

2013 Utah Extension IPM and Sustainable Agriculture Mini-Grant Program

Title: A Guide to Common Organic Gardening Questions: Step by Step Recommendations for Organic Vegetable and Fruit Gardening in Northern Utah

Project Leader: Katie Wagner, Extension Assistant Professor of Horticulture Salt Lake County

Project Co-Leader: Shawn Olsen, Extension Professor of Agriculture Davis County

Collaborators: At least one specialist reviewer/contributor – Utah Pests Team member/s, Dr. Dan Drost, Dr. Jennifer Reeve and/or Mark Williams (University of Kentucky Extension)

Justification:

A recent Extension survey at the 2012 Salt Lake Tribune Home and Garden Festival found 92 % (n=522) of participants would like to reduce use or never use pesticides in their home fruit and vegetable garden. These results indicate a need for gardening information with a focus on reduced pesticide use. One way homeowners can reduce pesticide use is through integrated pest management (IPM) techniques. Cultural, mechanical and reduced risk pesticide control techniques equip homeowners with alternative options to using broad spectrum pesticides. Much Extension information exists on IPM control of common pests and diseases, notably through the Utah Pests website and IPM advisories. It is the project leader's personal experience that many calls into the Extension office are from homeowners with very limited gardening experience. One phone call can easily turn into a 45 minute conversation and Extension faculty sometimes feel that only a portion of the conversation was actually absorbed by the caller. It seems that some callers do not know where to start looking or which questions to ask. They may inquire about a specific pest or disease, however, their problem is often due to a lack of basic growing knowledge such as correct soil preparation, irrigation and fertilization practices. Such callers benefit from referencing Extension publications after the initial call.

Extension guides callers through their questions, typically by emailing fact sheet links to individuals. This is a time consuming process. Personal experience has found that callers sometimes experience difficulties navigating online resources on their own. For example, a caller may discover that they have blossom end rot (Utah Pests advisory) on their tomatoes and read that they should adjust their watering practices to reduce incidence of the problem but have follow-up questions on correct irrigation delivery and frequency. Therefore, control recommendations are often impacted by other gardening considerations. Furthermore, the same survey found that 67% of participants responded they choose to access Extension information from online publications compared to 58% that prefer to email a knowledgeable gardener and 32% that prefer to call-in their question through a phone helpline. These results reflect the survey participant preference for Extension publications over direct contact resources.

Based on the survey results and experiences mentioned above, there is need for an Extension manual to walk readers through basic vegetable and fruit gardening using research-supported, organic gardening practices and integrated pest management techniques. 'A Guide to Common Organic

Gardening Questions' would fill this need by introducing readers to variety of organic gardening considerations, such as site selection, soil preparation, weed control, fertilization, irrigation and IPM pest and disease control techniques. The intent of the manual is not to provide readers with comprehensive information on these topics, but rather provide an overview of basic information and direct readers to other online resources, such as fact sheets and the Utah Pests website, where readers can easily access additional information. Therefore, this manual would provide beginning gardeners a starting point to help them better navigate the basics of organic vegetable and fruit gardening and IPM resources. This guide would also provide Master Gardener volunteers a valuable resource to reference as they educate the public on sustainable agriculture subjects at farmer's markets, community gardens, and the future USU Extension Demonstration Teaching Garden at the historic Wheeler Farm in Salt Lake County.

The project leader and project co-leader are currently completing a similar manual on general vegetable and fruit gardening (see attached). The general gardening manual was reviewed by Dr. Dan Drost, USU Vegetable Production Specialist, and Mike Pace, USU Extension Agriculture/4-H Agent Box Elder County. The organic gardening manual would use the same formatting as the general guide with modified text. Much of the same photography purchased for the general guide would also be available for the organic guide. It should be clarified why the use of the term 'organic' was selected over other terms such as 'sustainable' or 'IPM' in the title. Although these terms are a widely recognized throughout the Extension community, the general public tends to be most familiar with the term 'organic'. It is the project leader's hope that this manual will serve as an ideal way to introduce new readers to the basics of IPM and sustainable agriculture concepts.

Project Objectives:

- Author "A Guide to Common Organic Gardening Questions: Step by Step Recommendations for Organic Vegetable and Fruit Gardening in Northern Utah" with the project co-leader;
- Attend Dr. Jennifer Reeve's 'Organic Production Workshop' at the 2013 Urban and Small Farms Conference for ideas and current information on organic gardening information;
- Author additional reference fact sheets as needed;
- Work with at least one specialist to review and contribute to manual content;
- Work with USU Marketing to format and identify photography for the manual;
- Work with USU Marketing to print initial copies of the manual;
- Disseminate printed copies to community garden managers through the Wasatch Community Garden network and the Salt Lake County Urban Farming Initiative as well as Master Gardener volunteers who educate the public on organic gardening topics.
- Adhere to project expectations defined in the call for proposals.

Procedures:

Through completion of the general gardening guide in 2012, much of the groundwork is in place for completion of the organic gardening guide in 2013. The project leader would work off the same format as the general guide and adjust sections headings and text to focus of organic gardening preferences as opposed to more conventional gardening techniques. The format and photography theme for both guides is 'garden chic'. Images are intended to be informative and draw reader interest to the text. The target audience would be new gardeners, many of which have young families. Text would be authored by the project leader and project co-leader. At least one specialist would review manual content. Several specialists would be invited to contribute to manual content. USU Marketing would oversee manual formatting, editing and printing. Printed copies would be disseminated to community garden managers through existing partnerships with Wasatch Community Gardens (Susan Finlayson, Network Coordinator) and Salt Lake County Urban Farming Initiative (Julie Peck-Dabling, Salt Lake County Open Space and Urban Farming Coordinator). Master Gardeners who volunteer at the future USU Extension Demonstration Teaching Garden and deliver educational classes at community gardens across the county would have access to a copy as a reference. Eventually it is the project leader's goal to sell the manual through USU Extension offices located throughout the state, much as the fruit and vegetable guides are currently sold.

Educational Products:

The primary educational product would be the manual itself. Additional products would include reference fact sheets currently not in existence through the USU Extension publication library. Additionally, the guide would provide a structure for 'Organic Gardening Classes' delivered to the public at Wheeler Farm throughout the 2013 growing season. Results from project evaluation forms passed out at classes and to manual recipients would be submitted to a peer referred journal. Community garden managers and Master Gardeners referencing the guide for educational classes would also be asked to evaluate the manual.

The project leader and co-leader would work with USU Marketing to print copies of the manual to sell in County Extension offices throughout the state.

Project results would be presented at a national or regional meeting and at a 2014 USU Extension Annual Conference 'best management practices' session.

Evaluation:

Impact of the guide would primarily be evaluated through community garden managers and Master Gardeners referencing the guide. Recipients of the guide would be asked to complete a WSARE project evaluation form and organic gardening class participants would also be evaluated. Ultimately, impact of the manual would be evaluated quantitatively through the number manuals sold to the public.

Project Timeline:

Task	Jan - Mar	Apr-Jun	Jul-Sept	Oct-Dec	Responsible
2013					
Author organic gardening manual		■ ■ ■ ■			Wagner, Olsen
Attend organic gardening workshop	■				Wagner
Author reference factsheets		■ ■ ■ ■			Wagner, Olsen
Work with specialists on review			■ ■ ■		Wagner, Specialists
Work with marketing on formatting and photos			■ ■		Wagner, Marketing
Work with marketing on printing				■	Wagner, Marketing
Structure organic gardening classes off manual content & evaluate participants		■ ■ ■ ■	■ ■ ■ ■		Wagner
Disseminate printed copies and collect evaluations				■ ■	Wagner
2014					
Submit final report		■			Wagner
Present results at meetings	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■				Wagner, Olsen
Submit results to journal		■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■			Wagner, Olsen

Budget: Total \$3000

USU Marketing formatting and editing: \$1200

Purchase of professional photography (i-stock): \$300

Cost of initial printing: estimated (from general gardening manual) \$15 each (100 copies) = \$1500