November 2008

Mississippi State University Extension Service

Agronomy Notes

Nutrient and Soil Management by Dr. Larry Oldham

The fertilizer price situation continues to be volatile so growers should employ good business principles in managing fertility inputs. This includes evaluating fertilizer material purchases on an equal basis by comparing prices based on equal units of nitrogen, phosphorus (phosphate), or potassium (potash) as noted recently by David Henry and Robert Mullen of Ohio State Extension. This allows comparison on an equal playing field.

Basic information needed for the comparison:

- Cost per unit weight (for solids) or volume (for liquids)
- Material nutrient analysis (N-P-K)
- Density or specific gravity (for liquids)

Assume urea (46-0-0) can be purchased for $500 per ton and anhydrous ammonia (82-0-0) can be purchased for $1020 per ton, which material is the cheapest?

Material price per ton

---------- = Nutrient cost

($/lb of nutrient)

2000 X Material analysis (percent)

With this equation, urea costs $0.54 per pound of nitrogen, and the anhydrous ammonia would cost $0.62 per pound.

Liquid fertilizers add to the complexity of comparisons because some are sold by volume (especially starter forms of material). This can lead to confusion when attempting to determine the price per pound of a nutrient when the price is in price per volume ($/gallons typically). Each material that is sold should have a value known as specific gravity (density). This is the weight in pounds for each gallon of the material (pounds per gallon). To determine the price per pound of a nutrient for liquid materials, divide the price per gallon of material by the specific gravity multiplied by the material nutrient analysis.

Material price per gallon

---------- = Nutrient cost ($/lb of nutrient)

Specific Gravity (lb/gallon) X Nutrient analysis (percent)

Using this equation, if 10-34-0 (ammonium polyhoshate) costs $6.56/gallon ($1,125/ton) and has a specific gravity of 11.67 lbs/gallon, each pound of P205 costs $1.65. Compare this to $0.98 per pound of P205 from DAP (18-46-0) at $900/ton, using the first equation. The DAP is a more economical choice as a phosphorus source in this example.

The analysis of commercially marketed fertilizer materials in Mississippi is regulated by the Bureau of Plant Industry. Just because someone claims their material is more "available" to the plant does not necessarily make it true (especially for the macronutrients – nitrogen, phosphorus, potassium, calcium, magnesium, and sulfur). Some products are marketed with claims of increased availability that could save you the producer some money, and from the economic perspective may be cheaper in the short term. However, if you do the calculations you are buying a fraction of the total nutrient amount at a substantially higher cost. Even though you may pay less, you are receiving less total nutrient at a higher cost of pound of nutrient input. This is why these calculations are important. It is a good idea to run through these calculations when approached by someone making you an offer you cannot refuse. Some simple math can reveal that in the end you are not getting that good of a deal for what you are buying.

Additional information on this and other fertilizer fundamentals is available at http://msucares.com/crops/fertilizer/index.html.

Inside this issue:

Soybean
by Dr. Trey Koger

Variety selection is one of the most critical decisions of all the components involved with growing a productive and profitable soybean crop. Selecting a variety capable of producing a high yielding, quality crop consistently across a range of environmental conditions is very important to the profitability and sustainability of each soybean crop. Factors such as soil type, irrigation capabilities, drainage, planting date, row pattern, harvest capabilities, and the production of other crops all influence the selection of the proper variety or in most cases varieties for each farm operation.

The following list was compiled to serve as a condensed list of varieties that perform consistently across a range of environments. Consistent performance across a range of environmental conditions is important to producing sustainable, productive, and profitable crops. This list was developed to provide you with a list of varieties that have shown to produce consistent yields. These choices were made based on performance in the MSU variety trials, long-term yield performance, and personal field observations. The selection of promising new varieties on the list was based almost entirely on yield performance in the 2007 and 2008 MSU variety trials. We encourage you to plant these "promising" new varieties on a limited scale to determine if they have a fit on your farm operation.

Environmental conditions are rarely the same from year to year or even within a single growing season. Thus it is important to diversify your variety selection each year by picking multiple varieties that will help to reduce risk and cover a range of environmental conditions often encountered each season.

The best variety trial is the one you conduct on your own farm under your management practices. Keep in mind it is important to not plant your entire crop to one variety but plant multiple varieties, and plant new varieties on a limited scale to determine if they have a fit on your farm operation within your management strategies. Keep in mind there is no such thing as a perfect variety. Every variety has some weaknesses. With that in mind, it is important to diversify your variety selection to find the "next to perfect" varieties for your individual farm operation.

Please attain a copy of the Mississippi Soybean Variety trials in its entirety to help aid you in the variety selection process. The variety trial publication can be found on the MSUcares website (www.msucares.com) or in your local county extension office.

If you have any questions or comments, please do not hesitate to contact your county extension office, MSU area agronomist, or your extension specialist.

2009 Preferred Soybean Variety List

Roundup Ready Maturity Group III's

Hornbeck 3927	NK S39-A3	Armor 39-K4	Asgrow 3905	Asgrow 3906
Asgrow 3803**	Progeny 3906**			

Roundup Ready Maturity Group IV's (Early)

Asgrow DKB46-51†	NK S46-U6	Asgrow 4403	Hornbeck 4527	NK S44-D5**	Progeny 4206
Pioneer 94B73	Dynagro 33Y45	Morsoy 4556**	Asgrow 4605	Asgrow 4703	Terral 46R15
Schillinger 457**	DK 4667				

Roundup Ready Maturity Group IV's (Late)

Asgrow DK4866†	Hornbeck 4924	Asgrow 4903	Asgrow DP4888†	Delta Grow 4970
Schillinger 495	Progeny 4906	Delta King 4968	Terral 47R18**	AgVenture 49X9**
Delta Grow 4975	Stine 4782-4**	Dyna-Gro 37P49		Terral 49R17

Roundup Ready Maturity Group V's (Early)

Pioneer 95M50	NK S56-D7	Asgrow DP5335†	Delta Grow 5555	AgVenture 51X5**
Asgrow DK5068†	Hornbeck 5525	FFR 5663	Terral 54R28**	Dyna-Gro 32A53**
Hornbeck 5226	Terral 55R15	Progeny 4949	Armor GP-533	AgVenture 50X6**
NK S52-F2**	Pioneer 95B43	Armor GP-500**	Dyna-Gro 33B52	Delta King 52K6
Progeny 5650	Asgrow DP5634†	Dyna-Gro 35F55**	AgVenture 54X4**	

Roundup Ready Maturity Group V's (Late)

Terral 59R16	Progeny 5706	Dyna-Gro 33C59	Asgrow DP5808†	Delta Grow 5970
Terral 57R16	Asgrow 5905			

Conventional varieties

Maturity Group IV's	Maturity Group V's (Early)		Maturity Group V's (Late)
Hornbeck 4926	Hornbeck C5025	Jake	Osage
	USG 5002T	Stoddard	
	Hutcheson		

Varieties are chosen based upon overall consistency, yield performance, field observations, results from variety trials, and ability to perform consistently across a wide range of environments.

** Indicates that a variety is a "Promising New Variety" and was selected based on excellent yield performance in Mississippi State University Variety Trials, but minimal field testing in production settings.

† Varieties formerly known as Dekalb, Delta King, or Delta and Pine are now referred to as "Asgrow" followed by initials and numbers of former name. Ex. Dekalb 46-51 is now Asgrow DKB46-51.

MSPB Mississippi Soybean Promotion Board

Mississippi State University Extension Service

Soybean continued...
by Dr. Trey Koger

Reference guide for short list varieties

Important: This guide was developed to serve as a reference in the variety selection process. Factors such as soil type, planting date, surface drainage, irrigation capabilities, row spacing, and harvest capacity influence selecting the proper varieties for each farm operation.

Soil type information: Every variety has a soil type or range of soil types it is best suited for in order to reach full yield potential. The "preferred" soil type for each "short-list" variety is listed in the table below. This is not to say that a given variety will not perform well on soil types other than the one(s) listed below. The soil type listed for each variety is simply the "preferred" soil type. Other factors in addition to soil type such as surface drainage, raised beds vs. flat planted, and crop rotation also influence variety performance in addition to soil type. Soil type information in the table below is compiled into the three following categories:

loam = sand, sandy loam, and silt loam (i.e. cotton soil)

mixed = clay loam, loamy clay, clay

heavy clay = silty clay (gumbo clay)

The following practices should be considered to reduce the potential of certain varieties (i.e growthy varieties suited for mixed to heavy clay) from lodging when planted on loamy soils:

Plant earlier (early April vs. mid- to late-April or May helps to reduce excessive growth)

Reduce the seeding rate (10 to 15% from the normal recommended rate)

Avoid planting in single 38" or 40" rows. Plant in twin-row or narrow row system

In general, earlier maturing varieties don't produce as much vegetative growth as later maturing varieties.

Plant a variety better adapted for loam soils if possible.

Plant color: Most varieties listed as having a light tawny plant color are more grayish in color than tawny (tannish-gray). For this reason, varieties listed as having a light-tawny plant color are listed as "light tawny / gray" in the table below. Tawny is a brownish to tannish color, with a red or brown tinge. A gray soybean plant is light to dark gray in color. Plant color is influenced by environmental conditions as well as genetic background of the variety.

Plant height / canopy width categories: Height and growth habit are related to the genetic background of every variety. However, factors such as soil type, planting date, row pattern, seeding rate, and irrigation also affect height and canopy width for every variety.

Plant height: short, medium-short, medium, medium-tall, tall
Canopy width: thin, medium, medium-bushy, bushy

STS varieties: If the box contains "STS" then the variety is tolerant of higher use rates of Synchrony XP herbicide. Keep in mind Synchrony XP herbicide can be applied to non-STS soybean, but at lower rates than for STS soybean varieties. An STS soybean variety should be planted when soybean is planted behind wheat if Finesse or Finesse grass and broadleaf herbicide is applied to wheat. If the box in the "STS" table column does not contain the abbreviation "STS" then the variety is a non-STS variety.

Variety	Best adapted soil type	Plant color	Plant height / canopy width	STS
Group III's				
Armor 39-K4	loam to heavy clay	tawny (red)	medium-tall / bushy	
Asgrow 3803**	loam to heavy clay	gray	tall / thin	
Asgrow 3905	loam to mixed	tawny (red)	medium / medium	
Asgrow 3906	loam to mixed	tawny (brown)	medium / medium	
Hornbeck 3927	loam to heavy clay	gray	medium / bushy	
NK S39-A3	loam to mixed	light tawny / gray	medium-tall / medium	
Progeny 3906**	loam to mixed	light tawny / gray	medium-short / medium	
Group IV's early				
Asgrow 4403	loam	light tawny / gray	medium-tall / thin	
Asgrow 4605	loam to heavy clay	light tawny / gray	short / bushy	STS
Asgrow 4703	loam to mixed	light tawny / gray	medium / bushy	
Dekalb 46-51	loam to heavy clay	tawny (red)	medium / medium	
DK 4667	mixed to heavy clay	tawny (brown)	medium-tall / bushy	
Dynagro 33Y45	loam to mixed	gray	medium / bushy	STS
Hornbeck 4527	mixed to heavy clay	tawny (red)	medium-tall / bushy	
Morsoy 4556**	loam to mixed	light tawny / gray	medium / bushy	STS
NK S44-D5**	loam to mixed	tawny (brown)	medium / bushy	
NK S46-U6	loam to heavy clay	light tawny / gray	tall / medium-bushy	
Pioneer 94B73	loam to heavy clay	light tawny / gray	medium-tall / bushy	
Progeny 4206	loam to mixed	light tawny / gray	medium-short / medium	
Schillinger 457**	loam to heavy clay	tawny (brown)	tall / medium-bushy	
Terral 46R15	mixed to heavy clay	tawny (red)	medium-tall / bushy	
Group IV's late				
AgVenture 49X9**	mixed to heavy clay	tawny (brown)	medium-tall / medium	
Asgrow 4903	loam to heavy clay	tawny (brown)	medium / bushy	STS
Delta Grow 4970	loam to heavy clay	light tawny / gray	tall / bushy	
Delta Grow 4975	loam to heavy clay	light tawny / gray	medium-tall / bushy	
Delta King 4866	loam to heavy clay	light-tawny / gray	medium-tall / bushy	STS
Delta King 4968	mixed to heavy clay	gray	medium-tall / bushy	
DPL 4888	mixed to heavy clay	tawny (red)	tall / bushy	STS
Dyna-Gro 37P49	mixed to heavy clay	tawny (brown)	medium-tall / medium	
Hornbeck 4924	loam to heavy clay	light-tawny / gray	tall / bushy	
Progeny 4906	loam to mixed	tawny (red)	medium-tall / bushy	
Schillinger 495	loam to heavy clay	light tawny / gray	tall / medium-bushy	STS
Stine 4782-4**	loam to mixed	light tawny / gray	medium / bushy	STS
Terral 47R18**	mixed to heavy clay	tawny (red)	medium-tall / bushy	
Terral 49R17	mixed to heavy clay	tawny (brown)	tall / bushy	
Group V's early				
AgVenture 50X6**	mixed to heavy clay	gray	medium-tall / medium	
AgVenture 51X5**	loam to heavy clay	tawny (red)	tall / medium-bushy	STS
AgVenture 54X4**	mixed to heavy clay	tawny (red)	medium-tall / bushy	
Armor GP-500**	loam to clay	tawny (red)	medium / bushy	
Armor GP-533	loam to clay	tawny (red)	medium / bushy	
Delta Grow 5555	loam to mixed clay	gray	medium / bushy	
Delta King 5068	mixed to heavy clay	gray	tall / bushy	
Delta King 52K6	loam to clay	tawny (red)	medium / bushy	
DPL 5335	mixed to heavy clay	tawny (red)	medium-tall / bushy	STS
DPL 5634	loam to heavy clay	tawny (red)	medium / bushy	
Dyna-Gro 32A53**	loam to heavy clay	tawny (red)	medium / bushy	
Dyna-Gro 33B52	mixed to heavy clay	gray	medium / bushy	
Dyna-Gro 35F55**	mixed to heavy clay	gray	medium / bushy	

Soybean Continued...
by Dr. Trey Koger

Variety	Best adapted soil type	Plant color	Plant height / canopy width	STS
FFR 5663	loam to mixed	tawny (red)	medium / bushy	
Hornbeck 5226	loam to heavy clay	tawny (red)	medium-tall / bushy	
Hornbeck 5525	loam to heavy clay	tawny (red)	medium-tall / bushy	
NK S52-F2**	loam to heavy clay	tawny (red)	medium-tall / medium-bushy	
NK S56-D7	loam to heavy clay	tawny (red)	medium-tall / medium-bushy	
Pioneer 95B43	heavy clay	gray	tall / bushy	
Pioneer 95M50	loam to heavy clay	tawny (red)	medium / bushy	STS
Progeny 4949	mixed to heavy clay	tawny (brown)	tall / bushy	
Progeny 5650	mixed to heavy clay	gray	medium-tall / bushy	
Terral 54R28	loam to heavy clay	tawny (red)	medium-tall / bushy	
Terral 55R15	heavy clay	gray	tall / bushy	
Group V's late				
Asgrow 5905	loam to heavy clay	gray	medium-tall / bushy	
Delta Grow 5970	mixed to heavy clay	gray	tall / bushy	
DPL 5808	mixed to heavy clay	tawny (brown)	Medium-tall / bushy	
Dyna-Gro 33C59	mixed to heavy clay	gray		
Progeny 5706	loam to mixed	gray	medium-tall / bushy	
Terral 57R16	mixed to heavy clay	tawny (red)	medium-tall / bushy	
Terral 59R16	loam to heavy clay	gray	medium / bushy	
Conventional IV's				
Hornbeck4926	loam to heavy clay	gray	tall / bushy	
Conventional V's				
Hornbeck C5025	heavy clay	gray	tall / bushy	
Hutcheson	loam to heavy clay	gray	medium / bushy	
Jake	loam to heavy clay	tawny (red)	medium / bushy	
Stoddard	loam to mixed	tawny (red)	medium-short / bushy	
Osage	loam to heavy clay	gray	medium / bushy	

Soybean Continued...
by Dr. Trey Koger

Sponsors
BASF
Bayer
Cullum Seed
Dupnt / Pioneer
Helena
Monsanto

Sponsors
NK seed/Syngenta
Progeny
Terral
UAP (Dyna-Gro)
Valent
AMVAC

Soybean Production & Planning Meeting

Monday – Dec. 8 – 9:00 to 1:00

Greenwood Civic Center on Hwy 7

- **Presentations by MSU MAFES and MSU-ES specialists**
- **Roundtable discussion**
- **Input from growers on research and extension needs**

2008 Soybean Crop Overview – Trey Koger
Weed management and resistance – Tom Eubank
Bedding systems – Brewer Blessitt
Soybean diseases – Tom Allen and Billy Moore
Bean leaf beetle issues – Jeff Gore
Soybean Looper control issues– Dr. Angus Catchot

Lunch provided

MSPB Mississippi Soybean Promotion Board

For more information, contact
Trey Koger
662-207-1604, tkoger@drec.msstate.edu

Mississippi State University Extension Service

Forages

by Dr. Rocky Lemus and Jimmy Ray Parish

Alfalfa (*Medicago sativa*) is a productive and vigorous forage crop that has not been widely grown in the Mississippi because information on adapted varieties is lacking. It is the fourth largest crop (acreage base) grown in the United States following corn, soybeans, and wheat. Alfalfa is high quality forage commonly fed to beef cattle, sheep, and horses and it can be also used for green chop and silage. Alfalfa is a cool-season perennial legume with up to 36 inches of growth and a deep taproot. Most tillers arise from the crown. Leaves are trifoliloate with serrated leaflets at the tip.

When planting alfalfa always select a variety that will fit your area. New varieties with greater yield potential, better persistence, winter hardiness and disease resistance, and improved forage quality have been developed in the last years. Varieties will perform differently in various growing regions; look for varieties grown in similar soil type and climate to your farm as possible to determine yield potential. Persistence depends on management. Expected persistence in Mississippi should be 3 to 4 years with good management practices. Fall dormancy determines how tall alfalfa will grow in the month following the last cutting. Three areas of adaptation have to be considered in Mississippi (Figure 1). Dormant alfalfas (dormancy 4 to 5) will fit in the northern part of the state. Dormant and semi-dormant alfalfas (dormancy 5 to 7) will fit in the central part. Semi-dormant and non-dormant alfalfas (dormancy 7 to 10) will fit the southern part of Mississippi. Semi-dormant and non-dormant varieties typically might recover faster after cuttings, yield more in the fall and might green up earlier in the spring.

Alfalfa requires a well-drained soil for optimum and production and establishment. Always soil test before planting. Liming is the most important part in establishing, maintaining high yielding and quality alfalfa stands. Alfalfa is sensitive to soil acidity and soil pH of 6.2 or above is required for optimum yield production. Apply lime at least 6 months (preferably 12 months) prior to seedling since lime reacts very slowly with soil acids. Alfalfa is a legume that should fix most of its own N requirement. Applying 20 to 55 pounds of fertilizer N per acre at establishment will aid seedling growth while root nodules are forming. Phosphorous, potassium, boron and sulfur are important nutrients for a good establishment. Manure is a good source of macro- and micronutrients that could be used to satisfy alfalfa nutrient requirements. Testing the manure prior to application is recommended for application rates that will satisfy alfalfa nutrient needs. Avoid direct manure/seed contact. Manure application prior to seeding should be incorporated into the soil. On soils with a relatively high leaching potential (sandy and sandy loam) apply manure within 3 to 4 weeks of seeding. On less leachable soils, manure may be applied in the fall before alfalfa seeding.

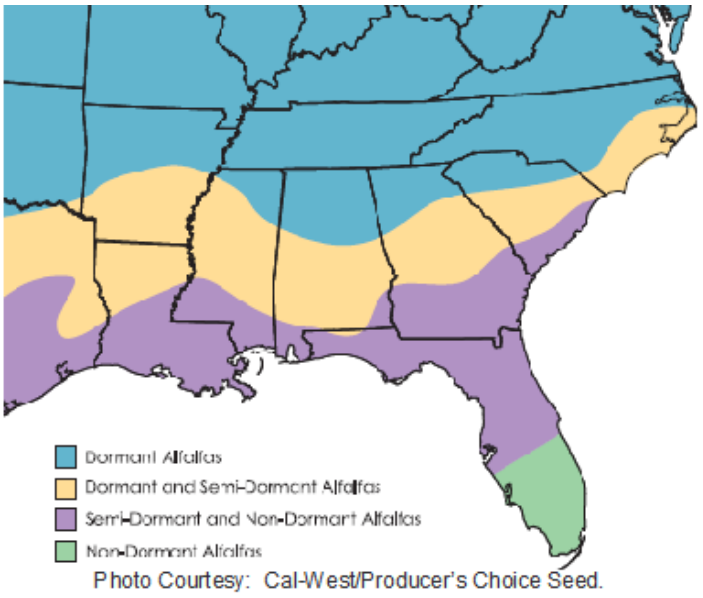

Figure 1. Alfalfa adaptation map for Mississippi.

Fall seeding is preferred since adequate soil moisture and cool temperatures enhance germination and establishment. Alfalfa should be plated from mid-September to mid-October in a well-prepared seed bed at a seeding rate of 15 to 20 lb/acre. No-till is better recommended for Round-up Ready (RR) varieties. Plant seeds ¼ to ½-inch deep in medium to heavy soils and ½ to 1-inch deep on sandy soils. Alfalfa usually needs about 6 weeks growth after germination to store the necessary carbohydrates and survive the winter. To ensure a proper nitrogen fixation, it is better to purchase pre-inoculated seed or treat the seeds using commercial inoculums. Nodules are the result of an infection by an effective strain of bacteria (*Rhizobium meliloti*). The inoculum should be from the current year and should have been stored in a cool place in the store away from sunlight. Contact your local County Extension Office for the proper inoculating procedure.

One of the major challenges for alfalfa producers is a successful weed control using conventional herbicides. The most critical time for weed management in alfalfa is during establishment. Weed infestation and competition during establishment will reduce seedling vigor and affect persistence and longevity of the perennial crop. Yield reduction in thinning stands results in loss of ½ to 1 lb of yield for each pound of weeds produced. Roundup Ready (RR) technology has been successfully incorporated into alfalfa and is scheduled for commercial release in the near future. Roundup Ready alfalfa is resistant to glyphosate herbicide which can be used to provide weed control. Roundup Ready alfalfa can provide high quality, weed-free forage with excellent crop safety and minimal harvest restrictions. Yields advantages have been reported at Mississippi State University (Table 1).

Forages continued...

by Dr. Rocky Lemus and Jimmy Ray Parish

Roundup Ready alfalfa may also help in the establishment of no-till alfalfa stands, but it may not be appropriate for all situations.

With adequate soil moisture, alfalfa can produce good quantity of grazeable forage for five to seven months. Alfalfa productivity in the southern part of Mississippi can occur from March to November while in the northern part could be April to October. It could be used for pasture, hay, or silage. Spring grazing is usually help to avoid weather delays and quality loss which it typical during the first cutting. Summer grazing of alfalfa could benefit livestock during the "summer slump" (late July and August) when quality of warm-season grasses and tall fescue declines substantially. Grazing in the fall could help avoid problems with slow curing of hay due cooler temperatures and high humidity and when most warm-season pastures have completely utilized. Alfalfa also makes excellent forage alternative for weaning claves. I can add weight to yearling cattle or increase cow condition prior to winter.

Even though alfalfa can be grazing tolerant, it still can cause bloat. Currently none of the new varieties have the reduced bloat potential. Grazing pure alfalfa stands through the growing season does not have much appeal to many livestock producers. This problem can be reduced combining grass with alfalfa in fields to be grazed. A 50/50 (alfalfa/grass) mixture is recommended. This mixture percentage or even a lower alfalfa percentage will not guarantee that it will be bloat free, but sharply reduce the risk potential. Provide an anti-bloating agent such as poloxalene several days prior to and while grazing alfalfa. It is also important to provide mineral high in sodium and avoid excessive calcium, magnesium, and potassium.

Continuous grazing of alfalfa is not recommended because it will result in lower grazing efficiency and rapid stand decline. When rotational grazing alfalfa divide the pasture that each paddock will have approximately 25 to 35 days rest period, which means six to eight grazing days. Flexibility can occur in this grazing scheme, but it is not recommended grazing for no more than 10 to 12 days. Stocking rates that can be used on alfalfa depend on grazing management and production. When grazing alfalfa in the spring, wait until the plants has reached 6 to 8 inches of growth. Avoid reducing stubble height to less than 3 inches. It is important to monitor livestock during spring grazing because rapidly growing young alfalfa might present a higher bloat potential. After the spring grazing has ended, allow alfalfa to grow for about 25 to 40 days before cutting it for hay. In fall, bloating potential still remains a concern, especially three to five days after a hard freeze. It is recommended to leave a 6 to 8 inches stubble height after fall grazing. To help alfalfa to survive through the winter, allow the plants to grow with cutting or grazing for four to six weeks prior to the expected hard freeze (usually October 15 to November 15). This rest period will allow plants to store carbohydrates to maintain plants alive throughout the winter and develop new shots in the spring.

Table 1. Alfalfa Production in Mississippi in 2006 and 2007.

	2006[2]			2007		
Variety	**Alfalfa**	**Weed**	**Total**	**Alfalfa**	**Weed**	**Total**
	Yield (lb/ac)					
Alfagraze	6951	671	7622	13071	795	13866
Alfagraze 300 RR[1]	8400	0	8400	15598	0	15598
Alfagraze 600 RR[1]	10078	0	10078	14832	0	14832
Amerigraze 702	8717	472	9189	15728	565	16293
NFABI	6715	565	7281	13177	600	13777
NFOK	8293	448	8742	14850	848	15698
R84BD31[1]	8376	0	8376	14090	0	14090
Average	**8219**	**308**	**8527**	**14478**	**401**	**14879**

[1]RR = Round-ready varieties.
[2]Planting rate = 20 lb/ac Pure Live Seed in a Marietta sandy loam soil in Starkville, MS.
Source: J.R. Parish et al., 2008. American Forage Grassland Council Annual Meeting.

Rice

by Dr. Nathan Buehring

With high rice prices and riding on the coat tails of two consecutive years of record yields, the hope of a record three-peat was on the minds of many. Those hopes soon diminished after harvest and to say the least, this was a disappointing year for rice yields. The October USDA yield projection for Mississippi was set at 7,200 lb/A (160 bu/A), which would be slightly lower than last year. I believe once the last bushel of rice is counted, the state average yield will be lower and could possibly be around 6,500 lb/A (144 bu/A). The latest USDA acreage report has set Mississippi at 229,000 harvestable acres, which is up 21% from 2007. The increase in acres is mainly due to high rice prices.

The 2008 rice crop was planted later than normal. By April 15th only 25% of the crop was planted. In 2007, I would estimate that 75% of the crop was planted by April 15th. Also, a considerable portion (~25%) of the rice crop was planted after May 15th. This was mainly due to a wet spring and planting behind wheat. In general, later planted rice yields lower than rice that is planted in April and this was very evident this year. Rice yields for the later planted rice has ranged from 4500 lb/A (100 bu/A) to 5625 lb/A (125 bu/A).

Weather, as always, is a big contributing factor in determining rice yields. Wet weather in general was the biggest weather factor in 2008. Wet weather in the spring delayed planting and wet weather in August and September affected pollination and delayed maturity in later planted rice. The total rainfall received during August and September was in excessive of 12 inches, which is significantly higher than 2007. Also, the average temperature for August and September were significantly lower than in previous years.

Cotton

by Dr. Darrin Dodds

2008 Cotton Short Course: The 25th Annual Cotton Short will be held at the Bost Extension Center on the campus of Mississippi State University on December 1-2, 2008. Speakers will include experts from Mississippi State University and surrounding institutions, Mississippi Farm Bureau, and USDA -ARS. The program for the 2008 Short Course is nearly complete and will be available in the near future. Pre-registration fees are $80 (until November 25, 2008) and $100 thereafter. Pre-registration for the 2008 Cotton Short course is now available on-line at: http://msucares.com/crops/cotton/short-course08/index.html

To receive Agronomy Notes via email, please contact Tammy Scott at (662) 325-2701.

Mississippi State University Extension Service