



Cotton/Soybean Insect Newsletter

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Newsletter Update

This is the initial installment of the newsletter for 2009. Because I was asked by our Agronomic Program Team Leader last year to cover soybean insects in addition to cotton insects, I have decided to rename the newsletter the “Cotton/Soybean Insect Newsletter” this year. These two crops “share” many of the same species of pestiferous insects, so it makes sense to cover them in one newsletter. Our increased acreage of soybeans has certainly made issues with insects in the crop more prominent. As in previous years, the target day of the week for email delivery to your inbox remains each Thursday (I’m a day early this week), allowing time for incorporating news of the week and preparation. If you would like to be removed from the email distribution list that will receive these weekly newsletters, or if you know of someone else who would like to be included, please let me know (green4@clermson.edu).

Pest Patrol Hotline

New this year will be a toll-free hotline for quick updates on insect problems. I will update the short message weekly for at least as long as the newsletter runs. Simply call the free number (877) 285-8525 and select the messages you would like to hear. The hotline is sponsored by Syngenta Crop Science.

Cotton Situation

Planting is underway, but we already have problems. It was too wet to finish planting corn in many places, so that delay pushed into planting time for cotton, especially with the very warm weather we have experienced recently. We observed how fast our soil moisture could disappear, and now it is raining excessively again. It seems like it is either too wet or too dry and no in-between. **Projections on acreage for 2009** are dynamic, even this late. Here is where we have been for the last five years on cotton acreage in SC and where USDA-NASS stands on the 2009 estimate. Most folks thought that our 2009 acreage would be down slightly again, but recent reports are more positive.

Year	Planted Acres (PA)	% Difference (PA) from Previous Year	Harvested Acres	Yield (lb lint/acre)
2004	215,000	-	214,000	875
2005	266,000	+24%	265,000	743
2006	300,000	+13%	298,000	697
2007	180,000	-40%	158,000	486
2008	135,000	-25%	134,000	896
2009	140,000	+3.7%	-	-

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South Carolina Cotton Summary (2008)

Cotton was planted on about 135,000 acres in South Carolina during 2008. That was a reduction of another 25% from that planted in 2007. Most of the reduction was again due to increased acreage planted to corn and soybeans. About 96% of cotton acres were planted with varieties containing Bt technology. Early forecasts on

yield were lower than realized at season's end. Early-season insect problems were characterized by moderate levels of thrips. Mid-to-late-season insect problems consisted of bollworm and stink bugs primarily. Populations of secondary pests such as aphids, spider mites, fall armyworm, etc, were generally not problematic. In most locations of the state, numbers of boll-feeding bugs (i.e. stink bugs) were extremely low until the end of the season, where losses did occur. Overall, Bt cotton performed well in suppressing bollworm numbers, but all Bt technologies needed supplemental applications of insecticide under situations of

South Carolina – 2008

- Acreage: 135,000 total (52% < 2007)
 - Delta Pine (67.99%)
 - PhytoGen (14.80%)
 - Stoneville (11.36%)
 - Americot (2.57%)
 - Dyna-Gro (2.50%)
 - Fibermax (0.54%)
 - Bt 129,357 acres (96.19%)
 - DP 555BG/RR (45.35%)
 - PHY 485WRF (9.64%)
 - ST 4554B2/RF (5.21%)
 - DP 164 B2/RF (3.32%)
 - Non Bt 5,143 acres (3.81%)
- Early-season problems
 - Thrips
- Mid-season problems
 - Local Populations of Bollworm
- Late-season problems
 - Local Populations of Bollworm, fall armyworm, stink bugs
- Major pests for 08:
 - Bollworm, stink bugs
- Yield deterrents:
 - Droughty, hot conditions, bollworm, stink bugs, pigweed
- Yield:
 - Forecasted: avg 688 lb
- Losses:
 - Mostly due to dry conditions, HEAT, some insects

Jeremy Greene
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extreme pressure. Overall for 2008, yield losses were due mostly to weather conditions, but mid-to-late-season rainfall patterns resulted in a record average yield (estimated at 896 lb/acre), exceeding earlier projections.

What Varieties of Cotton Will Replace DP 555?

That is the question, at least for cotton producers. You can plant varieties with original Bollgard technology (i.e. DP 555, etc.) in 2009 and in 2010 for the last time. You must purchase seed for 2010 by 30 September of this year. The only varieties with Bt technology that will be available after 2010 will be those that contain more than one Bt gene (multiple Bt toxins), such as Bollgard II and WideStrike varieties commercially available now.

Remember that EPA “ruled” that a structured cotton refuge is no longer required for BOLLGARD II and WIDESTRIKE cotton east of Texas. This “natural refuge” option is available for any brand of cottonseed with BOLLGARD II technology or any PhytoGen brand cottonseed containing WIDESTRIKE planted east of Texas.

This ONLY applies to BOLLGARD II and WIDESTRIKE cotton – it does not apply to original BOLLGARD cotton (e.g. DP 555 BR) which still requires a structured non-Bt cotton refuge. **Bottom Line:** You no longer

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have to have a refuge for your BOLLGARD II and WIDESTRIKE cotton, but you must maintain the same refuge requirements for BOLLGARD.

See the link below to view OVT results from South Carolina for last year:

<http://www.clemson.edu/agronomy/vt/Cotton/cotton.htm>

This list will likely contain the varieties that you will use to replace DP 555 on your farm after 2010.

Cotton Insect Control Guide

Clemson University Publication IC97 (Cotton Insect Management) has been revised and is available free from your local county office or online at <http://www.clemson.edu/psapublishing/pages/ENTOM/IC97.PDF>.

Soybean Situation

Planting projections for soybeans are down slightly from 2008. Record average yield was observed in 2008.

Year	Planted Acres (PA)	% Difference (PA) from Previous Year	Harvested Acres	Yield (bushels/acre)
2004	540,000	-	530,000	27
2005	430,000	-20%	420,000	20.5
2006	400,000	-7%	390,000	29
2007	460,000	+15%	440,000	18.5
2008	540,000	+17%	530,000	32
2009	510,000	-5.5%	-	-

Soybean Insect Control Guide

Clemson University Publication SL1 (Soybean Insect Management) has been revised and is available free from your local county office. It is also available online at:

<http://www.clemson.edu/psapublishing/pages/AGRO/SL1.PDF>.

Insect control recommendations are also available online in the Soybean Production Guide at:

http://www.clemson.edu/edisto/soybeans/production_guide/.

News from Above the Lakes

This section will again serve as a place where I will include comments from any and all that submit information about the state of the crop(s) (cotton or soybeans) and the insect situation in their local area from “above the lakes”. I am intending for this to serve as a hub for statewide information. These sections of the newsletter would be more valuable if more external contributions were submitted regularly. Please send me your observations and comments mid-week! Wednesday contributions would be perfect.

News from Below the Lakes

Same as above, but pertaining to news in the southern part of the state.

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Management of Thrips/Nematodes in Cotton

Although most decisions about what preventative materials will be used for control/suppression of thrips and nematodes have already been made, here are a few suggestions. Because our soils are favorable for nematodes, soil sampling is a must in order to know what levels (and what species) are in each field. This should be the first piece of information gathered (<http://www.clemson.edu/edisto/cotton/nematode.pdf>). Your choices of preventative pesticides should depend upon the level of nematodes in each field. A nematicide such as Telone is needed where infestations are heavy, but if levels of nematodes are moderate to light, other products, such as Temik or a seed treatment (i.e. Avicta Complete Pak or Aeris plus Trilex), will offer suppression of nematodes and thrips.

Threat of Cutworms

There are reports from the Midsouth that this is a very bad year so far for problems with cutworms. Because the Midsouth tends to be just ahead of us most years, this might be an early indicator that we could see similar problems here in the Southeast. If you have any history of problems with cutworms, you might want to consider using a low-rate pyrethroid at planting. See IC97 (Cotton Insect Management) for suggestions for managing cutworms:

<http://www.clemson.edu/psapublishing/pages/ENTOM/IC97.PDF>

Tobacco Budworm & Bollworm

Captures of tobacco budworm (TBW) and bollworm (BW) moths in pheromone traps at EREC will be reported again this season. We have trapped for 1 week now and captured over 22 BW moths and 4 TBW moths per trap. I will put last year's final trap numbers and this season's chart in next week's newsletter.

Need More Information?

Log on to the following webpage to view important cotton management recommendations, data, and historical cotton insect newsletters: <http://www.clemson.edu/edisto/cotton/cotton.htm>

Sincerely,

Jeremy K. Greene, Ph.D.
Associate Professor – Entomologist