# PESTICIDE RECERTIFICATION

A (CORE) & E (TURF AND ORNAMENTALS)

November 18, 2011 | 9:00am-3:45pm

University of Minnesota Continuing Education Center, St. Paul Campus





This workshop meets MDA's pesticide applicator recertification requirements for Categories A (Core) and E (Turf & Ornamentals).

This is your last chance to recertify in 2011. Register now before the class fills up! SPACE IS LIMITED!

#### Schedule

Session I

9:00am—9:45am: MDA's Pesticide Applicator Licensing, Kay Sargent and Stephanie Ende, ACI

Session II

9:45am—10:30am: Pesticides and Skin, Dean Herzfeld

10:30am-10:45am: Break

Session III (Concurrent Sessions—choose 1)

10:45am—11:45am: Turf: Developing Disease-Resistant

Turfgrasses, Eric Watkins

10:45am—11:45am: Woodies: EAB Update, Jeff Hahn

11:45am—12:30pm: Lunch

Session IV (Concurrent Sessions—choose 1)

12:30pm—1:30pm: Turf: Current Topics in Landscape

Turfgrass Pests, Bob Mugaas

12:30pm—1:30pm: Woodies: Beyond the Emerald Ash Borer:

Replacement Trees for Ash, Kathy Zuzek

Session V (Concurrent Sessions—choose 1)

1:35pm—2:35pm: Turf: Sustainable Landscape Turfgrass

Management, Bob Mugaas

1:35pm—2:35pm: Woodies: Tree and Herbaceous Diseases on

the Horizon, Michelle Grabowski

2:35pm-2:45pm: Break

Session VI

2:45pm—3:45pm: Unintended Environmental Consequences of Herbicides to Landscape Trees & Shrubs, Mark Stennes

### **Session Descriptions**

#### Session I

#### MDA's Pesticide Applicator Licensing

Minnesota Department of Agriculture (MDA) will review the basics of pesticide application licensing, certification, recordkeeping and posting turf applications.



#### Session II

#### Pesticides and Skin

This presentation will provide a review of what we know from recent pesticide exposure and health research and how that research is shaping current thinking on safety recommendations for pesticide applicators. The concept of "universal precautions" will be discussed and how it has the potential to reduce overall exposure for pesticide applicators.

### <u>Session III (Concurrent Sessions—choose 1)</u> Turf: Developing Disease-Resistant Turfgrasses

Managing diseases in turf is one of the greatest challenges faced by a turfgrass manager. In recent years, there has been increased effort in the area of breeding for disease resistance and the result has been a number of disease-resistant turfgrass cultivars. This seminar will describe how plant breeders develop these disease-resistant turfgrasses. We will also discuss recent disease data from turfgrass cultivar trials and how to find useful disease resistance data.

#### **Woody Plants: EAB Update**

We will take a short look at the history of emerald ash borer (EAB) in the U.S. and in Minnesota, especially what is new in 2011. We will also look at what is being done in Minnesota to slow EAB down as well as the management options that are available.

## Session IV (Concurrent Sessions—choose 1) Turf: Current Topics in Landscape Turfgrass Pests

This session will take a look back at some of the more troublesome landscape turfgrass pests and situations occurring over the last couple of years. At least one of the specific topics will include a review of several winter related problems and injury. Other items will be added as situations arise during the growing season. Where appropriate, prevention and/or control practices related to these situations will be addressed.

#### Beyond the EAB: Replacement Trees for Ash

Now that the emerald ash borer has been found in Minnesota, owners of private and public properties are looking for replacement trees as ash are removed. There are many other tree species without serious pest issues that are hardy, provide beauty in our landscapes, and can be used in place of ash trees. This seminar will introduce you to many of the species that can be used to replace ash and diversify our urban forests.

#### <u>Session V (Concurrent Sessions—choose 1)</u> Turf: Sustainable Landscape Turfgrass Management

When it comes to managing our landscape turfgrass areas, the cultural practices we employ can play a significant role in the development and/or spread of particular pest problems. This session will address a number of cultural practices commonly used in landscape turfgrass management and how they can both impact the occurrence and severity of pest problems when carried out poorly or improperly. Common pest problems discussed will include insects, diseases and weeds. Make sure your cultural practices are as finely tuned as you can make them and learn how that contributes to a more sustainable turfgrass management program.

#### Woody Plants: Tree and Herbaceous Diseases on the Horizon

Grabowski will discuss some of the diseases anticipated in 2012 and beyond.

#### Session VI

## Unintended Environmental Consequences of Herbicides to Landscape Trees and Shrubs

Frequently, herbicides are used to control weeds in and around our landscape trees and shrubs. However, even correctly applied herbicides can have unintended consequences for those plants that range from minor foliar damage to plant death. This session will focus on how some of these problems can occur and the symptoms associated with a few of the more common herbicides

### Speaker Biographies

Michelle Grabowski completed a BS in botany and plant pathology at Michigan State University in 1998, and a master's degree in plant pathology at North Carolina State University in 2001. Michelle began working as a regional extension educator for the University of Minnesota in the spring of 2006. Her work focuses on common diseases of plants grown in landscapes, yards and gardens.



Jeff Hahn has a master's degree in entomology and has worked for the University of Minnesota Extension for 26 years. He specializes in urban insects, especially those found in landscapes, gardens, and buildings. He communicates insect information through publications,

newsletters, and educational programs to many audiences, including professional applicators, master gardeners, and extension staff.



**Dean Herzfeld** has nearly 25 years of experience in developing education programs for users of pesticides. Dean has a BS in integrated pest management, a MS in plant pathology and Ph.D. in designing non-formal adult education programs. In 2009, he was

elected president of the American Association of Pesticide Safety Educators and has been involved in other national and regional organizations related to pesticides. Dr. Herzfeld is also currently involved in educational outreach in the areas of water quality, invasive species, and integrated pest management for Master Gardeners in Minnesota and the Midwest.



**Bob Mugaas** is an extension educator in horticulture with the University of Minnesota Extension for the past 33 years. He has both his Bachelor's and Master's degrees in horticulture from the University of Minnesota. His primary area of emphasis during most of that time has been in turfgrass science and management.

Bob is actively involved in education about lawn issues such as low input lawn care, environmentally responsible lawn care, low maintenance turfgrass species and cultivars, chemical and non-chemical turfgrass weed control, and lawn care for protecting water quality



**Kay Sargent** is an agricultural advisor with MDA's Licensing and Certification Unit. She works with the UMN and sponsoring organizations, such as MNLA and MTGF, as they

develop Pesticide Applicator Recertification Workshops. Kay holds a BS in horticulture, a MS in environmental safety and health, working for many years at the UMN's experiment station in Grand Rapids.



Mark Stennes received his Bachelor of Science degree in Forest Science ('75) and his Master of Science in Plant Pathology ('81) from the University of Minnesota. His research concentrated on the practical management of Dutch elm disease with systemic fungicides. Mark has been practicing commercial arboriculture for

31 years. He works at S & S Tree Specialists as an arborist, plant pathologist, educator, customer care representative, salesman, liaison with professional associations and source of technical information. He served as president of the Minnesota Chapter of the International Society of Arboriculture (2000-2001) and as president of the Minnesota Turf and Grounds Foundation (2006-2007). Mark maintains a strong interest in plant pathology and the ecology of plant communities.



*Eric Watkins* is an assistant professor in the Department of Horticultural Science at the University of Minnesota. Eric received his Ph.D. in plant biology from Rutgers University. His research focuses on the development of lowinput turfgrass cultivars for use in cold climates. Research activities involve germplasm

improvement of several cool-season turfgrass species including tall fescue, Kentucky bluegrass, and perennial ryegrass. A major focus of his research is breeding native grasses such as prairie junegrass (Koeleria macrantha) for use as low-input turf. He is also involved with turfgrass cultivar evaluation and other turfgrass science research. Eric teaches four undergraduate turfgrass science courses.



Kathy Zuzek is an Extension Educator with expertise in trees and shrubs. Her training is in forestry science and in plant breeding and genetics. Prior to joining the University of Minnesota Extension horticultural team, she worked in forest pathology research followed by 19 years as a plant breeder in the University of

Minnesota's woody ornamental research program that has provided northern gardeners with the Northern Accents™ roses, the "Lights" series of azaleas, Garden Glow™ dogwood, Firefall™ Freeman maple, and other shrub and tree cultivars.

REGISTRATION FORMS AVAILABLE AT: www.mtgf.org AND www.mgcsa.org