North Carolina Cooperative Extension July 2014

Bertie County Farmline

Richard W. Rhodes County Extension Director



Contact Us

For more information regarding any of your farming needs, please feel free to contact our office at 794-5317 Your questions and concerns are important to us.

Bertie County Extension Office at New Location

The Bertie County Extension Staff spent the first part of June moving and settling in at a new office location. The Bertie County Extension Office is now located at 204 S. Queen Street in Windsor, directly across from the Windsor Community Building.



Welcome New Agricultural Extension Agent to Bertie County



Jarette Hurry, Agricultural Extension Agent began working in Bertie County on Monday, June 23, 2014. Jarette's areas of responsibilities will include corn, soybeans and wheat production, commercial and home horticultural, and forestry.

Please take time to call Jarrette at 794-5317 or stop by to see him at our new office location.

Bertie Cotton and Soybean Scouting School

A cotton and soybean scouting school has been scheduled for Thursday, July 24, 2014 beginning at 9:30 a.m. and ending at 11:30 a.m. The site of the meeting is the Windsor Community Building, located at 201 S. Queen Street. Dominic Reisig, Extension Entomologist from NC State is scheduled to make presentations on the current insect concerns, insect identification and scouting techniques. We plan to go to the field following their formal presentations. Those planning to attend scouting school need to call our office at 252-794-5317 to register. Pesticide and CCA credits will be requested for this meeting.

Peanut Disease Control Programs and Advisories Beginning

by Barbara Shew, Extension Plant Pathologist

Peanut growers should begin leaf spot control programs soon (Figure 1). In well-rotated fields, the first fungicide spray for leaf spot control should be applied when peanuts reach R3. This is when about half the plants in a particular planting have at least one pod starting to develop (Figure 2). In most years, peanuts will reach R3 around July 7. Spray programs can be delayed



by two weeks (R3+2) on the cultivar (Figure 1)

Bailey, which has moderate resistance to leaf spots. Reapply foliar fungicides every two weeks, or follow the Peanut Leaf Spot Advisory after the first spray.

Leaf spot and Sclerotinia advisories are delivered

(Figure 2) by daily e-mails throughout the summer. Contact Barbara Shew (barbara_shew@ncsu.edu) or your County Extension Office if you would like to receive peanut disease advisories. Advisories are also available on-line at http://ncsupeanut.blogspot.com/. For more information about peanut diseases, see 2014 Peanut Information.

Scouting for Plant Bugs by Dominic Reisig, Extension Entomologist

Although it looks like plant bugs may be an issue this year, we don't need to panic. What I mean by don't panic is that we shouldn't spray if it's not needed. Growers in the Midsouth contend with plant bugs at much greater densities and frequencies than we do. Managing plant bugs is as easy as any of our other pests if you have a scouting plan and stick to it. I cannot urge how important it is to both monitor square retention and to check for plant bugs. Plant bugs aren't the only cause of square loss – other stresses in the environment can cause this. So you don't want to spray a field where bugs aren't the problem. Also, plant bugs are extremely mobile and can rapidly move in and out of fields. Sometimes they may be present (especially adults), but not causing square loss.

Weekly checks of upper square retention is the most efficient way to assess if plant bugs can either be ruled out as an economic concern at that time or if sweeping for the adults and nymphs is needed. An upper square retention rate of 80% or more usually indicates that plant bugs are not present at damaging levels. If upper square retention is less than 80%, you should sweep six to eight or 10 locations in the field away from the edge, looking for live adult and immature plant bugs. In most years in North Carolina, square retention is very high – often in the mid-90s. A threshold of eight plant bugs per 100 sweeps usually indicates that a spray is needed at that time. Remember that when cotton is approximately one week into blooming, a five-foot black beat cloth is a more accurate sampling devise than the sweep net for plant bugs, especially immatures. I'll blog about this sampling option in the coming weeks.

Insecticides for Plant Bugs - With cotton squaring and flowering soon, it is a good idea to think about treatment options for plant bugs. In fact, some growers have already confirmed square loss from plant bugs and densities of plant bugs above threshold in our state. Some fields have already been sprayed, as a result, and it is a good idea to be prepared. Although I think plant bugs are going to be an issue this year, I also think that we can easily manage them if we scout our fields correctly. What I hope we can avoid is spraying when we don't need to, which can lead to resistance or flare other pests later in the season. For example, no insecticide will control adults that remigrate into a field after a spray or stop squares that are being shed from droughty conditions with no plant bugs present.

Generally the neonicotinoid-class insecticides perform well early in the season before flowering and often at lower rates. These include products such as Admire Pro, Belay, Centric, Intruder, Trimax Pro, etc. The advantage to using these products is that they generally do not flare secondary pests, such as spider mites, and may preserve some, but not all, beneficial insects. In general, a product that is killing a plant bug will likely kill related beneficial insects such as minute pirate bug and insidious flower bug, damsel bugs, assassin bugs, and big-eyed bugs. However, these products are still much less harsh on the system than pyrethroid and organophosphate-class insecticides.

Later on in the season, neonicotinoid insecticides generally do not work as well. However, Belay performed well in 2010 and 2013 trials that I had well into the growing season (Figures 1 and 2). That being said, I am recommending that you do not spray a pure neonicotinoid product more than once a season (common examples of Admire Pro, Belay, Centric, Intruder, Trimax Pro are listed above) or a mixed product more than twice a season (common examples include Brigadier, Endigo, and Leverage 360). Aphid resistance to neonicotinoids is on the rise and was confirmed in eastern North Carolina in 2012. All cotton seed treatments targeting thrips are neonicotinoids and pre-mixed product use in cotton is widespread. Hence, the increase in neonicotinoids in cotton is increasing aphid resistance to these products. Therefore, to counteract this resistance I am recommending that you rotate insecticides.

Plant Bug and Stink Bug Update - Over the past couple weeks, I've been inundated with questions concerning both plant bugs and stink bugs. I think it's critical to clarify a few issues.

First, when deciding to spray for plant bugs, square retention or presence of plant bugs should not be used alone to trigger a spray. These must be used in tandem. Square loss can be caused by lots of environmental factors (e.g., extreme heat, drought soil, cloudy weather) as well as plant bugs. So you need to scout and determine that you have a threshold level of plant bugs and square retention below 80% on the upper two or three top positions before you spray. Scouting recommendations and thresholds for cotton pre-bloom can be found here. If we spray unnecessarily in cotton we can expect to battle pests all season.

Secondly, we do not need to worry about stink bugs in cotton until bolls are present on the plant. Stink bugs are present in cotton and they will need to be treated this year. However, stink bugs cannot cause any impacts on plant height, height to node ratio, square retention, or flower initiation. Put simply, stink bugs should not be treated in cotton before bolls are there.

Kudzu Bug Scouting & Control Information

Kudzu bugs are late this year infesting soybean fields. The treatment threshold is 5 bugs per plant for soybeans a foot or less in height, 10 bugs per plant for beans 1 to 2 foot tall and the established threshold for beans 2 feet or taller is 1 kudzu nymph (immature kudzu bug) per sweep of a sweep net.

Please go to the web site at www.nccrops.com for information on this insect pest as well as the current situation concerning other field crop insects in North Carolina.



Bertie Agricultural Information



Bertie County Farmers can call 794-5331 to receive the *daily* Peanut Leaf Spot and Sclerotinia Spray Advisories. This

information will also be posted on our office web page – bertie.ces.ncsu.edu/.

Hopefully, this service will get underway during the first week of July.

Farmers Need A New NC Sales Tax Exempt Number

North Carolina farmers will need to file for a new Sales Tax Exempt Number soon, in order to have a the new tax number when the new tax ruling takes effect October 1, 2014. The sales tax exemption for farmers has changed to \$10,000 of gross income. The new tax-exempt number will start with number 7. The Department of Revenue estimates it may take up to 90 days to process the application for the new number. See enclosed form.

Events of Interest

July 24th - Bertie County Cotton & Soybean Scouting School

Time: 9:30 to 11:30 a.m.

Windsor Community Building

August 6st - 2014 Backland Farm Managers Tour

Wednesday, August 6, 2014

Registration at 7:00 a.m.

Tours begin at 8:00 a.m.

Location: Tidewater Research Station, Plymouth, NC

September 4th Peanut Field Day

Peanut Belt Research Station, Lewiston NC

September 10th – Cotton Field Day

Upper Coastal Plain Research Station

Rocky Mount, NC

Corn Earworm Treatment Thresholds for Peanuts and Soybeans

Corn earworms (CEW) will soon be present in peanut and soybean fields in Bertie but growers need to scout to determine if they have reached treatment threshold.

To sample for an active infestation in peanuts, reach halfway across plants along 2 feet of row with a dowel rod and shaking the foliage vigorously for 5 to 8 seconds toward the row middle. Using the dowel, push the foliage back so that you can see the soil under the plant. Carefully identity and count the worms.



treatment threshold is 4 worms per row foot up until September. For the first two weeks in September, the action threshold is 6 worms per row foot; and after mid-September, it is 10 worms per row foot.

For **soybeans** concentrate scouting first in fields that are most attractive to the CEW (**blooming soybeans with open canopies.** If worms are found in these areas continue to scout all of your acreage on a regular basis. Corn earworm numbers can vary considerably over a short distance. I have seen, in the past, fields on one side of the road severely infested with CEW, which warranted an insecticide treatment while fields across the road had very low levels and did not need spraying. The **Corn Earworm Economic Threshold Calculator** can be found at webipm.ento.vt.edu/cew/

When scouting soybeans remember the worms you find will not all be the CEW, so you will need to have a general knowledge of the various worm pests you may encounter in order to make the proper treatment decision. The **green cloverworm** in prevalent in soybean fields most years and can be found in low numbers at this time. This worm is light green with a faint white stripe along its body. Sometimes the stripe is not obvious. They have three pair of abdominal prolegs and move with a looping motion similar to the **soybean looper** (loopers have only two pair of prolegs). **When disturbed the green cloverworm thrashes violently**. In contrast the small corn earworm is usually brownish with small dark spots. **Larger CEW caterpillars may be green, brown, yellow, or black**. Their bodies are stocky with prominent pale brown or orange heads. Light and dark stripes run the length of the body, which has four pair of prolegs. **When disturbed the CEW will drop to the ground, curl up and remain motionless for a short period**. If you need assistance with identifying worms in your fields please give Jarette a call at **794-5317**.

Green cloverworms only eat foliage. They make holes in the leaves and are damaging only under very high populations or in combination with other defoliators such as the bean leaf beetle or other foliage feeding caterpillars like the yellowstriped armyworm, beet armyworm, silverspotted skipper, and the saltmarsh caterpillar. Treatment thresholds for defoliators vary depending on growth stage of the crop. Spray when defoliation exceeds 30% percent prior to bloom, and insects are actively feeding. From 2 weeks before bloom through blooming and pod set an insecticide application is suggested when defoliation exceeds 15%. Limited acreage of soybeans is currently blooming.



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NC Cooperative Extension Bertie County Center 106 Dundee Street PO Box 280 Windsor, NC 27983 RETURN SERVICE REQUESTED

