

Agronomy Notes

December
2005

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Mississippi Crop College
February 7-9, 2006
Mississippi State University
Bost Extension Center

The Mississippi Crop College will be held February 7-9, 2006, Mississippi State University at the Bost Extension Center in Building B.

The Crop College will begin on the morning of February 7th with registration followed by the Welcome and will conclude on the afternoon of February 9th.

There will be a social/dinner on the night of February 8th at the Starkville Country Club. All participants are invited to attend.

Participants can obtain more information and pre-register at <http://msucares.com/crops/college/>. Pre-registration deadline is January 30th. Cost is \$225.00 per person or \$75.00 per day per person. Credit cards (Visa, Mastercard, and American Express) will be accepted. If you pre-register online you will receive a bill via mail. At that time you may send your payment (credit card or check) by mail.

We would like to encourage everyone to pre-register. As it helps us prepare more efficiently.

The Mississippi Crop College is sponsored by the Mississippi State University Extension Service and the Mississippi Agricultural Industry Council (MAIC).

If you have additional questions, please contact Emily Rose at (662) 325-2701 or erose@pss.msstate.edu.

Forage

By Dr. Richard Watson

Salvaging annual ryegrass after a dry fall - The very active hurricane season not only delayed the planting of much of the ryegrass in the state, but this weather pattern also appeared to compound the situation by giving us in excess of 40 days without any significant rain over much of the state during September and October. Unfortunately, this drought coincided with the primary planting months for ryegrass and other cool season grasses, leaving many of us with stand failures and/or very later germination. In this article I will try answer some of the more common questions I have had this fall regarding cool-season plantings and the drought.

Will my ryegrass come back? - This will largely depend on whether the ryegrass in fact germinated and then died, or if conditions were just too dry to even result in germination. If you had significant germination, which was common with the moisture left in the soil after the hurricanes, and now you are unable to find much ryegrass then you will probably have lost most if not all of your ryegrass. However, if you did not get any germination, the seed should still be in the ground and will remain viable until the conditions are right for germination.

Most of the state had some rain in late November so you should start to see seedlings within a week or two. With the cooler conditions, it is important to realize that, while germination and some growth may be possible, it is unlikely that you will get significant grazing until next spring. Annual ryegrass is fairly good at growing in cold weather but if the soil temperature drops below 40 degrees then you will see a large reduction in growth rate. The sandier soils in the southern end of the state cool quicker but also warm up quicker so, depending on the weather, you may get some significant winter growth. The heavier clay and silt loam soils in the north of the state take longer to cool but once they are cool they will not warm up again until next spring and the growth will be poor during the winter.

Another thing to consider is whether the field you planted was historically used as a ryegrass pasture. If so, you may have a good bank of seed in the soil already from which regeneration of the stand can occur.

Should I replant if I have a stand failure? - This really depends on how badly you need the forage, bearing in mind that you are unlikely to get much production until next spring, and to what extent your ryegrass failed. In the south end of the state, a late planting will be much more successful because of the mild winters and "warmer" soil types. In the north of the

state, it will really depend on the weather and this could be a gamble.

Even a 50% ryegrass stand will be quite productive next spring so it probably does not warrant reseeding. Annual ryegrass has been in fairly short supply this year and that has driven the seed price up, which may make replanting uneconomical given the shortened grazing season. An alternative may be to use small grains, such as rye and winter wheat, that are better at getting up in cold weather and may be cheaper than ryegrass.

What can I do in the future to help? - We are always going to be at the mercy of the weather, but there are some things we can do to minimize the risk. The most important thing is to maintain your flexibility with things like planting date. Watch the weather and try to plant before a rainfall event. If the rain does not come the seed will be okay in the ground until it does, so you have not lost anything. When overseeding, a light chemical suppression of disking of the warm-season grass can help the ryegrass establish quicker. Conventional tillage will generally speed up establishment, but be warned that tillage can also deplete soil moisture and cause you to feel the affects of a drought more rapidly.

For those of you in the northern end of the state, with soils suitable for tall fescue, I strongly recommend that you give it some thought. Since it is a perennial, much of the risk with planting an annual each year is eliminated and you will have much more reliable fall grazing, in addition to the good spring production. The new MaxQ tall fescue may appear to be expensive when compared to ryegrass, but if you consider that it should be with you indefinitely if managed well, and that you are less likely to run into the problems we have had this year, then it is actually a pretty good investment.

For more information about forage and forage crop management contact your local office of the Mississippi State University Extension Service.

Rice

By Dr. Nathan Buehring

This year's variety trial information has been finalized and will be available as soon as the booklets are printed and will also be available on the web at www.msucares.com. Table 1 summarizes the 2005 on-farm variety trial information. As you can see, the rough rice and millings yields are down from last year. The biggest contributing factor to this is the hot weather during heading and poor harvesting conditions.

From the rice acreage survey, the varieties grown in Mississippi break down into the following percentages: Cocodrie 45%, Cheniere 18%, CL 161 17%, Priscilla 8%, Wells 6%, Hybrid 3%, and Francis 2%. In years past, Cocodrie normally had the majority of the rice acres in Mississippi. With Cheniere being available on a large amount of acres this year, it took away a good portion of those acres. CL 161, Priscilla, and Wells were grown on approximately the same amount of acres as last year.

When looking at rice varieties for next year, I am not sure if the Cheniere acres will increase, decrease, or remain the same. Some producers this year were pleased with Cheniere and some were not as pleased. The positive comment about Cheniere was that it yielded more than Cocodrie. The negative comments were it yielded less than Cocodrie, it was harder to harvest because the rice heads were not all the way at the top (like Cocodrie), and it has a thicker straw.

When comparing the yield of these two varieties over the past three years, it is the same (193 bu/A). I have also pulled the data out and looked at the yields of these two varieties based on soil type (silt loam vs. clay) and by location (North Delta vs. South Delta). I have found no clear-cut advantage to growing any one of these two varieties on any certain soil type or geographical location. Therefore, it is strictly up to the producer in determining which variety performs the best on their farm.

One word of caution when growing Cheniere: it is susceptible to blast. We normally do not see a lot of blast problems in Mississippi and we might not see any blast problems within the state for the life of this variety. However, blast could potentially be the death of this variety if we ever have a blast year, as we saw with Newbonnet. Therefore, I would exercise caution if you were considering growing it on all of your rice acres next year.

Pace is a new variety that was released by Dr. Dwight Kanter this year. It was grown for foundation seed this year and will be available for seed producers and dis-

tributors this upcoming year. As seen in Table 1, Pace was the highest yielding variety/hybrid in the rice variety trials this year. Pace was also similar in yield over three years when comparing it to other popular varieties grown within the state. Plant height, maturity, disease resistance and straight head tolerance of this variety will be similar to Priscilla. Next year we are planning on looking at this variety in on-farm strip trials and possibly including a RITE field with Pace.

Right now, the current outlook on rice in Mississippi is bleak due to high input cost and low rice prices. If input costs are not reduced and rice prices do not increase, Mississippi rice acres could be reduced by well over 25% next year. To maximize profits for next year under the current economic situation, rice will need to be grown on the most highly productive land that will have the lowest amount of inputs, such as straight levee rice fields.

Table 1. Summary of the 2005 on-farm rice variety trials.

Variety or Line	Rough Rice		Milling Yield		Bushel Weight
	2005	3 Year Average	Total	Whole	
	bu/A	bu/A	%	%	
Pace	184	193	63.6	46.7	38.5
XP 710	183	206	64.2	48.7	37.6
Priscilla	179	189	62.4	47.5	40.4
Wells	178	193	64.5	47.2	42.2
CL XL8	176	199	63.4	46.5	38
Cocodrie	176	193	63.6	52.1	41.1
Cheniere	168	193	64.2	49.2	40.4
XL 723	165	199	64.1	52.0	37.7
CL 131*	161		64.3	52.3	43.4
CL 161	149	168	62.4	50.6	40.2

* Only data from 2005.

Soybeans

By Dr. Alan Blaine

The following is the 2006 Soybean Variety List including both Group IV's and V's. We are still in the process of updating/validating the stem canker ratings. Once this is complete these ratings will be added to the variety list. Soybean yield information is available at <http://msucares.com/crops/variety/yield/index.html>. It is listed as 2005 preliminary yield data. I hope this information proves helpful. If you have any questions or concerns please do not hesitate to contact your county extension office.

2006 SOYBEAN VARIETY LIST				
RR Maturity Group III's				
			Promising New Varieties	
Asgrow	3906		Dyna-Gro	31J39
Delta King	3968		MorSoy	3883N
DPL	3861			
Progeny	3900			
Conventional Maturity Group IV's				
			Promising New Varieties	
DPL	4748S			
Progeny	4910			
RR Maturity Group IV's (Early)				
			Promising New Varieties	
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)				
			Promising New Varieties	
Asgrow	4903		Asgrow	4703
Delta Grow	4970		AGVenture	50D2N
Dyna Gro	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			
Conventional Maturity Group V's (Early)				
DPL	5110S			
USG	5002T			
Hutcheson				
Ozark				
Conventional Maturity Group V's (Late)				
Delta King	5870			
Hornbeck	C5894			
RR Maturity Group V's (Early)				
			Promising New Varieties	
Armor	GP513		Asgrow	5702
Asgrow	5501		Delta King	5066
Delta King	5161		Delta Grow	5160
Delta King	5366		Delta Grow	5650
DPL	5634		Hornbeck	5525
Dyna-Gro	33B52		USG	7515
FFR	5663		USG	7562
Pioneer	95B43			
Progeny	5250			
Progeny	5622			
RR Maturity Group V's (Late)				
			Promising New Varieties	
Asgrow	5903		Asgrow	5905
DPL	5808			
DPL	5915			
Garst	5924			
Hornbeck	5924			
Pioneer	95M80			
Progeny	5822			

Corn/Wheat

By Dr. Erick Larson

CORN

Hybrid Trials - The new MSU Corn for Grain Variety Trials are now available online at MSUcares.com. Severe lodging from Hurricane Katrina prevented data collection from five and the eight locations where corn trials were grown. Thus, although we did collect data from three locations, an actual printed publication will not be offered this year. If you would like printed data or do not have internet access, please feel free to request this data from your local Extension Service office. The grain sorghum trial at Stoneville was harvested and is posted within the Corn for Grain Hybrid Trials publication on the variety trials website. I also developed a list of suggested corn hybrids formulated from our and neighboring states' yield data to provide a quick reference guide for selection purposes. It is also posted on the website.

Corn Hybrid Selection Criteria - I generally recommend growers plant several corn hybrids based upon three primary criteria - grain yield, stalk strength and maturity. High grain yield is obviously the primary consideration because grain is sold on a weight basis. However, variety trials may not reflect harvestable yield in production fields unless stalk strength is considered. This season, extensive root lodging occurred in nearly all corn fields which were not harvested before Hurricane Katrina and many others which had lodged prior. These leaning or broken stalks significantly reduced harvest efficiency in terms of higher harvest grain loss, and increased harvest time and fuel expenses. Of course, environmental conditions and crop management influence root lodging, but substantial differences between corn hybrids were readily apparent as well. Thus, growers should use this information to select superior hybrids for their farm. This information will be noted on the corn hybrid short list. Hybrid maturity influences harvest date and may also impact profit through its effect on grain moisture. Hybrids grown may differ in maturity by as much as two weeks. Thus, large producers can spread harvest considerably by utilizing hybrids varying in maturity. Producers who market their grain at harvest may benefit from growing earlier-maturing hybrids because market prices usually decline through harvest.

WHEAT

Timing for Ryegrass Control is Critical: The best ryegrass control is obtained when postemergence herbicides, such as Hoelon or Osprey are applied to young, actively growing weeds (1-leaf to 2-tiller) in vigorously growing wheat that will shade competitive weeds. This timing normally occurs late in the fall, but this season's dry fall may delay optimum timing until early spring (February) in late-emerging fields. Delaying herbicide application until wheat stem elongation begins will allow ryegrass to rob nutrients and space. This competition will reduce wheat tiller numbers and yield potential. Because late-emerging wheat has less time to tiller, the optimum timing for ryegrass control may be very fine this season.

Cotton

By Dr. Tom Barber

As this is written the USDA cotton yield estimate remains at 854 lbs of lint per acre. If we can escape this season with a respectable average yield of 854 lbs I think we should be pleased, considering the conditions. I realize that this is not representative of the yield we could have reached with no interference from hurricanes. However, I think it is important to realize that it could have been much worse. Despite the hurricane damage we were blessed with dry harvesting conditions that allowed us to promptly harvest the crop and complete fall field preparation.

According to the USDA Classing office at Dumas the quality of the 2005 crop was not as good as last year in regards to staple length. As of 2/02/05 the 2005 crop averaged 34.59 staple with 37% 35 and 33% 34. The mike for the '05 crop is currently 4.56. 90% of the '05 crop ranged from 35-49, with 15% in the premium range 37-42. It does appear, however, that the majority of the '05 crop will be brighter with a 31 color grade and a 3 leaf.

As we all know, variety selection is one of the most important if not the most important decision a cotton producer can make. The 2005 Official Cotton Variety Trial data is complete and should soon be available on the MSUCares website (<http://msucares.com/pubs/crops3.html>) click on Cotton and then Variety Trials. You can also obtain a copy from your local county extension office or area agronomic agent. If you have trouble receiving a copy through the website or county office please call Tom Barber or ask for Emily Rose @ (662) 325-2701.

You will notice this year that a new entry trial was added at Stoneville, Tribbett, Brooksville and Verona, Mississippi. This trial was developed to evaluate the large number of Flex cotton varieties that were entered into the system. I believe there was a total of 48 varieties entered in this new entry trial. Also, you will notice that there are new players in the Mississippi cotton seed business this year; Croplan Genetics and Dyna-Gro will be offering Flex BGII varieties.

There will be many different choices to make when selecting varieties. Remember that the varieties that have been consistent on your farm for the past 3 years will most likely remain consistent next season. Plant the majority of your acres in proven performers that have been the most consistent on your farm. There are many good, new varieties that will be available again next season. We have a couple years of data on some of these varieties and they should be considered on small acreage. The first thing you must do to make a good variety decision and manage risk is to plant

more than one variety, and also plant varieties with different maturities. We do not know what next season will hold in regards to weather conditions and tropical systems. The fact that some of the weather experts say "we are in a 10 year cycle for hurricanes" scares me to death. That being stated, I certainly would not put all of my eggs in one basket.

As mentioned before, there will be many flex varieties available for planting next season. We have evaluated these varieties for one year and many of them appear to have the same yield potential as most of the current varieties we plant. However, remember the season and weather conditions. Just because they did well this year doesn't mean that they will perform the same in 2006. The technology is good and the flexibility to move past the 5th leaf window will be beneficial for all management strategies. It is important to try one or two of these varieties on **LIMITED** acreage if you believe the system will fit well into your operation. However, it is very important to remember the fields you have planted with Flex cotton, because an application of glyphosate (Roundup) past the 5th leaf stage of our current RR varieties could be disastrous, and drift onto these fields could also lead to disaster. Therefore, please mark the fields that you intend to plant with Flex varieties in order to keep them straight.

WELCOME TO THE 2006 DELTA AG EXPO

You are invited to the 33rd annual Delta Ag Expo. The Delta Ag Expo provides farmers and others interested in agriculture an opportunity to see the latest technology in agricultural products, services, and information. You will have the opportunity to view agricultural exhibits and talk with extension and research personnel and get up-to-date information for planning your crop year.

SEMINARS

Educational seminars featuring outstanding extension, research, and industry professionals will provide the latest research-proven information aimed at assisting producers. Seminars will be held in the meeting complex located adjacent to the exhibit hall.

SEMINAR HIGHLIGHTS:

Cotton/Corn Production
Rice Production
Soybean Rust
Peanut Production
Energy Saving Practices

KEYNOTE SPEAKERS

Tuesday, January 17, 2006:

11:30 – 12:30

Mr. Joe Sims
President, U. S. Oil & Gas Association
Jackson, MS

"A Perspective on Domestic and Regional Energy Matters"

Wednesday, January 18, 2006:

11:30 – 12:30

Dr. Charles Wax
Professor, Geosciences
Mississippi State University
"Changing Climate Trends and Cycles"
"Global Warming"

EXHIBITS

Over 100 commercial exhibits will represent every phase of agriculture and demonstrate innovative production practices.

HISTORY

The first Delta Ag Expo was held in 1974 as the first regional farm show in Mississippi. It was established to meet specific objectives:

**Improve lines of communication between industry, research, extension and farmers.

**Provide a setting for production seminars on various crops.

**Demonstrate the latest technology in machinery, chemicals and production practices.

LOCATION

Bolivar County Exposition Center
Highway 61 North
Cleveland, Mississippi

**For more information, contact:
Bolivar County Extension Service
(662) 843-8361
Fax: (662) 843-5611**

Delta Ag Expo program submitted by Kay Garrard

Tuesday, January 17, 2006

A.M.

9:00 – 11:00

RICE/SOYBEAN PRODUCTION

Moderators: Mr. Tommy Baird, County Director,
Sunflower County Extension, Indianola, MS
And

Mr. Mack Young, County Director, Quitman County
Extension, Marks, MS

Rice Production

Rice Production/Variety Selection:

Dr. Nathan Buehring, Assistant Extension Professor,
MSU/ES, DREC, Stoneville, MS

And

Dr. Tim Walker, Assistant Research Professor, DREC,
Stoneville, MS

Rice Fertility:

Dr. Tim Walker, Assistant Research Professor, DREC,
Stoneville, MS

Energy Savings With Intermittent Plus Multiple Inlet Irrigation:

Dr. Joseph Massey, Associate Professor, Plant and
Soil Sciences, Mississippi State University

Panel Discussion

Soybean Production Update 2006

Topics:

Annual Grasses and Other Concerns in Early
Maturing Soybeans
Soybean Rust Update
Soybean Insects

Panel:

...Dr. Dan Poston, Associate Extension/Research
Professor, DREC, Stoneville

...Dr. Billy Moore, Extension Plant Pathologist, retired

...Dr. Angus Catchot, Assistant Extension/Research
Professor, Entomology and Plant Pathology, Missis-
sippi State University

...Dr. Gordon Andrews, Extension Professor/
Entomology, DREC, Stoneville, MS

...Dr. Trey Koger, Research Agronomist, USDA/ARS,
Stoneville, MS

...Dr. Alan Blaine, Extension Professor, Plant and Soil
Sciences, MSU/ES, Mississippi State University

Tuesday, January 17, 2006

A.M.

11:30-12:30

Keynote Speaker:

Mr. Joe Sims
President, U.S. Oil and Gas Association
Jackson, Mississippi

"A Perspective on Domestic and Regional Energy

Tuesday, January 17, 2006

P.M.

1:30-3:00

COTTON/CORN/PEANUT PRODUCTION

Moderators: Mr. Art Smith, Area Extension Agent,
Agronomic Crops, Tunica County Extension, Tunica,
MS

And

Mrs. Ann Ruscoe, County Director, Coahoma County
Extension, Clarksdale, MS

Flex Cotton:

Dr. Tom Barber, Assistant Extension Professor, Plant
and Soil Science, Mississippi State University

General Cotton Issues/Weed Control:

Dr. Tom Barber, Assistant Extension Professor, Plant
and Soil Science, Mississippi State University

Cotton Insects:

Dr. Angus Catchot, Assistant Extension/Research
Professor, Entomology and Plant Pathology, Missis-
sippi State University

Corn Production:

Dr. Erick Larson, Associate Extension/Research Pro-
fessor, Plant and Soil Sciences, Mississippi State
University

Basics of Peanut Production:

Dr. Ron Henning, Peanut Product Specialist, Nitragin,
Inc., Reydon, Oklahoma

Wednesday, January 18, 2006

A.M.

9:00-11:00

Practical Energy Solutions That Could Save Money

*Moderators: Mr. Jerry Singleton, Area Extension
Agent/Agronomic Crops, Leflore County Extension,
Greenwood, MS*

And

Mr. Jimbo Burkhalter, County Director, Tallahatchie
County Extension, Charleston, MS

And

Dr. Steve Martin, Associate Extension Professor,
DREC, Stoneville, MS

Irrigation & Fuel Costs

Dr. Rob Hogan, Extension Economist, NEREC, Uni-
versity of Arkansas

General Ag Financial Outlook

Dr. Gregg Ibendahl, Associate Extension Professor,
Ag Economics, Mississippi State University

Fuel Savings by Planting No-Till Cotton

Mr. David Walker, Inverness, MS

Reducing Costs by Planting Skip-Row Cotton

Mr. Ricky Belk, Minter City, MS

Wednesday, January 18, 2006

A.M.

11:30-12:30

Keynote Speaker:

Dr. Charles Wax
Professor, Geosciences
Mississippi State University
"Changing Climate Trends and Cycles"

Calendar of Events

January

6, Tri-State Soybean Forum, Delhi Civic Center, Delhi, LA. For additional information, please contact Emily Rose, (662) 325-2701.

17-18, Delta Ag Expo, Bolivar County Exposition Center, Highway 61 North, Cleveland, MS. For additional information contact Bolivar County Extension Service (662) 843-8361.

17, Soybean Day, Bolivar County Exposition Center, Highway 61 North, Cleveland, MS. The Soybean Day will be held in conjunction with the Delta Ag Expo. For additional information contact Emily Rose (662) 325-2701.

February

7-9, Mississippi Crop College, Mississippi State University, Bost Extension Center. For additional information and to pre-register visit <http://msucares.com/crops/college/>. Pre-registration deadline is *January 30, 2006*. Contact Emily Rose (662) 325-2701.



We would like to wish you and your family a Merry Christmas and a Happy New Year!

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.

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UNIVERSITY
Extension
SERVICE