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SOYBEAN PLANTING DECISIONS AND VARIETY SELECTION (*Whitaker*)

The 2010 growing season is quickly approaching and it just seems like we put 2009 behind us. Although 2009 had its bumps and bruises with tremendous rainfall in most areas and a somewhat complicated harvest, soybean growers in Georgia produced a record crop which averaged 36 bu/A (USDA-NASS). This broke the old record set in 2000 (34 bu/A) when only 180,000 acres were harvested compared to 440,000 acres in 2009.

According to the 2010 planting intentions report released March 31 by the USDA, soybean planting is forecasted to land somewhere around the 320,000 acre mark in Georgia. Although somewhat lower than acreage during 2009 and 2008, this year's crop would be the fifth largest since 1995.

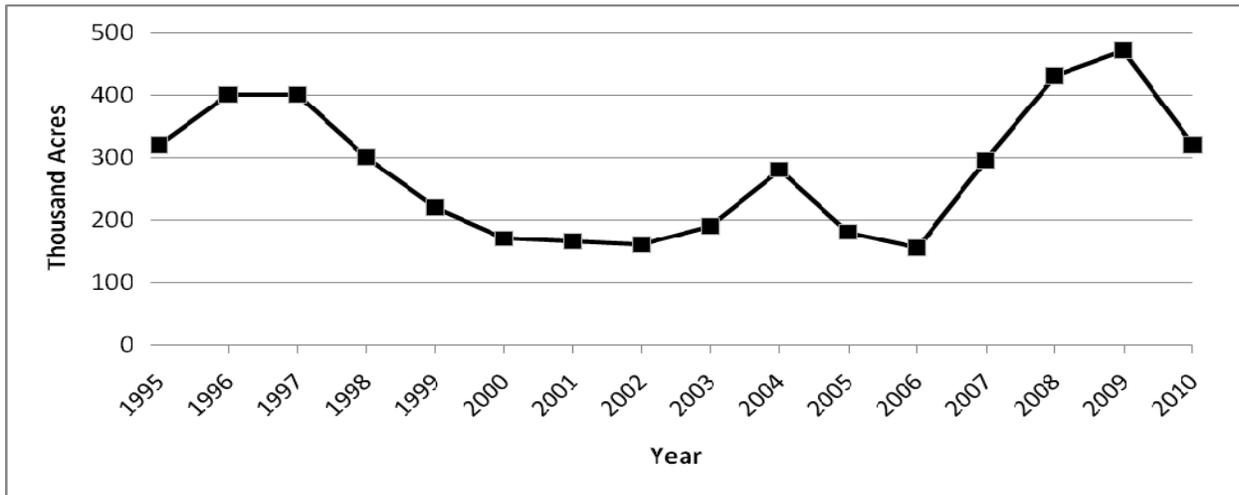


Figure 1. Planted soybean acreage in Georgia per year since 1995.

Georgia and United States 2009-2010 Prospective Plantings

Crop	Georgia			United States		
	2009	2010	% Change	2009	2010	% Change
	1,000 Acres		+/-	1,000 Acres		+/-
Corn	420	380	- 10	86,482	88,798	+3
Cotton	1,000	1,150	+ 15	9,149	10,505	+15
Hay	700	780	+ 11	59,755	60,460	+1
Oats	60	45	- 25	3,404	3,364	-1
Peanuts	510	540	+ 6	1,116	1,201	+8
Sorghum	55	50	- 9	6,633	6,360	-4
Soybeans	470	320	- 32	77,451	78,098	+1
Tobacco: Flue-cured	14	10	- 29	224	207	-8
Wheat, Winter	340	200	- 41	43,311	37,698	-13

Source: USDA-NASS, *Prospective Plantings*, March 31, 2010.

All reports are available, at no cost, on the NASS web site: <http://www.nass.usda.gov>

Figure 2. 2010 Prospective plantings for major crops in Georgia (USDA-NASS, 2010).

Recommended Soybean Varieties and Planting Decisions. Each year the UGA Soybean Committee develops a list of recommended varieties for planting in Georgia. Recommendations are developed from variety performance in the UGA Official Variety Trials (OVT). A particular variety can be added to this list only after it has been tested for two years in the OVT and has yields which are above the maturity group average. Varieties are listed according to maturity group and separated by Geographic region. This information can be found on the UGA soybean website and by clicking on the following link.

<http://www.caes.uga.edu/commodities/fieldcrops/soybeans/documents/2010GASoybeanVarietyRecommendations.pdf>

Characteristics of these varieties including information on plant height, lodging ratings, and nematode resistance ratings can also be found on the UGA soybean website or by clicking the following link.

<http://www.caes.uga.edu/commodities/fieldcrops/soybeans/documents/Characteristicsof2010RecommendedVarieties.pdf>

With regards to maturity group, a variety with a classification of V is considered early in maturity. These varieties usually perform best when planted early and mature in late September. A group VI is considered to be an early to mid-season variety which matures in early October. A group VII or VIII classification designates a late-season variety. These varieties usually mature in mid- to late-October and can be planted early or late in the planting season. When considering which variety to plant many factors including yield potential, maturity group, nematode resistance, geographic region should be considered to help ensure good yields and profits.

Diversification of maturity groups within a producer’s soybean crop may help spread risk for drought stress in dryland production and spread out harvest for soybean planted under irrigation. Soybean varieties with different maturity groups will progress through on a slightly different time frame. This difference in maturity has the potential to impact yields of dryland soybean dramatically.

The most important time in soybean development related to drought stress occurs from beginning pod set through pod fill. For the coastal plain area this critical period for optimum soil moisture for group V's is the last week of July through the first of September. The critical period is shifted approximately ten days later for each increase in maturity group. We know that drought stress can develop quickly in Georgia and if it occurs during this critical period yields will likely be negatively impacted. By diversifying the crop with different maturity groups the impact of a drought stress event may not affect an entire dryland soybean crop.

EARLY-SEASON DISEASE AND NEMATODE MANAGEMENT FOR GEORGIA'S SOYBEANS (*Kemerait*)

Asian soybean rust sentinel plots for monitoring the early development and spread of this disease are now being planted in a number of locations across Georgia. We are already scouting newly emerged kudzu for rust. **As of 19 April 2010, NO ASIAN SOYBEAN RUST is known to exist in Georgia** or in the southeastern United States. As the season progresses, I will be contacting agents via E-mail with frequent updates on soybean rust. Please note that in addition to Asian soybean rust, we will include information about other diseases of soybeans in there alerts. Also, everyone can follow the progress of Asian soybean rust during the 2010 field season at the website www.sbrusa.net. A list of fungicides approved for management of soybean rust is included at the end of this article. The list of fungicides is courtesy of Kent L. Smith, Ph.D., Plant Pathologist USDA, ARS, AO, Office of Pest Management Policy Washington, DC.

The 2010 Asian Soybean Rust Sentinel Plot Monitoring program in Georgia is funded through generous grants from the Georgia Commodity Commission for Soybeans and the North Central States Soybean Research Program. These grants are used to pay the salaries for our scout team (Caleb Clements and Ross Fulghum) and diagnosticians (Lyn Paclibar Young, Jou Ouano Carter, and Jeanette Bayla Mixon).

Phomopsis pod and stem blight coupled with anthracnose were diseases of significant importance in some fields across the state in 2009. These diseases may cause severe yield losses in some fields, especially where rainfall is abundant. The spores and propagules of these fungal pathogens will survive in the crop debris left in the fields and are readily spread through rain-splash. Growers, especially those with short soybean rotations and those who had problems with these diseases in 2009, should watch their fields for early development in 2010. The late bloom (R2) to early pod formation (R3) growth stages tend to be appropriate times for applications of Dimilin and boron and also for fungicide applications, if in fact they are needed.

Plant parasitic nematodes are a problem to more soybean producers in Georgia than are the diseases mentioned above. The nematode that seems to cause the greatest damage in our state at this time is the southern root-knot nematode (*Meloidogyne incognita*) with additional damage caused by the reniform, Columbia lance, and peanut root-knot nematodes. Effective management of parasitic nematodes requires an integrated approach that incorporates crop rotation (away from soybeans, peanuts, and cotton), selection of resistant varieties, and use of a nematicide (e.g. Temik 15G, 6 lb/a).

Table 1. Fungicides approved (Section 18) or registered (Section 3) for soybean rust (SBR) management.

**Changes in this Update, issued 1/14/10, are underlined

Items in Blue are currently not available for SBR

State registrations of federal products may vary – consult state and local authorities

Active ingredient	Product trade name (company)	State or Section 18		Federal or Section 3 status*
		start date	expiration	
azoxystrobin	Quadris (Syngenta)	none	none	Registered
azoxystrobin + cyproconazole	Quadris Xtra (Syngenta)	No longer available	No longer available	Registered
azoxystrobin + propiconazole	Quilt (Syngenta)	No longer available	No longer available	Registered
boscalid + pyraclostrobin	Pristine (BASF)	none	none	Registration approved in 2004 but not marketed
chlorothalonil	Bravo Ultrex & Bravo WeatherStik (Syngenta); Echo (Sipcam Agro); Equus (Makhteshim-Agan); Others	none	none	Registered
cyproconazole	Alto (Syngenta)	No longer available	No longer available	Registered
famoxadone + flusilazole	Charisma (DuPont)	Withdrawn	none	Withdrawn
flusilazole	Punch (DuPont)	started 2/7/07 for MN and SD – covers use in 2007, 2008, and 2009 growing season	expires 2/7/10 for MN and SD expires 6/15/10 for AL, AR, DE, GA, IA, IL, IN, KS, KY, LA, MD, MI, MO, MS, NC, ND, NE, OH, OK, SC, TN, TX, and VA temporary tolerance expires 12/31/10	Withdrawn from consideration for full Section 3 registration. Section 18 registrations will remain in place until the indicated expiration dates in the column at left.

Active ingredient	Product trade name (company)	State or Section 18		Federal or Section 3 status*
		start date	expiration	
flutriafol	Topguard (Chemnova)	started 12/1/06 for MN and SD – covers use in 2007, 2008, and 2009 growing seasons	expired 12/1/09 for MN and SD expires 2/12/10 for AR, IA, IN, KS, KY, MI, MO, NE, OK, and TN expires 5/11/10 for AL, GA, IL, MD, MS, OH, and ND expires 6/7/10 for DE, LA, NC, and TX expires 6/28/10 for SC and VA temporary tolerance expires 12/31/10	Section 3 decision has been postponed until February 2010 (PRIA date was moved back again)
metconazole	Caramba (BASF)	No longer available	No longer available	Registered but not currently being marketed
metconazole + pyraclostrobin	Headline Caramba co-pack (BASF)	Withdrawn by registrant		
	Operetta premix (BASF)	Withdrawn by registrant		
	Multiva (BASF)	none	none	Registered but not currently being marketed
myclobutanil	Laredo EC & EW (Dow Agro); Others	No longer available	No longer available	Registered
propiconazole	Tilt (Syngenta); Bumper (Makhteshim-Agan); PropiMax (Dow Agro) – No longer available for SBR	No longer available	No longer available	Registered
propiconazole + trifloxystrobin	Stratego (Bayer)	No longer available	No longer available	Registered
prothioconazole	ProLine (Bayer)	Was Pending but replaced by section 3 registration	none	Registered
Prothioconazole + trifloxystrobin	Stratego Pro (Bayer)	none	none	Registration expected in sometime in May 2010
pyraclostrobin	Headline (BASF)	none	none	Registered
pyraclostrobin + tebuconazole	Headline SBR (BASF)	No longer available	No longer available	Discontinued

Active ingredient	Product trade name (company)	State or Section 18		Federal or Section 3 status*
		start date	expiration	
tebuconazole	Folicur (Bayer)	No longer available	No longer available	Registered
	Orius (Makhteshim-Agan)	No longer available	No longer available	Registered
	Uppercut (DuPont)	No longer available	No longer available	Discontinued for SBR
	Others	none	none	Registered
tetraconazole	Domark (Valent)	No longer available	No longer available	Registered

Current submissions and approvals of Section 18s are listed on the EPA website at:

<http://cfpub1.epa.gov/oppref/section18/search.cfm>

SBR fungicides are also listed on the EPA site at:

http://www.epa.gov/oppfead1/cb/csb_page/updates/soybean_rust.htm

For general questions about Section 18s contact Tony Britten, 703-308-8179, britten.anthony@epa.gov. For specific questions about flusilazole contact Andrea Conrath at 703-308-9356 or conrath.andrea@epa.gov; for flutriafol contact Princess Campbell at 703-308-8033 or campbell.princess@epa.gov.

Please direct questions and recommendations about the general content and design of this table to Marty Draper at 202-401-1990 or mdraper@csrees.usda.gov, or Kent Smith at, 202-720-3186 or kent.smith@ars.usda.gov.

Disclaimer: Read the pesticide label prior to use. This information is not a substitute for a pesticide label. Trade names used herein are for convenience only; no endorsement of products is intended, nor is criticism of unnamed products implied. Consult your local extension specialist on the relative efficacy of the materials listed.

METRIBUZIN ON SOYBEANS (*Prostko*)

As many of you know by now, I have been actively promoting the use of metribuzin herbicides for residual weed control in soybeans with the hope of delaying PPO resistance. Since many of our younger county agents grew up in the era of RR crops (*i.e. Roundup babies*), it is highly likely that they would be unfamiliar with this herbicide. The following are some facts about metribuzin that may improve your understanding of this herbicide and help you to promote its use when possible:

A) Metribuzin was first sold in 1973 under the trade name of **SENCOR** (Bayer). It was also sold as **LEXONE** (DuPont). Both of these formulations are no longer available. Current formulations of metribuzin are as follows:

Table 1. Metribuzin Herbicides Labeled for Use in Soybean.

Trade Name	Active Ingredient	Manufacturer
Authority MTZ	Metribuzin + Spartan	FMC
Boundary	Metribuzin + Dual Magnum	Syngenta
Canopy	Metribuzin + Classic	DuPont
Cloak	Metribuzin + Classic	NuFarm
Metribuzin	Metribuzin	Loveland, MANA
TriCor	Metribuzin	UPI

B) Before the introduction of RR-soybeans, metribuzin was very popular in the U.S.

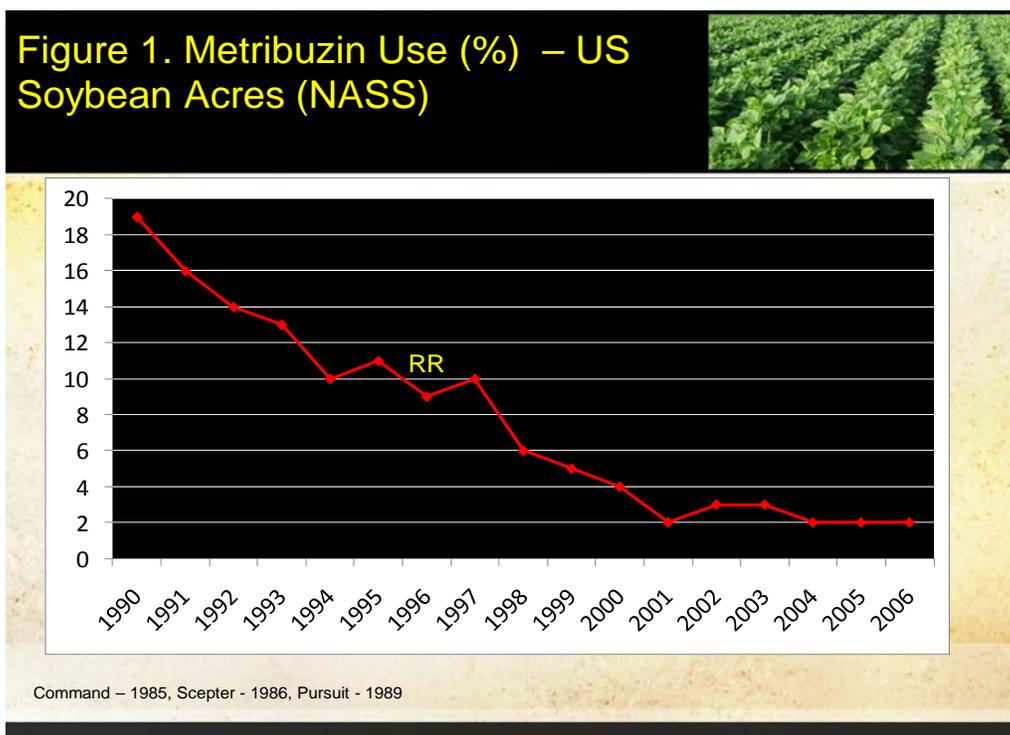


Figure 1. Metribuzin use in soybean in the United States.

C) Metribuzin is a triazine herbicide (i.e. same family as atrazine).

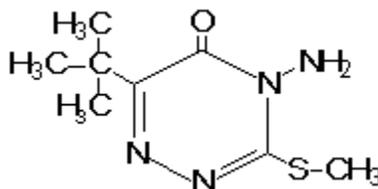


Figure 2. Metribuzin chemical structure.

D) Metribuzin does not provide adequate control of annual morningglory species. That is why Canopy (metribuzin + Classic) became a preferred formulation in the 80's and early 90's. The addition of Classic greatly improved the control of annual morningglory and sicklepod.

E) Metribuzin should **not** be used when 1 or more of the following conditions exist:

- Soils classified as sands
- Loamy sands or sandy loam soils with less than 1% OM
- Soils with pH above 7.5
- When sensitive soybean varieties are planted. A current list of tolerant varieties can be found in 2010 Pest Control Handbook (page 367) or 2010 Soybean Production Guide (page 54)
- In conjunction with an soil-applied OP insecticide (Lorsban, Thimet)
- soybean seed planted less than 1.5" deep
- heavy rainfall after application



Figure 3. Metribuzin injury on soybean.

F) Unlike Valor, metribuzin can be mechanically incorporated. This would be a big plus for dryland, conventional growers.

G) Refer to the 2010 UGA Pest Control Handbook (pages 344-351) for more specific information about application rates and precautions for metribuzin herbicides.

2010 SOYBEAN PRODUCTION GUIDES (*Whitaker*)

Helpful insight on numerous soybean production issues can be found in the 2010 Georgia Soybean Production. This guide can be downloaded or viewed at the UGA soybean webpage. There are still some printed copies available. County agents who are interested should contact me at jared@uga.edu.

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Your local County Extension Agent is a source for more information on these subjects

<http://www.caes.uga.edu/extension/office.cfm>

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