

# Louisiana



## SOYBEAN & FEED GRAIN REVIEW



Volume V, Issue XI

September 2007

### Contributors

**Dr. David Y. Lanclos  
J Stevens  
Dr. Steve Harrison  
Dr. Ed Twidwell  
Rob Ferguson  
Brad Guillory**



### Table of Contents

What is Lost When Residue is Burned?.....	p. 1
Wheat Production Guidelines for 2007-2008.....	p. 3
Upcoming Events.....	p. 6
Contacts.....	p. 6



### WHAT'S GOIN' ON...

#### WHAT IS LOST WHEN CORN CROP RESIDUE IS BURNED?

**J Stevens, Associate Professor and Specialist, Soil Fertility/Nutrient Management**

Corn plant residue from harvesting operations can be quickly decomposed to ashes through burning. The mineral elements such as phosphorus and potassium will be in the ashes. Most of the N can be lost and you can assign a dollar value to this loss. Sulfur (S) contained in the cornstalk residue will be affected in the same manner as N. The amount would be approximately 15 lb S per acre. A frequent question asked is how much nitrogen (N) went

up in smoke? Not all crop residue is completely turned to ash, and rarely is the entire field burned from one end to the other. Understanding what was burned and how much area was affected has an impact on the total amount of N lost. The amount of N contained in corn residue has been well documented from the late 60's and clearly delineated more recently by Iowa State University.

The estimated amount of N that may be lost will be based upon some assumptions. In the mid-range of corn yields, the dry matter weight of stalks, leaves, etc., is approximately equal to the dry matter weight of the grain. The N concentration in corn plant residue is approximately one percent.

An example might be 170 bushel yield. Take the 170 X 56 to equal 9,520 pounds. Take 9,520 X 0.845 to equal 8,044 pounds. (This has corrected the plant residue to a dry matter basis because the grain yield was a 56 pound bushel at 15.5 % moisture.) Take 8,044 X 1 % N to equal 80 pounds of nitrogen. Assign some price per pound of nitrogen and this would be the estimated value lost.

Another look at N loss, from Ohio State University, utilizes a table that provides a simple estimate of N loss. Remember, the N that was contained in the corn residue has been liberated into the atmosphere through burning, thus that amount is not available for the next season's crop.

<u>Yield (Bu/A)</u>	<u>N Lost (Lb/A)</u>
120	40
130	44
140	47
150	50
160	54
170	57
180	60
190	64
200	67

Along with the loss of N, carbon contained in the plant material is lost as well. It would have been incorporated into the soil organic matter fraction. While there are no universally accepted values for crop residue or soil organic matter levels, and no specific dollar amount tied directly to a loss of organic matter, an Iowa State University article recommends that one dollar per acre should be claimed. Unfortunately, the economic impact associated with the loss of residue can't be fully realized until later, especially in fields with high erosion potential.

Soil organic matter is an important component of soil that supplies plants with nutrients, holds soil particles together to prevent erosion, and improves soil tilth, which refers to the degree to which the soil is aggregated together. Organic matter also improves soil drainage and water holding capacity while controlling the decomposition and movement of some pesticides.

The effect on organic matter of removing all crop residue (not including roots), versus leaving it for a one-year period cannot be detected in an organic matter analysis. By using some standard values for what ends up in the soil organic matter, the addition of the example of 8,044 pounds of cornstalk residue would increase soil organic matter by approximately 0.068 percent.



## **WHEAT**

### **WHEAT PRODUCTION GUIDELINES FOR 2007-2008**

**Dr. Ed Twidwell, LSU School of Plant, Environmental & Soil Sciences**

**Dr. Steve Harrison, LSU School of Plant, Environmental & Soil Sciences**

Due to favorable wheat prices for the present and near future, there is a great deal of interest among growers in planting wheat this fall. Growers should expect wheat seed to be in short supply this fall and they are encouraged to book their seed early. The list of recommended wheat varieties can be found in the table below.

Wheat performance data for the 2006-2007 growing season can be found at the following web site: <http://www.agronomy.lsu.edu/LSUWheat/LSUWHEAT%20PREDATA.htm>

In early September the Wheat Research Summary publication will be placed on the LSU AgCenter web site at the following address:

[http://www.lsuagcenter.com/en/crops\\_livestock/crops/WheatOats/Variety+Trials++Recommendations/](http://www.lsuagcenter.com/en/crops_livestock/crops/WheatOats/Variety+Trials++Recommendations/)

Both of these sites contain wheat performance data from different locations across the state.

When choosing wheat varieties, pay attention to factors other than yield that can influence profitability:

1. Disease susceptibility – a single \$16 fungicide application is equal to about four bushels in yield.
2. Test weight- a low test weight can result in dockage at the elevator.
3. Lodging resistance – lodging increases harvest costs and decreases yield and test weight.

Recommended planting dates for wheat range from October 15 to November 15 in north Louisiana and from November 1 to November 30 in central and south Louisiana. Planting wheat earlier than the recommended planting dates will subject the plants to greater insect and disease pressure and also makes the plants more prone to winter injury.

Planting wheat with a grain drill is the preferred method because it allows uniform depth of planting and results in a more uniform stand. A seeding rate of 60 to 75 pounds per acre of high quality seed planted into a good seedbed with adequate moisture is satisfactory. Adjust the seeding rate up to about 90 pounds per acre for broadcast planting, late planting, or planting into a poorly prepared seedbed.

Fall fertilization and liming should be carried out to supply any needs indicated by soil testing. Phosphorus and potassium, where recommended, should be incorporated into the seedbed before planting. If lime is recommended, apply before seedbed preparation if possible. Fall application of nitrogen is usually not needed where wheat follows soybeans. Where wheat follows corn, sorghum or rice, application of 15 to 20 pounds of nitrogen per acre may be beneficial.



**Louisiana Cooperative Extension Service Recommended  
Wheat Varieties for 2007-08.**

<b>Brand/Variety</b>	<b>Notes</b>				
	Recom. Status *1	Stripe Rust *2	Leaf Rust *3	Test Weight *4	Sencor Reaction *5
<b>South Louisiana</b>					
AgriPro/Coker Magnolia	Recommended				
AGS 2000	Recommended	Susceptible			
AGS 2060	Recommended				
Delta King GR9108	Recommended				
Pioneer/26R87	Recommended				
Terral LA482	Recommended				
Terral LA841	Recommended				
USG 3209	Recommended	Susceptible	Susceptible		Susceptible

<b>Brand/Variety</b>	<b>Notes</b>				
	Recom. Status *1	Stripe Rust *2	Leaf Rust *3	Test Weight*4	Sencor Reaction *5
<b>North Louisiana</b>					
AgriPro Coker 9553	Recommended				
AgriPro Coker Beretta	Recommended			Low	
AgriPro Magnolia	Recommended				
AgriPro Coker Panola	Recommended				
AGS 2060	Recommended				
Croplan 8302	Recommended			Low	
Delta King 9577	Recommended				
Delta King GR9108	Recommended				
Dixie 989	Recommended				
Ragan & Massey LA95135	Recommended				
Pioneer/26R61	Recommended				
Pioneer/26R87	Recommended				
Terral LA841	Recommended				
Terral TV8466	Recommended		Susceptible		
Terral TV8558	Recommended				
USG3295	Recommended				

\*1 Recommended indicates the variety is recommended for production in that region based on past performance.

\*2 Susceptible or moderately susceptible to stripe rust and may yield substantially below the indicated means in some environments.

\*3 Susceptible or moderately susceptible to leaf rust and may yield substantially below the indicated means in some environments.

\*4 Test weights have been reported to be below average in some environments.

\*5 Susceptible to the herbicide Sencor (metribuzin).



### **Louisiana Soybean Association (LSA)**

LSA is a producer-based soybean organization affiliated with the American Soybean Association (ASA) and the United Soybean Board (USB). This organization has many roles, including updating statewide soybean producers on current legislative and environmental issues. The LSA has representatives on the ASA and USB boards. This allows Louisiana issues to be brought to a national audience. As a member of LSA, you support local, state, national and international promotion and use of soybeans. Membership is available to anyone involved in production agriculture. Agribusiness personnel are strongly encouraged to join.

When you join the LSA, you become a member of ASA, which is the collective voice of 25,000 U.S. soybean producers and other agbusiness personnel that are members of the association. By making the choice to become a member of ASA you make that collective voice even more powerful.

ASA is your advocate in Washington D.C., on issues like biodiesel legislation, the Farm Bill, transportation infrastructure and market access. This important policy work is paid for by your voluntary membership in ASA, and cannot come from checkoff dollars. As your number one advocate, ASA testifies before Congress, lobbies Congress and the Administration, provides written comments on key issues, helps develop key legislative language on soybean initiatives and relays information about the importance of ASA issues to the media.

ASA's commitment to policy development begins with the grower-members. They elect state Board members and voting delegates who establish the policy goals for ASA. For more than 85 years, ASA has been working on behalf of its members to build demand, enhance profit opportunities and protect the soybean industry. ASA is proud to represent its soybean grower members, and is looking forward to another 85 years of success.

To increase its representation on the national level, the LSA is seeking new members to be a part of their organization. By purchasing a three year membership to the LSA for \$155.00 the new or renewing member will receive credit for four bags of seed at their respective seed dealership. After paying for a three year membership and purchasing your seed as you normally do, send in a copy of the receipt and where you purchased your seed back to LSA by June 30<sup>th</sup>, 2007. Your account at that seed dealership that you choose will then be credited for four bags by the respective seed representative.

The seed companies participating in the LSA membership drive are: Asgrow/DeKalb, Croplan Genetics, Delta Grow, Delta King, Delta & Pine Land, NK/Syngenta Seed, Pioneer and Terral. If you have any questions on joining LSA call Charles Cannatella 337-207-4730 or go online at [www.SoyGrowers.com](http://www.SoyGrowers.com).



## **UPCOMING EVENTS**

### **September**

09/06 Southwest Louisiana Soybean and Energy Crop Result  
Demonstration Field Tour – Fenton, LA for details contact Allen  
Hogan [ahogan@agcenter.lsu.edu](mailto:ahogan@agcenter.lsu.edu)



## **PERSONNEL**

### **STATE EXTENSION SPECIALISTS**

Dr. Jack Baldwin, Professor, Entomology, Baton Rouge

[jbaldwin@agcenter.lsu.edu](mailto:jbaldwin@agcenter.lsu.edu)

Responsibilities: Soybeans, Corn & Grain Sorghum

Dr. Kurt Guidry, Associate Professor, Ag Economics and Agribusiness, Baton Rouge

[kmguidry@agcenter.lsu.edu](mailto:kmguidry@agcenter.lsu.edu)

Responsibilities: Soybeans and feed grain economic marketing

Dr. Clayton Hollier, Professor, Plant Pathology, Baton Rouge

[chollier@agcenter.lsu.edu](mailto:chollier@agcenter.lsu.edu)

Responsibilities: Grain Sorghum, Soybeans, and Corn

Dr. David Y. Lanclos, Assistant Professor and Specialist, Dean Lee Research and  
Extension Center, Alexandria

[dlanclos@agcenter.lsu.edu](mailto:dlanclos@agcenter.lsu.edu)

Responsibilities: Soybeans, Corn & Grain Sorghum

Dr. Charles Overstreet, Professor, Plant Pathology, Baton Rouge

[coverstreet@agcenter.lsu.edu](mailto:coverstreet@agcenter.lsu.edu)

Responsibilities: Nematodes in all agronomic crops

Mr. Jay Stevens, Assistant Professor and Specialist, Dean Lee Research and  
Extension Center, Alexandria

[jstevens@agcenter.lsu.edu](mailto:jstevens@agcenter.lsu.edu)

Responsibilities: Soil fertility for all agronomic crops

## EXTENSION ASSOCIATES

Rob Ferguson, Dean Lee Research & Extension Center, Alexandria  
[referguson@agcenter.lsu.edu](mailto:referguson@agcenter.lsu.edu) cell phone: 318-308-4191

Brad Guillory, Lee Research & Extension Center, Alexandria  
[bguillory@agcenter.lsu.edu](mailto:bguillory@agcenter.lsu.edu) cell phone: 318-308-2477

## PARISH CONTACT INFORMATION

Parish	County Agent	E-Mail Address
Acadia	Barrett Courville	<a href="mailto:bcourville@agcenter.lsu.edu">bcourville@agcenter.lsu.edu</a>
Allen	Randall Bellon	<a href="mailto:rbellon@agcenter.lsu.edu">rbellon@agcenter.lsu.edu</a>
Avoyelles	Carlos Smith	<a href="mailto:csmith@agcenter.lsu.edu">csmith@agcenter.lsu.edu</a>
Beauregard	Mike Lavergne	<a href="mailto:mlavergne@agcenter.lsu.edu">mlavergne@agcenter.lsu.edu</a>
Bossier	Joseph Barrett	<a href="mailto:jbarrett@agcenter.lsu.edu">jbarrett@agcenter.lsu.edu</a>
Caddo	John B. LeVasseur	<a href="mailto:jblevasseur@agcenter.lsu.edu">jblevasseur@agcenter.lsu.edu</a>
Calcasieu	Jerry Whatley	<a href="mailto:jwhatley@agcenter.lsu.edu">jwhatley@agcenter.lsu.edu</a>
Caldwell	Jimmy McCann	<a href="mailto:jmccann@agcenter.lsu.edu">jmccann@agcenter.lsu.edu</a>
Cameron	Gary Wicke	<a href="mailto:gwicke@agcenter.lsu.edu">gwicke@agcenter.lsu.edu</a>
Catahoula	Cliff Watts	<a href="mailto:cwatts@agcenter.lsu.edu">cwatts@agcenter.lsu.edu</a>
Concordia	Glen Daniels	<a href="mailto:gdaniels@agcenter.lsu.edu">gdaniels@agcenter.lsu.edu</a>
East Carroll	Donna Lee	<a href="mailto:drlee@agcenter.lsu.edu">drlee@agcenter.lsu.edu</a>
Evangeline	Keith Fontenot	<a href="mailto:kfontenot@agcenter.lsu.edu">kfontenot@agcenter.lsu.edu</a>
Franklin	Carol Pinnell-Alison	<a href="mailto:cpinnell-alison@agcenter.lsu.edu">cpinnell-alison@agcenter.lsu.edu</a>
Iberia	Jimmy Flanagan	<a href="mailto:jflanagan@agcenter.lsu.edu">jflanagan@agcenter.lsu.edu</a>
Iberville	Louis Lirette	<a href="mailto:llirette@agcenter.lsu.edu">llirette@agcenter.lsu.edu</a>
Jeff Davis	Allen Hogan	<a href="mailto:ahogan@agcenter.lsu.edu">ahogan@agcenter.lsu.edu</a>
Lafayette	Stan Dutile	<a href="mailto:sdutile@agcenter.lsu.edu">sdutile@agcenter.lsu.edu</a>
Madison	Mike Rome	<a href="mailto:mrome@agcenter.lsu.edu">mrome@agcenter.lsu.edu</a>
Morehouse	Terry Erwin	<a href="mailto:terwin@agcenter.lsu.edu">terwin@agcenter.lsu.edu</a>
	Richard Letlow	<a href="mailto:rletlow@agcenter.lsu.edu">rletlow@agcenter.lsu.edu</a>
Natchitoches	Hubert Wilkerson	<a href="mailto:hwilkerson@agcenter.lsu.edu">hwilkerson@agcenter.lsu.edu</a>
Ouachita	Richard Letlow	<a href="mailto:rletlow@agcenter.lsu.edu">rletlow@agcenter.lsu.edu</a>
Pointe Coupee	Miles Brashier	<a href="mailto:mbrashier@agcenter.lsu.edu">mbrashier@agcenter.lsu.edu</a>
Rapides	Matt Martin	<a href="mailto:mmartin@agcenter.lsu.edu">mmartin@agcenter.lsu.edu</a>
Red River	Hubert Wilkerson	<a href="mailto:hwilkerson@agcenter.lsu.edu">hwilkerson@agcenter.lsu.edu</a>
Richland	Keith Collins	<a href="mailto:kcollins@agcenter.lsu.edu">kcollins@agcenter.lsu.edu</a>
St. Charles	Rene' Schmit	<a href="mailto:rschmit@agcenter.lsu.edu">rschmit@agcenter.lsu.edu</a>
St. Landry	Keith Normand	<a href="mailto:knormand@agcenter.lsu.edu">knormand@agcenter.lsu.edu</a>
St. Martin	Alfred Guidry	<a href="mailto:aguidry@agcenter.lsu.edu">aguidry@agcenter.lsu.edu</a>
Tensas	Randy Smith	<a href="mailto:rsmith@agcenter.lsu.edu">rsmith@agcenter.lsu.edu</a>
Vermilion	Andrew Granger	<a href="mailto:agranger@agcenter.lsu.edu">agranger@agcenter.lsu.edu</a>
Washington	Henry Harrison	<a href="mailto:hharrison@agcenter.lsu.edu">hharrison@agcenter.lsu.edu</a>
West Baton Rouge	Louis Lirette	<a href="mailto:llirette@agcenter.lsu.edu">llirette@agcenter.lsu.edu</a>
West Carroll	Myrl Sistrunk	<a href="mailto:msistrunk@agcenter.lsu.edu">msistrunk@agcenter.lsu.edu</a>
West Feliciana	James Devillier	<a href="mailto:jdevillier@agcenter.lsu.edu">jdevillier@agcenter.lsu.edu</a>

## RESEARCH PERSONNEL

Scientist	Location	Responsibilities	E-mail Address
Dr. Roberto Barbosa	Dept. of Ag Engineering, Baton Rouge	Pesticide application, nozzle selection and variable rate application	<a href="mailto:rbarbosa@agcenter.lsu.edu">rbarbosa@agcenter.lsu.edu</a>
Dr. James Board	Dept. of Agronomy & Env. Mgmt., Baton Rouge	Soybeans: water-logging and other cultural practices	<a href="mailto:jboard@agcenter.lsu.edu">jboard@agcenter.lsu.edu</a>
Dr. Don Bouquet	Macon Ridge Station, Winnsboro	Nutrient Mgmt., BMP, and variety testing	<a href="mailto:dboquet@agcenter.lsu.edu">dboquet@agcenter.lsu.edu</a>
Dr. Ernie Clawson	NE Research Station, St. Joe	Soybeans: variety testing and early planting	<a href="mailto:eclawson@agcenter.lsu.edu">eclawson@agcenter.lsu.edu</a>
Dr. Dustin Harrell	Rice Research Station, Crowley	Research Agronomist	<a href="mailto:dharrell@agcenter.lsu.edu">dharrell@agcenter.lsu.edu</a>
Dr. Fangneng Huang	Dept. of Entomology, Baton Rouge	Corn & grain sorghum: insect pest management	<a href="mailto:fhuang@agcenter.lsu.edu">fhuang@agcenter.lsu.edu</a>
Dr. James Griffin	Dept. of Agronomy & Env. Mgmt., Baton Rouge	Soybeans and corn: weed management	<a href="mailto:jgriffin@agcenter.lsu.edu">jgriffin@agcenter.lsu.edu</a>
Dr. Manjit Kang	Dept. of Agronomy & Env. Mgmt., Baton Rouge	Corn: quantitative genetics and breeding	<a href="mailto:mkang@agcenter.lsu.edu">mkang@agcenter.lsu.edu</a>
Dr. Roger Leonard	Macon Ridge Research Station, Winnsboro	Grain crops: sustainable IPM programs	<a href="mailto:rleonard@agcenter.lsu.edu">rleonard@agcenter.lsu.edu</a>
Dr. H.J. "Rick" Mascagni	Macon Ridge/NE Research Stations, Winnsboro & St. Joe	Corn & grain sorghum: production and variety testing	<a href="mailto:hmascagni@agcenter.lsu.edu">hmascagni@agcenter.lsu.edu</a>
Dr. Donnie Miller	NE Research Station, St. Joe	Soybeans: weed control	<a href="mailto:dmiller@agcenter.lsu.edu">dmiller@agcenter.lsu.edu</a>
Dr. Steve Moore	Dean Lee Research & Extension Center, Alexandria	Corn: breeding and aflatoxin Soybeans: weathering Coordinator for variety testing	<a href="mailto:smoore@agcenter.lsu.edu">smoore@agcenter.lsu.edu</a>
Dr. Boyd Padgett	Macon Ridge Station, Winnsboro	Small grain diseases	<a href="mailto:bpadgett@agcenter.lsu.edu">bpadgett@agcenter.lsu.edu</a>
Dr. Ray Schneider	Dept. of Plant Pathology & Crop Physiology, Baton Rouge	Soybean: pathology	<a href="mailto:rschneider@agcenter.lsu.edu">rschneider@agcenter.lsu.edu</a>
Mr. Roy Vidrine	Dean Lee Research & Extension Center, Alexandria	Agronomic crops: weed control	<a href="mailto:rvidrine@agcenter.lsu.edu">rvidrine@agcenter.lsu.edu</a>
Dr. Bill Williams	NE Research Station, St. Joe	Corn and grain sorghum: weed management	<a href="mailto:bwilliams@agcenter.lsu.edu">bwilliams@agcenter.lsu.edu</a>
Dr. Jim Wang	Dept. of Agronomy & Env. Mgmt., Baton Rouge	Soil testing, plant analysis, soil chemistry	<a href="mailto:jjwang@agcenter.lsu.edu">jjwang@agcenter.lsu.edu</a>

Visit our Web site: [www.lsuagcenter.com](http://www.lsuagcenter.com)

**Louisiana State University Agricultural Center**

William B. Richardson, Chancellor

**Louisiana Agricultural Experiment Station**

David J. Boethel, Vice Chancellor and Director

**Louisiana Cooperative Extension Service**

Paul D. Coreil, Vice Chancellor and Director

Issued in furtherance of Cooperative Extension work, Acts of Congress of May 8 and June 30, 1914, in cooperation with the United States Department of Agriculture. The Louisiana Cooperative Extension Service provides equal opportunities in programs and employment.