

# NFREC NEWS



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## New Hydroponic Short Course at North Florida Research and Education Center-Suwannee Valley Rousing Success



An intensive two day short course and optional grower tour was held in March at the North Florida Research and Education Center – Suwannee Valley. The popularity in registrations led to a second course being offered the same week. In all, 70 attendees were able to learn about “Starting a Successful Hydroponic Business”. Attendees came from all over Florida but also from Ohio, New York, Alabama, and Georgia. Most attendees were prospective or very new commercial growers, but six County Extension faculty and three UF students were also able to participate.

Attendees were able to learn about most topics through hands-on experiences in the greenhouses. Important classroom topics included business planning and marketing. Topics inside the greenhouse production area included: greenhouse structures, culture under open shade areas, season extension, soilless media selection, floating systems, nutrient film technique (NFT), growing microgreens, production containers, vertical culture, water and nutrient management, integrated pest management (IPM), selecting vegetable, herb, and cut flower crops, an organic production in greenhouses.

A follow-up survey being conducted indicates attendees rated the short course value very high and encouraged us to offer that course again to other new growers. In addition 100% of respondents want additional intensive single day trainings as well. The two top requests were clearly fertilizer and pest management.

As a result, we plan to offer the course for new growers in March, 2010 and the intensive classes in November, 2009. Growers will select one of three days for the advanced topic class.

Special thanks to all NFREC-SV faculty and staff for making the event such a success. Additional thanks to Dr. Comerford, for his leadership and Al Wysocki, George Hochmuth, Tim Carpenter (Verti-Gro) and Tim Blank (Future Growing), Linda Landrum, Wanda Laughlin, and Lei Lani Davis for helping teach the workshops. [Bob Hochmuth]



**Special points of interest:**

- **July 10-11, 2009 - Tractor Short Course**, North Florida Research and Education Center, Quincy, FL. For more information call 850-875-7100.
- **August 1 & 2, 2009 - Florida Small Farms & Alternative Enterprises Conference**, Osceola Heritage Park, Kissimmee, FL. For more information on educational program content contact Danielle Treadwell at 352-392-1928 or email [ddtreadw@ufl.edu](mailto:ddtreadw@ufl.edu). For general conference information contact Mandy Stage at 352-392-5930 or email [mstage@ufl.edu](mailto:mstage@ufl.edu).
- **August 20, 2009 - Peanut Field Day**, North Florida Research and Education Center, Marianna, FL. For more information call 850-482-9904.
- **September 17, 2009 - NFREC 8th Annual Fall Field Day**, Quincy, FL. For more information contact Vicky Morris at 850-875-7115 or email [vpmorris@ufl.edu](mailto:vpmorris@ufl.edu).

For information on other events happening around the state go to <http://calendar.ifas.ufl.edu>



**“Peanut Rx”, a Tool for Managing Peanut Diseases**

Disease control accounts for 15-20% of the variable costs to grow a peanut crop. Therefore, knowledge of disease control strategies is very important to help minimize costs and maximize yield and profits. Each year, scientists from The University of Florida, Auburn University and the University of Georgia cooperate to develop a disease risk management tool called “Peanut Rx”. *Defining the potential risk of disease loss is the primary focus of Peanut Rx.* Factors that increase or decrease the risk of disease are given point values that sum together to create a risk index value for a particular field or farm. The final values are placed into Low, Medium or High risk categories that can be used to identify potential problems and develop appropriate control strategies. Crop rotation and variety are two key components of Peanut Rx. Peanuts are especially sensitive to crop rotation and benefit significantly from long rotation between peanut crops. Table 1 illustrates the benefits of rotating peanut with a non-legume crop like cotton, corn, sorghum, or bahiagrass. Variety selection is another very important consideration in managing disease risk. Table 2 shows the disease risk points assigned to several common varieties grown in the southeast (new varieties are added as data is available to support a risk value). Other risk factors include tillage method, date of planting, seeding rate, field history, irrigation, row pattern, and several others. I encourage using the complete Peanut Rx to identify disease risk and help minimize the risk of disease losses (available at this website:

<http://www.caes.uga.edu/commodities/fieldcrops/peanuts/2009peanutupdate/peanutrx.html>). [Barry Tillman]

Table 1. Peanut disease risk points based on rotation with a non-legume crop. Lower values = lower risk of disease.

Years Between Peanut Crops*	Spotted Wilt Points	Leaf Spot Points	White Mold Points	Limb Rot Points
0	NA	25	25	20
1	NA	15	20	15
2	NA	10	10	10
3 or more	NA	5	5	5

*\*All crops other than peanut are acceptable in a rotation to reduce leaf spot. Cotton and grass crops will reduce the severity of white mold. Rhizoctonia limb rot can still be a significant problem, especially with cotton, under a longer rotation with favorable conditions, e.g. heavy vine growth & irrigation/ rainfall. Rotation with soybeans can increase risk to white mold, Rhizoctonia limb rot, and CBR. Rotation with grass crops will decrease the potential risk of limb rot; tobacco and vegetables will not.*

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**Know Our Staff**



Anna was hired at NFREC in 2001 as a biological scientist for Dr. Patrick Minogue, Assistant Professor of Silviculture in various aspects of forestry.

Dr. Osiecka coordinates activities with faculty, staff and OPS personnel at NFREC, other IFAS units and cooperators outside University of Florida, including state and federal agencies, contractors and landowners to ensure implementation of research, extension and demonstration projects.

Anna’s responsibilities include developing research protocols, managing projects installation, maintenance, data collection and documentation; management of data sets, statistical analyses, preparation of results for publications and presentations, writing research reports, scientific and extension publications.

Anna is the recipient of the 2008 NFREC Distinguished Service Award for Technical Support Personnel. A native of Poland, she lives in Marianna, Fl. with her husband, Marian and daughter, Mary Ann.

**Anna Osiecka, Sr. Biological Scientist, NFREC Quincy**

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Note that rotation of peanuts with soybeans may lower the risk for leaf spot diseases, but it does not reduce the risk to CBR or peanut root-knot nematodes and only has minimal impact on risk to white mold or to *Rhizoctonia limb rot*.

Table 2. Peanut disease risk points of various peanut varieties grown in the southeast. Lower values= lower risk.

Variety	Spotted Wilt Points	Leaf Spot Points	White Mold Points	Limb Rot Points
AT-215 <sup>*,2</sup>	30	unknown	unknown	unknown
Georgia Green	30	20	25	15
Florida Fancy <sup>*,2</sup>	25	unknown	unknown	unknown
McCloud <sup>2</sup>	20	25	20	unknown
AP-4 <sup>*</sup>	20	20	15	unknown
C-99R <sup>4</sup>	20	15	15	25
AT 3085 RO <sup>2</sup>	15	30	25	unknown
Georgia Greener <sup>*</sup>	15	20	25	unknown
Georgia-02C <sup>2,3,5</sup>	15	20	10	20
Georgia-03L <sup>5</sup>	15	15	10	20
AP-3 <sup>4</sup>	10	25	10	25
Georgia-06G	10	20	20	unknown
Florida-07 <sup>2</sup>	10	20	15	unknown
Georgia-07W <sup>*</sup>	10	15	10	unknown
Tifguard <sup>3,6</sup>	10	15	10	unknown
York <sup>2</sup>	10	10	5	unknown

\*Data for these new varieties is limited and risk ratings will undergo changes as needed in the future.

2-High oleic variety.

3-Varieties GA-02C and Tifguard appear to have increased resistance to *Cylindrocladium black rot* (CBR) than do other varieties commonly planted in Georgia.

4-Varieties AP3 and C-99R are less resistant to CBR and are not recommended for fields where this disease is a problem.

5-The malady referred to as “funky” or “irregular” leaf spot tends to be more severe in GA02C and GA03L than in other varieties. Although this condition can look like early leaf spot (*Cercospora arachidicola*), the cause “funky” leaf spot is unknown. Disease losses are not typically associated with funky leaf spot.

### Western Flower Thrips for Fruiting Vegetables

It is that time of the year for western flower thrips in fruiting vegetables in northern Florida (and Tomato spotted wilt virus). Below are the recommendations from the University of Florida.

**Pepper and Eggplant:** 1. Distinguish between adult and larval thrips and identify adult thrips 2. Use economic thresholds of 10 adult western flower thrips per flower and 3 larval thrips per fruit 3. Native species of flower thrips are not damaging and they outcompete western flower thrips 4. When peppers are flowering, use insecticides for thrips and other pests that conserve natural populations of minute pirate bug predators 5. Never use insecticides that induce populations of western flower thrips 6. Ultraviolet-reflective mulch (never use pesticides that reduce the reflectivity of the mulch) 7. Sunflower and other refugia provide a source for minute pirate bugs 8. Vertically integrate management of thrips with other pests including pepper weevil and Lepidoptera 9. Follow recommended BMP’s for fertility and irrigation.

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**Tomato:** 1. Distinguish between adult and larval thrips and identify adult thrips 2. Use economic thresholds of 1 adult western flower thrips per flower and 3 larval thrips per fruit 3. Native species of thrips are not damaging and they outcompete western flower thrips 4. Avoid using insecticides that induce western flower thrips' 5. Ultraviolet-reflective mulch (never use pesticides that reduce the reflectivity of the mulch) 6. Vertically integrate management of thrips and other pests, including whiteflies and Lepidoptera 7. Follow recommended BMP's for fertility and irrigation 8. Use tomato spotted wilt resistant cultivars when horticulturally acceptable.

These recommendations reflect changes learned from managing a crisis situation in central and southern Florida and deviate somewhat from past recommendations. [Joe Funderburk]

## Coming Events Calendar

**June 2, 2009 - Diversifying Growing Systems to Meet Specialty Direct Market Sales**, Macclenny, FL. For more information contact Karen Hancock @ 386-362-1725 x 101 or [khancock@ufl.edu](mailto:khancock@ufl.edu).

**June 6, 2009 - Be a Hobby Beekeeper Short Course**, Clay County Agriculture Center, Green Cove Springs, FL. For more information call 904-269-6355, 284-6355 or 473-3711.

**June 7-9, 2009 - Florida State Horticultural Society Meeting**, Jacksonville, FL. For more information contact Mary Lamberts at 305-248-3311 x 234 or email to [lamberts@ufl.edu](mailto:lamberts@ufl.edu).

**June 23, 2009 - Palm Production Seminar**, Jasper, FL. To register call Allen Tyree at 386-792-1276, email [ATyree@ufl.edu](mailto:ATyree@ufl.edu) or Linda Landrum at 386-362-1725 x 105, email [LLandrum@ufl.edu](mailto:LLandrum@ufl.edu).

**June 27, 2009 - Crape Myrtle Field Day**, North Florida Research and Education Center, Quincy, FL. For more information contact Jill Williams at [B419@aol.com](mailto:B419@aol.com).

**July 9 - 12, 2009 - Southeastern Equestrian Trails Conference**, Gainesville, FL. For more information call 352-317-0273 or email to [setc2009@aol.com](mailto:setc2009@aol.com).

**July 10-11, 2009 - Tractor Short Course**, North Florida Research and Education Center - Quincy, FL. For more information call 850-875-7100.

**July 13-16, 2009 - American Society for Plasticulture Meeting**, Penn State University. Save the date.

**July 29-31, 2009 - Farm to Fuel Summit**, Rosen Shingle Creek, Orlando, FL. For more information visit [http://www.floridafarmtofuel.com/summer\\_2009.htm](http://www.floridafarmtofuel.com/summer_2009.htm)

**August 1 & 2, 2009 - Florida Small Farms & Alternative Enterprises Conference**, Osceola Heritage Park, Kissimmee, FL. For general conference information contact Mandy Stage at 352-392-5930 or email [mstage@ufl.edu](mailto:mstage@ufl.edu). For educational program content contact Danielle Treadwell at 352-392-1928 x or email [ddtreadw@ufl.edu](mailto:ddtreadw@ufl.edu).

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**NORTH FLORIDA RESEARCH AND EDUCATION CENTER** Phone: 850-875-7100 <http://nfrec.ifas.ufl.edu>

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