

Final Report

Project Title: Preventing Unnecessary Pesticide Applications by Correctly Identifying Biotic Pests in Woody Ornamentals

Project Location: Davis and Weber Counties

Total Grant Award: \$1,400

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Project Cooperators: (Reviewers)

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Other Cooperators:

Utah State Pest Control Association
Utah Botanical Center
Ogden Botanic Gardens
Weber County and Cities
Davis County and Cities
Davis County Master Gardeners
Weber County Master Gardeners

Objectives:

The main objective is to help horticulture professionals, PCO's, and Master Gardeners properly identify the most common insects and diseases and know the options available for their control. Through proper identification and an understanding of the pest, they can determine what, if any, control methods should be implemented.

However, the underlying motive is to get people to stop and think before they automatically grab a can of pesticide when they see a problem pest. The idea is to get them to first properly identify the problem before they ever try to treat it. It sounds odd, but many people start to spray before they even know for sure what the problem is. Not only homeowners, but many professionals never take the time to properly ID most pests. By training them to first look for abiotic problems, and then common insects and diseases, they should start to think before they start to spray. And if they stop to first properly identify, perhaps the next step is to get them to look at other options besides a spray. Change is a slow process, but this is a good way to get them pointed in the right direction.

The different ways we plan to achieve these objectives are:

1. Develop two new posters and fact sheets to complement those developed in 2008 (Top Ten Abiotic Diseases of Woody Plants) [This fact sheet is currently under peer review]: Namely "The Top Ten Insect Pests of Woody Plants" and "The Top Ten Diseases of Woody Plants". The posters and fact sheets would be in the same format as the previous one. The fact sheets would be sent through the peer review process for publication. These posters would be on the walls of county buildings hopefully reminding those who see them to first identify the problem before treatment considerations are made.

2. Disseminate the posters to all city maintenance professionals in Davis and Weber Counties and all interested Extension Agents. Make the fact sheets available to the public through the Extension offices and the Ogden Botanical Gardens and Utah Botanical Center. They will also be advertised through the websites of both gardens.
3. Train Master Gardeners to properly identify the 10 most common insect and disease problems in Northern Utah. They in turn will be better equipped to help homeowners.
4. Present the information to PCO operators at their annual winter meetings.
5. Present the information to Master Gardeners in both Davis and Weber Counties.
6. Include the information in the PowerPoint developed in 2008 to complete the educational curriculum package. This material will be in a format that can easily be adapted and taught by Extension Agents and other professionals.

This training will focus on Davis and Weber Counties, but it will be applicable to the rest of Utah and other intermountain areas. The focus of this program is two-fold. It is a diagnostic training program for professionals to reduce pesticide usage on woody landscape plants and can also be utilized to teach Master Gardeners and homeowners. The project will develop a training curriculum for use by Master Gardeners in the above-mentioned counties and additional counties throughout the state. It will also include a curriculum that they can use to train others.

Providing Master Gardeners with initial diagnostic training and supplying them with resource materials to educate others will provide a critical nucleus of well-trained people to help answer questions from the public.

Summary and Results of Projects:

1. Posters of The Top Ten Insect Pests of Woody Ornamentals and The Top Ten Pathogenic Diseases of Woody Ornamentals were developed for the training of horticulture professionals, PCO's, and Master Gardener volunteers. These posters played an intricate role in providing visual support in educating clientele concerning the most common problems associated with woody ornamental plants. Due to printing costs, a digital file copy (pdf) of the Posters (including last year's Top 10 Abiotic Disorders) was emailed to USU County Agents throughout the state for use in their offices as well as with their own clientele. A power point presentations for each Top 10 poster was also been developed and will be made available through the IPM website. The posters have also been formatted and submitted to the Utah State University Fact Sheet peer review process (as of November 2009). The posters have also been adopted and/or used by Extension Agents from three other states (Idaho, Ohio and Oregon).
2. 60 posters, consisting of the Top 10 pathogenic diseases and the Top 10 Insect Pests, have been printed for each of the 30 different cities of Davis and Weber Counties. The posters will be distributed to each city as part of a bi-annual Urban Forestry Municipal Training to be held spring of 2010. These two posters will compliment the Top 10 Abiotic poster presented to the cities at the training in 2008. The posters will be displayed in the shops and work places of the parks and recreation departments of the cities as a visual reference for the workers.
3. Two presentations were given at the Utah Pest and Lawn Care Association's annual winter meeting on February 12th and 13th in Salt Lake City, Utah. The presentations covered the top 10 most common pathogenic diseases and insect pests associated with woody ornamentals. 115 individual PCO operators were in attendance.
4. An eight week training course was developed focusing on the most consistently posed diagnostic questions and problems received in the Extension office. This training course was taught to

Master Gardeners from Davis County from October 14th – December 18th. The Top 10 training posters, focusing on woody ornamentals, provided the vast majority of the curriculum for the training and were a great visual resource according to the participants. An evaluation of the training was conducted from class participants. Using a scale of 5 being exceptional and 1 being poor, participants ranked the In Depth Diagnostic Training as a 4.8. Some comments include; “The program is excellent”, “Great visuals” and “Best Master Gardener Class ever”. This training will be offered to the Weber County Master Gardeners in the spring of 2010.

5. After seeing the set of Top 10 training posters at the Davis County Extension Office, the Davis County Commissioners were desirous to provide funding of \$700 for the express purpose of printing 4 additional sets of the Top 10 training posters for the local nurseries and garden centers to display for the public.

6. See email attachments for the following:

Fact Sheets (under peer review):

Top 10 Abiotic Disorders and Cultural Problems of Woody Ornamentals

Top 10 Pathogenic Diseases of Woody Ornamentals

Top 10 Insect Pests of Woody Ornamentals

Training Posters:

Top 10 Abiotic Disorders and Cultural Problems of Woody Ornamentals

Top 10 Pathogenic Diseases of Woody Ornamentals

Top 10 Insect Pests of Woody Ornamentals

Power Point Presentations:

Top 10 Pathogenic Diseases of Woody Ornamentals

Top 10 Insect Pests of Woody Ornamentals

(You should already have the Abiotic presentation)