



The University of Georgia

College of Agricultural and Environmental Sciences  
*Cooperative Extension*



## *Burke County Agricultural Newsletter*

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### **Kudzu Bugs Are On The Move**

Last week I saw first hand just how many bean plataspid actually can actually congregate on a soybean plant! Dr. Jared Whitaker alerted us that they were on soybean plants at the Southeast Research and Education Center in Midville. We saw a few of these pests last year but never had any reports of them actually on soybeans (only on kudzu). It appears that this year may end up being different.



## **Kudzu Bugs on Soybean Plants at SEREC**

Kudzu bugs are an economic pest. Dr. Phillip Roberts measured yield losses in 2010 ranging from 11% - 23% in untreated plots. In cage trials he reports observing fewer pods per plant and fewer seeds per pod where high numbers of this pest are present. The current suggested threshold for treating is 3-5 per plant. Typically the infestation is higher around field borders. Last year treating field borders was successful for some producers.

These pests are not difficult to control with insecticides. Based on information was gathered from trials in 2010 Karate (lambda-cyhalothrin), Seven (Carbaryl), Orthene (acephate), Belay (clothianidin), PennCap M (methyl parathion), Leverage 360 and Endigo all provided control. We need to learn more about this pest. If you observe adults, nymphs or egg masses, please give me a call.



**Kudzu bug adults (left), nymphs & adult (middle), and hatching egg mass (right)**

## **Mixing Sequences for Pesticides**

You may occasionally experience problems with mixing one or more agro-chemicals. In some cases, the order of mixing may be the cause of the problem. Dr. Eric Protsko provided the listing of pesticide mixing sequences that may help. It was provided to him by Dr. Gregory W. Schwing of DuPont Crop Protection. The Formulation Science mixing sequence is as follows: Water soluble bags (WSB)

1. Water soluble bags (WSB)
2. Water soluble granules (SG)
3. Water dispersible granules (WG, XP, DF)
4. Wettable powders (WP)
5. Water based suspension concentrates (aqueous flowables) (SC),  
Microencapsulated (ME), flowables (F)
6. Water soluble concentrates (SL)
7. Suspoemulsions (SE)
8. Oil based suspension concentrates (OD)

9. Emulsifiable concentrates (EC)
10. Surfactants, oils, adjuvants
11. Soluble fertilizers (one exception to this rule: when using AMS with glyphosate, the AMS must be added before the glyphosate. In my opinion AMS should only be used with glyphosate when hard water (high levels of Ca, K, Na, etc.) is used as the carrier)
12. Drift retardants

**Protecting the Peanut crop against white mold:** Dr. Bob Kemeraut warns us that despite the dry weather the warm soil temperatures could actually lead to earlier-than-normal outbreaks of white mold (stem rot). Early outbreaks of white mold are especially likely on poorly rotated, irrigated fields where the disease may affect the crop as “underground white mold.” Growers who have reason to be concerned about early-season white mold may want to consider initiating their white mold program earlier than usual, perhaps at 45 rather than 60 days after planting. If a grower does decide to begin a program early, he may be able to use a combination of chlorothalonil (1-1.5 pt/A) + tebuconazole (7.2 fl oz/A) as an economical means to “extend” white mold control in his full program that includes other products. Note: If a grower does extend the white mold program with additional applications of tebuconazole + chlorothalonil, he should ensure that such still maintains effective fungicide resistance management strategies.

### **Paraquat and Peanut Yield**

The question comes up every year, “...what are the potential negative effects does paraquat have on peanut yields?” We know that it will cause varying degrees of injury. It has also been documented that tank-mixtures with Basagran (bentazon) or Storm (bentazon + acifluorfen), may help “safen” the peanut crop. “Does this injury result in peanut yield loss?”

Over the past several years, using current popular cultivars, Dr. Eric Protsko has conducted numerous field trials to address this issue. From these trial results, the following observations can be made:

- In 1 of 2 years, when grown under weed-free conditions, Gramoxone Inteon applied at 8 oz/A caused significant yield reductions of GA-06G and FL-07 (3.3-7.5% yield reductions). Tifguard yields were not reduced by this herbicide treatment in 2010. The second year of data for Tifguard will be collected this year.
- Gramoxone Inteon (12 oz/A) + Basagran (8 oz/A) had no effect on peanut yield in any trial.

In 2009 average air temperatures at Attapulcus from May 27 until June 30 (i.e. the period when paraquat was applied) were 1.39-2.290 higher than normal and average rainfall amounts were 4.36” lower than normal. These hotter/drier conditions likely impeded the peanut plant’s ability to withstand/recover from the paraquat injury. Therefore yield loss occurred.

The following are the current recommendations Dr. Protsko has for the use of paraquat in peanut:

- Never use more than the labeled rate.
- Do not apply paraquat alone after 14 days after cracking.
- Tank-mixtures of paraquat + Storm or paraquat + Basagran may be less injurious to peanut but may also be less effective on certain weeds for the same reason (inhibition of foliar penetration on crop and weeds)

- After paraquat is applied, maintain adequate peanut plant health with irrigation, prayers for rain or enthusiastic rain dancing!
- Paraquat has been successfully used on peanut since 1987. During this time period, a vast amount of crop tolerance and weed efficacy data has been collected. When you add it all up, the proven benefits of paraquat use outweigh the potential risks!

### **Thrips and False Chinch Bugs on Cotton Seedlings**

I have had a couple reports of false chinch bugs on seedling cotton. False chinch bugs are a sporadic and uncommon pest of cotton. Historically it is more likely to observe this pest during dry periods. False chinch bugs also tend to be more common in conservation tillage fields where winter weeds such as primrose and wild radish persisted longer. It is not uncommon to observe hundreds of nymphs per square foot in infested fields. False chinch bugs have needle like mouthparts and feed on plant juices. Extremely high populations can weaken and stunt small seedlings and in severe situations kill some plants. Once plants reach the 4-5 leaf stage and are growing rapidly, we would not expect treatment to be necessary.

Thrips, however, however are proving to be a bigger issue in some fields. High populations and slow plant growth seems to have compounded plant injury symptoms in certain cases. We need to protect young seedlings, especially during early developmental stages (1-2 leaf) but we do not need to apply unneeded applications due to the potential of flaring other pests such as spider mites and aphids, suggests Dr. Phillip Roberts, UGA Cotton Entomologist. The threshold for thrips is when 2-3 thrips per plant are counted and immatures are present. Treatment is rarely necessary after plants have 4 true leaves and are growing vigorously. **Growing vigorously** is the key. If cotton is not growing vigorously, seedlings with 4 or more leaves may still need to be treated.

**Cotton Scout Schools:** Cotton insect scouting schools are annually held at various locations in Georgia. These programs offer basic information on cotton insects and scouting procedures and will serve as a review for experienced scouts and producers and as an introduction to cotton insect monitoring for new scouts.

**Location City Date Time Contact for additional information:**

Tifton Campus Conference Center Tifton GA June 13, 2011 9:00 am -12:30pm Debbie Rutland (229) 386-3424

**Southeast Research and Education Center Midville GA June 21, 2011 9:00 am - 12:30pm Peyton Sapp (706) 554-2119**

**INSECT UPDATES:** Check the **Cotton Insect Hotline (1-800-851-2847)** for updates on current insect conditions. The Cotton Pest Management Newsletter and additional cotton production information is also posted on the UGA Cotton Homepage at:

**<http://www.ugacotton.com>**