller. We are looking forward to next season and are very grateful for assistance and advice received from ISU staff Darrin VanderPlas, Peter Lawlor, Nick Howell, and many others. See you in 2011.

#### 2010 Officers

Kate Solko, co-chair Jennifer Vazquez, co-chair Theo Gunther, co-chair Jess Soulis, treasurer

Table 1. Summary of 2010 Student Organic Farm CSA produce totals for all shares.

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Produce	Total (lb)	Produce	Total (units)
Arugula	10.0	Cabbage	180.0
Asparagus	12.5	Celery root	20.0
Beans	67.2	Cucumbers	240.0
Beets	115.0	Daikon radish	40.0
Broccoli	23.0	Eggplant	7.0
Carrots	40.0	Fennel bulbs	20.0
Cauliflower	4.0	Leeks	80.0
Collard greens	55.0	Lettuce heads	50.0
Edamame	70.0	Onions, spring	240.0
Herb bouquet	30.0	Peppers, hot	170.0
Other herbs	48.0	Peppers, sweet	80.0
Kale	67.5	Radishes, bunch	60.0
Kohlrabi	100.0	Raspberries (½ pint)	8.0
Lettuce mix	10.0	Rutabaga	40.0
Melon	260.0	Strawberries (qt)	20.0
Okra	73.0	Turnips	130.0
Onions	570.0	Winter Squash	285.0
Peas, snap	15.0	Zucchini	215.0
Potatoes, red	200.0		
Rappini	10.0		
Rhubarb	7.0		
Spinach	15.0		
Sweet potatoes	200.0		
Swiss chard	20.0		
Tomatoes, cherry mix	30.0		
Tomatoes	162.5		