



## Upcoming Educational & Industry Events

**February 8 - Integrated Pest Management Update for Nurseries Video Workshop / 1:30pm-4:00pm** / Mid-Florida Research and Education Center / \$20 per person, non-refundable / 3 CEUs /  
Registration: <http://ipmorangecounty.eventbrite.com>

**February 8 & 9 - Florida-Friendly Landscaping Environmental Workshop / 5:30pm-8:30pm** / 6 CEUs / 950 Calabria Dr., Altamonte Springs / Call 407-665-5575 for more info

**February 22 - Weed Control Strategies in Ornamentals / 9:00am - 1:00pm** / Mid-Florida Research and Education Center / 4 CEUs / Free program! / Registration: 352-205-5626 or [frank.fornari@partners.basf.com](mailto:frank.fornari@partners.basf.com)

**March 30 - Lake County Farm Tour** - go to <http://lake.ifas.ufl.edu/> for more details

**May 23 - Research Update & Field Day / 7:45am-4:30pm** - Mid-Florida Research and Education Center / CEUs available / Agenda available at <http://orange.ifas.ufl.edu/cfnurseries/> Registration details coming soon

### Pesticide Applicator Training

**March 15 - Best Management Practices Certification Class / 7:45am-4:00pm** / Orange County Extension Education Center / 4 CEUs / \$10 per person, non-refundable / Registration: <http://bmp.eventbrite.com>

**March 19 - Limited Certification Pesticide Applicator Licenses Review & Exams / 8:00am-3:00pm Class, 3:00pm Exams** / Lake County Extension Education Center / 6 CEUs / \$20 per person, non-refundable  
Registration: <http://limitedcertification.eventbrite.com>

**March 23 - Best Management Practices Certification Class / 8:00am-3:15pm** / Seminole County Extension Education Center / 4 CEUs / Call 407-665-5554 for more info

For more information and links to other programs go to any of the following links:

<http://lake.ifas.ufl.edu/calendar.shtml>

<http://orange.ifas.ufl.edu/cfnurseries/>

<http://calendar.ifas.ufl.edu/calendar/index.htm>



## New Law Bans Cell Phones for CMV Drivers

By Liz Felter, referenced from FNGLA News

If you haven't yet heard, there's a brand new federal law on the books intended to put an end to distracted driving. On January 3rd, it became illegal for drivers operating many trucks and buses to use hand-held cell phones. This means drivers of commercial motor vehicles (CMVs) in interstate commerce and intrastate drivers within FL who operate CMVs transporting hazardous materials that require placarding. If you have a commercial driver's license (CDL), this ban applies only when you're operating a CMV. Hands-free use of a cell phone is allowed if you use either a wired or wireless earpiece.

The fines are pretty steep (although there's nothing "pretty" about them): Drivers who violate the ban face federal civil penalties up to \$2,750 for each offense. Multiple offenses may prompt disqualification from operating a commercial motor vehicle. Commercial truck and bus companies that allow their drivers to use hand-held cell phones while driving face a maximum penalty of \$11,000. <http://www.fmcsa.dot.gov/about/other/faq/cellphone-ban-faqs.aspx>





# International Plant Propagators' Society Report

By Juanita Popenoe

In 2011, the Southern Region IPPS annual meeting was held in Valdosta, GA. We toured many interesting nurseries in north Florida and Georgia, which are highlighted in the virtual tour videos (links and photos on page 3). There was also a great series of presentations on specifics of propagation and ornamental value of many new and old crops. A few of the presentations are highlighted below.

Mike Worthington of Worthington Farms reported on his experience with growing container trees. He has tried pot in pot, but found that a lower cost alternative is a wire basket with non-woven polypropylene sidewalls and bottoms. The sides breathe and keep cooler – 20 degrees cooler than black plastic pots on the ground. The wire basket has C rings to attach the fabric to the wire. Some roots do tack down, but the sides are air root pruned. He puts them on bare ground rather than ground cloth and the soft bottoms conform to uneven soil surfaces. This system uses one tenth of petroleum that plastic does and reduces trash. He has a Fanntum Grabber that picks up pots and loads them on trucks even on the wet ground.

Matt Sawyer of Bennett's Creek Nursery reported on his marketing experience. Matt has greatly increased marketing with the downturn in the economy with in-house changes. He has changed the website to have information and videos that he can track the use of with Google Analytics. He uses Constant Contact to keep track of emails to customers that allows him to see how many open the emails and what he can do to increase contact. He uses Facebook and Twitter pages to allow customers to get information the way they want. He uses a showroom van with graphics on the sides. Inside are shelves with the products on display, AC and cold drinks. He drives the van to retailers and shows them what they have and they can look and order on site. He provides employees with branded collared shirts and name tags. The plants also get brand identity with POP A-frame displays, branded pots, and tags with color laser printer photos and growing information attached with a double bead fastener like garment tags.

Chuan Hong from Virginia Tech is researching mitigation of pathogen spread through irrigation systems without water treatment. Chuan's research looked at *Phytophthora* levels in runoff and irrigation ponds. He found that *Phytophthora* counts were lower the further you get

from runoff entry into a pond. Within 100 meters, the levels were below detection in bait stations. Water pH also affected *Phytophthora* survival. *P. nicotiana* died off in a few days and higher pH water made it die off faster. He found that slowing down the water movement with gravel weirs reduced the pathogen survival. He also found reducing the direct contact of the runoff water with plant material was important to reduce cross contamination chances. His recommendations: capture the water as quickly as possible, run it through weirs and a long pond before it is taken back up by the pump for reuse. <http://www.irrigation-pathogens.ppws.vt.edu/> is the website with his results.

John Reuter from UGA reported on tea-oil *Camellia oleifera*, as a new edible oil crop for the U.S. Tea oil is the main cooking oil in south China and a very high quality oil. However, the extraction methods are difficult and secret. John has been looking into propagation and plant growth for optimum yields. Stratification increased seed germination to 96% within 60 days. Growth rate of the plants increased with fertilizer and 30% shade. Cuttings could also be rooted with 1-2 nodes, 3500 ppm Dip N Grow quick dip and mist propagation in July. Chinese literature indicates 150 gallons per acre, and he is working on that.

Scott Nesmith from UGA discussed the new ornamental blueberries that have the qualities homeowners are looking for: beauty and extended harvest season. There are several new selections for this new market: 'Blue Suede' with sky blue berries, good fall color and prolonged ripening; 'Summer Sunset'™, a mostly rabbiteye hybrid with multicolored fruit and a good tart flavor; and 'Titan' rabbiteye with fruit the size of a quarter.

Michael Dirr reported research on marketing. 70% of plants are bought in March-May, 10% from June-August, 15% September-November and 2-3% in winter. Women buy 70-80% of the plants. Know your market!





# IPPS North America Region 2011 Nursery Tours

By Juanita Popenoe



Hackney Nursery <http://youtu.be/SSpIZKumDUw>



Simpson Nursery [http://youtu.be/5Kl\\_VrcGTqQ](http://youtu.be/5Kl_VrcGTqQ)



Nursery Equipment : <http://youtu.be/lzMGrKD4q74>



Clinton Nursery <http://youtu.be/JJTtXtVCh6w>



Monrovia Nursery <http://youtu.be/1RY6JQsGwCs>



Superior Trees Nursery <http://youtu.be/iIYHGmluOCE>



May Nursery [http://youtu.be/H0bC1\\_1zYk8](http://youtu.be/H0bC1_1zYk8)



Tallahassee Nursery <http://youtu.be/4XJpQQTvkGM>



# Water-based Cold Protection of Foliage Plants in Shadehouses

By Matt Lollar

In the winters of 2006 through 2008, Dr. Bob Stamps (Mid-Florida Research and Education Center) and several graduate students conducted water-based cold protection studies in shadehouses. Four water-based cold protection systems (two mist systems and two fog systems) were evaluated for their water use and effectiveness in protecting ornamental foliage plants from chilling injury under shade structures at three commercial operations in Central Florida.



(Credit: Robert H. Stamps)

The four systems evaluated were an under-benches mist (UBM), over-roadways mist (ORM), and two among-plants fog (APF1, APF2). The UBM system used mist nozzles on 9.8 inch above-ground risers spaced 71 inches X 142 inches apart combined with an overhead retractable heat curtain. This system eliminates leaching and waterlogging of the growing medium and allows the heat to rise through the crop. A fog is produced as the air becomes saturated. The ORM system had mist nozzles located at a height of about 71 inches spaced on 146 inch centers. This system uses mist nozzles installed over the roadways so that the water neither leaches through the plant beds nor directly wets the crop foliage. Moisture and heat content of the air are increased, resulting in the formation of fog inside the shadehouse. The APF1 and

APF2 systems had the low pressure fog nozzles mounted on 9.8 inch above ground risers spaced 106 inches X 217 inches apart. These systems allow for water to be applied using low-pressure fog nozzles arranged among the plants. Depending on the system, irrigation was set to turn on at varying temperatures. In the UBM system, the mist irrigation turned on when the temperature dropped to 59°F. In the ORM system, the mist irrigation turned on when the temperature dropped to 44.6°F. In the APF1 and APF2 systems, the fog irrigation turned on when the temperatures dropped to 44.6°F and 46.4°F respectively and was stopped when these temperatures were surpassed.

Outside low temperatures reached as low as 28°F at the various test sites. The UBM system combined with retractable heat curtains maintained about a 30°F temperature differential between inside and outside the shadehouse during an advective freeze. The APF1 system maintained temperatures ≈6.4°F warmer than the ORM system on all but one of the nights observed and used 86% less water (740 gallons per hour compared to 5,245 gallons per hour). Compared with using sprinkler irrigation or combustion heaters, it has been estimated that cold protection systems using fog may require only 20% and 0.3% of the fuel energy, respectively. These results display a significant water savings potential of low-pressure fog irrigation systems for heating shadehouses. Further research is required to increase the accuracy of water application rates required to maintain specific temperature points with shadehouses. For additional information, please check out the EDIS Publication:

<http://edis.ifas.ufl.edu/ep429>

◆ **Production Times** is brought to you by:

*Juanita Popenoe, Ph.D.*

Commercial Horticulture, Lake County Extension

*Liz Felter, M.S.*

Production Horticulture & Exploration Gardens,  
Orange County Extension

*Matt Lollar, M.S.*

Commercial Horticulture, Seminole County Extension



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