

Your Experts for Life

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On The Farm

On the Farm is the name of Eddie McGriff's Extension Newsletter in Coffee County Georgia. Eddie McGriff writes one of the best timely information County Agent Newsletters in the U.S. It is his suggestion that we name this letter "On The Farm" also.

UPCOMING PRODUCTION MEETINGS

Huxford Row Crop Field Day

Date: August 15, 2007

Time: 8:30 –noon.

Place: Starting Place: Huxford Baptist Church. From I-65 at Atmore take Highway 21 North for about 8 miles. Just past the pole mill take highway 30 going west toward McCullough. Continue for ½ mile. The Huxford Baptist Church is on the left. .

Topics: Cover Crops: Kirk Iversen, USDA-ARS National Soil Dynamics Lab

Soybean Asian Rust Update: Dr. Dennis Delaney, AU Soybean Specialist

AU Cotton Variety Test: Dr. Dale Monks, AU Cotton Agronomist

Cotton Insects, Mike Donahoe, UFL Extension Director, Santa Rosa County, Florida

Peanut Variety Test: Chris Baukum and Austin Hagan, AU Peanut Specialists

Brewton Research and Experiment Station Update: Randy Akridge, Superintendent.

On Farm Research Projects in Southwest Alabama: Richard Petcher, REA Agronomy

CRP33 Program: Dr. Mark Smith, AU Wildlife Specialist

Sponsored Dinner at the Volunteer Fire Department in McCullough.

UFL Extension: John Adkins and Libby Johnson

ALABAMA A&M AND AUBURN UNIVERSITIES, AND TUSKEGEE UNIVERSITY, COUNTY GOVERNING BODIES AND USDA COOPERATING

The Alabama Cooperative Extension System offers educational programs, materials, and equal opportunity employment to all people without regard to race, color, national origin, religion, sex, age, veteran status, or disability.

Wiregrass Research and Extension Center Field Day

August 22, 2007 in Headland, Alabama. Registration starts at 8 a.m. with registration. Field tours start at 8:30 and end with a sponsored lunch after the field tour.

Peanut Field Day NFREC, Marianna, FL

August 23, 2007. The program starts at Marianna NFREC at 8 a.m. with registration. Field tours start at 8:30 and ends with a sponsored lunch after the field tour.

Topics and Speakers:

Fine-tuning your Sprayer Calibration – Dick Sprenkel, Entomologist, and Clyde Smith, Extension Agronomist

Disease Management – Albert Culbreath, Plant Pathologist

Controlling Nematodes in Peanuts – Jim Rich, Nematologist

Peanut Management and Crop Rotation – David Wright, Agronomist

New Peanut Varieties – Barry Tillman, Peanut Breeder

Research Plot Management – Wayne Branch, Research Coordinator

Fairhope Gulf Coast Research and Extension Center Row Crop Field Day

Date: September 11, 2007

Place: Gulf Coast Research and Extension Center (GCREC) on Highway 104 near Fairhope.

Time: 4:00 p.m. until 7:00 p.m.

Tour: On station of soybean, cotton and peanut research tests.

Speakers: Malcomb Pegues, with GCREC. Dr. Austin Hagan, AU Peanut Pathologist, Dr. Dale Monks, AU Cotton Agronomist, Dr. Kathy Lawrence, AU Cotton Pathologist, Dr. Ed Sikora, AU Soybean Pathologist, Dr. Dennis Delaney, AU Soybean Agronomist and Dr. Barry Tillman, UFL Peanut Plant Breeder.

Sponsored Dinner. For more information, contact GCREC at (251) 928-2740

Peanut Crop Update: 150,000 acres of peanuts planted in Alabama. in 2007. Approximately 40,000 acres planted in the Southwest Region and are in good to excellent condition.

Impose: The first generic formulation of Cadre (imazapic) is now available. The product is manufactured and marketed by Makhteshim Agan of North America Inc. (MANA). Similar to Cadre, Impose is a 2 lb ai/gallon formulation with a 4 oz/A peanut use rate. A copy of the current label can be obtained at the following web-address:

<http://www.cdms.net/LDat/Id86B000.pdf>

In UGA peanut field trials in 2006 and 2007, there were no major differences observed in the performance of Cadre and Impose.

Disease Management

In most peanut growing areas, growers are looking to reduce their disease spray program. In our area the Gulf Coast growers are more concerned about tightening up their disease spray programs. This is very good for two reasons. The Gulf Coast weather brings more frequent showers and has more humidity than most regions. Also, our typically higher peanut yields in this area hopefully will support higher input costs. Most growers are on

top of their leaf spot spray program and well started on their white mold and Rhizoctonia limb rot control. Rhizoctonia prefers wet weather while white mold fires off when we have wet, then dry repetitive weather. Remember white mold may exist in an underground form. Control for soilborne disease typically starts 60 days after planting. Fungicides currently labeled for control of white mold and Rhizoctonia limb rot include: Provost, Artisan, Moncut, Abound, Folicur (and many tebuconazole generics such as Tebuzol, Tri\$sum, Orius, etc.), Headline and Evito. Tomato Spotted Wilt is present in most fields but not at an alarming level.

Provost: from Bayer is an excellent new fungicide. It is a pre-mix of tebuconazole and prothioconazole. It provides leaf spot control that is consistently better than Folicur and white mold and limb rot control that is at least as good as Folicur. Some growers are seeing some chemical burn with applying Provost and 2,4-DB. This seems to be wide spread, but has no apparent yield effect at this time.

Evito: became available to peanut growers in 2006. Its timing for use is similar to Abound. Evito (fluoxastrobin) is not the same as Abound (azoxystrobin). Presently there is very little university data on Evito. For example in Dr. Bob Kemeraït's UGA Peanut Pathologist single trial comparing Evito to Abound, Abound beat Evito by 1000 lb/A in yield.

Tank Mixing Fungicides: Tank mixing tebuconazole with either 0.75 pt/A chlorothalonil (Bravo WeatherStik, Echo, Equus, etc.) or 5 fl oz/A thiophanate methyl (Topsin M and other products) can offer great economic value to growers. Given the cut in the cost of generic tebuconazole and lower costs of chlorothalonil products, some growers may be able to apply 7.2 oz/A tebuconazole tank mixed with 0.75 pt/A chlorothalonil at a great price (rumored about \$10.50/A or less). The tank mix of tebuconazole with chlorothalonil is a good option for managing soilborne disease and leaf spot.

Most of the information for the article above came from Dr. Bob Kemeraït UGA Extension Peanut Pathologist.

Soybean Asian Rust Update:

Soybean Asian Rust was found on June 25, 2007 at the GCREC sentinel plot in Baldwin County. Sentinel and commercial fields are being monitored in all of the neighboring counties. No rust has been detected at any of these other monitored or commercial locations yet. At this time, growers in Baldwin County and neighboring counties with soybeans in reproductive stages of growth (bloom through pod fill) should consider applying a triazole fungicide (Folicur, Top Guard, Laredo, Caramba, Alto, Orius) or tank mix (Quadris or Headline) with one of the previously mentioned triazole fungicides. In counties North if weather continues to be conducive to other soybean diseases (such as Frog-eye) and your crop yield looks good, it most likely would pay to apply Quadris or Headline to control these diseases. This would also prevent the Asian Rust if it did arrive in your area.

The Auburn University Soybean Rust Hotline (Dr. Ed Sikora) is 800-446-0388. View the Soybean Rust PIPE website: <http://www.sbrusa.net> for frequent updates.

Cotton Update:

Alabama planted ½ million acres of cotton in 2007, with approximately 65,000 acres in the Southwest Region. Presently the crop condition looks very promising. Cotton that was planted late needs three good weeks of blooming to make a decent crop. Be encouraged, typically an open bloom on September 10 or 20 in Baldwin will still make harvestable cotton. Insects are at low levels for the most part. Scouting is of key importance to protect your crop. From time to time, you may want to call the UGA Cotton Hotline with Dr. Phillip Roberts, UGA Cotton Entomologist: 800-851-2847.

Corn Harvest: Alabama has 300,000 acres of corn to harvest. And harvest has just begun. Of major concern to growers is the prospect of harvesting corn with aflatoxin. This article from the Walking Your Fields News Letter written by Rob Duffield, Agronomist with Pioneer Corn, should be very helpful.

Aflatoxin in Corn: by Rob Duffield

The drought we have experienced this year has some dryland growers concerned about potential aflatoxin problems in corn. Listed below are some helpful hints on how to deal with corn that has confirmed or expected aflatoxin.

What Is Aflatoxin? Aflatoxin is the name given to a group of highly toxic substances produced by the molds *Aspergillus flavus* and *Aspergillus paraciticus*. These molds infect ears of corn in the field and may continue to grow in storage unless grain is managed appropriately. Even at relatively low levels, aflatoxin in corn may present a serious health risk to livestock and people who consume it. Once present, aflatoxin cannot be eliminated; however, one can take steps to control the molds which produce the mycotoxin. The allowable concentration for aflatoxin in grain is 20 parts per billion and is regulated by the Food and Drug Administration (FDA) at the state level.

Can Aflatoxin Be Killed? No, aflatoxin is a chemical just like sugar or salt and thus cannot be killed. However, one can take steps to control the molds which produce aflatoxin.

Aflatoxin Development In Corn. Areas affected by drought stress this summer, followed by hot and humid weather prior to harvest should be aware of the potential for aflatoxin. Remember, black light tests can confirm the presence of the mold but laboratory tests are needed to detect the presence and level of aflatoxin. If the *Aspergillus* mold is detected or expected to be a problem, early harvest, drying, and good storage practices can minimize the growth and spread of the mold. The combine should be set to minimize cracked grain. Fans should be set higher to clean out lightweight cracked grain and undeveloped kernels. Ears that have been in contact with the ground for some time usually exhibit higher levels of aflatoxin and should be left unharvested. **Since the optimum growth environment for the *Aspergillus* mold on grain is 13-20 percent moisture, mold growth can be minimized by harvesting at above 20 percent moisture and drying to below 13 percent.** Corn should be dried rapidly within a few hours of harvest to reduce post-harvest spread of infection. Maintain moisture at 12-13 percent. One last suggestion, harvest and store drought stricken areas separate from non-stressed areas to prevent contamination of good corn.

WHEAT AND OAT PRODUCTION FOR GRAIN

Fall is a busy time of year. It is difficult to do much planning while you are busy harvesting cotton and peanuts. Hopefully this article will help you to prepare for this important fall planted crop. Producing an outstanding grain crop does not happen by accident. Understanding of all of these production practices will greatly help a grower in producing the optimum crop.

WHEN TO PLANT

Plant in September if you plan to graze. Or plant October 15 through December 15th if you are going for grain only. Planting November 15 to December 1 would be optimum. Planting too early brings on Hessian fly problems and can give you too much top growth and lush vegetation which lead to winter kill. Planting later than December 15 does not give the wheat enough time for good establishment and full opportunity for growth and proper tillering before heading out. Oats are a little more cold sensitive. Their best planting dates would be October 15-November 15. Planting small grains too early or too late can greatly damage the yield potential. One of the best ways to spread out your risk in small grain production is to plant on two different planting dates. This gives you an edge on the weather patterns.

VARIETIES:

Planting the very best variety for our area is one of the best ways to up your yields. The top six oat varieties in order that they placed in South Al. on farm tests are: Horizon 321, Trophy, Coker 716, Florida 501, Horizon 474 and Coker 227. Since Auburn University does not have a grain agronomist I leaned heavily on Dr. Erick Larson, MS State Grain Specialist for variety recommendations. Terral LA 841, AGS 2000, Pioneer 26R61, AgriPro Coker 9553 are some good standard varieties for this area. There are quite a few other varieties to choose from. For planting late Terral LA 841 and LA 482, USG 3209, AGS 2010 and Fleming do well. Pioneer 26R61 will perform well if not planted too late. For very late go with Fleming.

It would be best for you to know the characteristics of each before selecting. For example planting a very early variety at the regular planting date may expose it to injury by early spring frost. Also you may want to plant particular varieties for earlier harvest for double cropping soybeans or cotton. Knowing the characteristics of each variety is very important. The climatic conditions have a great effect upon the yield of these varieties. As the weather changes each year, so do the yield of these varieties. The fact that a certain variety yields the best one year, does not necessarily mean it will bring top yields the next. If you are planting 100 acres or more it would be best to plant three different varieties. This is one of the best ways to spread out your risk.

DEEP TILLAGE: Small grains respond to deep tillage. This is especially important if the winter is too wet or the spring is too dry during the grain fill period. Preparing a good seedbed by deep tillage will usually result in 18-20 bushels yield increase over just discing. It is important to disc first and then chisel plow. Discing after deep tillage recompacts the soil and essentially negates the positive effects of the deep tillage trip.

CONSERVATION TILLAGE: Most of our soils in South Alabama are low in fertility and water holding capacity. Organic matter content in these soils is low usually less than

1 percent and may be as low as 0.5 per cent. With excessive tillage, the organic matter content is very difficult to increase. The result is reduced crop productivity. The best way to increase organic matter and crop productivity is to minimize the tillage and increase the crop residue ground cover.

NEW TOOLS FOR DEEP TILLAGE: The Paratill, Worksaver's Terra-Max and the French Durou plow are several of these. These tools subsoil and lift the soil with very little disturbance to the soil surface, leaving 70-80 per cent of the ground cover intact. Reduced tillage has the potential to save energy, lower production costs, reduce erosion and runoff, increase organic matter and soil fertility and increase crop productivity. When double cropping in many of our soils if you deep till in the fall it may increase yields to deep till again in the spring before planting your second crop.

FERTILITY: Fertilizing and liming are critical management practices for small grain production. A properly managed fertility program can greatly improve yield and quality. This program including soil testing, knowledge of crop nutrient requirements and crop nutrient removal, timely application of nutrients and record keeping. Economic wheat yields are optimized at soil pH between 6.0 and 6.5. Nitrogen rates and timing of application are key management factors for making good wheat yields. Nitrogen is also the most expensive nutrient. For expected wheat yields of 40 to 70 bushels use a total N rate of 80 to 100 lb/acre. For expected wheat yields of 70 bushels or more use a total N rate of 120 lb/acre. Adjust the rate based on the preceding crop. If following peanuts or soybeans, decrease the N rate by 20 to 40 lb/acre. If following corn or cotton increase by 20 to 40 lb/acre. Demand for N is relatively low in the fall but increases rapidly in the spring just prior to stem elongation. Therefore, apply 20 to 40 lb N/acre at planting, and then the remaining N prior to stem elongation. Use the lower rates on heavy textured soils and the higher rate on sandy soils. Phosphorus and potassium fertilizer applications should be based on soil testing. Because 65 percent of the total P uptake and 90 percent of the total K uptake occurs before the boot stage, these nutrients should be applied before planting. Split applications (half at planting and half at topdress) of K is recommended on deep sandy soils. Sulfur is an essential nutrient for wheat production and is often missing in our soils. Therefore, wheat producers should include at least 10, but preferably 20 pounds per acre in their fertilizer applications. This can be done either pre-plant or topdress. Research shows that both Zinc and Manganese may become deficient. Other deficiencies of micronutrients in wheat are rare. **POULTRY LITTER** managed properly can be a valuable source of plant nutrients for wheat production. Poultry litter typically contains 60 lb of N, 40 lb of P₂O₅ and 40 lb of K₂O per ton. Two tons of poultry litter is the recommended rate supplying all of the P and K the wheat crop needs. It is best used pre-plant incorporated. Only 25 per cent of the N is readily available so you will need another 50 lb of N/acre in the spring. The crop should be monitored for topdress N applications.

SEED TREATMENTS: Fungicide and insecticide seed treatments are an inexpensive but effective method of protecting seed and seedlings from diseases and early season insects such as aphids and Hessian fly.

SEEDING RATE: Use one and one-half to two bushels for wheat and two to three bushels for oats, using the higher rate when planting late or when broadcasting or aerial applying or planting in dry seed beds. Quite a few growers are upping their wheat seeding rate to 140 pounds per acre and believe this to increase their yields. Generally a seeding rate of 35 seed per square foot is desirable. Depth of planting is 1-2 inches. Plant one inch in heavy and 2 inches in sandy soils.

DISEASES: There are quite a few diseases that affect oats and wheat. Barley Yellow Dwarf is worse in oats than wheat, but affects both. This disease is spread by aphids. Planting too early will allow aphid build up and also allow BYD build up. Plant at the recommended time and spray to control the aphids. Powdery mildew, leaf and glume blotch and leaf rust are other diseases. Some wheat varieties have some resistance. Also applying the fungicides such as Tilt, Quilt, Stratego, Headline or Quadris typically ups your yields in a dry year by 6 to 9 bushels and in a wet disease year by 18 to 20 bushels. There are several other fungicides. Read the labels for rate and timing of each. Loose smut is another disease that can be devastating. It infects the seed. It is transmitted in the seed and is not detected until the next crop makes seed and then there is no control. Take-all is another disease in wheat that affects us. This can be seen as stunted plants with white seed heads that have shriveled or no seed. Nematodes are also a problem, but rarely seen unless a grower plants continuous wheat. The best controls for diseases are rotation, planting high quality seed of disease resistant varieties, planting on time, good weed control in the wheat and rotation crop, using seed treatments and fungicides. In almost every crop, disease losses can be minimized by a balanced fertility program that allows the vigorous growth of the plants.

WEED MANAGEMENT: Weeds not only compete with the wheat crop, but they also contaminate the crop at harvest. Weed control in the previous crop has a lot to do with the weeds in the winter crop. Planting bin run seed rather than weed free certified seed has been the number one culprit for wild mustard in South Alabama. Either discing or applying a burn down chemical before planting is extremely helpful in controlling weeds. There are numerous herbicides for use on wheat and oats. Oats are typically much more sensitive to herbicides than wheat. Be sure to read the label and know the weeds and growth stage of your crop as often herbicides are recommended for different growth stages. **HERBICIDE CARRYOVER** from time to time is a problem. Small grains, especially oats, are very sensitive to some of the herbicides used on cotton and peanuts. For example Cadre and Pursuit have a plant back restriction of 4 months for wheat and 18 months for oats. Karmex used as a late season layby treatment for cotton can injure small grains, especially oats. Also consider the replanting restrictions of herbicides used on small grains. Osprey for example has a 12 month replant restriction for corn. Plan your rotations and look over labels for rotational restrictions.

INSECTS: The Hessian fly in wheat is the major problem. Even though it has not been a problem here in recent years, it can be devastating. In 1989, the Hessian fly destroyed many fields and caused losses of \$28 million in Georgia. The best strategy is to plant resistant varieties. And do not plant too early. If possible, chisel plow and disk harrow fields to bury wheat debris known to have Hessian fly infestation. Hessian flies do not

attack oats. Planting too early is also harmful when needing to control aphids which spread Barley Yellow Dwarf. Plant on time and then scout and spray for the aphids when you need to. Armyworms are another important insect to scout for. They usually attack early fall planted small grains. A good cold freeze will limit their activity. For aphids and armyworms threshold levels differ with plant size, time of year, weather and other factors. Stink bugs do infest wheat in south Alabama but rarely cause much loss. The damage comes when they move out of wheat to nearby corn and cotton fields where they cause significant damage. Thrips, another very small insect, enjoys feeding on wheat, but cause very little damage. Thrips carry Tomato Spotted Wilt Virus, but this is not a problem for wheat. However, as wheat matures and dries down these thrips carrying the virus do move to adjacent peanut crops where they may cause some damage by spreading TSWV.

HARVEST: Harvest small grains when moisture content drops to 15 % or less. Moisture should be 12 % or less for storage if desiring to keep for any length of time.

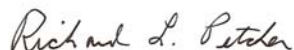
TO BURN OR NOT TO BURN: Burning wheat or oat straw is really not recommended as the straw returns organic matter to the soil. However, some growers burn the stubble for necessity of planting their next crop with the equipment they have. Burning stubble has no effect on controlling the Hessian fly.

PROFITS: Some growers have found a market for their straw. This has been an added benefit. Auburn University wheat budgets estimates total costs for wheat to average \$190 per acre. Forty bushels per acre is a close to a break even point. Having a good stand of wheat or oats does not usually happen by accident. Careful planning, obtaining the best varieties, good seedbed preparation, planting at the right time, good fertility, and good weed and disease control usually pay off in extra bushels at harvest. All of the above plus good weather and good wheat prices should yield some profits.

RESOURCE: Most of this information came from the Southern Small Grains Resource Management Handbook

Again I hope this newsletter “On The Farm” has been helpful to you,

Sincerely,



**Richard L. Petcher
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Agronomy**

