

Organic Seed Partnership
Plant Genetic Resources Unit
Terminal Report

Introduction

From support by an Reimbursable Cooperative Agreement with Cornell University; the Plant Genetic Resources Unit in Geneva, NY (PGRU), the Northeast Organic Farming Association of New York (NOFA –NY) and Cornell University’s Department of Plant Breeding and Genetics recognized the need for training opportunities in small-scale organic agriculture in the areas of plant breeding, seed production and on-farm organic trial evaluation. The Organic Seed Partnership (OSP) began in 2005. The activities of this project were centered on increasing the accessibility of new, publicly bred, open-pollinated and heirloom vegetable varieties to small-scale organic farming target populations. This nationwide program consists of the three leading agencies (Plant Genetic Resources Unit, Northeast Organic Farming Association-NY and Cornell) and five “hubs” across the country (Alcorn State University – Mississippi, New Mexico State University, Oregon State University, University of California at Davis, and West Virginia State University). The major areas for the OSP were a) on-farm trialing of new promising vegetable varieties on organic farms under organic conditions, b) participatory plant breeding involving organic farmers in the development of new vegetable varieties that are adapted to organic production systems, and c) the development of capabilities of organic farmers for small-scale production of seed for use in organic farming conditions.

The Plant Genetic Resources Unit (PGRU) took the lead role in developing the capacities of organic farmers for small-scale seed production of vegetable seed and other crops for use by organic farmers. Capacities for seed production by organic farmers were developed with a three

prong approach. First, training in seed production was provided through a number of courses. Also, there were a number of seed processing demonstrations at several general and organic specific farm events which included the NOFA summer conferences at Amherst, MA, the Common Ground Country Fair in Unity, Maine and Empire Farm Days in Seneca Falls, NY. However, the most important approach to developing these capabilities was through the conduct of numerous “community seed days” events which provided organic farmers access to small-scale seed processing equipment. The PGRU also took the responsibility for establishing and maintaining a website for dissemination of training and other information through the World Wide Web.

Website

The USDA - ARS, PGRU has been responsible for the creation and maintenance of the Organic Seed Partnership’s website since the OSP’s commencement in 2005. Teri Balch updated the website with current events as well as updates on breeding projects and trials when the information was provided by the appropriate partners. Material available on the current website include organic resources for farmers, breeding technique and seed cleaning videos, links to similar projects as well as much more. All materials are 508 compliant for accessibility to person with disabilities. Additional information will be added to the website once 2008 annual reports and terminal reports are reviewed and made available to PGRU in Adobe PDF form.

Since its commencement, the Organic Seed Partnership website has been hit more than 4,800 times in 81 different countries. In 2008, there were 985 unique visitors that used our website as a resource, slightly down from the 1,234 unique visitors in 2007. The website was viewed most frequently in July and August. This statistic is valuable in that critical updates should be in place before that time. The most frequent browser used is Internet Explorer (59%

down from 66% in 2007), followed by Firefox (26%) and Safari (15%). Windows remains the top operating system used to view the website at 96%. Google is by far the search engine preferred by most visitors at 89% usage. The Public Seed Initiative website, the Organic Seed Partnership's predecessor website remarkably has received over 11,000 hits and still averages greater than 50 hits per month.

Once final reports have been collected from the Organic Seed Partnership's main partners and hubs, they will be available for download from the website. In addition to final reports, vegetable variety trial results, farmer – led plant breeding efforts and seed production guidelines will be available to stakeholders.

Community Seed Days

As part of the Organic Seed Partnership, the USDA – ARS, Plant Genetic Resources Unit based in Geneva, NY organized and staffed the Mobile Seed Processing Unit which travels across the Northeast to organic farms and sets up demonstrations, seed processing workshops and community seed days for local small scale seed growers and organic seed companies. The Mobile Seed Processing Unit is a self contained 7 x 12 trailer holding several mechanical and manual seed processing mechanisms (belt thresher, air column, wet vegetable seed separator, clipper office tester, and much more). During the last 5 years, this Unit has travel to Maine, Connecticut, Massachusetts, New York, West Virginia, and Pennsylvania to provide training on seed production and to provide equipment for organic producers to process their seed.

Community Seed Days have been conducted to provide training in seed production for interested growers and to give seed producers the opportunity to use the equipment to clean their own seed, saving the farmer considerable time and effort. Once training is concluded, the seed processing equipment stays available to local growers at the hosting farm for up to a month.

Through these community seed days over 19 events were conducted that provided training, refresher training and most importantly, access to small scale seed processing equipment to approximately 400 persons.

The OSP provided support so that we could station some basic seed processing equipment including a belt thresher and seed blowers in Maine at Maine Cooperative Extension at Highmoor Farm in Monmouth, ME. This equipment was available for producers in Maine to use without having to move the Mobile Seed Unit such a long distance. At this time, the equipment is still available for organic farmers in Maine to use for seed processing.

Training Workshops

The Organic Seed Partnership was started with a workshop at PGRU in 2005. This involved taking three field tours given simultaneously August 23, 2005 at 10:30, 1:00 and 3:00. The tours consisted of in-depth discussions on seed regeneration, plant breeding and practical farmer knowledge to incorporate different crops into current farm operations. Each tour was led by one PGRU staff, one plant breeder, and one local farmer. Crops toured included the PGRU's heirloom variety tomatoes, tomatillos, winter squash, onions, celery, radish, and Chinese cabbage. In addition to the farm tours, a poster session was held in one of the barn's bays while barn tours also were given in-between each field tour to show characterization and evaluation of a current *Physalis* project. There were 49 people in attendance from all around the Northeast.

Training was also provided in a pre-conference workshop at the NOFA-NY annual winter conference in 2005 with several sections on seed-saving by PGRU staff and others. At this conference there was also training on accessing the national plant germplasm system through the genetic resources information network (GRIN). A similar pre-conference workshop was held at the 2006 NOFA annual winter conference. The Organic Seed Partnership hosted a grower's

breeding workshop from 9:00 AM – 5:00 PM entitled Crop Improvements on Your Farm and in Your Garden. The crop improvement workshop began with practical information from a diverse array of breeding experts and continued in to the afternoon with a round-robin of small learning groups that focused on more in-depth discussions of breeding projects and hands-on demonstrations of pollination techniques and seed production practices. You could also sign up for the 2006 Organic Seed Partnership’s vegetable variety trials, on-farm breeding projects, or for the mobile seed processing unit.

Larry Robertson (USDA - ARS, PGRU) participated as a panelist with Will Bonsall (Scatterseed Project), Peter Pringle (journalist and author of “Food, Inc.”), and Dr. Jane Rissler (Sr. Scientist, Union of Concerned Scientists) at the 2006 State of the Seed forum on Agriculture and Biodiversity. This forum focused on agriculture, biodiversity, seed saving and food security and ran from 9:00 AM until 12:00 PM. From 2:00 PM until 5:00 PM Will Bonsall and Larry Robertson gave a hands-on Seed Saving Workshop for all those interested in saving seed from garden produce.

Numerous training sections were also conducted as part of the community seed days discussed above. These were refresher courses for persons who had been trained in workshops conducted previously and also included initial training to people who had not been exposed to use of the equipment. One important aspect of the training was providing safety equipment for all to use who came to the equipment to process their seed.

Demonstrations

The Common Ground Country Fair (conducted by the Maine Organic Farmers and Gardeners Association at Unity, Maine) is a celebration of rural, sustainable living. Hundreds of vendors, exhibitors and demonstrators, roughly 1500 volunteers, and an estimated 60,000 fairgoers gather

annually in Unity, Maine to: share knowledge about sustainable living; eat delicious, organic, Maine-grown food; buy and sell beautiful Maine crafts and useful agricultural products; compete in various activities; dance; sing and have a great time. The Organic Seed Partnership's Mobile Seed Processing Unit was in attendance at the Common Ground Country Fair for five straight years (supported by both the OSP and the previous Public Seed Initiative) to demonstrate wet and dry seed processing and to clean local organic seed for small-scale seed companies and farmers. Each year the PGRU demonstrated seed cleaning and processing at the Common Ground Fair to over 1,000 visitors with numerous others visiting the displays to pick up literature, receive free heirloom seed, and to learn more about the OSP.

The Mobile seed Unit was also taken in 2005 and 2006 to the Northeast Farming Association Summer Conference in Amherst, MA with demonstrations of seed processing, as was conducted at the Common Ground Fair, were also provided to approximately 400 visitors per year. Again, numerous other visitors visited the displays to pick up literature, receive free heirloom seed, and to learn more about the OSP.