

Louisiana



SOYBEAN & FEED GRAIN REVIEW



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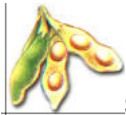
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SOYBEAN UPDATE

SOYBEAN SEED GERMINATION

Dr. Ronald J. Levy, Specialist LSU AgCenter

With many producers waiting for dry weather to plant soybean fields, it appears that soybean acres will continue to increase in Louisiana again this year. Soybean planting intentions are at slightly above a million acres.

Germination, the first step to a good stand of soybean, is a physiological process that begins when water enters the seed. It begins when the soybean seed absorbs about 50 percent of its weight in moisture.

A soil moisture level of field capacity, the highest amount of moisture that can be held by soil without runoff, is optimum for germination. Germination proceeds at slower rates as soil moisture nears the wilting point. Seed may be wetted and dried repeatedly during the process of germination but not without the loss of some viability. Some seed may not germinate if they are repeatedly wet and dry. Germination culminates when the embryo ruptures the seed coat.

After germination, the radicle or primary root begins to extend downward within the next 12 to 24 hours. Shortly thereafter, the hypocotyl (the small stem section between the cotyledon node and the primary root) begins to elongate upward, pulling the cotyledons with it.

Emergence of the cotyledons usually occurs within three to six days after planting under ideal environmental conditions.

The time required for emergence depends on soil moisture, temperature, seed vigor, variety, and planting depth. Soil temperature controls many enzyme activities associated with germination.

The synthesis of new tissue and growth rate for soybean increase with favorable temperature. While soil temperatures above 50 degrees Fahrenheit allow germination to begin, emergence and growth will be slow. Once temperatures reach 65 degrees and above, emergence should be fairly rapid.

If you have questions concerning soybean production, contact your local Extension Agent.



WHAT'S GOIN' ON...

SNAILS AND SLUGS - COMMON VISITORS IN CONSERVATION TILLAGE FIELDS

Dr. Rogers Leonard, Jack Hamilton Regents Chair in Cotton Production, LSU AgCenter

In recent years, snails and slugs (mollusks) have been observed as occasional seedling pests of field corn, cotton, and soybean in Louisiana. These pests should not be considered new problems, but have become more common with a change production systems using reduced tillage practices, crop rotation, and early planting dates in wet, cold soils. This type of environment is similar to that in the mid-west where slugs have typically been a more consistent problem. Both animals can persist throughout the entire season, but usually their occurrence on plant seedlings during the early season usually generates the most attention. Outbreaks appear to be more common in soybean and cotton following heavy crop residue from a previous crop of corn, grain sorghum, or rice.

Snails are easily recognized because of their hard covering or shell, while appearing nearly immobile (**Plate 1**). When a snail's head has emerged from its shell, the presence of extendable "eye stalks" is obvious. Although snails are the most noticeable ones of this pair, snails typically cause little or no injury from direct feeding to small plants. In some environments, extremely heavy numbers (>50/plant) can actually "weigh the plant down" slowing optimum growth and development. Both mollusks leave a slime (mucus) trail on plant tissue or residue that appears shiny upon drying, a diagnostic characteristic for the presence of one or both animals. Slugs can basically be described as snails without shells, soft wet-looking bodies with very visible "eye stalks" (**Plate 1**). The most common slugs in Louisiana fields are grey to black in color and generally < 1 inch in length. Slugs are capable of feeding on a variety of plants and can induce plant death by destroying all plant tissue above the soil line. If the seed furrow is not completely sealed, slugs also will feed on germinating seed and emerging stems (**Plates 2, 3**). Slugs primarily feed at night; prefer cool, humid conditions, and wet soils. Most of their body is comprised of water, so they tend to hide from direct sunlight preventing death from desiccation. During the daylight hours, slugs remain beneath the previous year's crop debris or within the seed furrow if not fully closed. High infestations can be detected by turning over decaying stalks and leaf mulch, which may provide an indication of potential injury to the current year's corn, cotton, or soybean crop in that field.

Unfortunately, there are no practical or affordable chemical control methods for these pests. There are no defined action thresholds for these pests. One molluscicide, metaldehyde, has been used around homes and in gardens for several years as a bait. In row crops, this product is labeled as Deadline MP, and is marketed by AMVAC Chemical Company. This is a slug and snail bait that is applied broadcast at a use rate of 10-40 lb (product)/Acre. During 2007, Mississippi State University entomologists evaluated Deadline MP at the low rate of 10 lb/Acre (\$18-20/acre) and significantly reduced slug populations by 92% compared to the non-treated control at 10 DAT. The application of granular nitrogen-based fertilizer applications concentrated on a band and centered over the seed furrow may have some effect in reducing snails and slugs by "salting", but research results are limited in this area. The most effective means of controlling snails and slugs are cultural methods that destroy their habitat. Consider all conservation tillage fields that have heavy grain crop residues as high risk and sample to determine if an infestation is present. If slugs are detected prior to planting, limited cultivation that removes residue from the seedbed surface (drag or do-all) and allowing the seedbed to dry a few hours before planting may eliminate or significantly reduce the impact of slug injury. As temperatures increase and seedlings begin to grow rapidly, feeding by slugs will likely cause little damage.



Plate 1. Slug (upper left) vs. snail. Photograph adapted from Catchot et al. 2008, Mississippi Crop Situation No. 7, April 30, 2008.



Plate 2. Heavy residue from a previous crop can create a favorable environment for slugs and result in heavy damage to seedlings.



Plate 3. Severe feeding from slugs on seedling leaves and stems can result in plant death.

SOYBEANS: FUNGICIDES APPROVED (SECTION 18) OR REGISTERED (SECTION 3) FOR SOYBEAN RUST (SBR) MANAGEMENT

Changes in this Update, issued 3/30/09, are Underlined
Items in Blue are currently not available for SBR

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)	started 3/31/06 for MN and SD - covers use in 2006, 2007, and 2008 growing seasons	expires 3/31/09 for AL, AR, DE, GA, IA, IL, IN, KS, KY, LA, MD, MI, MN, MO, MS, NC, ND, NE, NY, OK, OH, SC, SD, TN, TX and VA; temporary tolerance for cyproconazole expires 12/31/09	<u>Registered</u>

Active ingredient	Product trade name (company)	State or Section 18		Federal or Section 3 status
		start date	expiration	
azoxystrobin + propiconazole	Quilt (Syngenta)	started 11/10/04 for MN and SD - covers use in 2005, 2006 and 2007 growing seasons	expired 11/10/07 for AL, AR, CO, DE, FL, GA, IA, IL, IN, KS, KY, LA, MD, MI, MN, MO, MS, NC, ND, NE, NJ, NY, OH, OK, PA, SC, SD, TN, TX, VA, VT, WV, and WI	Registered
boscalid + pyraclostrobin	Pristine (BASF)	none	none	Registration approved in 2004 but not marketed for SBR due to poor solo efficacy by boscalid against SBR
chlorothalonil	Bravo (Syngenta), Echo (Sipcam Agro), Equus (Makhteshim-Agan)	none	none	Registered
cyproconazole	Alto (Syngenta)	started 3/31/06 for MN and SD - covers use in 2006, 2007, and 2008 growing seasons	expires 3/31/09 for AL, AR, DE, GA, IA, IL, IN, KS, KY, LA, MD, MI, MN, MO, MS, NC, ND, NE, NY, OK, OH, SC, SD, TN, TX and VA; temporary tolerance expires 12/31/09	<u>Registered</u>
famoxadone + flusilazole	Charisma (DuPont)	Pending: AL, AR, IL, IN, IA, KS, KY, LA, MD, MI, MN, MO, NE, NC, ND, OK, SD, TN, TX and VA (<u>withdrawn</u>)	none	<u>Withdrawn</u>

Active ingredient	Product trade name (company)	State or Section 18		Federal or Section 3 status
		start date	expiration	
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.
flutriafol	Topguard (Cheminova)	started 12/1/06 for MN and SD - covers use in 2007, 2008, and 2009 growing seasons	expires 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	Registration decision expected in <u>late</u> 2009
metconazole	Caramba (BASF)	started 4/19/06 for MN and SD - covers use in 2006, 2007, and 2008 growing seasons	expires 4/19/09 for AL, AR, DE, GA, IA, IL, IN, KS, KY, LA, MD, MI, MN, MO, MS, NC, ND, NE, NY, OK, OH, SC, SD, TN, TX, and VA; temporary tolerance expires 12/31/10	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

Active ingredient	Product trade name (company)	State or Section 18		Federal or Section 3 status
		start date	expiration	
myclobutanil	Laredo EC (Dow Agro) Laredo EW (Dow Agro)	started 11/10/04 for MN and SD - covers use in 2005, 2006 and 2007 growing seasons	expired 11/10/07 for AL, AR, CO, DE, FL, GA, IA, IL, IN, KS, KY, LA, MD, MI, MN, MO, MS, NC, ND, NE, NJ, NY, OH, OK, PA, SC, SD, TN, TX, VA, VT, WV, and WI	Registered
propiconazole	Tilt (Syngenta), Bumper (Makhteshim-Agan) PropiMax (Dow Agro) - No longer available for SBR	started 11/10/04 for MN and SD - covers use in 2005, 2006 and 2007 growing seasons	expired 11/10/07 for AL, AR, CO, DE, FL, GA, IA, IL, IN, KS, KY, LA, MD, MI, MN, MO, MS, NC, ND, NE, NJ, NY, OH, OK, PA, SC, SD, TN, TX, VA, VT, WV, and WI	Registered
propiconazole + trifloxystrobin	Stratego (Bayer)	started 11/10/04 for MN and SD - covers use in 2005, 2006 and 2007 growing seasons	expired 11/10/07 for AL, AR, CO, DE, FL, GA, IA, IL, IN, KS, KY, LA, MD, MI, MN, MO, MS, NC, ND, NE, NJ, NY, OH, OK, PA, SC, SD, TN, TX, VA, VT, WV, and WI	Registered
prothioconazole	ProLine (Bayer)	Pending: AR, IA, IL, KS, KY, LA, MD, MI, MN, MS, MO, NE, NC, SC, SD, TX, and VA (replaced by section 3 registration)	none	Registered
pyraclostrobin	Headline (BASF)	none	none	Registered
pyraclostrobin + tebuconazole	Headline SBR (BASF)	started 11/10/04 for MN and SD - covers use in 2005, 2006 and 2007 growing seasons	expired 11/10/07 for AL, AR, CO, DE, FL, GA, IA, IL, IN, KS, KY, LA, MD, MI, MN, MO, MS, NC, ND, NE, NJ, NY, OH, OK, PA, SC, SD, TN, TX, VA, VT, WV, and WI; temporary tolerance for tebuconazole expires 12/31/09	Discontinued

Active ingredient	Product trade name (company)	State or Section 18		Federal or Section 3 status
		start date	expiration	
tebuconazole	Folicur (Bayer)	started 11/10/04 for MN and SD - covers use in 2005, 2006 and 2007 growing seasons	expired 11/10/07 for AL, AR, CO, DE, FL, GA, IA, IL, IN, KS, KY, LA, MD, MI, MN, MO, MS, NC, ND, NE, NJ, NY, OH, OK, PA, SC, SD, TN, TX, VA, VT, WV, and WI; temporary tolerance expires 12/31/09	Registered
	Orius (Makhteshim-Agan)	started 11/10/04 for MN and SD - covers use in 2005, 2006 and 2007 growing seasons	expired 11/10/07 for AL, AR, CO, DE, FL, GA, IA, IL, IN, KS, KY, LA, MD, MI, MN, MO, MS, NC, ND, NE, NJ, NY, OH, OK, PA, SC, SD, TN, TX, VA, VT, and WV; temporary tolerance expires 12/31/09	<u>Registered</u>
	Uppercut (DuPont)	started 11/10/04 for MN and SD - covers use in 2005, 2006 and 2007 growing seasons	expired 11/10/07 for AL, AR, DE, GA, IA, IL, IN, KY, LA, MD, MN, MO, MS, NC, NE, OH, SC, TN, and VA; temporary tolerance expires 12/31/09	<u>Discontinued for SBR</u>
tetraconazole	Domark (Valent)	started 11/10/04 for MN and SD - covers use in 2005, 2006 and 2007 growing seasons	Expired 11/10/07 for AL, AR, DE, GA, IA, IL, IN, KS, KY, LA, MD, MI, MN, MO, MS, NC, ND, NE, NJ, NY, OH, OK, PA, SC, SD, TN, TX, VA, VT, WV, and WI	<u>Registered</u>

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 and famoxadone 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; for cyproconazole and metconazole contact Stacey Groce at 703-305-2505 or groce.stacey@epa.gov; and for propiconazole, tebuconazole, myclobutanil, trifloxystrobin and tetraconazole contact Andy Ertman at 703-308-9367 or ertman.andrew@epa.gov.

Please direct questions and recommendations about the general content and design of this table to Marty Draper at 202-301-1990 or mdraper@csrees.usda.gov, or Kent Smith at, 202-720-3186 or kent.smith@ars.usda.gov.

2009 AGRICULTURAL OUTLOOK PUBLICATION

Dr. Kurt Guidry, Gilbert Durbin Professor, Ag Economics, LSU AgCenter

The 2009 Agricultural Outlook Publication is a compilation of outlook articles written by AgCenter personnel. These articles provide a glimpse as to what the production and market environments may look like for the majority of the major agricultural commodities produced here in the state. It also contains an article on the outlook for both Louisiana's and the United State's general economy written by personnel from the Department of Economics here at LSU. This publication has been posted on the LSU AgCenter website.

<http://www.lsuagcenter.com/nr/rdonlyres/36c0cd75-0489-4365-bac6-2691359c0ac5/56890/pub3048agoutlook2009lowres1.pdf>



Louisiana Soybean Association (LSA) Annual Meeting

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 30th, 2009. 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/DPL, Croplan Genetics, Delta Grow, 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.



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