

# North Carolina Pest News

Departments of Entomology and Plant Pathology



Stephen J. Toth, Jr., editor

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## CAUTION !

The information and recommendations in this newsletter are applicable to North Carolina and may not apply in other areas.

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[http://ipm.ncsu.edu/current\\_ipm/pest\\_news.html](http://ipm.ncsu.edu/current_ipm/pest_news.html)

## **FIELD AND FORAGE CROPS**

From: Jack S. Bachelier, Extension Entomologist

### **Bollworms on Cotton**

Although the bollworm moth flight is now present throughout North Carolina, you wouldn't know it in some areas due to the low moth numbers. Trap numbers are "all over the board" this week, generally far lower at this time compared with any of the past three years. Given the

increased corn acreage and hot dry conditions that we normally associate with high levels of bollworm moths, I expected much higher moth numbers and associated bollworm problems than has been the case. A few local areas have produced good numbers, however. The light trap at John's, North Carolina had a three-day past Monday count of 377 moths, with the other two Scotland County traps accounting for approximately 150 moths each. The underground bollworm pupal stage seems to have the capacity to remain in that state during dry conditions, and then emerge as moths after a penetrating rainfall. Also, both bollworm moths and stink bugs often gravitate toward areas that have received higher moisture levels, so watch for higher levels of both of these pests in ranker cotton and lower levels in cotton which has begun to "cut out." We saw this dramatically in a graduate student class yesterday in which a large cotton field graded from a higher dry area of "cut out" cotton and a lower area with plenty of moisture. Stink bugs and bollworm moths were easy to find in low area of the fields and essentially non-existent in the upper dry area. Threshold levels of bollworms that have been found this past week have been mostly developing on small bolls in both conventional and on Bollgard cotton, and less in the terminals.

### **Stink Bugs on Cotton**

Stink bugs also seem to be giving us a significant break so far this year. Most consultants and producers that I have spoken to this past week are reporting internal boll damage levels of less than 10 percent, though some fields have higher damage levels, such as our stink bug threshold test in Wayne County where a 20 percent threshold treatment was met yesterday. Unfortunately, another situation has presented itself that cotton producers hate to see in early August: premature "cut out." In cases where "cut out" and dry weather have conspired to throw off small bolls, most of the remaining bolls may be too old and big for stink bugs to damage. That is 3.5 weeks old or about 1¼ inches in diameter. If this situation is observed, be sure to raise the internal boll damage threshold accordingly. For example, if half of the bolls are in this "bug safe" category, the 10 percent threshold may be raised to 20 percent.

### **Beet Armyworms on Cotton**

An odd occurrence of high levels of beet armyworms feeding on Bollgard II cotton was pointed out by a consultant this past week in Nash County (apparently feeding on a lot of adjacent pigweed). Past experience with beet armyworms on Bollgard II cotton suggests low armyworm survival when beet armyworm egg masses are deposited directly on the cotton by adult females. Bollgard cotton, however, provides only limited protection from beet armyworms, and conventional cotton none. This might be a good year to look out for beet armyworms, especially in the "all too many" cotton fields with high Palmer pigweed populations. Fortunately, we now have larvicides that are very effective against beet armyworms.

From: Rick L. Brandenburg, Extension Entomologist

### **Peanut Insect Pests**

For a majority of the peanut producing areas, insect and mite problems have been a real "hit or miss" affair this year. Most fields have not suffered from corn earworms or mites this summer.

The hot, dry weather throughout many areas has made us nervous about spider mites, but the lack of worm problems and avoiding foliar insecticides has certainly helped us. Fields that have been treated with Lorsban or other chlorpyrifos products do need to be scouted frequently, however.

There have been a couple of reports of beet armyworms in peanuts. These sometimes occur during dry years. They don't feed as much as the other caterpillars, but their numbers can be very high, and given enough of them, they can damage peanuts. Most of our pyrethroid insecticides do not do a great job against beet armyworms, but Steward has proven effective against them and Tracer does a good job as well. We do need to watch for caterpillars (and spider mites) throughout the month of August.

From: Jim Dunphy, Extension Crop Science Specialist, and Steve Koenning, Extension Plant Pathologist

### **Soybean Rust Update**

Asiatic soybean rust has been confirmed on soybeans in Louisiana, Texas, Oklahoma and Arkansas during the past two weeks, but there have been no new finds east of the Mississippi River.

The closest rust to North Carolina confirmed to date remains in Florida, as we reported on July 16. The Marion County site represents the closest rust found on soybeans to date for Elizabeth City (595 miles), Fayetteville (440 miles), Raleigh (490 miles), Washington (525 miles) and Wilmington (420 miles). The Gadsden County find was at the research station near Quincy, and represents the closest rust found on soybeans to date for Charlotte (390 miles), Murphy (315 miles) and Winston-Salem (455 miles).

To date, Asiatic soybean rust has been found on soybeans or kudzu in five counties in Alabama (one on soybeans), two counties in Arkansas (both on soybeans), 10 counties in Florida (two on soybeans), five counties in Georgia (all on kudzu), six parishes in Louisiana (five on soybeans), one county in Mississippi (kudzu), two counties in Oklahoma, and 21 counties in Texas (20 on soybeans).

## **ORNAMENTALS AND TURF**

From: Stephen B. Bambara, Extension Entomologist

### **Orangestriped Oakworms**

I haven't seen any of these insects yet, but orangestriped oakworms (Fig. 1) should be present as tiny caterpillars starting to strip the leaves of (usually) willow oak. If you've had them before, you'll probably have them again. Watch for defoliated ends of branches and falling black fecal pellets on cars, lawn furniture or sidewalks beneath trees. These don't seem to kill trees, but can totally defoliate smaller trees. I've never seen a tree actually killed by them, even after repeated

defoliation. A *B.t.* microbial insecticide would be a good treatment at their first appearance. Most of the other caterpillar insecticides should also be effective, if appropriate. By next month, county Extension agents will be receiving calls from people who didn't know they had them.



**Fig. 1. Orangestriped oakworm. Image by James R. Baker.**

### **Velvet Ants**

Elizabeth Taylor starred in "National Velvet," Mel Torme was known as "The Velvet Fog," Bobby Vinton sang "Blue Velvet" and mutilid wasps are known as "velvet ants." Velvet ants are parasitic wasps. The females are wingless and resemble hairy ants (Fig. 2). Female velvet ants seek out a host nest and lay their eggs on the host larva. The velvet ant larvae consume the host wasp larvae and pupate and mature into another generation of velvet ants. A velvet ant parasitizes the nests of the cicada killer wasp. Adults slip into the host wasp nest, lay their eggs, and depart. The exceptionally tough exoskeleton of the velvet ant protects it from stings of the host wasp in case they meet in the nest. Velvet ants are not usually numerous and no control measures are usually needed. Usually a big stick or heavy-soled shoe will take care of this insect, but normally there is no harm in letting them live. It would be good advice to not handle them.



**Fig. 2. Velvet ant. Image by Bart Drees, Texas A&M University.**



**Fig. 3. Damage by the oak shothole leafminer. Image by Stephen B. Bambara.**

## Oak Shothole Leafminers

A sample of an oak shothole leafminer was received in the Plant Disease and Insect Clinic at North Carolina State University this week. I've only seen this two other times. A tiny leafmining midge, *Agromyza viridula*, makes a tiny circular mine in the leaf when it is only half developed. The leaf continues to grow and the circular mine dries and drops out of the leaf leaving a hole of variable size and shape (Fig. 3). Damage is cosmetic and usually confined to parts of the tree. Control would seem to be unnecessary, and usually it is too late by the time symptoms appear. For more information, see page 206 of *Johnson and Lyons*.

## General Reminders Regarding Insects and Mites of Landscapes and Turf

- Yellow jacket populations should be nearing their peak, with a higher likelihood of negative encounters.
- Bagworms should be large and stripping Leyland cypress trees and junipers.
- Fall webworms should be very noticeable in pecan, sourwood and hickory trees.
- Be on the lookout for fall armyworms in turf, especially newly-sodded lawns.
- Cicada killer wasps may be more noticeable.
- Spider mite injury is now very evident.

## INSECT TRAP DATA

From: Thomas G. Pegram, Agricultural Extension Agent, Union County

### Light Trap Data from Anson, Stanly and Union Counties

```

*****
                        Number of Adult Insects
*****
      Anson S      Anson N      Union S      Union N      Stanly
*****  *****  *****  *****  *****
Date    CBW  GR  BR  CBW  GR  BR  CBW  GR  BR  CBW  GR  BR  CBW  GR  BR
*****
July 9   -   -   -    0   0   0    6  36   0    7   4   2   10   0   0
July 11  -   -   -    0   0   0    6  40   0    4   4   0    3   0   0
July 13  -   -   -   10   0   0    7  41   0   10   3   2    4   0   0
July 16   9  53   0   15   -   -    7  19   -    4   7   0   10   0   0
July 18   9  55   0    -   -   -    9  27   -    8   5   1    6   1   0
July 20  12  64   2   19   -   -   26  39   -    7   9   0    6   0   0
July 23  13  58   0   20   -   -  power outage  11  2   0   12   1   0
July 25  12   2   0   22   -   -   37   7   0    7   0   0   13   1   0
July 27  31   4   0   85   -   -   28   3   0   10   1   0   17   0   0
July 30  72  18   1   75   1   -   56  21   -    7   3   1   13   0   0
August 1  29   5   0   67   1   -   32  16   -   19   4   0   18   2   0
August 3  55  23   0   51   1   -  104  18   -   12   1   0   19   1   0
*****
    
```

CBW = cotton bollworm moths; GR = green stink bugs; BR = brown stink bugs

From: Richard W. Rhodes, County Extension Director, Bertie County

**Light Trap Data from Bertie County**

```

*****
                Windsor      Woodard      Hexlena      Roxobel      Colerain
                *****      *****      *****      *****      *****
Date           BW GSB BSB    BW GSB BSB    BW GSB BSB    BW GSB BSB    BW GSB BSB
*****
July 19        0  0  0      7  3  0      0  0  0      16  5  0      -  -  -
July 20        5 16  0      24  3  0      0  4  0      -  -  -      -  -  -
July 21        0  0  0      -  -  -      0  0  0      10  3  0      -  -  -
July 22        3  0  0      -  -  -      0  0  0      -  -  -      -  -  -
July 23        0  0  0      14  2  0      0  0  0      16  0  0      0  0  0
July 24        3  4  0      7  0  0      6  0  0      13  1  0      29  0  0
July 25        4  1  0      16  1  0      -  -  -      16  1  0      47  0  0
July 26        5  0  0      26  1  0      3  0  0      12  0  0      30  0  0
July 27        3  0  0      27  1  0      6  0  0      22  2  0      69  0  0
July 28        3  0  0      -  -  -      -  -  -      -  -  -      -  -  -
July 29        9  1  0      -  -  -      -  -  -      -  -  -      -  -  -
July 30        7  1  0      41  1  0      11  0  0      23  0  0      115  1  0
July 31        4  0  0      10  0  0      14  0  0      14  0  0      40  0  0
August 1       11  0  0      11  1  0      15  0  0      9  0  0      57  0  0
August 2       14  0  0      11  0  0      19  0  0      14  0  0      54  0  0
August 3       26  0  0      15  0  0      26  0  0      5  0  0      62  4  0
*****

```

BW = Bollworm moths; GSB = Green stink bugs; BSB = Brown stink bugs

From: Mike Carroll, Agricultural Extension Agent, Craven County

**Light Trap Data from Craven County**

```

*****
                        Number of Adult Insects
*****
Date           THW   TBW   CEW   GSB   BSB   ECB   FAW   BAW   Looper
*****
July 6         3     1    11     1     1     -     2     -     -
July 9         5     1    26     2     1     -     1     -     -
July 11        2     -    22     1     1     -     -     -     -
July 13        4     -    28     2     -     -     1     -     -
July 16        4     2    34     2     1     -     3     -     -
July 18        3     -    10     1     -     -     -     -     -
July 19        5     1    23     3     2     -     1     -     -
July 23        7     2    31     2     1     -     2     -     -
July 25        1     -    29     -     -     2     1     -     -
July 27        1     -    33     1     -     -     2     -     -
July 30        -     -     -     -     -     -     -     -     -
August 1       1     -    73     1     -     -     4     -     -
August 3       -     2   141     1     -     3     5     -     -
*****

```

THW = tobacco hornworms; TBW = tobacco budworms; CEW = corn earworms;  
 GSB = green stink bugs; BSB = brown stink bugs; ECB = European corn  
 borers; FAW = fall armyworms; BAW = beet armyworms

Location of trap: Cove City  
Cooperators: R&W McCoy Farms and Cove City Fertilizer

From: Colby S. Lambert, Agricultural Extension Agent, Cumberland County

### Light Trap Data from Cumberland County

```
*****  
                        Number of Adult Insects  
*****  
Date      THW      CEW      GSB      BSB  
*****  
July 11    0         3         5         0  
July 13    0         2         5         0  
July 16    4        33        12         0  
July 18    2        66         6         0  
July 20    7       160        20         0  
July 23   23       214         0         0  
July 25   14       150         6         0  
July 27   12       202        13         0  
July 30    6       197        12         0  
*****
```

THW = tobacco hornworms; CEW = corn earworms;  
GSB = green stinks bugs; BSB = brown stink bugs

Trap located in Godwin at Cumberland/Harnett County Line  
at Lewis Farms off of Highway 301

From: Curtis D. Fountain, Agricultural Extension Agent, Duplin County

### Light Trap Data from Duplin County

```
*****  
                        Number of Adult Insects  
*****  
Date      BW      GSB      BSB  
*****  
July 2     0         1         0  
July 4     0         0         0  
July 6     0         4         4  
July 9     4         8         0  
July 11    1        11         0  
July 13    4         7         2  
July 16    3         6         0  
July 18    9        13         0  
July 20   21        23         0  
July 23   22         3         0  
July 25   15         0         0  
July 27   53         4         0  
July 30   73         1         0  
August 1  98         2         0  
August 3  71         3         0  
*****
```

BW = cotton bollworms; GSB = green  
stink bugs; BSB = brown stink bugs

Trap location: approximately two miles east of Albertson  
 Cooperator: Justin Murphy

From: Arthur R. Bradley, Jr., Agricultural Extension Agent, Edgecombe County

### Light Trap Data from Edgecombe County

```

*****
                        Number of Adult Insects
*****
      W Edgecombe /a      Coakley /b      Lawrence /c
*****
Date      CEW    BS    GS      CEW    BS    GS      CEW    BS    GS
*****
July 10      -    -    3      14    0   46      -    -    -
July 11      -    -    6       4    0   28      -    -    -
July 13       0    0    7       8    0   44      -    -    -
July 15       0    0    5      10    0   49      -    -    -
July 18       0    0    8       2    0   39      -    -    -
July 20       8    0    1       1    0   56      4    0    4
July 23       8    0    0       8    0    3      1    0    0
July 25      17    0    2       -    -    -       7    0    0
July 27      24    0    3      14    0    5      10   0    3
July 30      29    0    8      28    0    5       2    0    2
*****
  
```

Abbreviations: CEW = corn earworms;  
 BS = brown stink bugs; GS = green stinks bugs

a = trap located 12 miles west of Tarboro; maintained by Tom Porter.  
 b = trap located 5 miles east of Tarboro; maintained by Glenn O'Neal.  
 c = trap located at Lawrence; maintained by Terri Thomas.

From: Franky J. Howard, Agricultural Extension Agent, Jones County

### Light Trap Data from Jones County

```

*****
                        Number of Adult Insects
*****
      Date      BW      BSB      GSB      HW
*****
July 2          0        0        0        0
July 4          0        0        0        0
July 6          1        0        0        1
July 9          7        0        0        0
July 11         0        0        0        1
July 13         0        0        0        0
July 16         0        1        1       15
July 18         0        4        0       18
July 20         0        0        1        7
July 23         1        0        0        4
July 25         5        0        1       10
July 27        23        0        0        2
  
```

```

July 30      27      0      0      0
August 1     49      0      1      2
August 3     34      0      0      5
*****

```

Trap Location: Comfort  
Monitored by: Morris and Brett Pike

BW = bollworms; BSB = brown stink bugs;  
GSB = green stink bugs; HW = hornworms

From: Alan A. Harper, Lenoir County

### Light Trap Data from Lenoir County

June

```

*****
                        Number of Adult Insects
*****
Date      HW      CEW      ECB      AW      AWC      GSB      BSB      TBW
*****
June 15   0        5        0        5        2        0        0        0
June 16   0        7        0        1        3        0        0        0
June 17   0        0        0        2        2        2        0        1
June 18   0        1        1        1        4        0        0        0
June 19   0        3        0        0        2        2        4        0
June 20   0        5        1        0        3        0        2        0
June 21   -----no electric power-----
June 22   0        2        0        0        1        0        0        0
June 23   1       10        1        3       14        1        0        1
June 24   0        3        0        1        4        0        0        0
June 25   0        1        1        1        2        1        0        0
June 26   0        0        5        0        6        3        0        0
June 27   0        3        4        1        2        2        0        0
June 28   0        4        1        0        3        1        0        0
June 29   0        4        0        1        2        0        0        0
June 30   0        4        2        1        5        0        0        0
*****

```

July

```

*****
                        Number of Adult Insects
*****
Date      HW      CEW      ECB      AW      AWC      GSB      BSB      TBW
*****
July 1    -----no electric power-----
July 2    0        3        0        0        3        2        0        0
July 3    0        6        2        0        6        1        0        0
July 4    0        1        0        0        3        0        0        0
July 5    0        2        1        0        5        4        0        0
July 6    0        3        1        0        2        1        0        0
July 7    0        3        1        1        3        4        0        0
July 8    -----no electric power-----
July 9    0        2        2        0        5        3        0        0
July 10   0        2        0        0        0        7        0        0
July 11   0        1        0        0        3        3        0        0

```

July 12	0	0	0	0	1	1	0	0
July 13	0	2	2	0	5	9	0	0
July 14	0	4	2	0	3	1	0	0
July 15	0	0	3	4	1	4	0	0
July 16	1	2	1	1	4	9	0	0
July 17	0	3	2	1	2	3	0	0
July 18	0	2	0	0	1	1	0	0
July 19	1	12	1	0	3	15	0	0
July 20	0	11	2	0	7	7	2	0
July 21	-----unplugged-----							
July 22	0	12	2	0	7	0	0	0
July 23	0	8	4	0	4	1	0	1
July 24	1	13	0	1	2	0	0	0
July 25	0	22	1	1	2	3	0	0
July 26	0	21	3	1	4	1	0	0
July 27	0	19	1	0	3	3	0	0
July 28	0	27	6	1	3	2	0	2
July 29	0	28	4	1	4	2	0	0
July 30	0	41	0	1	3	2	0	0
July 31	1	31	3	0	3	3	0	0

\*\*\*\*\*

August

\*\*\*\*\*

Number of Adult Insects

\*\*\*\*\*

Date	HW	CEW	ECB	AW	AWC	GSB	BSB	TBW
August 1	2	37	2	0	8	5	1	0
August 2	0	85	3	0	2	11	0	0
August 3	0	76	4	0	3	6	0	0

\*\*\*\*\*

Abbreviations: HW = hornworms; CEW = corn earworms; ECB = European corn borers; AW = true armyworms; AWC = armyworm complex; GSB = green stink bugs; BSB = brown stink bugs; TBW = tobacco budworms

From: J. B. Coltrain, County Extension Director, Martin County

**Light Trap Data from Martin County**

\*\*\*\*\*

Farm Life      Robersonville

\*\*\*\*\*

Date	BW	GSB	BSB	BW	GSB	BSB
July 16	7	3	0	0	8	0
July 18	4	5	0	0	5	0
July 20	1	3	0	0	7	0
July 23	7	0	0	7	0	0
July 25	11	0	0	6	1	0
July 27	9	0	0	10	0	0
July 30	17	2	0	16	2	0
August 1	16	0	0	10	1	0
August 3	22	1	0	27	1	0

\*\*\*\*\*

BW = Bollworm moths; GSB = Green stink bugs; BSB = Brown stink bugs

From: Charlie Tyson, Agricultural Extension Agent, Nash County

**Light Trap Data from Nash County**

```

*****
                        Number of Adult Insects
                        *****
Date          CEW          GSB          BSB
*****
July 13       3            -            -
July 16       10           -            -
July 18       5             3            -
July 20       8            10           1
July 23       14           3            0
July 25       1             0            0
July 27       25           0            0
July 30       23           0            0
August 1      16           0            0
*****
    
```

CEW = corn earworms; GSB = green stink bugs; BSB = brown stink bugs

Trap location: near Hickory Crossroads

From: Craig Ellison, Agricultural Extension Agent, Northampton County

**Light Trap Data from Northampton County**

```

*****
                        Number of Adult Insects
                        *****
Woodland   Conway   'Neck   Seaboard   Gaston   Jackson
*****
Date      CEW GR BR   CEW GR BR   CEW GR BR   CEW GR BR   CEW GR BR   CEW GR BR
*****
July 18   - - -     - - -     - - -     3 4 -     - - -     0 12 0
July 20   - - -     - - -     - - -     2 2 0     - - -     12 89 2
July 23   - - -     4 2 0     - - -     6 0 0     - - -     25 2 0
July 25   0 0 0     - - -     - - -     12 4 0     - - -     26 5 0
July 27   0 0 0     5 1 0     - - -     16 2 0     1 0 0     37 3 0
July 30   3 1 0     - - -     - - -     14 2 0     3 0 0     79 7 0
August 1  3 0 0     4 1 0     - - -     12 4 0     7 0 0     59 9 0
August 3  5 0 0     13 3 0    - - -     18 9 0     5 0 0     119 7 0
*****
    
```

CEW = corn earworms; GR = green stink bugs; BR = brown stink bugs

Locations: Woodland, Conway, 'Neck, Seaboard, Gaston and Jackson  
 Monitored by: L. Culpepper, K. Edwards, B. Johnson, T. Flythe,  
 D. Grant and B. Bryant

From: Tray Bridgers, Agricultural Extension Agent, Onslow County

### Light Trap Data from Onslow County

```
*****
                        Number of Adult Insects
                        *****
Date      Bollworms   GSB    BSB   Hornworms
*****
July 4         6         3     0       0
July 6        20         7     0       0
July 9        25        19     3       0
July 11       21        10     0       0
July 13       33        10     3       1
July 16       31        10     0       0
July 18       34         3     5       3
July 20       39        18     2       6
July 23       25         5     0       3
July 25       25         0     0       0
July 27       57         4     0       2
July 30      105         7     0       0
August 1       70         3     0       3
August 3      185         3     0       0
*****
```

GSB = green stinks bugs; BSB = brown stink bugs

Trap location: Richlands; Cooperator: Richland Farms  
Insect counts are from a single black light trap  
located approximately 1 mile east of Richlands.

From: Kent Wooten, Agricultural Extension Agent, Robeson County

### Light Trap Data from Robeson County

```
*****
                        Number of Adult Insects
                        *****
Date      BW      GSB    BSB    FAW
*****
July 6         12      -     -     -
July 7-8       23      -     -     -
July 9         18      -     -     -
July 10        15      -     -     -
July 11        11      -     -     -
July 12        14      -     -     -
July 13-15     47      18     3     -
July 16        18       7     1     2
July 17-18    132     17     4     -
July 19        98     11     1    11
July 20       105      7     1     9
July 21-22    172      5     0    13
July 23       105      2     0     2
July 24       102      3     0     0
July 25        97      5     1     3
July 26        93      4     0     4
July 27-29    165      6     0     3
*****
```

```

July 30      58      3      0      4
July 31-1   191     35      1      4
August 2    69      2      1      1
*****

```

BW = bollworms; GSB = green stick bugs;  
BSB = brown stink bugs; FAW = fall armyworms

Location is Rowland; monitored by Kay McGirt

From: Josh Gaddy, Agricultural Extension Agent, Sampson County

**Light Trap Data from Sampson County**

```

*****
                        Number of Adult Insects
                        *****
Date          BW      GSB      BSB      THW
*****
July 2        ----- trap set up -----
July 5         3       0       1       1
July 6         3       0       0       0
July 9         3       7       0       4
July 11        3       1       1       2
July 13        4       4       0       8
July 16        -       -       -       -
July 18        12      0       0      12
July 20        57      5       0       8
July 23       132      2       0      17
July 25        50      0       0       4
July 27        93      1       0       3
July 30       118      5       0       3
August 1      124      1       1       2
August 3     130      5       0       1
*****

```

BW = cotton bollworms; GSB = green stink bugs;  
BSB = brown stink bugs; THW = tobacco hornworms

Black trap located 6 miles south of Clinton on  
US-701S on the farm of Mike and James Hope.

From: David E. Morrison, Agricultural Extension Agent, Scotland County

**Light Trap Data from Scotland County**

```

*****
                        Number of Adult Insects
                        *****
                        Gibson          John's          Laurinburg
                        *****          *****          *****
Date          BW  GSB  BSB  FAW      BW  GSB  BSB  FAW      BW  GSB  BSB  FAW
*****
July 11      13  14   0   0       22  33   1   0       12  10   1   0
July 13       8  10   0   0       17  25   6   0        3   7   0   0
July 16      16  14   0   0       61  14   0   0       26   5   0   0

```

July 18	16	5	0	0	74	24	2	0	57	6	0	0
July 20	41	7	0	0	223	41	0	0	156	11	0	0
July 23	26	1	0	0	268	3	0	0	81	1	0	0
July 25	62	3	0	0	138	1	0	0	146	6	0	1
July 27	53	4	0	0	164	4	0	0	110	5	0	0
July 30	133	9	0	0	377	5	0	0	175	5	0	1
August 1	27	2	0	0	274	0	0	0	96	3	0	0
August 3	142	23	0	0	308	1	0	0	323	9	0	0

\*\*\*\*\*

BW = bollworm moth; GSB = green stink bugs;  
 BSB = brown stink bugs; FAW = fall armyworms

From: Kevin Johnson, Agricultural Extension Agent, Wayne County

### Light Trap Data from Wayne County

\*\*\*\*\*

Number of Adult Insects

\*\*\*\*\*

Date	Seven Springs				Goldsboro			
	GSB	BSB	CEW	HW	GSB	BSB	CEW	HW
July 6	-	-	-	-	2	0	1	0
July 9	-	-	-	-	23	6	1	0
July 11	-	-	-	-	1	0	1	0
July 13	1	0	1	2	5	0	3	1
July 16	2	0	6	4	-	-	-	-
July 18	0	0	5	0	10	-	11	2
July 20	4	0	4	3	-	-	-	-
July 23	1	0	8	5	2	0	61	2
July 25	-	-	-	-	1	1	50	3
July 27	2	0	4	3	3	0	120	0
July 30	2	1	6	2	7	5	75	0
August 1	5	0	12	2	5	1	51	0

\*\*\*\*\*

GSB = green stink bugs; BSB = brown stink bugs;  
 CEW = corn earworms; HW = hornworms

Cooperators: D. M. Price (Seven Springs); Willie Howell (Goldsboro)

From: Norman E. Harrell, Agricultural Extension Agent, Wilson County

### Light Trap Data from Wilson County

```

*****
                        Number of Adult Insects
*****
                Lucama      Pender's Xrds      Sims      Fountain
*****
Date            CEW  BS  GS      CEW  BS  GS      CEW  BS  GS      CEW  BS  GS
*****
July 16         -   -   -        -   -   -        -   -   -        4   0   9
July 18         -   -   -       14   0   1        0   0   2        4   0  25
July 20         -   -   -       10   0   0        3   0   0       18   0  24
July 23         12   0   0       17   0   1        0   0   0       37   0   3
July 25         2   0   1       25   0   0        1   0   0       13   0   3
July 27         4   0   2       15   0   1        4   0   0       20   0  14
July 30         7   0   2       12   0   1        9   0   0       36   0  26
August 1        4   0   0       12   0   0        0   0   0       26   0   0
August 3        6   0   1       31   0   0        0   0   1       58   0  10
*****

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Locations: Lucama, Pender's Crossroads, Sims and Fountain  
 Monitored by: Chris Bass, Adam Gardner, Thad Sharpe and Barbara Smith

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*Recommendations for the use of chemicals are included in this publication as a convenience to the reader. The use of brand names and any mention or listing of commercial products or services in this publication does not imply endorsement by North Carolina State University, North Carolina A&T State University or North Carolina Cooperative Extension 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. For assistance, contact an agent of North Carolina Cooperative Extension.*

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