IPPS EASTERN REGION CONFERENCE PROGRAM

Keep it Green!

October 11-14, 2017
Grand Rapids, Michigan

Our host hotel is the **Holiday Inn Grand Rapids Downtown** at 310 Pearl St. NW, Grand Rapids, MI 49504. Group rate sleeping rooms are available at this property. Tours will depart from and return to the Holiday Inn. A limited number of conference events will be held there (registration Tuesday & Wednesday, Board of Directors’ meeting Tuesday).

The **L.V. Eberhard Center** of Grand Valley University is an easy walk from the Holiday Inn. All educational sessions, the poster session, welcome reception and silent auction will be held on the second floor of the Eberhard Center (301 West Fulton, Grand Rapids, MI 49504.)

**Tuesday, October 10**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:00–7:00 PM</td>
<td>Eastern Region Board of Directors’ Meeting, Rogue Room, Holiday Inn Downtown</td>
</tr>
<tr>
<td>7:00–9:00 PM</td>
<td>Registration: Looking Glass Room, Holiday Inn Downtown</td>
</tr>
</tbody>
</table>

**Wednesday, October 11**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:30–7:00 AM</td>
<td>Registration: Looking Glass Room, Holiday Inn Downtown</td>
</tr>
<tr>
<td>8:00 AM–5:00 PM</td>
<td>Pre-Conference Tour: buses depart from and return to the Holiday Inn Downtown</td>
</tr>
<tr>
<td>3:00–5:00 PM</td>
<td>Poster and Display Session Set-up: 2nd Floor L.V. Eberhard Center. (Contact Ron Strasko if you would like to present a poster: <a href="mailto:ron@creekhillnursery.com">ron@creekhillnursery.com</a>; 717-556-0000)</td>
</tr>
<tr>
<td>5:30–7:00 PM</td>
<td>Welcome Reception (appetizers and cash bar) at the L.V. Eberhard Center, 301 West Fulton – a very short walk from the hotel.</td>
</tr>
<tr>
<td>5:30–7:00 PM</td>
<td>Registration: 2nd floor L.V. Eberhard Center</td>
</tr>
<tr>
<td>7:00 PM</td>
<td>Dinner on your own. There are numerous dining options within easy walking distance of our host hotel.</td>
</tr>
</tbody>
</table>

**Thursday, October 12**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00–7:55 AM</td>
<td>Registration: Looking Glass Room, Holiday Inn Downtown</td>
</tr>
<tr>
<td>8:00 AM–8:30 PM</td>
<td>Conference Tour: buses depart from and return to the Holiday Inn Downtown. Dinner &amp; live auction will take place at the last stop: Spring Meadow Nursery.</td>
</tr>
</tbody>
</table>
Friday, October 13

7:30–11:00 AM Registration: L.V. Eberhard Center, 2nd Floor

8:00–8:15 AM Welcome and Introductions
Dale Pierson, President, IPPS Eastern Region

General Session

GREEN ENVIRONMENT: Moderator Steve Foltz

8:15–8:45 AM Keeping Nutrients in Their Place: Irrigation Management to Enhance Nutrient Retention in Container Production
Tom Fernandez, Professor, Dept. of Horticulture, Michigan State University, East Lansing, MI

Irrigating to excess may seem to be a good way to reduce plant losses from improper irrigation but the negative consequences of over-irrigating can be as costly as under-irrigating. Depending on your water rights, water costs can be negligible or a significant part of the production cost. Loss of nutrients due to excess leaching wastes fertilizer and has detrimental environmental effects. Over-irrigating can prolong production time and increase losses to pests. This presentation will cover scheduling irrigation in order to conserve water, reduce runoff, and retain nutrients in containers and how this affects plant growth, quality and costs.

8:45–9:15 AM Green Roofs: Plant Production and Installation Methods
Brad Rowe, Professor, Dept. of Horticulture, Michigan State University, East Lansing, MI

Green roofs are a means of partially replacing the vegetated footprints that are destroyed when buildings are constructed. Learn about the various types of green roofs, how they impact the environment, what plant species are suitable, and how the components and installation methods vary among conventional built-up systems, pre-vegetated mats, and modular green roof systems.

9:15–9:45 AM Marketing the Ecosystem Services Provided by Food Plants for Pollinators
David Smitley, Professor, Dept. of Entomology, Michigan State University, East Lansing, MI

Pollinator-attractive plants serve three important services in the urban landscape: (1) they provide food (pollen and nectar) for honey bees, monarchs, swallowtails, and other desirable pollinators; (2) they provide food for predators and parasitoids that keep plant pests under control; and (3) the pollinators they attract are excellent indicators of the level of natural control that you can expect in the yard or garden. In addition, many perennials, shrubs and trees are important food plants for caterpillars that develop into desirable butterflies. In this session I will briefly review lists of annuals, perennials, shrubs and trees that are good food plants for pollinators, predators and parasitoids, then explain in simple terms the important benefits they provide in urban and rural habitats, including natural pest control, a reduction in pesticide use, a boost for honey bees, and habitat for threatened species. The session will conclude with bullet points that can be listed for plants that are attractive to pollinators.

9:45–10:05 AM IPPS Eastern Region Awards Presentations
Brian Decker, Recognition Committee Chair

10:05–10:25 AM Coffee Break

10:25–11:00 AM How to Begin a Successful Biocontrol Program
Chris Howe, Assistant General Manager, Hortech, Inc., Spring Lake, MI
Chris will present the 10 essential steps to implementing a successful biological pest control program. He will stress the importance of education, planning, training, scouting, record keeping, and execution. In addition, transitioning from a conventional pesticide program to a biological pest control program will be covered. Lastly, examples of tools available for effective distribution and sources for acquiring biological control agents will be provided.

11:00–11:45 AM  **LED Panel Discussion**  
**Erik Runkle**, Michigan State University, East Lansing, MI  
**Drew Koschmann**, Walters Gardens, Zeeland, MI  
**Garrett Owen**, Michigan State University, East Lansing, MI

The science and technology of light-emitting diodes (LEDs) has advanced rapidly in the past several years, yet many questions remain about if and how they “fit” in commercial plant production. Erik, Garrett, and Drew will briefly share their experiences using LEDs in the production of young plants, including as supplemental greenhouse lighting and sole-source lighting indoors. Time is allotted for participants to ask the panelists questions and to stimulate discussion.

11:45 AM–1:00 PM  **Lunch** (included in conference registration)

**General Session, continues**

**GREEN PROFITS**: Moderator Brian Decker

1:00–1:30 PM  **Current Status of E-commerce in the Green Industry**  
**Cheryl Boyer**, Assoc. Professor, Kansas State University, Manhattan, KS

Cheryl Boyer loves to help nursery professionals meet their business goals and solve production problems, and has a growing reputation as an expert in new media technologies for garden center marketing. Are you ready for E-commerce? Time to find out!

1:30–2:00 PM  **Plant Propagation for Successful Hydroponic Production**  
**Hye-Ji Kim**, Asst. Professor of Sustainable Horticulture, Purdue University, West Lafayette, IN

Using hydroponics to produce crops creates unique challenges, including the choice of crops and cultivars, type of propagation media, hydroponic water and nutrient management, and environment control and management. This presentation will provide general information on propagation practices, and specific goals and unique strategies for each process to establish stronger and healthier seedlings.

2:00–2:30 PM  **Grow Your Business**  
**Dale Deppe**, President, Spring Meadow Nursery Inc., Grand Haven, MI

Hear from a successful nursery owner and industry legend how to plan for the future, be different, add value and become more profitable.

2:30–3:00 PM  **IPPS Eastern Region Annual General Meeting** (Business Meeting)

3:00–3:20 PM  **Coffee Break**

3:20–3:50 PM  **Can’t sell apples out of an empty barrel – production cycles at Sheridan Nurseries**  
**Bart Brusse**, Container Manager, Sheridan Nursery, Georgetown, Ontario
A look at production planning and growing cycles at Sheridan Nurseries, how we make decisions – propagation, buying in liners and liner choices. Follow through some real examples. There will be some photos, some fun, and yes – some math!

3:50–4:20 PM  **People are Social, Plants Should be Too!**  
Bridget Behe, Professor, Dept. of Horticulture, Michigan State University, East Lansing, MI

Plants are cool. Plants are hip. But has our industry kept up with consumers, how they shop, how they buy, and how they interact with our products? Bridget will share some consumer research findings to help you better understand what today’s consumer is looking for and doing with our products.

4:20–5:05 PM  **LEAN Panel Discussion**  
Gerson Cortes, FlowVision, Dillon, CO  
Matt Fredrickson, Midwest Groundcovers, St. Charles, IL

Learn from two green industry leaders what you can do to reduce costs in a very tight margin industry by improving productivity, optimizing space utilization, improving throughput and reducing overproduction — a common problem for plant propagators!

5:05–6:00 PM  Cocktail Hour with final Silent Auction bidding (cash bar)

6:00 PM  Dinner on your own. There are numerous dining options within easy walking distance.

8:00–9:30 PM  Auction item pick-up at L.V. Eberhard Center.

---

**Saturday, October 14**

6:30–7:30 AM  Eastern Region Board of Directors’ Meeting, Foundation Room, L. V. Eberhard Center

7:30–11:00 AM  Registration

8:00–8:10 AM  **Welcome and Introductions**  
Dale Pierson, President, IPPS Eastern Region

**General Session**

**GREEN PLANTS:** Moderator Ron Strasko

8:10–8:40 AM  **Foliar Application of Auxin During Propagation**  
Aren Phillips, Asst. Manager of Propagation, Spring Meadow Nursery, Grand Haven, MI

The recent purchase of automated sticking machines at Spring Meadow Nursery led to an experiment involving foliar applications of the plant rooting hormone auxin. The effect of different foliar treatments on rooting scores was compared to the standard method of a basal quick dip. The experiment involved hardwood evergreen cuttings in the winter of 2016-2017 and deciduous softwood cuttings in the spring and summer of 2017.

8:40–9:10 AM  **Restoration Horticulture: propagation, production and marketing of native plants**  
Bill Schneider, owner, Wildtype Ltd., Mason, MI

For more than 20 years Wildtype Nursery has specialized in growing Michigan native plants, including trees, shrubs, grasses, wildflowers and wetland species typical of Michigan woodlands, wetlands and prairies, with an emphasis on maintaining genetic diversity. Is this a niche that would work for you — come find out!
Plant Breeding at North Dakota State University
Todd West, Assoc. Professor, Dept. of Plant Sciences, North Dakota State University, Fargo, ND

North Dakota State University has been evaluating and selecting ornamental woody plants for over 60 years. In the past five years, breeding has been added to the program with focus on environmental (hardiness and pH tolerance) conditions as well as ornamental characteristics. The presentation will give insights on goals and objectives of this woody plant improvement program.

IPPS-ER 2018 Preview: Eastern Region Conference and International Tour
Steve Castorani, Site Committee Chair and Paul Cappiello, International Tour Chair

Time for a tempting preview of not only our 2018 conference in Newark, DE but also the International Tour that precedes it bringing IPPS members from around the world to the Eastern Region.

Coffee Break

Cyclophysis – What’s Old and New about Phase Change and Propagation
Bob Geneve, Professor, University of Kentucky, Lexington, KY

Physiological aging (cyclophysis) is an important factor associated with propagation. It is important for determining the time to first flowering and therefore seed set. Equally important is the relationship between a plant’s physiological age and the ability to regenerate adventitious organs (like rooting in some woody perennial cuttings). It was the subject of one of the first IPPS presentations made by F.L. O’Rourke in 1950 and published in Vol. 1 of the Proceedings. Although there has been recent work on the mechanisms controlling phase change (especially the transition from the juvenile to reproductive maturity), many of the concepts related to the impact of juvenility on propagation have not changed in the past 50 years. This presentation will revisit physiological aging and discuss current methods of plant manipulation related to phase change and propagation.

Managing Water and Oxygen for Optimum Rooting
Erin Yafuso, Ph.D. Candidate in Horticulture, University of Florida, Gainesville, FL

Oxygen is essential for healthy root growth. Should you inject oxygen into your irrigation water? Or just avoid over-watering? Learn about new research on ways to supply oxygen to growing roots.

Mycorrhiza in Woody Cutting Production
Robert Kuszmaul, D & B Plants, Richmond, MI

The use of mycorrhiza at D&B Plants has helped us blend an environmental aspect with high tech equipment and techniques to produce a diverse selection of superior starter plant material. Come learn more about the growth benefits that mycorrhiza offers in our propagation and growing-on environments.

New Plant Forum
Charles Tubesing, Plant Collections Curator, The Holden Arboretum, Kirtland, OH

Join other attendees for a look at the latest new plants and some old favorites that we should consider using more, moderated by Charles Tubesing. Contact Charles (ctubesing@holdenarb.org or 440-602-3840) if you would like to take part in this long-standing IPPS tradition! (In keeping with the spirit of the IPPS motto To Seek & To Share, please consider participation in the New Plant Forum as a chance to share and not as an opportunity for commercialism.)

Meeting adjourns