

Master Gardener Plant Health and Diagnostics Educator Specialist Training

Date: February 8 and 9, 2018

The Gonzales Master Gardeners are pleased to host the first Master Gardener Plant Health and Diagnostics Educator Specialist training program. Chaired by Dr. Kevin Ong, Director of The Texas Plant Disease Diagnostic Laboratory and Professor in the Department of Plant Pathology & Microbiology, Texas A&M University, the course will offer an intensive training with a broad overview of plant health and diagnostics.

Course Description: The Plant Health & Diagnostics Education Specialist course is designed to provide Master Gardener Specialist candidates with a science-based understanding into issues of plant health and management strategies. Emphasis will be focused on environmental factors and organisms that cause disease in plants, the mechanisms by which these factors induce disease in plants, and the methods of preventing or controlling disease and reducing the damage it causes. Trainers for the program are specialists in the fields of Plant Pathology and Entomology. This course is recommended for Master Gardeners who desire to increase their understanding of how scientific research and knowledge informs plant health management recommendations and would use this knowledge to provide science based educational support and assistance on this topic to their communities in support of Texas A&M AgriLife Extension Service outreach education.

Participants will be required to complete a minimum of 20 service hours-educational outreach activities to qualify as a certified Master Gardener Plant Health & Diagnostic Education Specialist.

The course will be taught over two weekdays (Thursday and Friday) and includes 16 hours of classroom instruction.

Course Fee: \$185. Master Gardener specialists who successfully complete their volunteer service component and become certified as Specialists are eligible for a \$50 rebate of the course fee through the Texas Master Gardener Association.

Your course fee includes all course materials, lunch on both days and dinner Thursday night.

Accommodations: The Gonzales Master Gardeners have made special arrangements with local hotels. Be sure to mention the Master Gardeners:

The La Quinta in Gonzales (located on Highway 183) is offering a special room rate of \$67 per night (plus taxes) for a standard room (two queens or a king) with a hot breakfast included. Visit their website for more details.

The Dilworth Inn in downtown Gonzales is offering a 10% discount off standard room rates. Room rates vary by room. A continental breakfast is included. Visit their website for more details

Gonzales also offers several Bed and Breakfast Inns. The St. James Inn is offering a special rate \$110 for two or \$95 for one person per room. Also consider two other local favorites: Belle Oaks Inn and Boothe House. Contact these facilities directly for more information.

Registration:

Registration deadline for the course will be January 16, 2018. Participation will be limited to 28 participants. Please limit applications to 2 participants per Master Gardener Association. (Additional spaces may be available shortly before the application deadline).

Syllabus

Plant Health and Diagnostics Educator Specialist Training

Date: February 8-9, 2018

Hosted by: Gonzales Master Gardeners, Gonzales, Texas

Day 1

Morning Sessions

Introduction Topics

REVIEW (or INTRODUCTION) to DISEASE DEVELOPMENT

- Understanding the disease development process
- Understanding disease cycle and how to utilize information in a disease cycle to understand pathogen better
- Understanding differences between biological and abiotic disease systems, and its implications in interpretation.
 - Epidemiology (understanding transmission: impacts of vectors) – with focus on insect vectors.

Afternoon Session

Understanding the DIAGNOSTIC APPROACH

- What needs to be considered when doing diagnostics.
- How to approach diagnostics in a logical fashion
- How to utilize information for diagnostics (educated guess)
- How to move beyond the diagnostics.

DETAILS/RECOGNITIONS OF DISEASE FACTORS

ABIOTIC

- Chemicals
- Environmental factors/issues
- Physiological & Physical factors
 - Systems and Cultural Practices that impact plant success
 - Environmental Issues
 - Recognition and Diagnosis of environmental illness

Syllabus

Continued

Day 2

Morning Session

BIOLOGY – types of microorganisms that are plant pathogens

- FUNGI & FUNGAL-LIKE ORGANISMS (eg. OOMYCETE)
- BACTERIA
- VIRUS
- NEMATODES
- PARASITIC PLANTS

Afternoon Session

PUTTING IT ALL TOGETHER

LOOK AT HOLISTIC APPROACH TO PLANT HEALTH (with specific focus on disease systems/issues)

- DISEASE CONTROL PRINCIPLES
 - RESISTANCE/INHERENT PLANT TRAITS (aka plant selection)
 - EXCLUSION, PROTECTION, ERADICATION & AVOIDANCE (utilizing natural and non-natural approaches to encourage plant health)
 - THERAPY (strategies for mitigation of disease problem – primarily post diagnostic situations).

GENERAL UNDERSTANDING FOR SCIENCE, RESEARCH and IMPLEMENTATION OF RESEARCH DATA

- Scientific versus Anecdotal
- Implications of scientific rigors for vetted information
- What is fact, fiction, myth and urban legend.

DISCUSSION: Role as a Master Gardener Specialist – Plant Health & Diagnostic Education Specialist

- Harmony with mission of Texas A&M AgriLife Extension Service to deliver science based information
- How to continue to pursue (and stay current) on plant health issues research, applications and legitimate recommendation/suggestion for plant health management.

APPLICATION

Master Gardener Plant Health and Diagnostics Educator Specialist

Course will be held @ 623 North Fair Street in Gonzales, TX 78629

Program Dates: February 8-9, 2018

Name: _____

Address: _____

Phone #: _____

Email: _____

Master Gardener Association: _____

County: _____

Course Fee: \$185 Course fee must be paid at time of application to reserve your space. **Please make checks payable to Gonzales Master Gardeners.**

Master Gardeners should make their own hotel reservations by contacting the accommodation of their choice. Mention the Gonzales Master Gardeners at the time of your reservation to receive special pricing. If you have special needs that we should be aware of, please describe below:

Send Application and Course Fee to:

Gonzales County Extension Office

1709 E Sara DeWitt

Gonzales, Texas 78629

(830) 672-8531

For more information, call the Texas A&M AgriLife Extension-Gonzales County Office or Master Gardener Gail Johnson (830) 491-1996.