

## 2003 Grand Rapids summer turf and landscape field day

### *Author*

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Horticulture Educator

### *Industry partner*

Association of Grand Rapids Landscape Professionals

### *Significance*

The annual summer field day provides hands-on training that addresses basic landscape management issues. The program follows an intensive winter lecture series and often times, the summer topics allow for hands-on follow-up to winter lectures. These programs are held yearly; topics change based upon current issues affecting the green industry.

### *2003 Program description*

#### **I. Good Nutrients Gone Bad-When Does Phosphorous Become a Problem?**

Phosphorous loading has become a significant issue in most watershed environments of West Michigan. Tom Smith, executive director of the Michigan Turfgrass Foundation, shared the basics of phosphorous movement in urban landscape management, the influence of local legislation in this issue and the efforts of the MTF and MSU to be proactively engaged.

#### **II. Professional Etiquette on Your Customer's Home Front**

How does your workforce represent the standards

and values of your company in public? All too often, employees are sending messages about quality to your customer with unwritten signals. Rob McCartney, director of horticulture at the Frederik Meijer Gardens and Sculpture Park, discussed his many years of customer service experience at a major theme park during this presentation. Participants came away with positive ways to be in tune with what the client thinks is important.


#### **III. Take the Guesswork out of Liquid Calibration!**

Calibrating hand held sprayers can be tricky and poorly calibrated equipment can lead to over or under applying pesticides. Reading the label, understanding how to mix products, and handling equipment properly to take the guesswork out of calibration were presented by Tony VanDorp, sales consultant for BLESCO, and Dirk Bakhuyzen of PROCARE.

#### **IV. Small Engine Trouble Shooting**

Is your lawn mower smokin'? Is your tailpipe draggin' you down? Eric Ozolins, service manager for Kubota of West Michigan led participants through some on-the-spot trouble shooting tips to save time and headaches with equipment on the job.

#### **V. Walk on the Wild Side**

Calvin College's campus was the location for discussion of current turf problems while exploring solutions that were environmentally sound and cost effective. Participants shared their experiences with workshop leaders, Kevin Timmer of Tender Lawn Care and Jim Zylstra of Tuff Turf-MoleBusters. 

## Emerald ash borer volunteer education

### *Team members*

Colleen Boyer<sup>1</sup>, Bob Bricault<sup>1</sup>, Rebecca Finneran<sup>1</sup>, Gary Heilig<sup>1</sup>, Terry McLean<sup>1</sup>, George Silva<sup>1</sup>, Dave Smitley<sup>1,2</sup>, Diane Brown Rytlewski<sup>1,2</sup>, Mary Wilson<sup>1</sup>  
<sup>1</sup> MSU Extension; <sup>2</sup> MSU Department of Entomology


### *Michigan Department of Agriculture staff*

Kendra Anderson, John Bedford

On October 2 more than 100 Master Gardeners and staff from Clinton, Eaton, Genesee, Ingham, Kent, Muskegon, Shiawassee, Oakland and Ottawa counties participated in a bus tour and emerald ash borer (EAB) identification training in Oakland County. Following a presentation by Dr. David Smitley on EAB biology, pest distribution, and research efforts and an update of regulatory efforts by MDA staff, Master Gardeners received "hands on" experience in

searching for EAB infestation of park trees.

Participants eagerly dug out many larvae for their collection bottles. The samples will be very useful for programs and public displays on EAB. (Photo, color insert, page 1A.)

The purpose of training sessions like this one is to prepare Master Gardeners to assist their local agents with activities related to EAB outreach efforts such as staffing hotlines, door to door delivery of information and to answer homeowner questions with the most up-to-date information available, write newsletter articles, and assist with educational programs and projects. They will also watch for suspected new infestations as they work in their respective communities on various volunteer projects. Each participant received a packet containing a variety of bulletins on the subject and a chisel to use for peeling off ash bark, to look for larvae. 

# Ornamental plant industries education in Southeast Michigan

### **Organizer**

Mary A. Wilson, Genesee County Horticulture Agent

### **Funding**

Program registrations

### **Significance**

Solving landscape ornamental and turfgrass problems is paramount to business success within the ornamental plant industries. However, the amount of knowledge to be “mastered” is extensive plus the landscape is a dynamic ecosystem. The environment, plants, pests and management techniques are constantly changing. Businesses must stay up-to-date to remain competitive.

The industry is also challenged by the lack of trained pesticide applicators due to high employee turnover rate within the industry.

### **Program goals**

1. Provide identification and environmentally sound management information on turfgrass and ornamental plant pests to industry professionals.
2. Train industry professionals to become certified pesticide applicators.
3. Provide certified pesticide applicators with CEUs on current issues relating to environmental protection, personal safety, regulations and pest management.

### **Programs**

**Pest Management** – The annual, one-day “Pest Management in the Landscape: Turf and Ornamentals” seminar was held in Flint on February 4, 2003. Collaborators were Dr. David Smitley, MSU Entomology Specialist; David Gilstrap, MSU Turfgrass Specialist; Dr. David Roberts, MSUE District Horticulture Agent; and Diane Brown-Rytlewski, MSU IPM Program, Entomology. There were 144 industry professionals in attendance, and 110 pesticide applicators obtained four recertification credits for 3b (ornamentals), 3a (turfgrass), or core.

**Turfgrass Education** – A one-day “Turfgrass Short Course” in early March focused on the dirty truth of soils, grub wars and other turf battles, weedy matters and the fate of phosphorus. Collaborators were Dr. James Crum and Ron Calhoun, MSU Turfgrass Specialists; Terry Davis, MSU Entomology Research Assistant; and Greg Lyman, MSU Turfgrass Environmental Stewardship Program Manager. There were 145 industry professionals

trained at this short course, and 97 pesticide applicators were granted four recertification credits in category 3a (turfgrass).

**Pesticide Applicator Training** – A three-day training series was held in March in Flint for ornamental plant industry professionals. Resource people were Bob Bricault, Washtenaw County MSUE Horticulture Agent; Darren Bagley, Genesee County MSUE Natural Resources Agent; and Mary Wilson, Genesee County MSUE Horticulture Agent. There were 73 professionals trained during this program, and 54 participants took the Michigan Department of Agriculture pesticide applicator exams following the training sessions. Also, 19 currently certified pesticide applicators were granted 2 recertification credits for each session they attended.

### **Impacts**

**Pest Management in the Landscape** – A formal evaluation was distributed with 73 completed forms returned. The program impacts were: 97% gained knowledge that will improve profitability, 91% plan to change pest management practices, 97% gained knowledge to help control or explain new pest problems and 100% gained knowledge on pesticide selection for both pest control and environmental concerns. Participants were also surveyed for their experience level. Of the participants, 58% have been in the industry 10 years or less with 26% for less than 5 years.

**Turfgrass Short Course** – A formal evaluation with 48 responses indicated: 98% plan to change cultural practices to improve turfgrass health, 100% gained knowledge to improve turfgrass health and maintain/improve environmental quality, 98% indicated they can now implement strategies that will reduce insect problems and hard-to-control weeds, 92% of the athletic field managers can now implement or modify cultural or pest management practices that will improve plant and reduce injuries and liability. When asked specifically about soil testing and fertilizer options, 59% of those not offering soil testing for the clientele, will now offer, or consider offering, soil testing. Of those persons not offering low or no phosphorus fertilizer for their clientele, 12% will offer this option and 86% will now consider offering this option.

**Pesticide Applicator Training** – Based on information from Michigan Department of Agriculture, 54 (100%) of the program participants not currently certified passed their pesticide applicator exams with high scores. ☞

## Plants of distinction 2003

### *Program organizers*

Rebecca Finneran, Kent County Horticulture Agent; Mary Wilson, Genesee County Horticulture Agent

### *Funding*

Program registrations

### *Significance*

A growing number of landscape customers have become more discriminating about the plants in their landscape. They no longer want “cookie-cutter” landscapes. Consequently, there is a need to increase industry awareness of new and underutilized plants as well as new uses for current plants in the Michigan landscape. Coupled with this is the need to diversify plantings and seek pest resistance. By selecting the proper plant material, not only will customer satisfaction (and profit) improve, but there will also be fewer pesticides and fertilizers added to the environment.

### *Program goals:*

1. Increase awareness of new and underutilized plant material for the Michigan landscape.
2. Communicate information about plant evaluations and trials to professionals and plant enthusiasts.
3. Increase profitability for ornamental plant businesses by exposing them to new and proven plant material that is more marketable to their customers.
4. Expose professionals and plant enthusiasts to landscape plant material with fewer pest problems and nutrient requirements.
5. Increase consumer demand and satisfaction through education of improved plant performance.
6. Encourage use of diverse plant material in the Michigan landscape.

### *Program*

Two hundred and seventy-seven industry professionals and plant enthusiasts attended “Plants of Distinction” programs in Grand Rapids and Flint in February 2003. Horticultural experts from universities, public and private gardens, and businesses are brought in to provide their perspectives on a number of plant related topics that change

yearly. The portfolio of speakers and topics for this year’s programs included Dr. Edward Hasselkus (Emeritus, University of Wisconsin-Madison) who shared his extensive knowledge of conifers for the backbone of the garden. In addition to being a professor of horticulture for many years, Dr. Hasselkus is the curator of Longenecker Gardens, a 50-acre collection of ornamental trees and shrubs within the UW Madison Arboretum, which includes a large number of conifers.

Jeff Epping, manager of horticulture at Olbrich Botanical Gardens, in Madison, Wisconsin delivered an information-packed talk about plants to use for special effects in the landscape. Tom Kimmel, owner of Twixwood Nursery in Berrien Springs entertained the audience with his quirky sense of humor and discussion about how to make landscapes soar through the use of vines. Tim Wood, of Spring Meadow Nursery in Grand Haven, covered the merits of landscape specimens for the most challenging growing conditions and Nancy Lindley of Great Lakes Roses in Belleville shared new and innovative ways to use roses in the landscape. Two pesticide applicator recertification credits were offered for ornamentals (3b).

### *Results*

Through formal surveys conducted after both seminars, participants indicated the following impacts: 100% plan to apply information from this session in their business; 98% gained knowledge of plants that have fewer pest problems and/or lower maintenance requirements; 100% gained knowledge about plants that will solve clients’ needs and site-related problems; and 100% gained knowledge that will improve customer satisfaction and business profitability.

The Nursery / Landscape AoE focus on “Plants of Distinction” has been an initiative since 1998. Local growers have modified the assortment of plants that they are now growing. Also, the impacts on customer purchasing decisions at area garden centers are now apparent. Past participants return repeatedly for continually emerging plant information. This issue continues to be a priority identified by local advisory boards, the Nursery/Landscape AoE and Michigan Nursery and Landscape Plant Promotion Committee. ☞

### West Michigan Nursery Growers Summer Tour

#### *Program organizer*

Thomas A. Dudek, District Extension Horticulture and Marketing Agent, West Central Region

#### *Sponsors*

Zelenka Nursery, Greenstone Farm Credit Services

#### *Industry partners*

Zelenka Nursery, Vans Pines Nursery, Northland Farms, Inc., Michigan Evergreen Nursery, Sawyer Nursery

#### *Program presenters*

David Smitley, Diane Brown-Rytlewski, George Bird, MSU Dept of Entomology; Tom Fernandez, Rob Richardson, MSU Dept of Horticulture; Bud Hart, Dept of Forestry; Lee Jacobs, MSU Dept of Crop and Soil Sciences

Zelenka Nursery was host for the 2003 West Michigan nursery growers summer tour. The first program of the day was by David Smitley, who presented results of phytotoxicity testing of Flagship 25 WG, (a neonicotinoid insecticide) and Dinetofuran 20 SG (a nitroguanidine insecticide) on container stock, and showed a demonstration plot of 26 taxa of both woody and herbaceous plants treated with the compounds. Rates used included controls with no insecticide applied, and rates of 1x, 2x and 4x the recommended rates. Results of the tests, sponsored by the IR-4 program, which provides for testing and registration of pesticides for minor-use crops, can be found on page 7 of this report. He also gave updates on current European chafer and emerald ash borer research.

Zelenka Nursery was also the site for a research project related to managing water quality in landscape nurseries. The project, in its final year, was designed to look at the effects of several different fertilization regimes on levels of nitrate leaching into groundwater. Several slow-release fertilizers were evaluated this year. Bud Hart presented the research results.

The next tour stop was Vans Pines, the site of research on weed control for deciduous tree and shrubs seedlings including green ash, pin oak,

highbush cranberry, autumn olive, rugosa rose and white oak. Rob Richardson led the tour through the trials of several promising new herbicides.

While at Vans Pines, Tom Fernandez discussed the implications of the new groundwater protection bill (Senate Bill 289) and their potential impacts on nurseries with tour participants. If the bill becomes law, annual reporting of water usage will be required.

At Northland Farms, the topic for discussion by David Smitley and Jim Oros (of Northland Farms) was the nursery's experience with biological control of Fletcher scale on Taxus. Natural enemies kept scale populations in check without the use of insecticides. Also at Northland Farms, Rob Richardson showed results of trials with Flumioxazin (Sureguard) and other herbicides in field-grown liners of Taxus and Arborvitae. Sureguard is expected to receive registration "for outdoor use on and around conifers and deciduous trees" in Michigan in fall of 2003.

An interesting presentation about using cheese biosolids as a nutrient source for nursery fields followed at Michigan Evergreen Nurseries. Lee Jacobs, with the department of crops and soil science at MSU spoke about this practical and innovative approach for putting a waste product to good use as fertilizer. The cheese by-product provides a good source of nitrogen and phosphorus.

Research into methyl bromide alternatives for field production of herbaceous perennials was shown at Sawyer Nursery, the site for trial plots of alternative fumigants including: idomethane; metham sodium; Basamid; TeloneII; Telone C-35 and chloropicrin in various combinations and rates of application (mostly under tarp) compared to two standard methyl bromide plus chloropicrin treatments and a tarped and untarped control. (Photo, color insert, page 1A.) George Bird explained the project and pointed out results of treatments, several of which appeared especially promising. The final item on the tour was a summary of planned research in methyl bromide alternatives that will be conducted over the next three years, presented by Diane Brown-Rytlewski. A USDA grant for over \$370,000 was recently awarded for this new project. ☞

## Winter protection 2003-04

### *Overall program organizer*

Thomas A. Dudek, District Extension Horticulture and Marketing Agent, West Central Region

### *Organizer for east Michigan location*

Mary Wilson, Horticultural Agent, Genesee County

### *Program sponsors*

Harrell's, The Scotts Company, and Genesee Area Landscape and Nursery Association

### *Program presenters*

Bert Cregg, Tom Fernandez, Rob Richardson, Department of Horticulture; Willie Kirk, Department of Plant Pathology; Tom Dudek, District Extension and Marketing Agent, West Central Region; Mary Wilson, Horticultural Agent, Genesee County; Al Nietring, Zelenka Nursery; Paul Pilon, Sawyer's Nursery; Andrew Austin, Austin's Nursery; Bryan Purkey, Purkey's Nursery and Landscaping; Tom Kluck, Kluck Nursery; and Bob Kuzmaul, D&B Plants.

In response to record amounts of winter damage that occurred on a wide range of herbaceous and woody nursery stock, a day-long educational program was organized to provide information for nursery growers about conditions that trigger winter injury and an update of the latest techniques for winter protection of ornamentals in nursery settings. To give growers from more locations in the state an opportunity to attend, the program was held in Grand Haven on September 24, 2003 and repeated in Flint on October 29.

Explanations of cold hardiness, conditions that trigger acclimation, deacclimation and dormancy release by Tom Fernandez and Bert Cregg set the stage for later talks about winter protection strategies. Topics covered by Bert Cregg included pros and cons of decreasing fall irrigation to force dormancy, the effects of nutrition on winter hardiness and the use of antitranspirants. Tom Fernandez gave an overview of root hardiness, watering container plants before storage in hoopouses, pot spacing, thermal blankets, hoopouse design considerations, pot-in-pot systems and short term frost protection.

Willie Kirk spoke about preparing herbaceous perennials for winter from a disease prevention viewpoint. Tom Dudek addressed protection for plants from rodents and deer at the program held in Grand Haven, while Mary Wilson presented rodent protection at the program held in Flint. Rob Richardson discussed recent herbicide research on major problem weeds in nurseries and mentioned several different backpack sprayer types to use for herbicide application, and a constant flow valve that can be used to improve the accuracy of spray output, an important consideration when using herbicides. The final portion of the program was a panel discussion by growers who talked about overwintering strategies used in their nurseries, results they had seen with various types of protection; what worked; what didn't work. Throughout the day, a number of good questions were asked, which furthered discussion between the presenters and the audience. A related article about winter injury is on page 22. 