

Penn State Extension Greenhouse News

December 6, 2011

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Topics

- *Jan 26, 2012 Penn State Greenhouse Meeting at Shady Maple*
- *Grower visits*
- *Whitefly*
- *Silicon in greenhouse crop production*
- *Personal message*

Jan 26, 2012

Penn State Greenhouse Meeting at Shady Maple

The program is looking good and I can assure you lunch will be fantastic! Here are highlights. We will send the full program brochure out next week - HOLD THE DATE Thursday, January 26, 2012 at Shady Maple

7:45 a.m. Registration

8:30 a.m. Morning Program

- *Gary Thompson, Assoc. Dean from the Penn State College of Agriculture Sciences will discuss continued support for the variety trials*
- *Rick Yates, Griffin Greenhouse Supply will discuss thielaviopsis root rot control*
- *David Barcel, OHP, Inc. will give an update on PGR's*
- *Kerry Richards from Penn State will provide core credits*
- *Alan Michael and Alyssa Collins Variety trial update*

*******LUNCH*******

Afternoon Breakouts 1:00 p.m.

Pest Management, 1 core 3 Cat. Credits* (Alyssa Collins, moderator)

- *More core credits with Kerry Richards*
- *IPM of Root rot control with Rick Yates*
- *Getting the most from beneficial nematodes with Jeff Gabric, Becker Underwood, Inc.*

Greenhouse Culture (Virginia Brubaker, moderator)

- Injector repairs with Linda Kelly, Dosatron USA
- Handling the peat shortage with Jamie Gibson from Fafard

Marketing (Steve Bogash, moderator)

- Connecting to customers with Kathy Kelly, PSU
- Social media, are you ready with Jeff Hyde, PSU
- Perennial Marketing with John Friel, Emerald Coast Growers

* Applied to PDA and awaiting approval

Grower Visits

I had the pleasure to visit a few growers this past week, looking at poinsettias, sharing some memories and taking a few pictures.

Ashcombe Farm and Greenhouse, Mechanicsburg PA – John Bear and Deb Shearer have served on the Greenhouse Advisory Committee and have been helpful in so many ways to the Capital area greenhouse industry. Their retail store is one of the area’s fun places to visit, great looking plants and a good place to catch lunch. Here are some pictures.



Ashcombe retail area with Deb Shearer and daughter Kerry Laudig



John Bear and Chris Volant with their prize poinsettias

Millers Plant Farm, York PA – Had a good visit with Dave Miller, greenhouse and vegetable grower in York, PA. Dave and crew were busy getting their new garden center ready for Christmas. They open this spring and had a good summer with vegetables and flowers. The retail sales area is nice-looking, plant material is first rate, the parking area is paved and the bathrooms are clean, spacious and attractive. Sales have been good and the pies and sugar buns are mouthwatering. This year in the greenhouse they changed all the propane heaters to natural gas and are installing flood benches. It is a well-run family business.



Miller Plant Farm's new retail center; Dave Miller & nephew Steve Slyder in retail Nexus greenhouse.



Miller Plant Farm's production greenhouse with a son & grower - Dustin Miller.

Whitefly (*Bemisia tabaci*) Management Program

SAF (Society of American Florist) has put together a strategy to manage *Bemisia tabaci* whiteflies on ornamental plants see this Link from GPN.

2011 Whitefly Management Program for Ornamental Plants -- Get your copy of it here!

Or go to

([http://safcms.memberfuse.com/sites/saf/files/Government_Affairs/WhiteflyManagementProgram_2011](http://safcms.memberfuse.com/sites/saf/files/Government_Affairs/WhiteflyManagementProgram_2011.pdf))pdf

This program does not require a pesticide application when the first whitefly adult is detected. However, it does outline steps to manage and maintain whitefly populations throughout the initial propagation and active growth stages at levels to minimize the whitefly numbers on the final plant material being shipped.

- *This program will minimize development of resistance irrespective of whitefly biotype while helping to achieve top quality plant materials.*
- *As you are developing your own personalized management plan, test products for crop safety on a small set of plants and check label restrictions for number of total applications per crop.*
- *It is highly recommended that any whiteflies in your facility be tested periodically for biotype because more management tools are available for B-biotype than Q-biotype whiteflies. The contact information for the laboratory authorized to biotype whiteflies is presented in the document.*
- *Testing biotype is especially important if a product does not adequately control whiteflies. Select products based on the biotype of any whiteflies that are present.*

This project was partially funded by the Floriculture & Nursery Research Initiative (USDA-ARS, Society of American Florists, American Nursery & Landscape Association) and the IR-4 Project.

Silicon's role in crop production

Research has shown that silicon (Si) is not an essential plant nutrient even though is the second most abundant element on earth; it is clearly beneficial for some plants. Si benefits have been observed as follows:*

- *Poinsettia have decreased bract edge burn and improved shelf-life*
- *Zinnias, sunflowers, and phlox have decreased powdery mildew disease*
- *Si increased the size of gerbera flowers*
- *Decreased populations of aphids on zinnias*
- *Improved salt tolerance in New Guinea impatiens*
- *Orchids, tomatoes, cucumber, and rice benefit from Si***

One source of Si is rice hulls in a mix at a rate of 10 – 20% by volume. Another sources is calcium silicate slag, a by-product of ore smelting. The best response in this research was when the growing media had 1% (10,000 ppm) Si, additional amounts did not improve plant response. Slag will raise pH as it is a liming material.

A Si drench using 60 ppm of potassium silicate can provide benefits in production areas when water quality is a problem; such as hi salts (EC), copper, iron or manganese is present from water or pesticides etc. The researchers' recommend that you do a small scale test yourself and see if it works in your operation.

A couple of cautions:

- Si does not always provide benefits*
- Sunflowers have shown head deformations with 100 – 200 ppm drenches*
- Slag and other Si compounds added to mix can increase pH, monitor media frequently*

**From: J. Frantz, J. C. Lock, and N. Mattson. Nov/Dec 2010. OFA Bulletin 924. Pg. 17-18.*

*** From: Soil Science & Plant Nutrition 29(1). 71-83. 1983*

For more information contact the senior author Jonathan Frantz

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PERSONAL NOTE

Dear Friends,

As most of you know, I will be retiring on Dec. 30, 2011. Yes - it is bittersweet as I look forward to the next stage of my life. I must tell you it has been great working and getting know you and your families - yes, I will miss that most of all. It has been fun making the occasional correct diagnosis, seeing the adoption of suggestions, witnessing the next generation take over, and seeing success. My job was education and any success I had was because you supported Penn State Extension programming. I would like to thank you for:

- Making the Variety Trials a success for both PA and the whole Northeast*
- Using biological control for whitefly and root rots when no one else was doing it*
- Starting a crop management assoc.*
- Providing plants for consumer displays*
- Hosting educational meetings, with all the disruption that entails*
- Growing plants for trialing and keeping them straight*
- Keeping the Greenhouse Advisory Committee strong, providing advice, volunteering, planting the trials, getting donations for 'Silent Auction' and 'Floriculture Endowment' and most of all for being good friends.*

- *The wonderful help from the Master Gardeners for being there on short notice, standing in the blazing summer heat counting flower blooms, organizing and planting variety trials, and for being good friends.*
- *To my coworkers in Horticulture & Plant Pathology & Entomology Extension here in the counties and at Penn State. No program is an island, we are blessed with great people dedicated to making the best better!*
- *To my family*

On a personal note, I will become a gentleman farmer (I don't have to make a profit, although it would be nice) by moving to my wife's, Carol, family farm in Southern Fulton County. She tells me the first thing I must do is build her a greenhouse ---- and the saga begins again!

My cell phone will remain the same 717-503-3547. Thank you for 26 years of fun, friendship, and professional growth.

Alan

[WEBSITE --- Trialgardenspsu.com](http://Trialgardenspsu.com) Contains 2009, & 2010 & 2011 variety trial pictures and data

WINTER GREENHOUSE MEETING SCHEDULED FOR JAN. 26, 2012 AT SHADY MAPLE

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