Mississippi State University Extension Service

Agronomy Notes

November 2005

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2005 Cotton Short

The 2005 Cotton Short Course will be held November 29-30, 2005 at Mississippi State University, Bost Extension Center. Pre-registration is $60 (**deadline is November 22nd**) and on-site registration is $80 (begins at 8:30 a.m. on the 29th).

There will be a social/ dinner on the 29th at the MAFES Conference Center (Bull Barn) starting at 6:00 p.m.

Pre-registration is available on line at http://msucares.com/crops/cotton/short_course.html.

Please contact Emily Rose (662) 325-2701 for additional information.

See page 2 for pre-registration form.

Rice
By Dr. Nathan Buehring

This year has been one filled with discussion. Variety/hybrid selection and economics issues are now on the mind of many producers since harvesting is nearly complete.

In coordination with RiceTec, we had two Clearfield strip trials at Cleveland and Clarksdale comparing Clearfield XL8, Clearfield XP730, CL 161, and CL 131. At each location, we planted two strips of each variety/hybrid, which were approximately 0.5 Acres in size and managed according to their recommendations. Yield and milling data were also collected at the end of the growing season.

I want to begin this discussion by talking about Clearfield XP 730. This year we saw problems with this hybrid even before the two hurricanes hit. The first problem was lodging. A week or two before Katrina, we already had some Clearfield XP 730 lying on the ground due to some strong thundershowers in the area. Also, as this hybrid reached maturity, signs of shattering were beginning to show up. Once the first hurricane hit, the shattering became more evident, especially in production fields. In prior experiences with hybrids, we have seen them shatter a little here and there, but this is the most I had ever seen with a hybrid. As a result of the problems we have seen with this hybrid, we will not recommend this Clearfield XP 730 for production in Mississippi.

I have had a lot of questions concerning CL 131 and what it can offer over CL 161. From an agronomic perspective, CL 131 is approximately 3 to 4 days earlier than CL 161. CL 131 is approximately 6 inches shorter than CL 161; therefore, the lodging potential is less with CL 131. Also, CL 131 will be rated very susceptible to sheath blight. In all of my observations this year, I have not seen anything that has convinced me that CL 131 is any more resistant to sheath blight than CL 161. As a result, I would budget for a fungicide application if planting CL 131 next year.

Probably the biggest question you want answered is: How does it yield? When averaging across both locations, CL 131 yielded about 13.5 bu/A better than CL 161 (Table 1). The average milling quality was low due to the Clarksdale location being harvested at approximately 12% moisture. Even in spite of the dry harvest conditions, CL 131 still averaged to mill a 52/67.5, which was slightly better than CL 161.

Since there was a pretty significant yield increase with CL 131 over CL 161, we decided to look at the economics of growing the Clearfield varieties and hybrids using the Mississippi State Budget Generator. To figure the total income produced per an acre from each variety or hybrid, the value per bushel of rice was determined using the milling data and the loan value for rice ($10.54/cwt for whole kernels and $5.27/ cwt for broken kernels). We also included a $0.50/premium over the loan value. To calculate the total direct expenses, the herbicide, insecticide, labor and diesel fuel ($1.85/gallon) cost per an acre were constant across all varieties and hybrids; the seed, fungicide, fertilizer, hauling and drying cost per an acre were variable per variety or hybrid. To plant a Clearfield hybrid it cost approximately $66/A than a Clearfield variety. We budgeted a fungicide application for only the Clearfield varieties. For the Clearfield varieties we budgeted 400 lbs of Urea (45% N) per an acre, and for the Clearfield hybrids we budgeted for 333 lbs of Urea (45% N) per an acre. The cost of urea for these budgets was set at

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Rice, Continued from page 1

$275/ton. The cost of hauling ($0.10/bu) and drying ($0.40/bu) the rice was dependent upon yield. The total fixed expenses (equipment and deprecation) were constant across all varieties and hybrids.

CL 131 had the highest value per bushel and Clearfield XL8 had the lowest value per bushel (**Table 2**). Clearfield hybrids produced the most total income, but also had the highest total direct expenses. The returns between CL 131 and Clearfield XL8, only resulted in a difference of $2/Acre, which puts them nearly equal in economic return.

When looking at the returns of these varieties and hybrids, I thought maybe I had over budgeted something because we were barely making money or losing money. With the high fuel and fertilizer cost along with the low rice prices, the returns on Clearfield varieties or hybrids were not as good as in years past.

Rice acres next year will definitely go down. The price of fuel, fertilizer, and rice will determine how much reduction in acres will occur. If I were a producer looking to cut back on rice acres, I would begin cutting down on Clearfield rice acres and plant soybeans until the price of rice increases or inputs decrease to make Clearfield rice more economical. If the price of rice increased by 20% (~$4/bu) and the input cost remained the same as this year, the returns on CL 131 and Clearfield XL8 would increase to over $120/A, which could be more profitable than soybeans.

As a side note, the Annual Area Rice Meeting will be held on November 17, 2005 at 6:00 p.m. at Bolivar County Extension office.

Table 1. Average yield and milling quality across both strip trial locations.

		Milling (%)	
	Yield (bu/A)	Whole	Total
CL 161	144.82	50	66.5
CL 131	158.3	52	67.5
CL XL8	175.62	47	68
CL XP730	163.91	49	67.5

Table 2. Economics of the selected Clearfield varieties and hybrids.

	Value per bushel ($)	Total Income ($)	Total Direct Expenses ($)	Total Fixed Expenses ($)	Returns Above Total Expenses ($)
CL 161	3.26	472.11	412.25	91.74	-31.88
CL 131	3.33	527.14	419.06	91.74	16.34
CL XL8	3.23	567.25	461.22	91.74	14.29
CL XP730	3.26	534.35	455.29	91.74	-12.68

Soil Testing
By Dr. Keith Crouse

Pelletized lime is very fine ground limestone material that is pelletized with an aid of clay or synthetic binders to typically provide pellets in the 5 to 14-mesh range. Pelletized lime is made up of very fine ground limestone material (finer than 100-mesh) meaning it is a relatively fast-acting material. Depending on the binder used may inhabit disperse of the pellets therefore, increasing the amount of time it would take to neutralize an acid soil. An advantage of pelletized lime is that it is easier to spread compared to pulverized aglime.

One ton of a typical aglime contains about five hundred pounds of particles finer than 100-mesh that bring about rapid soil pH change and the rest of the particles provide medium and long-term acidity neutralization that prevents the need to relime each year. These particles of aglime finer than 100-mesh are used to make up pelletized lime. Even though each ton of aglime has about five hundreds pounds of fine material (finer than 100-mesh), that doesn't mean that five hundreds pounds of pelletized lime has the same neutralization value of one ton of aglime. For most crops, lime should be incorporated into the top 5 to 6 inches of the soil, preferably at least 3 months in advance of planting. MSU-ES Soil Testing Laboratory's lime recommendations assume that limestone being used has a calcium carbonate equivalent (CCE) of 100%.

We are still receiving samples without proper payment or MSU customer identification number. These samples are placed on hold thus effecting the sample turn around. To avoid such delay make sure that the MSU-ES Soil Testing receives the proper payment or customer identification number with the sample.

Corn/Wheat
By Dr. Erick Larson

Hybrid Trials Available Online

The MSU Corn for Grain and Grain Sorghum Hybrid Trials are posted online on the MSUcares.com Variety Testing section under "Preliminary Yield Data." Later this month the data will be transferred to "Published Trials" and the publication will be available. Unfortunately, damage from Hurricane Katrina rendered five of the eight trial locations unharvestable.

Minimizing Expenses / Increasing Profit

Increasing fuel and fertilizer prices have many growers shying away from grain production in 2006. However, I would encourage them not to abandon one of the most beneficial practices employed in the South – crop rotation. Crop rotation benefits are easy to overlook when comparing budgets of crop A vs. crop B, but if growers go back to monoculture systems, the numbers aren't going to pencil out nearly as well. The reason is relatively simple – crop rotation significantly increases productivity of all your crops, while reducing input costs. Reports consistently indicate 10-20% yield advantages for cotton or soybeans grown in rotation with corn on Mississippi farms. Crop rotations normally improve yields because many weed, insect, nematode and disease problems build up when using the same management program every year. Crop rotation systems effectively disrupt many of these cumulative effects, preventing problems, reducing input costs and increasing yields. Crop rotation allows the producer to attack predominant pest problems by altering tillage systems, changing chemistry, and disrupting life cycles. The primary long-term benefit of utilizing corn crop rotation is the improvement of soil physical properties by increasing organic matter, increasing the proportion of large soil aggregates, and increasing soil-water infiltration and water holding capacity. This reduces the need for expensive annual deep tillage operations and irrigation. Numerous other beneficial effects of rotation have been reported, including improvements in soil fertility, soil moisture, soil microbes, and phytotoxic compounds and/or growth promoting substances originating from crop residues. A crop rotation system also spreads risk in case of unpredictable problems. Growers can maintain these benefits by continuing to rotate crops on a yearly basis.

WHEAT

Late Planting

If factors delay wheat planting, wheat growers in the south may still achieve high yields if wheat meets vernalization requirements (accumulation of cold temperature needed to trigger head development the following spring) and tillering doesn't suffer. Optimum planting dates actually extend through mid-November for the northern part of the state and early December for south MS. Producers can compensate for problems associated with delayed planting by increasing seeding rate and planting varieties with a relatively short vernalization requirement. Fall application or late winter nitrogen application (15-20 pounds per acre) can also be used to stimulate tillering of late-emerging wheat. Diammonium phosphate (DAP 18-46-0) is an excellent fall fertilizer source to broadcast on late-planted wheat because it supplies both nitrogen and phosphorus, which will promote vigorous growth and advance maturity - essentially serving as a "starter fertilizer."

Forage
By Dr. Richard Watson

Mixing Your Forages

Working in forages presents a fairly unique set of challenges. There are very few other agricultural disciplines where you have to be familiar with so many different crop species, and I don't just mean the plants. Basically, if it is a plant that animals can consume to provide nutrients, it falls in the category of a forage. It seems like the list of potential forage crops continues to grow (no pun intended), some that work, and some that do not. If you look at the Southern Forages book, written specifically for the Southeastern USA, it lists over 60 grasses, legumes, and forage herbs that are use to a greater or lesser extent in this part of the country. The question is "Do we really need that many choices for our animal production systems?" The answer on an individual farm level is "certainly not", but when considered across a broad range of climate, soils types, production systems, and management practices, this level of species diversity becomes more necessary. In this article I want to address forage species diversity on an individual farm level. Specifically, I want to compare single species forage production systems with those that use two or more forage species.

Single species forage systems

Single species forage production systems are generally more common throughout Mississippi than multiple

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species systems. Bermudagrass and Bahiagrass dominate most of the state's pasture and hay land, and form the basis of almost all of the single species production systems. These grasses have dominated for several reasons: 1. They are well adapted to the climate and soils in Mississippi, 2. They produce a lot of forage and store as well as hay, and 3. They persist under a wide range of management and fertilization conditions. Of all the reasons for the dominance of these two species it is probably the management and fertility aspects that are most important. The truth is, these grasses are not only relatively easy to manage, they are very forgiving of less than ideal management. Therefore, it is hard to go past them when forage systems are based on continuous grazing and extensive hay production/feeding.

However, we are facing increasing problems with single species systems. The expense of the high nitrogen inputs required to maintain high yields of perennial summer grasses, and the need to make and feed a lot of hay have greatly increased the costs of production. Single species systems, in particular the perennial summer grasses, can also restrict animal production due to relatively poor quality during late summer and a short growing season.

The increase in costs, and need for longer growth periods of quality forage, means that we must look towards different forages and improved forage management practices to meet these needs. The primary challenges are finding forages that will minimize stored feed requirement by extending the growing season, improve overall forage quality, and reduce the need for high fertilizer inputs.

Multiple species forage systems

As the name implies, multiple species systems use two or more forage species. There two main types of multiple species systems 1. Individual Crop systems where the forages are planted and managed on separate areas of the farm, or on the same area in different growth seasons (e.g. annual ryegrass overseeded on summer perennial pasture), and 2. Mixed Pasture systems where two or more forages are established in the same pasture and have similar or overlapping growth seasons. Both systems have pros and cons. I should note here that it is quite possible to have both systems running on the same farm i.e. you may have pastures that are mixed and other areas that are managed as single species crops.

Individual Crop Systems

Individual Crop Systems are, in fact, several single species systems on the same farm. For example, you may have an area designated for warm-season production, such as bermudagrass or bahiagrass, and an area devoted to cool-season production, such as tall fescue. Overseeding warm-season perennial pastures with cool-season annuals also falls under an Individual Crop System, as you are managing each crop separately, albeit on the same area. The main benefit of the individual crop system is that they are often easier to manage, as you are able to apply management practices that are specific to the crop rather than try to juggle the needs of the many different species in a mix. It is also easier to match a specific forage species to certain areas of your farm that have the appropriate soil type and may suit your animal program better. For example, you may have a mix of hill and bottomland, which are more suitable for bermudagrass and tall fescue respectively, or you may wish to establish your cool-season pastures closer to working facilities so you can more easily deal with cows during calving and mating.

The downside to this system (with the possible exception of overseeded annuals) is that there will be times of the year that each area will not be productive (e.g. a warm-season perennial pasture will not be very productive from November through March, and, in most years, you will be unable to graze tall fescue pastures in July and August). However, lack of production per se is not really the problem in Mississippi, it is really the distribution of that production throughout the year that is most important. For example, well-fertilized common bermudagrass can yield up to 3-5 tons per acre in an average Mississippi summer (hybrids will yield much higher than this), which can be enough forage to meet the annual dry matter requirements of a 1100 lb cow. The problem is that almost all of this production is done in a 6-7 month period leaving large excess in the summer (need to make a lot of hay), and nothing in the winter (need to feed a lot of hay). If you take that same acre of land and put half of it in tall fescue you will still have annual yields of 3-4 tons but that yield will be spread out over 12 months, which will significantly reduce or even eliminate the need for hay production/feeding.

Mixed Pasture Systems

In a mixed pasture you are trying to find forage species that will co-exist to improve quality and productivity of the pasture. One of the main advantages of a mixed pasture system, from a forage production standpoint, is the potential to utilize the same acre in a year-round grazing program. However, this can be difficult in the Mississippi environment (particularly south Mississippi) where at least one of the species needs to be a warm-season forage. In north Mississippi, tall fescue, bermudagrass, and dallisgrass will "naturally" co-exist in the same pasture, effectively giving a 12-month production system. Further south, where tall fescue cannot be grown reliably, annual ryegrass must be oveseeded to cover cool-season production.

In Mississippi, the single most important example of mixed species pastures is the legume (e.g. clovers) grass mix. With a wide range of annual and perennial

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clover species available to us, there are very few situations where introduction of a legume will not have a great benefit. As mentioned in my last Cattle Business article, legumes provide a significant amount of organic nitrogen that can offset or even eliminate the need for expensive inorganic nitrogen fertilizer. Legumes can also significantly improve the nutritional quality of pasture grasses, particularly the warm-season ones, and can extend the growth seasons.

The main challenges with mixed species systems is choosing forages that are compatible, and then applying management practices that 'optimize' the productivity of the mix.

Choosing forage species to put in a mix

It is no secret that there are some forages that will grow well together and others that will not. It is important to understand that there are several factors that determine the compatibility of different forages. First, the forage species must at least have similar fertility, soil type, and climatic requirements. Second, each species must be able to occupy a separate ecological niche within the pasture without competing too much with the other species. For example, bahiagrass has a very dense sod and will dominate the pasture in harsh low fertility environments leaving no room for other less hardy forages to survive. On the other hand, a more open bunch grass (e.g. tall fescue) sod is more amenable to including other species such as clovers. Third, fertilization and grazing management practices must be suitable for all species in the mix. For example, if you have a bermudagrass/tall fescue mix and put all your nitrogen fertilizer out in the summer you will end up favoring the bermudagrass and losing the tall fescue. The best way to graze mixed pastures is in a rotational system where grazing pressure (animal numbers, and duration) can be easily controlled. Rotational grazing prevents less grazing tolerant species, such as most clovers, from being overgrazed and will also help the productivity of the other more hardy species in the mix. The Southern Forages book, written by Drs. Ball, Hoveland and Lacefield, is an excellent reference material for learning about the forage species that work in our environment.

Some possible mixes

Base species	Companion species
Bermudagrass	1. Often can be found 'naturally' with other warm-season species such as bahiagrass and dallisgrass. 2. White clover will persist in bermudagras if the pH is above 6 and it is not overgrazed. Durana white clover is one of the best options in bemudagrass. 3. Annual ryegrass, small grains and annual clovers all work well when overseeded on bermudagrass.
Bahiagrass	1. It is very hard to get other forage species to exist in bahiagrass. 2. The best options are generally overseeded winter annual clovers and grasses.
Dallisgrass	1. White and Red clover will generally grow very well in a Dallisgrass pasture. 2. Dallisgrass can also be overseeded with winter annuals.
Tall fescue	1. White clover works very well with Tall fescue. 2. On soils that are moist in the summer Red Clover is another good option. 3. While Tall fescue may co-exist with bermudagrass it will generally be easier to establish and manage alone.

Cotton
By Dr. Tom Barber

As we move into November, the 2005 cotton season is close to completion. There are scattered fields left to pick but overall the crop has been harvested. The dry conditions during October have allowed for a speedy harvest. According to the Mississippi Agricultural Statistics service we are way ahead of schedule for cotton harvest comparing to 77% harvested this time last year and a 5 year harvest average of 73%. The USDA Ag report released at the first of October estimated cotton yields at 895 lbs/A. I do not believe that this report has taken into account the losses received from Hurricane Rita. However, the next report should include these losses and we will most likely see these yields decrease once the total loss from Rita has been calculated.

Many decisions will be made in the next several months and one of the most important will be which variety to plant. The Mississippi variety trial plots have been harvested, but we are waiting on the gin turnout before we release the data. We should have the data analyzed and available for you in the near future. The most important thing to rely on in your variety selection is past experience. Proven performers on your farm over the last two to three years are the best choices. Remember we have had two seasons with good growing conditions and the past season with hot and dry conditions. The variety that has performed well over the last three years with variable conditions will most likely perform well again. It is important to spread the risk by choosing at least three to four varieties with differences in maturity. Many new varieties were planted this season and have done well on small acreage. It is also important to look at the fiber characteristics along with yield as you pick which varieties to plant.

Next season the introduction of new technology such as Flex, Flex BGII, Flex WideStrike and Roundup Ready

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WideStrike cotton varieties will offer more choices for the Mississippi cotton producer. The flex system will allow producers to apply a glyphosate product (Roundup and others) over the top of cotton from planting to 60% open boll. Therefore the dreaded 5 leaf window will be eliminated in this system. Over the last several years Dan Reynolds has conducted many studies evaluating the effect of glyphosate applied numerous times on flex cotton from planting until harvest. The results from his research have shown no detrimental effect or yield loss when Roundup was applied with high rates to flex cotton, at any time during the growing season. The Flex cotton technology is sound as far as cotton tolerance, however we are still uncertain that the new flex cotton varieties will yield with our current Roundup Ready varieties. This new technology will only be available in Flex and Flex BG1I or Flex Widestrike. The BollGard II and WideStrike lines provide increased worm protection with 2 BT genes instead of 1 BT gene which is represented in current BollGard varieties. In trials conducted by Angus Catchot, both the BollGard II and the WideStrike technology increased worm control over BollGard.

Many of these flex varieties were planted in MAFES variety trials and seed production fields in Mississippi. The preliminary data looks fairly good on these new flex lines. However we still do not have enough yield and agronomic information for me to be comfortable. It is important to try this new technology and new varieties on **SMALL** acreage only.

Verticillium Wilt: I walked many complaints on Verticillium wilt (Vert) this season. The majority of the fields I walked were planted in Stoneville 5599 BR. This variety, in some cases, does not seem to be as tolerant as others, however conditions were favorable this year and it is a possibility that we will not see these conditions again next year. If your field has had a history of Vert, I would strongly consider planting a more tolerant variety and also burying the cotton stalks and stubble to reduce overwintering. Vert seems to intensify under conditions of poor soil drainage and potassium deficient areas. Therefore, it is important to have good drainage (raised bed) and adequate levels of potassium to reduce disease severity.

Nematodes: This fall when you are soil sampling remember to pull some nematode samples as well. Many growers have told me that their yields continue to slip every year in some fields. In most cases when we sampled, these fields were very high in either Root Knot or Reniform nematode. Reniform populations continue to rise and spread every year. In situations where high populations are present, a rotation to Corn or Milo is one way to reduce Reniform levels. If Root Knot populations are high, Milo is the best choice for rotation. If the levels of either nematode are above threshold levels, I would at least include Avicta as a seed treatment or use Temik in-furrow at 5lbs per acre. Heavier populations may require an additional side-dress application of Temik (at least 5lbs) by pinhead square. Growers who have utilized the side-dress application seem to be pleased. Another alternative is applying Temik at 7.4 lbs at about 4 to 5 leaf cotton. Gary Lawrence at Mississippi State University has found benefits to applying 8ozs of Vydate at pinhead with a follow-up application 14 days later. For extreme populations (10-30X threshold) the best control method seems to be Telone at 3 gallons per acre, however this is also the most expensive and the most difficult to apply.

Soybeans
By Dr. Alan Blaine

It has been a long growing season, but with all the field activities going on this year time has flown by. We just completed harvest last week and although rust never materialized we feel we are in better shape to answer questions regarding rust.

Our sentinel efforts were successful and these plots will be utilized in the future. In addition, numerous fungicides, fungicide combo's, and timings were evaluated. Although many questions remain unanswered we feel we are in a much better position to deal with rust.

In MS those of us working in soybeans feel that the southern US missed a great opportunity regarding rust. The inoculum potential this season was so low that it took a long time for rust to start to move. This is evidenced by the fact that it took so long to be found in a second location.

Once sentinel plots begin to exhibit symptoms of rust additional fields begin to show up. We feel the destruction of sentinel plots with rust would have contributed greatly toward reducing the inoculum potential. We are not saying this would control rust but it could have helped delay the onset in the U.S.

Kudzu, although a host appears to be a poor host. We have searched numerous plants all summer and nothing is a better indicator than soybeans. Delaying the spread could save U.S. farmers millions of dollars. However, I realize many disagree. But, the opportunity to

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work on a new disease clouded some folk's vision as far as the big picture is covered.

Sure we need to learn more about this disease but early on we can learn from other countries and those working in containment facilities (short-term). Once rust becomes well established we can then begin our field efforts. I refuse to believe anyone who says this was not an option when I reflect on the success of boll-weevil eradication. Our field experience and the input we receive from other pathologists particularly Moe Bondy in Beltsville, MD, makes us feel it is an option that should be considered.

We realize that rust can move on its own but it sure is ironic that Mississippi destroyed their sentinel plots once rust was found and to date have found rust in only one grower field, 5 miles from the first sentinel plot. Other factors played a role but even after two hurricanes in the immediate area no rust has been found as of 10-25-05.

Below is a preliminary shortlist that includes only Group 4 maturity varieties. Group 5 data is being summarized. I hope this partial list is helpful and we will complete the entire list once Group 5 data is compiled.

2006 SOYBEAN VARIETY SHORT LIST (Preliminary)

RR Maturity Group III's

		Stem Canker	**Promising New Varieties**		**Stem Canker**
Asgrow	3906		Dyna-Gro	31J39	
Delta King	3968		MorSoy	3883N	
DPL	3861				
Pioneer	3900				

Conventional Maturity Group IV's

		Stem Canker	**Promising New Varieties**		**Stem Canker**
DPL	47485				
Progeny	4910				

RR Maturity Group IV's (Early)

		Stem Canker	**Promising New Varieties**		**Stem Canker**
Asgrow	4201		Armor	GP-454	
Asgrow	4403		Delta Grow	4660	
DeKalb	4651		Delta Grow	4460	
Delta King	4461		Delta King	4667	
DPL	4546		FFR	4545	
Dyna Gro	3443		MorSoy	4665	
GARST	4612				
Hornbeck	4623				
Progeny	4401				
Terral	45R14				

RR Maturity Group IV's (Late)

		Stem Canker	**Promising New Varieties**		**Stem Canker**
Asgrow	4903		Asgrow	4703	
Delta Grow	4970		AGVenture	50D2N	
Delta Grow	36M49		Pioneer	94M80	
Delta King	4967		Progeny	4804	
Delta King	4866				
DPL	4724				
Dyna Gro	3481				
GARST	4999				
Hornbeck	4924				
Morsoy	4802				
Morsoy	4993				
Pioneer	94B73				
Progeny	4949				
RC	495				

Calendar of Events

November

3**-4, Mississippi Entomological Association Insect Conference**, Mississippi State University, Bost Extension Center. For additional information contact Michael Williams (662) 325-2986.

17, Annual Area Rice Meeting, 6:00 p.m. at Bolivar County Extension office. For more information, contact Bolivar County Extension office at (662) 843-8361.

22, Pre-registration deadline for the Cotton Short Course.

24-25, Thanksgiving Holiday, University Closed.

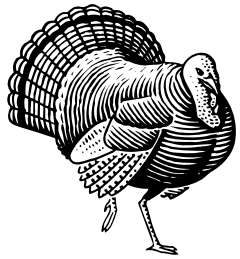
29-30, 2005 Cotton Short Course, Mississippi State University, Bost Extension Center. Pre-registration and information available on line at http://msucares.com/crops/cotton/short_course.html. For additional information contact Emily Rose (662) 325-2701.

December

2, Horticulture Club Christmas Open House, Mississippi State University, Plant and Soil Sciences Greenhouse, behind Dorman Hall. For additional information contact Dr. Richard Harkess (662) 325-4556 or email rharkess@pss.msstate.edu.

February

7-9, Mississippi Crop College, Mississippi State University, Bost Extension Center. More details to follow. Contact Emily Rose (662) 325-2701.



We would like to wish you and your family a Happy Thanksgiving!!!!

Plant and Soil Sciences
Box 9555
Mississippi State, MS 39762
(662) 325-2701

Michael Collins

Dr. Michael Collins
Department Head

This issue of Agronomy Notes was edited by Emily Dabney.