

# ALABAMA FRUIT & VEGETABLE GROWERS ASSOCIATION

## NEWSLETTER

### *Fall, 2004*

#### **2004 ANNUAL CONFERENCE**

#### **Deep South Fruit & Vegetable Growers Conference and Trade Show**

#### **8-10 December 2004**

#### **Riverview Plaza Hotel**

#### **Mobile, Alabama**

*As was noted in a letter to you back in the summer, we will be meeting jointly with the Fruit and Vegetable Growers Associations of Mississippi, Louisiana, and Arkansas as we did last year.*

*We are actively working with folks from these states to put together a great program. There will be speakers from Auburn as well as a grower or two from Alabama on the program.*

*There will be sessions on: fruit production, vegetable production, a new farmers forum (what you need to know), citrus production, specialty fruit and vegetable production, organic fruit and vegetable production, and a blueberry session, as well as talks on labor issues and marketing.*

*You will find a draft copy of the agenda below. There might be a change or two in the final program, so be sure to get a copy at the conference.*

*Last year the trip to **Bellingrath Gardens & Lights** was so popular, we decided to do it again this year on Wednesday, 8 December. We will leave the hotel around 6 PM. The cost is \$20 per adult and \$17.50 per child. This cost includes transportation and entry fees for the Gardens and Lights. If you are interested, be sure to sign up on the bottom of your registration form. For more information on Bellingrath Gardens go to <http://www.bellingrath.org/>*

*You must also be sure to make your hotel reservation by **15 November** in order to receive the special conference rate of \$63 for single occupancy*

*and \$73 for double occupancy. This price includes parking.*

*Please pre-register for this year's conference! You will save some money as well as help us cut down on the amount of paperwork at the conference. Pre-registration forms must be received by 25 November! Mail your forms and checks to the address indicated on the pre-registration form.*

*The **Taste of the South** is set for **Thursday, 9 December from 6:30 PM until 8:30 PM**. James Miles is heading up this effort again and is looking for items to be donated – fresh fruits and vegetables, candies, sauces, drinks, etc. - any item that was grown or made right here in Alabama. Please contact James at 251-574-8445 or [jmiles@aces.edu](mailto:jmiles@aces.edu).*

*We will also have **two Special Sessions on Wednesday evening both aimed at New and Novice Growers**. One will address how to get started growing in the Fruit and Vegetable business and the other will tell you how to get started in the blueberry business. These sessions will follow the end of the General Session on Wednesday evening. Both will involve a Grower's Panel – farmers that have been involved in the industry. These will be great opportunities to ask the folks that are in it all of your burning questions.*

## Deep South Fruit and Vegetable Growers Conference

Riverview Plaza Hotel, Mobile, Alabama

8-10 December 2004

WEDNESDAY PM, 8 December

### **General Session**

- 1:15 PM **Welcome**
- 1:30 PM **FDA Action On New Bioterrorism Legislation - Ms. Patricia K Schafer**
- 2:30 PM **Food Safety Starts On the Farm - Dr. Anna Hood**
- 3:30 PM **BREAK – Visit with the Exhibitors!!!**
- 4:00 PM **USDA Good Agriculture Practices - Danny Mayfield**
- 4:30 PM **Direct Marketing Off the Farm - Ralph Hanskiewicz**

THURSDAY AM, 9 December

### **General Session**

- 8:00-10:00 AM **Agritourism**  
*Joe R. Gains, Asst Commissioner – Market Development Div., TN Dept. of Agric.*  
*Ramay Woody Winchester – Regional Marketing & Public Relations Manager,*  
*Dept of Tourist Development*
- 10:00-10:30 AM **BREAK – Visit with the Exhibitors!!!**

THURSDAY, 9 December Concurrent Sessions

### **Blueberry Growers**

- 10:30 AM **Spring Freeze Damage to Rabbiteye Blueberry Buds and Berries - Donna Marshall**  
**A Method to Determine Chilling Requirement in Blueberries - Donna Marshall**
- 11:00 AM ***Osmia chalybea* - A New Bee for Blueberry Pollination - Blair Sampson**  
Details and Control of a Newly Discovered Pest, Blueberry Tip Midge - *Blair Sampson*
- 11:30 AM **New Blueberry Variety Releases - Steve Stringer**
- 12:00 PM **Lunch**
- 1:30 PM **Tribute to the 50<sup>th</sup> Anniversary of the USDA-ARS Small Fruit Research Lab In Poplarville, Mississippi - Jim Spiers**
- 2:00 PM **Blueberry Production, Varieties and Disease Control in North Carolina - Bill Cline**
- 2:30 PM **New Technology in Blueberry Grading Equipment - Butch Greiffendorf**
- 3:00 PM **Food Safety Issues in Blueberry Production, Handling and Packing - John Braswell**
- 3:30 PM **Hot Topics in Blueberry Related Equipment and Products - Exhibitors**

THURSDAY, 9 December Concurrent Sessions

### **Fruits and Small Fruits**

- 1:30 PM **Fig Production in the Southeast - Dr. John Pyzner**
- 2:00 PM **Pecan Nut Growth and Development - Dr. Esteban Herrera**
- 2:45 PM **Native Plums- Postharvest Characteristics - Dr. James O. Garner**
- 3:00 PM **BREAK – Visit with the Exhibitors!!!**
- 3:30 PM **Fruit Wine Making - Dr. Juan Silva**
- 4:00 PM **Temperate Fruit Crops Role in Soil and Water Conservation - Dr. Girish Panicker**
- 4:40 PM **Fruit Disease Control – Update on Materials to Use - Dr. Alan Henn**

THURSDAY, 9 December Concurrent Sessions

***Greenhouse Tomato Production***

- 10:30 AM **So, You Want To Grow Greenhouse Tomatoes?** - *Dr. Richard G. Snyder*  
11:15 AM **Practical Guidelines for Growers Based on Applied Research** - *Dr. Hanna Y. Hanna*  
12:00 PM **Lunch**  
1:30 PM **What Does It Cost To Get Into The Greenhouse Tomato Business?** - *Dr. Ken Hood*  
2:00 PM **Insect & Mite ID & Management For Greenhouse Growers** - *Dr. Ken Sorensen*  
2:30 PM **Disease Identification, Prevention, and Control** - *Dr. David Ingram*

THURSDAY, 9 December Concurrent Sessions

***Vegetable Production – Watermelons, Squash, Cantaloupes, Cucumbers, Pumpkins & Other Vine Crops***

- 10:30 AM **Mini-Melons** - *Dr. Jonathan Schultheis*  
11:00 AM **Diagnosing and Managing Diseases in Cucurbits** - *Dr. Ed Sikora*  
11:30 AM **Pollination Essentials – What You Need to Know to Get the Most Out of Your Crop’s Potential** - *Dr. Clarence Collison*  
12:15 PM **LUNCH**  
1:15 PM **Using Plastic Mulches and Row Covers for Maximizing Production in Cucurbits** - *Dr. Carl Motsenbocker*  
1:45 PM **Specialty Melons** - *Dr. Jonathan Schultheis*  
2:15 PM **Using the Right Cultural Practice to Maximize Your Production – Irrigation, Plasticulture, Spacing, etc.** - *Dr. Terry Kelly*  
2:45 PM **Seedless Watermelon Production for Early Harvest** - *Dr. Marty Baker*  
3:15 PM **BREAK – Visit with the Exhibitors!!!**  
3:45 PM **Weed Control Strategies for Cucurbits** – *Dr. Stanley Culpepper*  
4:30 PM **Migrant (H2A & H2B) vs. Local Labor and Optimal Labor Usage** – *Dr. Deacue Fields*  
5:00 PM **Managing Insect Pest of Cucurbit Crops** - *Dr. Ken Sorensen*

THURSDAY, 9 December Concurrent Sessions

***Peach Production***

- 1:30 PM **Welcome**  
1:45 PM **Peach Pest Management Updates, Fungicides and Insecticides** - *Dr. George Philly & Dr. Wheeler Foshee*  
2:15 PM **Experiences of 2004 Using Chemical Bloom Thinning** - *Mr. Bryan Wilkins*  
2:45 PM **Spray Program for Bacterial Spot Control in Peaches** - *Dr. Jim Jacobi*  
3:00 PM **BREAK – Visit with the Exhibitors!!!**  
3:30 PM **Growing and Marketing Peaches in Texas** - *Mr. Tim and Mrs. Kathy Cooper*  
4:00 PM **Use of Soybean Oil, Ethrel, and a Dragon in Peach Production** - *Mr. Robert Boozer*  
4:30 PM **Grower Discussion, Questions and Answers**

THURSDAY, 9 December Concurrent Sessions

***Alternative Crops and Value-Added Products***

- 10:30 AM **Mayhaw Jelly Sells the Tree** - *Harry Thames*  
11:00 AM **Kiwi Production** - *Jim Pitts*  
11:30 AM **LUNCH**  
1:00 PM **Edible Flowers** - *Dr. Patricia Knight*

- 1:30 PM **How to Grow Cut Flowers** - *Dr. Lane Greer*
- 2:00 PM **Asian Vegetables** - *Dr. Carl Motsenbocker*
- 2:30 PM **Grape Tomatoes** - *Dr. Eric Simonne*
- 3:00 PM **Specialty Vegetables** - *Dr. Kent Cushman*
- 3:30 PM **Square Watermelon Production** - *Dr. Christine Coker*
- 4:00 PM **Shiitake Mushroom Production** - *Dr. Cathy Sabota*

THURSDAY, 9 December Concurrent Sessions

***Citrus Production***

- 1:00 PM **A Survey of Mite Populations and Damage on Satsuma in Alabama** –  
*Terry Hargroder*
- 2:00 PM **Review of Cold Hardiness Research on Satsuma in Alabama** - *Monte Nesbitt*
- 2:30 PM **Salt Problems in Louisiana Citrus** - *Wayne Bourgeois*
- 3:00 PM **BREAK – Visit with the Exhibitors!!!**
- 3:30 PM **A Mathematical Model for Determining Freeze Risk of Satsuma Mandarin** -  
*Bob Ebel*
- 4:00 PM **Things That I Have Learned From My Own Citrus Orchard** – *Jimmy Boudreaux*

THURSDAY, 9 December Concurrent Sessions

***Farm to Value-Added Sales***

- 10:30 PM **Product Development and Food Safety Regulations (For Value-added Processing)**  
*Dr. Juan Silva*
- 11:15 AM **Labeling Regulations for Value-added Products** - *Dr. Anna Hood*
- 1:15 PM **Web-based Marketing (e-commerce)** - *Dr. Beth Duncan*
- 2:20 PM **Recordkeeping, Cost Controls and Pricing Products** - *Dr. Ken Hood*
- 3:00 PM **BREAK – Visit with the Exhibitors!!!**
- 3:15 PM **Marketing Your Value-added Products** - *Dr. Ken Hood*

THURSDAY, 9 December Concurrent Sessions

***Strawberry Production***

- 10:30 AM **Strawberry Variety Evaluations in Alabama** - *Robert Boozer*
- 10:45 AM **Strawberry Yield Enhancement Study** - *Robert Boozer*
- 11:00 AM **Strawberry Variety Evaluations in Louisiana** - *Dr. James E. Boudreaux*
- 11:30 AM **Evaluation of Fungicides for Strawberry Production in Louisiana** –  
*Dr. Regina Bracy*

THURSDAY, 9 December Concurrent Sessions

***Sustainable Farming Using Natural Methods***

- 10:30 AM **Panel Discussion - Organic Products "What organic & biological products work & why?"**
- 12:00 PM **Lunch**
- 1:30 PM **Panel Discussion - Equipment - "What equipment is practical for small growers not using chemicals and pesticides?"**
- 3:15 PM **Panel Discussion - Economics - "Is growing organically profitable?"**
- 5:00 PM **Adjourn**

## DEALING WITH DAMAGED FRUIT TREES FOLLOWING HURRICANE IVAN

**Mr. Robert Boozer, Area Ext./Research Horticulturist**  
**Chilton Research & Extension Center**  
[rboozer@aces.edu](mailto:rboozer@aces.edu)

Damage from hurricane Ivan varies across Alabama from severe to light. Among the damage to structures there has been damage to trees and shrubs in the home landscape. On farms there has been damage to fruit and nut trees. In some cases the size and extent of the damage will not allow for recovery; however there are situations that can be addressed to aid in the recovery of orchards. Time is critical. With the clear skies and breezy conditions that have followed 'Ivan', recovery can be more difficult. Priorities likely have been to structural damage, loss of electricity, freezers and clearing fallen trees. Now attention is turning to orchards.

Damage to fruit and nut trees ranges from broken branches, limbs, and tops to trees slightly leaning and those that are lying on the ground. Take photos of the damage before beginning any recovery efforts. Your best efforts might still result in tree losses.

### **Severe Damage**

Trees that have fallen on the ground would be the worse case situation. Much of the root system will often be exposed and begin drying out. In some cases a large quantity of soil will still be covering many of the roots. Water exposed roots and soil and keep covered with plastic or tarps to retain moisture. If soil has filled in the area where roots will be placed when the tree is straightened, remove amount necessary for roots to return to their normal depth in the soil. Some broken roots may have to be removed to be able to set the tree. Limit the amount of root pruning as much as possible.

Some trees will need the limbs cut back  $\frac{1}{3}$  to  $\frac{1}{2}$ -inch length. This will reduce the amount of water needed during recovery and also reduce the weight of the tree for repositioning. Forked limbs can be used as props to help support the tree after it is straightened. Soil should be firmed up around the tree to remove air pockets and trees should be watered once a week. Fertilization is not beneficial at this time and can be held off until spring.

Equipment might have to be used to raise trees. Care should be taken, first for the operator and any helpers and secondly for the tree. Use of bare cables can cut into bark and increase the damage to the tree. Be sure the straps, cradles, and cables are all in excellent condition and of sufficient weight rating for the job.

### **Moderate Damage**

Moderate damage might include a number of scenarios. Trees leaning more than forty-five degrees, many broken and damaged limbs, or trees that have been twisted and twirled during the hurricane, creating a opening of the soil at the base of the trunk.

Straightening up leaning trees will be similar to the process described above. Moisten the soil around the tree before attempting to correct the angle. Firm up the soil after straightening and provide support to the trunk during the recovery process. Many fruit trees, especially smaller trees and trees such as peach that are maintained closer to the ground can be left leaning, pruned and retrained to a new upright growth in the next growing season. In some cases this is not an option due to obstruction of equipment movement down row middles.

Depending on soil type, some damage might have occurred to cambium tissue when trees are swirled at the base. Examine the trunk for damage. Apply a protective fungicide/bactericide to damaged areas. Fill in any gap between the soil and trunk and firm soil around trunk. When watering during recovery, do not apply water directly to trunk area.

### **Slight Damage**

Limit pruning to broken branches. Check base of trunk and firm soil if needed.

Even with your best efforts losses can still occur. Large trees will have much more difficulty recovering and are much more difficult to handle. Recovery efforts may not be justified due to extent of damage, age of trees, pre-hurricane condition of trees and the financial costs involved.

## THE POTENTIAL OF PUMPKINS

**Mr. Doug Chapman, Regional Extension Agent**  
**Northwest Tennessee Valley Region, AL**  
[lchapman@aces.edu](mailto:lchapman@aces.edu)

Pumpkins have been grown in North and Central America for thousands of years. They were unknown to the rest of the world until the explorers began taking them back to Europe and other parts of the Old World. Native Americans grew them along with squash and other cucurbits for food. Pumpkin was served at the first Thanksgiving meal but it may not have been in a familiar form. It can be dried and stored for a lengthy time or can be made into soup or even bread. In fact, the pumpkin in the first pumpkin pie may have actually been part of the crust instead of the filling.

Pumpkins are still an important food but are perhaps more important as a decoration during Autumn festivals and holidays. Most pumpkins are sold during the month of October. Many pumpkins are carved to make Jack 'O Lanterns. There is an interesting story about how carved pumpkins came to be called Jack 'O Lanterns. It seems that the tradition comes from Ireland.

There is a tale about a fellow named "Stingy Jack" who tricks the devil into not claiming his soul. Instead, the devil forces "Stingy Jack" to wander in darkness for eternity with only a lighted coal to guide him. Jack hollows out and carves a turnip to carry his coal in and his ghostly figure is referred to as "Jack of the Lantern". Eventually it was shortened to Jack 'O Lantern. In Ireland and Scotland, people sometimes carve turnips and potatoes and place them in their windows to keep "Stingy Jack" away from their dwelling. When they immigrated to North America, they found the pumpkin well suited to carving into Jack 'O Lanterns.

It takes approximately 120 days for a pumpkin to grow from seed to maturity. In order to have their pumpkins available for the October market window, farmers plant pumpkins during the summer, usually around the latter part of June or first part of July in North Alabama.

Planting a cucurbit during this time of year poses a number of problems for growers. Summer heat, diseases and insects are more likely to affect a pumpkin patch and lack of rainfall can limit production. Many growers are now planting pumpkins on irrigated beds that are covered with plastic mulch. This provides a degree of weed control as well as a way to water the crop during crucial times of drought. Several farmers are using no-till methods to grow pumpkins as well.

There are many varieties of pumpkin but most of the ones planted today are specifically bred to be used for Jack 'O Lanterns. While most of the modern hybrids are bred to be just the right size for carving, some are also bred to be smaller. The largest pumpkin on record seems to be one that tipped the scales at 1,140 pounds. There are also still a few planted each year specifically for food. The largest pumpkin pie ever made was five feet in diameter and weighed 350 pounds. It took 80 pounds of cooked pumpkin, 36 pounds of sugar and 12 dozen eggs to make it. Pumpkin seeds are sometimes roasted and eaten.

Food-grade pumpkins in the Southeast are rare because Southerners have traditionally preferred the less fickle sweetpotato as a base for pies rather than the pumpkin. However, the decorative pumpkin crop is bursting at the seams. There is even an Alabama Pumpkin Growers Association now. Most of the production in Alabama is based in the Northern part of

the state. Nationally, the top five pumpkin growing states are Illinois, New York, California, Pennsylvania and Michigan.

**UPDATE FROM THE SAND MOUNTAIN**  
**Mr. Dan Porch, Regional Extension Agent**  
**Northeast Alabama Sand Mountain Region**  
[dporch@aces.edu](mailto:dporch@aces.edu)

Ivan blew through without tremendous impact on the fruit and vegetable industry in the Northeast area of the State. Staked tomatoes were blown over and had to be re-staked. That was a substantial cost, but well worth the effort as 25 lb. boxes went to around \$20 after the storm. There was also some late planted squash that got too much water and was lost. The area was very dry just prior to the storm and after the storm so the 4 – 6 inches of rainfall had less impact than if we had been wet when Ivan arrived. There were no reports of fruit trees being blown down in the area.

Row crop producers, especially corn growers were affected most. Fields at higher elevations without windbreaks of some kind were flattened. Those fields in lower elevations were impacted as well. Some were flattened while others stood the wind fairly well, especially those that had a windbreak of some type. Some cotton was blown out of the bolls, but more damage was done to quality rather than quantity.

Tomato producers may be interested in a couple of diseases that were fairly severe in one 20 acre field of staked tomatoes this year in Blount County. Bacterial canker infected the field at an early stage. What was surprising was that the field was 100% infected. The disease first appeared as a very black, water soaked lesion on the edge of the leaf. It slowly moved inward until the entire leaf was affected. This disease is difficult to manage. Refer to IPM Guide for Commercial Vegetables for control measures. This disease was in three fields this year and I suspect will be a disease that we will have to manage even more in the future.

Tobacco Mosaic Virus (TMoV) was a virus that I had heard about but never seen in any of our commercial fields, until this year. As if TSWV (Tomato Spotted Wilt virus) and CMV (Cucumber Mosaic virus) were not enough, TMV infected one field 100% this year. It was a late planted field, the same field that had the bacterial canker infection. The plants appeared stunted with undulating and slightly mottled foliage. The new growth in the top of the plant died, either as a result of Ivan's sustained winds or from the virus. Information on this virus indicates that foliage can become necrotic when exposed to high temperatures. The new foliage died about 14 days after Ivan when temperatures reached upper 80's. I'm still not sure if the necrosis was

wind related or virus related, but either way the field was a total loss. Keep an eye out for this disease and take precautions to prevent it. Make sure all individuals wash their hands with soap and water if they are going to be handling plants. Discourage the use of tobacco products by anyone coming into contact with plants and use resistant cultivars when possible. Make sure seed are treated before planting.

## **NEW REGIONAL EXTENSION AGENTS (REA'S) FOR COMMERCIAL HORTICULTURE TEAM**

**Dr. Ken Tilt**

**Extension Horticulturist & Professor**

[ktilt@aces.edu](mailto:ktilt@aces.edu)

The Alabama Cooperative Extension System (ACES) has revamped and overhauled "The System" and is currently launching a new, leaner but more focused educational service. The change helps us adapt to the fewer dollars and people in ACES. The key concept in the renovation was to concentrate on some primary agricultural areas and do them well. Commercial Horticulture and Home Horticulture surfaced as 2 of the 13 priority agricultural focus areas. The system offers 6 new dedicated regional commercial horticulturists to serve the turf, nursery, landscape, professional grounds maintenance, greenhouse, Christmas tree, fruit, nut and vegetable industries.

There are also two other specialists that have responsibilities in smaller more targeted areas. Their job is to work strictly with the commercial horticulture enterprises in their regions. Listed below are the new REA's and the counties they represent along with their phone numbers. Invite them to your business or local county meetings so you can get to know them. The State Specialists, REA's and county agents will be working as a team to concentrate on the educational needs of the commercial horticulture industry. As always, we will be partnering with you to jointly plan the best use of the Teams' time and efforts.

The Commercial Horticulture Team also includes about 30 agents and state specialists with partial responsibilities to commercial Horticulture. Our commodity specialists will continue to lead and work with the Regional Agents to develop and deliver research-based educational opportunities and assistance. Depending on your commodity area, you will recognize Dr. Ken Tilt as the Nursery, Christmas Tree and Landscape Specialist, Dr. David Han as the Turf Specialist, Dr. Raymond Kessler as the Greenhouse Specialist, Dr. Joe Kemble as the Vegetable Specialist and Dr. Bill Goff as the Pecan or Nut Crop Specialist. There are a number of supporting specialists from agronomy and soils, entomology, agricultural economics, pathology and other areas that support and lead in our horticultural efforts.

Dr. Tilt has the Team leadership responsibility. His job is to stimulate and coordinate communication among the members and help identify and facilitate opportunities among the members and industry to foster

economic development. He is also the liaison with the Extension Administration to express the needs and concerns of the team.

We are excited to have this new emphasis on our industry. Please help us make this new system work.

### **– New Regional Agents (REA's) & Their Counties –**

**DOUG CHAPMAN:** *Northwest Tennessee Valley Region*  
Lauderdale, Limestone, Madison, Colbert, Franklin, Lawrence, Morgan, Marion, Winston, Walker

Contact him @ 256-232-5510 or [ichapman@aces.edu](mailto:ichapman@aces.edu).

**GARY GRAY:** *Central West Alabama Black Belt Region*  
Lamar, Fayette, Pickens, Tuscaloosa, Bibb, Chilton, Jefferson, Shelby, Sumpter, Greene, Hale and Perry

Contact him @ 205-280-6268 or [ggray@aces.edu](mailto:ggray@aces.edu).

**DAVID HUBBARD** will offer Commercial support in the Birmingham area with Gary Gray.

Contact him @ 205-325-5342 ext. 39 or [dhubbard@aces.edu](mailto:dhubbard@aces.edu).

**JAMES MILES:** *Southwest Alabama Coastal Region*  
Choctaw, Marengo, Wilcox, Dallas, Clarke, Monroe, Washington, Conecuh, Mobile, Baldwin, Escambia

Contact him @ 251-574-8445 ext. 51 or [jmiles@aces.edu](mailto:jmiles@aces.edu).

**CHAZZ HESSELEIN** will offer commercial support in Mobile and Baldwin Counties with James primarily in greenhouse and nursery crops with a specialty in pest management.

Contact him @ 251-342-2366 or [chessele@aces.edu](mailto:chessele@aces.edu).

**DAN PORCH:** *Northeast Ala. Sand Mountain Region*  
Jackson, Marshall, DeKalb, Cullman, Blount, Etowah, Cherokee, St. Clair, Calhoun

Contact him @ 205-274-2129 or [dporch@aces.edu](mailto:dporch@aces.edu).

**CHIP EAST:** *East Alabama Piedmont Region*  
Talladega, Cleburne, Clay, Randolph, Coosa, Tallapoosa, Chambers, Autauga, Elmore, Lee, Montgomery, Macon, Russell

Contact him @ 256-463-2620 or [weast@aces.edu](mailto:weast@aces.edu).

**ERIC CROWDER:** *Southeast Ala. Wire Grass Region*  
Lowndes, Butler, Covington, Pike, Bullock, Barbour, Crenshaw, Coffee, Geneva, Dale, Henry, Houston

Contact him @ 334-774-2329 ext. 25 or [rcrowder@aces.edu](mailto:rcrowder@aces.edu).

**PLANT PATHOLOGY NOTES FROM**  
**Dr. Edward Sikora**  
**Extension Plant Pathologist**  
[esikora@aces.edu](mailto:esikora@aces.edu)

**ASIAN SOYBEAN RUST TARGETS U.S.**

Asian soybean rust has not been identified in the continental United States. However, experts warn that soybean rust could reach the United States within the next five years. The disease is caused by the fungus *Phakopsora pachyrhiza*. Wind borne spores that can be transmitted long distances primarily spread soybean rust. The disease has caused soybean yield losses of up to 80% in Asia, Africa and South America. The fungus infects more than 90 species of legumes. Principal hosts include soybean, kudzu, snap beans, yellow lupine, and cowpea. Over 11 million acres of kudzu exist in the southeastern United States and kudzu may eventually serve as a reservoir host for the soybean rust pathogen. The broad host range of this pathogen increases the likelihood of rapid spread once introduced into the U.S. Little attention has been given to developing control practices on hosts other than soybean. At this time, it is anticipated that soybean growers in the southeast may need to apply two-to-three fungicides during the season to control soybean rust once it establishes in this region.

**FIRST REPORT OF PLECTOSPORIUM BLIGHT ON PUMPKIN AND SQUASH IN ALABAMA**

In October, 2001, *Plectosporium* blight, caused by the fungus, *Plectosporium tabacinum*, was observed in field plantings of pumpkin in Cullman and Jackson counties in North Alabama. This was the first report of the disease in Alabama. Symptoms were white or tan, spindle shaped lesions on stems and leaf petioles and slightly raised corky, white or light brown lesions on pumpkin fruit and fruit stems. Pumpkin symptoms were identical to previous descriptions of the pathogen on pumpkin, zucchini and yellow summer squash. Disease severity ranged from less than 10% stem tissue damage on pumpkins in Cullman County to 40 to 45% on pumpkins in Jackson County. In a fungicide trial at the Jackson County location, a 50% reduction in marketable fruit was observed in fields not sprayed with a fungicide compared to fields sprayed weekly. It has been shown in other states that a weekly fungicide sprayed program, started before the diseased develops, will effectively control *Plectosporium* blight. The disease was observed on pumpkin to a lesser degree in 2002 and 2003, and was observed for the first time on yellow summer squash in Blount County in 2004.

**NEW AZOXYSTROBIN FUNGICIDES REGISTERED FOR VEGETABLES**

Two new Syngenta fungicides with the active ingredient azoxystrobin are now available for use on vegetables. Amistar is a broad-spectrum fungicide labeled on most vegetables. When using Amistar or Quadris (another azoxystrobin material), growers should follow the manufacturer's recommendation with regard to disease resistance management. The label reads that the fungicide should not be applied more than once before alternating with a fungicide with a different mode of action.

Another Syngenta product, Quadris Opti, has also received a label for use on tomatoes, potatoes and most vegetables. Quadris Opti is a prepackaged combination of azoxystrobin and chlorothalonil, the active ingredients of Quadris and Bravo.

**TWO NEW FUNGICIDES FOR GREEN AND COLE CROPS**

Switch and Endura are now labeled for use on a number of crops including broccoli, cabbage, collard, kale and mustard greens. Switch, a water-dispensable granule, is a mixture of two chemicals, cyprodinil and fludioxinil. It is marketed by Syngenta. Endura is a dry granular formulation of the active ingredient boscalid and has both protectant and curative activity. Both fungicides are labeled on all crops in the "Brassica Leafy Vegetable" crop group used by EPA with one exception: turnip. Turnip greens may be treated with Switch, but not with Endura. Turnips harvested for or with roots may not be treated with either fungicide. Both fungicides control *Alternaria* leaf spot and powdery mildew. Endura also controls gray mold and white mold. Endura is the only fungicide registered to control white mold on Cole crops and greens. Based on tests in Georgia, Switch is less effective against *Alternaria* than Quadris. Both Switch and Endura would be a good rotation partner with Quadris for controlling *Alternaria* leaf spot on collards. Switch may be applied until 7 days before harvest. Endura may be applied up to the day of harvest on heading Cole crops, but no later than 14 days before harvesting greens.

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