

# TURN ROWS

A NEWSLETTER COVERING THE SOUTHERN PIEDMONT OF NORTH CAROLINA

JULY 2013  
VOLUME 7: ISSUE 5



## Topics:

- Blight on Cotton
- Kudzu Bug Update
- July Soybean Planting
- Soybean Disease Management
- Corn Earworm in Soybeans
- Plant Bugs
- Pesticide Classes

### Contact:

**Jessica Anderson**  
Extension Agent-Anson  
Agriculture

[jessica\\_a\\_anderson@ncsu.edu](mailto:jessica_a_anderson@ncsu.edu)

**Andrew Baucom**  
Extension Agent-  
Union, Stanly  
Agriculture

[andrew\\_baucom@ncsu.edu](mailto:andrew_baucom@ncsu.edu)

**CAUTION:** Information & recommendations presented are applicable in the Southern Piedmont of NC & may not apply in your area. Consult your local extension agent.

Recommendations for the use of chemicals are included in this publication as a convenience to the reader. Mention or display of a trademark, proprietary product, or firm in text or figures does not constitute an endorsement or imply approval to the exclusion of other suitable products or firms by NCSU, NCA&T, or NCCE nor discrimination against similar products or services not mentioned. Individuals who use chemicals are responsible for ensuring that the intended use complies with current regulations and conforms to the product label. Be sure to obtain current information about usage regulations and examine a current product label before applying any chemical.

Union County, 3230-D Presson Road Monroe NC 28112 704-283-3739 [www.union.ces.ncsu.edu](http://www.union.ces.ncsu.edu)  
Stanly County, 26032-E Newt Road Albemarle NC 28001 704-983-3987 [www.stanly.ces.ncsu.edu](http://www.stanly.ces.ncsu.edu)  
Anson County, 501 McLaurin Street Wadesboro NC 28170 704-694-2915 [www.anson.ces.ncsu.edu](http://www.anson.ces.ncsu.edu)

## Wet Weather Blight on Cotton

The wet, cloudy weather at planting was fairly conducive to wet weather blight, particularly for some planting dates. Wet weather blight is caused by ascochyta fungus. We see this from time to time in cotton in North Carolina during wet cloudy periods. All the situations that have been brought to our attention have the disease showing only on the cotyledons as seen in the picture to the right. Notice that the new leaves look healthy and the symptoms are limited to the cotyledons and older leaves. This outbreak could pose variable consequence due to the extended period of cloudy wet weather. We will continue to monitor weather forecast and disease symptoms in relation to those weather patterns.



### ADA Accommodation Statement

For accommodations for persons with disabilities, contact Andrew Baucom at 704-283-3739, no later than five business days before the event.

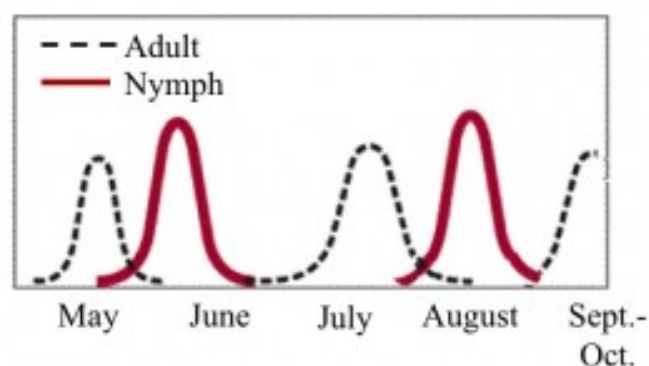
Distributed in furtherance of the acts of Congress of May 8 and June 30, 1914. NCSU and NCA&T commit themselves to positive action to secure equal opportunity regardless of race, color, creed, national origin, religion, sex, age, veteran status or disability. In addition, the two universities welcome all persons without regard to sexual orientation. NCSU, NCA&T, USDA, and local governments cooperating.

**NC** State University  
A&T State University  
**COOPERATIVE  
EXTENSION**  
*Empowering People • Providing Solutions*

# Kudzu Bug Update..again

1. We have now reached the end of the first migration of adult kudzu bugs into soybeans. Keep in mind these adults resulted from eggs laid last August (2012). Adults can feed on the plants and cause stunting and/or yield loss. However, these insects are spent and will likely die off in the next few weeks.
2. Some full-season beans are now “sweepable”. Use the sweep net whenever you can follow the one nymph per sweep threshold anytime your beans are near the reproductive stages. By the time nymphs are large enough to see stacked up and down the stem you have probably already lost some yield.
3. For both visual samples and sweeping, you can check field edges to see if the bugs are present. However, the insect congregates much more heavily on the edges of fields and we do believe they colonize with each other due to a aggregation pheromone. You need to base all treatments decisions on field interiors.
4. Keep in mind that there are two generations of kudzu bugs a year and that **insecticides won't kill the eggs**.

Kudzu bug activity in soybeans across all planting date/maturity groups



## Soybean Planting in July

Plants per Foot*	Seeds per Foot**	Pounds of Seed per Acre***	Row Width
2.5	2.8	60-84	7"
5.3	5.9	58-81	15"
6.9	7.7	57-80	20"
10.1	11.3	56-79	30"
12	13.3	55-77	36"

\* Assumes determinate varieties. For indeterminate varieties, increase target populations by 20%.

\*\* Assumes 90% emergence. If 85% emergence is anticipated, increase planting rate by 5%.

\*\*\* Range is in pounds of seed per acre with seed lots averaging 3500 seeds per pound (first number in range) to 2500 seeds per pound (second number in range).

# Management of Soybean Diseases

## Management of Soybean Diseases Fungicide Efficacy for Control of Foliar Soybean Diseases—April 2013

The North Central Regional Committee on Soybean Diseases and the Regional Committee for Soybean Rust Pathology (NCERA-212 and NCERA-208) have developed the following information on foliar fungicide efficacy for control of major foliar soybean diseases in the United States. Efficacy ratings for each fungicide listed in the table were determined by field-testing the materials over multiple years and locations by the members of the committee. Efficacy ratings are based upon level of disease control achieved by product, and are not necessarily reflective of yield increases obtained from product application. Efficacy depends upon proper application timing, rate, and application method to achieve optimum effectiveness of the fungicide as determined by labeled instructions and overall level of disease in the field at the time of application. Differences in efficacy among fungicide products were determined by direct comparisons among products in field tests and are based on a single application of the labeled rate as listed in the table, unless otherwise noted. **Table includes systemic fungicides available that have been tested over multiple years and locations. The table is not intended to be a list of all labeled products<sup>1</sup>.** Efficacy categories: NR=Not Recommended; P=Poor; F=Fair; G=Good; VG=Very Good; E=Excellent; NL = Not Labeled for use against this disease

Fungicide(s)				Aerial web blight	Anthracnose	Brown spot	Cercospora leaf blight <sup>2</sup>	Frogeye leaf spot <sup>3</sup>	Phomopsis/ Diaporthe (Pod and stem blight)	Soybean rust	White mold <sup>4</sup>	Harvest restriction <sup>5</sup>
Class	Active ingredient (%)	Product/Trade name	Rate/ A (fl oz)									
QoI Strobilurins Group 11	Azoxystrobin 22.9%	Quadris 2.08 SC	6.0 - 15.5	VG	VG	G	F	VG	-- <sup>6</sup>	G-VG	P	14 days
	Fluoxastrobin 40.3%	AfterShock 480 SC Evito 480 SC	2.0 – 5.7	VG	G	G	-- <sup>6</sup>	VG	-- <sup>6</sup>	-- <sup>6</sup>	NL	R5 (beginning seed) 30 days
	Picoxystrobin	Approach 2.08 SC	6.0 - 12.0	VG	G	G	-- <sup>6</sup>	VG	-- <sup>6</sup>	G	-- <sup>6</sup>	14 days
	Pyraclostrobin 23.6%	Headline 2.09 EC/SC	6.0 - 12.0	VG	VG	G	F	VG	-- <sup>6</sup>	G-VG	NL	21 days
DMI Triazoles Group 3	Cyproconazole 8.9%	Alto 100SL	2.75 – 5.5	-- <sup>6</sup>	-- <sup>6</sup>	VG	-- <sup>6</sup>	F	-- <sup>6</sup>	VG	NL	30 days
	Flutriafol 11.8%	Topguard 1.04 SC	7.0 – 14.0	-- <sup>6</sup>	VG	VG	F	VG	---- <sup>6</sup>	E	G	21 days
	Propiconazole 41.8%	Tilt 3.6 EC Multiple Generics <sup>7</sup>	2.0 - 4.0	P	VG	G	NL	F	NL	VG	NL	R5 (beginning seed)
	Prothioconazole 41.0%	Proline 480 SC <sup>8</sup>	2.5 – 4.3	NL	NL	NL	NL	VG	NL	VG	G	21 days
	Tetraconazole 20.5%	Domark 230 ME	4.0 – 5.0	NL	VG	VG	F	VG	-- <sup>6</sup>	VG-E	G	R5 (beginning seed)
MBC Thiophanates Group 1	Thiophanate-methyl	Topsin-M Multiple Generics	10.0 – 20.0	--	--	--	F	VG		G	G	21 days

---

# Corn Earworm Management in Soybeans

Corn Earworm's have been the most consistent soybean insect pest, sprayed on the majority of our acres in most years. This year's pressure seems to be inline with last year-relatively light with hot spots. Below are some suggestions going forward with management of this pest for the upcoming year:

1. Begin scouting on soybeans that are flowering. These are very attractive places for moths to lay eggs. Be sure to scout several locations throughout the field. Use a drop cloth for wide rows and a sweep net for narrow rows on drilled beans.
2. There are very few cases where earworm impacts flowering soybeans. Flowering beans can tolerate at least 2-3x the corn earworm threshold levels of podding soybeans.
3. The threshold for chemical treatment is specifically for podding soybeans (R4-R7). This threshold is very conservative and there should be no need to adjust. If you have reached threshold then you should be spraying. Be sure to note the differences between corn earworm and tobacco budworm to make sure you are spraying for the appropriate pest.
4. There have been small reports of pyrethroid-resistant moths in the system. These are not widespread and are very spotty. If you have a control failure with a pyrethroid, do not spray with a pyrethroid again. Other chemicals you should consider are the diamides, like Belt and Prevathon. Besiege is a new registered product that is a pre-mix of Prevathon and a pyrethroid. Blackhawk and Steward have also been very effective in recent studies.
5. Each product has its advantages and disadvantages. Above all, **rotate chemistry and only spray at threshold.**





---

# **Plant Bugs**

With some cotton fields nearing squaring, retention monitoring should be getting underway. Weekly checks of upper square retention is the most efficient way to determine if plant bugs can be ruled out as an economic concern or if sweeping is necessary. A retention rate of 80% or more usually indicates that damaging levels have not been reached. If less than 80%, sweeping is recommended in 6-8 locations throughout the field away from the edge. A threshold of 8 plant bugs per 100 sweep usually indicates that a spray is needed at that time.



Generally the neonicotinoid-class insecticides perform well early in the season before flowering and often at lower rates. Examples of these products are: Admire Pro, Belay, Centric, Intruder and Trimax Pro. Another advantage to these products is that they generally do not destroy beneficials which keep secondary flare ups at bay.

If plant bugs are a concern later on, or require a second spray, first check to see that aphids are not common in the field. If they are, you should not use a neonicotinoid product again. Continued use of these products in seed treatments and premixes are beginning to show pockets of insect resistance and should be avoided at all costs.



Switch to a product like Carbine or Transform. If aphids are not a concern, you should still switch to a premix and not a stand alone such as Bidrin, Orthene or Vydate. Many of these products are also effective against stink bugs. The downside to these products is that they will kill off beneficial organisms putting you at risk for bollworm and spider mites.

---

## **Upcoming Pesticide Applicator Training:**

- August 21: V Credit Recertification Class  
9am-11am, Stanly County Agri-Civic Center, 2hrs credit available for V
  - August 22: V Credit Recertification Class  
9am-11am, Union County Agricultural Center, 2hrs credit available for V
  - September 5: Transportation, Pesticide Storage and Record Keeping  
9am-11am, Union County Agricultural Center  
2hrs credit available for A,B,G,H,I,K,L,M,N,O,T,D,X
  - September 10: V Credit Recertification Class  
6pm-8pm, Union County Agricultural Center, 2hrs credit available for V
  - September 16: V Credit Recertification Class  
6pm-8pm, Stanly County Agri-Civic Center, 2hrs credit available for V
  - September 19: Transportation, Pesticide Storage and Record Keeping  
1pm-3pm, Stanly County Agri-Civic Center  
2hrs credit available for A,B,G,H,I,K,L,M,N,O,T,D,X
- 

**NC STATE UNIVERSITY**

North Carolina Cooperative Extension Service

Anson County Center

501 McLaurin St.

Wadesboro, NC 28170