



North Carolina Pest News

Departments of Entomology and Plant Pathology

Volume 24, Number 19,
August 21, 2009

In This Week's Issue . . .

CAUTION !

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

**Stephen J. Toth, Jr.,
editor**

Dept. of Entomology,
North Carolina State
University, Box 7613,
Raleigh, NC 27695

(919) 513-8189 Phone
(919) 513-1114 Fax
Steve_Toht@ncsu.edu

Distributed in furtherance of the acts of Congress of May 8 and June 30, 1914. North Carolina State University and North Carolina A&T State University commit themselves to positive action to secure equal opportunity regardless of race, color, creed, national origin, religion, sex, age, or disability. In addition, the two Universities welcome all persons without regard to sexual orientation. North Carolina State University, North Carolina A&T State University, U.S. Department of Agriculture, and local governments cooperating.

FIELD AND FORAGE CROPS 2

- General Cotton Outlook
- Late Season Considerations: Bollworm and Stink Bugs
- Fall Armyworms on Cotton
- Podworms and Stink Bugs on Soybeans

ORNAMENTALS AND TURF 3

- Peachtree Borer Still Boring
- Pine Wilt
- Lygaeid Bugs
- What Is It?
- Is a Redheaded Pine Sawfly Headed Your Way?
- Sweat Bees

INSECT TRAP DATA 6

- Light Trap Data from Bertie County
- Light Trap Data from Craven County
- Light Trap Data from Duplin County
- Light Trap Data from Edgecombe County
- Light Trap Data from Hoke County
- Light Trap Data from Lenoir County
- Light Trap Data from Martin County
- Light Trap Data from Northampton County
- Light Trap Data from Onslow County
- Light Trap Data from Robeson County
- Light Trap Data from Scotland County
- Light Trap Data from Stanly County
- Light Trap Data from Union County
- Light Trap Data from Wayne County
- Light Trap Data from Wilson County

See current and archived issues of the *North Carolina Pest News* on the Internet at: http://ipm.ncsu.edu/current_ipm/pest_news.html

FIELD AND FORAGE CROPS

From: Jack Bacheler, Extension Entomologist

General Cotton Outlook

Cotton in many areas of the state is moving quickly toward shutting down, with the crop still mostly driven by its history and present availability of rainfall. Our crop ranges from being about a week away from cracked bolls to cotton that has first position white flowers 5 to 7 nodes down from the terminal. Fortunately, even the large, “lusher” cotton in most areas has a good boll load and will be advancing toward maturity rapidly in the next few weeks. Good fall weather will bring an excellent crop to many.

Late Season Considerations: Bollworm and Stink Bugs

As often happens at this time during the growing season, bollworm moths and adult stink bugs levels can appear either scarce or plentiful depending on the field’s maturity level. At Rocky Mount on Monday, August 17, we evaluated a number of plots in both dry “cutout” fields and in a field with good moisture. We didn’t observe the first moth in the dry field. In the lush cotton field, bollworm, tobacco budworm, soybean looper and fall armyworm moths were commonly flushed as we walked from one plot to the next. The level of moths was impressive, though not a threat to the drier cotton which had medium bolls all the way to the top.

Scouts and consultants can begin to prioritize their cotton fields into higher risk, later-maturing categories and focus their primary scouting efforts on those situations. Conventional and Bollgard cotton fields that are on the lush side and blooming well may be still susceptible to significant bollworm damage and should receive the highest scouting priority. The same is true for all technologies with stink bugs in later cotton.

On the other hand, if blooms and squares are becoming hard to find, those fields can be unattractive to adult stink bugs and bollworm moths. Additionally, hatching bollworms have a hard time becoming established on medium-sized bolls, and stink bugs can not damage bolls that are more than 3.5 weeks old and have an approximate outside diameter of 1.25 inches or greater. At this time of year, if three quarters or more of the bolls on a cotton plant are greater than the above size, an internal boll damage threshold of 30 to 50% on quarter-sized bolls is probably appropriate. In most situations, stink bugs do very little damage to cotton after the seventh week of bloom.

Fall Armyworms on Cotton

Fall armyworms are still a problem in some fields. Fall armyworms made up approximately one-fourth of the bollworm/fall armyworm mix we found at Rocky Mount this week. Outside of WideStrike and Bollgard II, the insecticides with the most activity for fall armyworms are Coragen, Belt and Diamond, unfamiliar products to most cotton producers up this way. None of these products has any stink bug activity, however. In years past, bifenthrin (Capture, Brigade, Discipline, and others) or Karate tank mixed with Larvin showed at fair to good fall armyworm activity, though Larvin has been hard to come by this season.

During the past three weeks, fall armyworms have damaged some cotton fields, primarily damaging bolls via getting a start either within blooms or within dried bloom tags and feeding on small bolls. At our latitude, September 1 often marks about the point at which fall armyworms have difficulty becoming established on cotton in North Carolina. The early instar larvae become increasingly restricted to feeding on the bracts of medium and larger bolls within the canopy and do not seem to be able to gain a foothold.

Podworms and Stink Bugs on Soybeans

As is often the case, podworms (corn earworms) and their main damage to pods is extremely variable, primarily depending on the maturity of the crop and the moth level. Pay particular attention to fields with open canopies that are still blooming and setting pods. Pyrethroid insecticides are still our primary option for controlling combinations of stink bugs and podworms, although podworm tolerance and/or resistance to pyrethroid insecticides is present from time to time and may be on the rise. In a soybean insecticide screening test we evaluated last week in Rocky Mount, Karate provided 93.3% control of medium to large podworms, Larvin 96.4% control, and Indigo 91.7% control. Unlabeled (for soybean), new insecticides Belt and Coragen gave 96.9% and 99.3% control of podworms in the same test.

Remember that stink bugs can damage soybean fields that are no longer attractive to podworm moths. Also, podworm and stink bug thresholds are additive. That is, if a soybean field has, for example, 0.7x the threshold for stink bugs and 0.7x the threshold for podworms, this situation (1.4 times the threshold) would call for treatment.

As was mentioned in last week's issue of *North Carolina Pest News*, the calculator should help define podworm thresholds for various combinations of sampling methods, row spacings, and application costs at various soybean values (see <http://www.ipm.vt.edu/cew/>).

ORNAMENTALS AND TURF

From: Steve Bambara, Extension Entomologist

Peachtree Borer Still Boring

Peachtree borer season is upon us now. We have already had one sample in the Plant Disease and Insect Clinic at North Carolina State University. These insects are common on peach and related *Prunus* trees, especially some laurel varieties in the landscape. The adults are day flying moths that resemble wasps. The wood boring larvae do all the damage near the base of the tree. The symptoms are frass and gum exudate around the base of the tree or shrub. There are several out-of-date treatment suggestions floating around. The most reliable treatment is preventive bark sprays on the lower trunk and crown region. There is no practical treatment for insects already boring in the wood. Though some adult moths (Fig. 1) are present most of the summer, the first of September is the peak moth flight period in eastern North Carolina in a typical year.



Fig. 1. Peachtree borer moth. Image by James R. Baker.

For additional information on the peachtree borer, see *Ornamental and Turf Insect Note No. 141* at <http://www.ces.ncsu.edu/depts/ent/notes/O&T/trees/note141/note141.html>). For a list of homeowner borer protective sprays, refer back to the June issue of the *North Carolina Pest News* on the web at http://ipm.ncsu.edu/current_ipm/08PestNews/08News11/pestnews.html#title4. For commercial sectors, Acelepryn is newly registered as a bark spray for clearwing borers.

Pine Wilt

This summer we have received the usual reports of Japanese black pines (*Pinus thunbergii*) suddenly turning yellow and dying in a few short weeks. Pine wilt disease is a fungal problem or a nematode problem or an insect problem. This is an awesome and interesting complex that involves beetles, nematodes and fungi. The trees are ultimately killed by nematodes destroying the water conducting cells in the tree. The nematodes feed on blue stain fungus in dead trees also. They are moved to living trees in the breathing holes of the pine sawyer, *Monochamus carolinensis* (and related) (Fig. 2). The pine sawyer feeds on living and dead pines. Scots (*Pinus sylvestris*) and mugho pines are probably the most commonly affected in North Carolina, but there are several other species affected, especially non native conifers. Though there is a mildly effective abamectin trunk injection preventive treatment, it is expensive, about 60% effective and must be repeated about every two years. Hence, pine wilt disease, once diagnosed, is a death sentence. It may be wiser in the future to not plant any of the susceptible exotic pines. For more information, see <http://www.extension.iastate.edu/Publications/SUL9.pdf>.

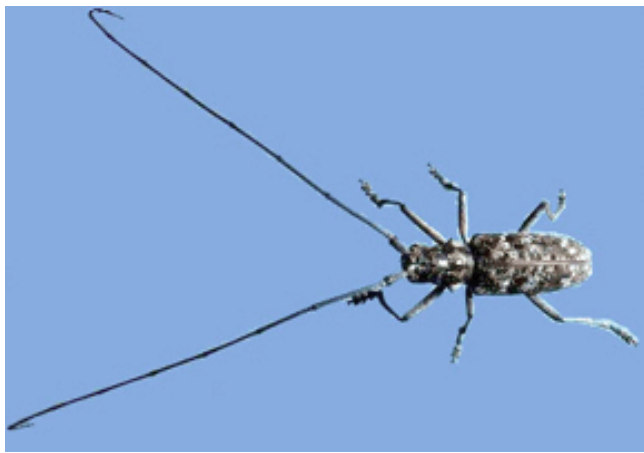


Fig. 2. The southern pine sawyer, one of the longhorned beetles. Image by James R. Baker.



Fig. 3. Milkweed bug. Image by J. L. Foltz, University of Florida

Lygaeid Bugs

Lygaeid bugs are primarily seed feeders, but adults may feed on flowers and foliage of various crops and ornamental plants. They tend to be brightly colored. This group includes the milkweed bug (Fig. 3), tarnished plant bug, goldenrain tree bug, and boxelder bug. They tend to be gregarious as nymphs and adults. Most times, with ornamental crops, the damage is not an issue. For more information, see <http://entomology.ifas.ufl.edu/foltz/eny3005/lab1/hemiptera/Lygaeid.htm>.

What Is It?



Can you identify the image in Fig. 4? The answer will be provided in next week's issue of the *North Carolina Pest News*.

Fig. 4. What is it? Image by Lucy Bradley.

Is a Redheaded Pine Sawfly Headed Your Way?

Sawflies are so-named because the adults resemble flies and the females have a saw-like ovipositor that they use to saw open leaves or needles to lay their eggs inside. Redheaded pine sawflies lay 120 or so eggs usually in the needles of one twig of southern yellow pines and other hard pines. The females insert the eggs in a row. From the eggs hatch tiny caterpillars (Fig. 5) that are much like moth and butterfly caterpillars (but sawfly caterpillars have more legs). Redheaded pine sawfly caterpillars are often abundant locally and feed in groups. Large pines may be noticeably defoliated and small trees may be killed if defoliated. When mature, the caterpillars usually crawl to the soil where they pupate in small (1/2 inch), brown-colored cocoons. Within a few weeks small, fly-like adults (Fig. 6) emerge and mate. There are four or five generations each year. Pine sawflies overwinter as prepupae in cocoons. Some prepupae develop the following year whereas others may wait two or more years before developing. There is additional information at http://ipm.ncsu.edu/AG189/html/Redheaded_Pine_Sawfly.HTML and <http://www.forestpests.org/southern/redheadpine.html>.



Fig. 5. Sawfly caterpillars. Image by James R. Baker.



Fig. 6. Sawfly adult laying eggs. Image by James McGraw.

In small trees, the best control is to knock them out of the tree with a stick and step on them!

Sweat Bees

Halictid bees are better known as sweat bees (Fig. 7). These bees are often companions of the landscaper on warm spring and summer days as the bees land on the arm or leg to lap perspiration. Sometimes these bees are caught in the fold of an elbow or knee and they sting with a slight but noticeable sting. When sweat bees are abundant, about the only thing to do is to use an insect repellent. Sweat bees are solitary bees or only primitively social. They do not have an organized alarm pheromone which encourages the bees to swarm out of the nest after a predator. In some cases, the first offspring of the founding queen remain with the nest and assist the mother in rearing additional brood. However, only the last generation of mated females survives the winter to found new nests the following spring. Sweat bees nest in soil. The tiny nest resembles an ant hill (a hole in the ground surrounded by a small mound of loose soil called the tumulus). A very small amount of Sevin insecticide sprinkled on the tumulus would be fatal to these beneficial insects and it is sad to even think of doing such a thing.



Fig. 7. Sweat bee. Image by Debbie Roos.

INSECT TRAP DATA

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

Light Trap Data from Bertie County

```

*****
Windsor      Woodard      Hexlena      Roxobel      Colerain
*****      *****      *****      *****      *****
Date         Moths  GSB   Moths  GSB   Moths  GSB   Moths  GSB   Moths  GSB
*****
July 22      -     -     -     -     -     -     -     -     -     -
July 23      -     -     -     -     0     0     3     2     -     -
July 24      -     -     -     -     -     -     -     -     -     -
July 25      12    0     -     -     -     -     -     -     -     -
July 26      35    0     -     -     -     -     -     -     -     -
July 27      100   0     -     -     8     0     10    0     -     -
July 28      46    0     -     -     6     0     4     0     81    0
July 29      107   0     16    1     4     0     3     0     160   0
July 30      96    0     10    2     16    5     16    0     59    0
July 31      76    2     12    0     11    5     27    0     215   1
August 1     -     -     25    3     7     0     -     -     -     -
August 2     -     -     12    1     -     -     -     -     -     -
August 3     45    0     24    2     30    0     115   1     356   0
August 4     18    0     23    1     6     0     30    1     80    0
August 5     15    0     12    2     11    0     32    1     36    0
August 6     10    0     27    0     8     0     42    0     52    0
August 7     6     1     -     -     7     0     27    0     18    0
August 8     -     -     22    1     -     -     -     -     -     -
    
```

August 9	75	3	19	0	-	-	-	-	-	-
August 10	45	8	27	1	-	-	85	5	168	2
August 11	62	3	27	1	7	0	37	2	118	7
August 12	79	1	25	1	12	4	1	0	45	7
August 13	36	1	-	-	-	-	58	0	41	1
August 14	53	4	62	7	3	1	-	-	50	7
August 15	-	-	65	4	-	-	49	3	-	-
August 16	-	-	30	6	-	-	-	-	-	-
August 17	19	1	18	6	20	9	68	5	-	7
August 18	-	-	59	9	-	-	-	-	77	9
August 19	-	-	12	1	-	-	7	4	28	0
August 20	21	12	14	4	10	5	20	2	-	-

Moths = Bollworm moths; GSB = Green 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 10	-	2	2	-	-	-	-	-	-
July 13	0	1	15	1	-	-	-	-	-
July 20	8	3	80	3	-	-	-	-	-
July 22	3	1	47	-	-	-	1	-	-
July 24	2	-	37	1	-	7	-	-	-
July 27	2	-	72	10	-	-	8	-	-
July 29	3	-	82	-	-	-	4	-	-
July 31	-	1	134	3	-	-	2	-	-
August 3	1	1	133	1	-	-	2	-	-
August 5	-	1	53	3	-	-	-	-	-
August 7	-	-	53	-	-	-	1	-	-
August 10	-	-	196	5	-	-	1	-	-
August 12	1	-	68	3	-	-	2	-	-
August 14	2	-	193	-	-	-	2	-	-
August 17	3	-	83	6	3	-	1	-	-
August 19	1	1	53	-	-	-	-	-	-

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: Cove City Fertilizer

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

Light Trap Data from Duplin County

```

*****
                        Number of Adult Insects
*****
Date      BW      GSB      BSB
*****
July 6    -        -        -
July 8    -        -        -
July 10   -        -        -
July 13   -        -        -
July 15   0         4         0
July 17   10        13        0
July 20   15        32        0
July 22   31         2         0
July 24   22        15        0
July 27   74        37        0
July 29   62         9         1
July 31   37         7         0
August 3  98         4         2
August 5  16         0         3
August 7  18         1         2
August 10 18         5         3
August 12 13         5         2
August 14 87        20         0
August 17 41         7         4
August 19 46         4         0
August 21 50         7         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., County Extension Director, Edgecombe County

Light Trap Data from Edgecombe County

```

*****
                        Number of Adult Insects
*****
                        Coakley      West Edgecombe      Lawrence
*****
Date      CEW  BS  GS  CEW  BS  GS  CEW  BS  GS
*****
July 17   15  -  3   -   -   -   -   -   -
July 20   10  -  4   -   -   -   -   -   -
July 22   18  1  3   -   -   -   -   -   -
July 24   14  -  4   -   -   -   5   -  20
July 27   45  -  3   -   -   -  30  0  7
*****

```

July 29	36	-	0	-	-	-	35	0	3
July 31	57	-	2	-	-	-	7	0	2
August 3	33	-	4	-	-	-	11	0	2
August 5	14	1	0	-	-	-	1	0	2
August 7	12	0	0	-	-	-	2	0	0
August 10	47	0	0	-	-	-	40	0	3
August 12	31	0	2	-	-	-	5	0	0
August 14	19	0	0	-	-	-	4	0	0
August 17	21	0	0	-	-	-	5	0	5
August 19	20	0	5	-	-	-	10	0	1
August 21	22	0	1	-	-	-	8	0	4

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

From: Keith B. Walters, County Extension Director, Hoke County

Light Trap Data from Hoke County

Date	Moths	GSB	BSB
July 8	5	10	-
July 10	5	4	-
July 13	4	1	-
July 15	4	5	-
July 17	5	4	-
July 20	4	7	-
July 22	3	6	-
July 24	7	6	-
July 27	28	6	-
July 29	100	9	-
July 31	51	1	-
August 3	162	1	-
August 5	20	1	-
August 7	32	3	-
August 10	48	2	-
August 12	29	1	-
August 14	29	1	1
August 17	43	3	1
August 19	25	4	-

GSB = green stink bugs; BSB = brown stink bugs

Location of trap is Chisholm Road, Raeford.
 Trap monitored by Earl Hendrix.

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 10   1       0       1       0       0       0       0       0
June 11   1       0       0       0       0       3       2       0
June 12   1       0       0       0       0       2       0       0
June 13   1       3       0       0       1       16      2       0
June 14   1       1       0       0       0       8       13      1
June 15   0       3       0       0       5       38      1       0
June 16   1       4       1       0       1       4       0       0
June 17   1       3       0       0       1       3       0       0
June 18   0       2       0       1       0       4       1       0
June 19   0       0       0       0       0       24      4       0
June 20   0       4       0       0       1       14      19      0
June 21   0       7       0       0       3       5       14      1
June 22   0       5       0       1       4       1       5       0
June 23   0       6       0       0       1       1       2       0
June 24   1       3       0       0       3       4       0       0
June 25   0       4       1       0       8       1       1       0
June 26   1       1       0       1       9       16      1       0
June 27   0       1       0       0       4       9       2       0
June 28   0       2       0       1       1       6       1       2
June 29   0       1       0       0       1       7       3       0
June 30   0       1       0       0       1       0       1       0
*****

```

July

```

*****
                        Number of Adult Insects
*****
Date      HW      CEW      ECB      AW      AWC      GSB      BSB      TBW
*****
July 1    0       1       0       0       1       3       0       0
July 2    1       2       0       0       2       5       1       0
July 3    0       1       0       0       4       1       0       0
July 4    0       2       0       0       5       0       0       0
July 5    0       2       0       0       3       0       0       0
July 6    0       0       0       0       0       1       2       0
July 7    0       1       0       0       1       5       0       0
July 8    0       0       0       0       0       3       0       0
July 9    0       2       0       1       2       5       0       0
July 10   0       2       0       0       1       3       0       0
July 11   0       2       0       0       4       6       0       0
July 12   1       0       0       0       6       2       0       0
July 13   0       0       0       0       3       2       0       0
July 14   0       1       0       0       2       0       0       0
July 15   1       4       0       0       7       6       0       0

```

July 16	1	8	0	0	4	3	0	0
July 17	0	5	1	0	3	1	0	0
July 18	0	6	1	0	1	2	0	0
July 19	0	26	6	1	6	3	1	0
July 20	1	31	6	0	2	4	0	1
July 21	2	22	0	0	5	4	0	0
July 22	1	70	1	0	2	2	0	0
July 23	0	61	3	0	5	12	1	0
July 24	0	41	2	1	5	1	0	1
July 25	1	62	1	0	5	6	0	0
July 26	0	67	2	0	6	3	0	3
July 27	0	40	0	0	7	4	0	0
July 28	1	80	2	0	1	1	0	1
July 29	0	70	0	0	3	5	0	0
July 30	0	49	2	0	1	0	0	1
July 31	0	31	0	0	2	2	0	0

August

Number of Adult Insects

Date	HW	CEW	ECB	AW	AWC	GSB	BSB	TBW
August 1	----- unplugged -----							
August 2	0	41	0	0	3	2	0	1
August 3	1	38	1	0	2	3	0	0
August 4	0	29	1	0	5	2	0	0
August 5	0	28	0	0	2	3	0	0
August 6	0	34	2	0	1	4	0	0
August 7	0	28	0	0	1	4	0	0
August 8	0	24	0	0	2	3	0	0
August 9	0	5	2	0	0	2	0	0
August 10	0	8	0	0	0	0	0	0
August 11	0	6	1	0	2	1	0	0
August 12	0	6	1	0	0	0	0	0
August 13	0	24	0	0	0	2	0	0
August 14	0	22	5	0	0	0	0	0
August 15	0	17	1	0	1	2	0	0
August 16	0	9	2	0	5	0	0	1
August 17	0	11	1	0	2	2	0	0
August 18	0	5	1	0	1	2	0	0
August 19	0	10	2	0	1	3	0	1
August 20	0	16	4	0	2	3	0	3
August 21	0	21	13	1	1	1	0	1

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

```

*****
                Robersonville      Farm Life
*****
Date            BW      GSB      BW      GSB
*****
July 20         5       0       3       2
July 22         4       0       6       1
July 24         3       0       5       7
July 27        14       3       8       3
July 29        34       2      14       0
July 31        14       0      19       0
August 3       42       1     126       4
August 5       16       2      26       2
August 7        4       0       7       0
August 10      39       0      32       2
August 12      44       0      27       2
August 14      34       0      44       0
August 17      55       1      47       1
August 19      51       1      37       1
August 21      50       1      13       2
*****
    
```

BW = Bollworm moths; GSB = Green stink bugs

From: Craig Ellison, Agricultural Extension Agent, Northampton County

Light Trap Data from Northampton County

```

*****
                Number of Adult Insects
*****
                Woodland      Conway      Galatia      Seaboard      Gaston      Jackson
                *****      *****      *****      *****      *****      *****
Date      CEW GR BR  CEW GR BR  CEW GR BR  CEW GR BR  CEW GR BR  CEW GR BR
*****
July 24   1  0  0   -  -  -   1  6  0   -  -  -   -  -  -   10  4  0
July 27   1  9  0   -  -  -   6 21  0   9  6  0   -  -  -   87 41  2
July 29   2  2  0   -  -  -   8 16  0  14  0  1   -  -  -  121 11  0
July 31   6  1  0   -  -  -  14 21  0   -  -  -   -  -  -
Aug. 3    7  0  0   9  0  0  71 15  1  16  4  0   -  -  -  392 21  2
Aug. 5    7  1  -  20  2  1  14  2  1  25  0  0   -  -  -   72  7  3
Aug. 7    8  1  0  18  8  0  19  1  0   -  -  -   6  2  0   -  -  -
Aug. 10  11  1  0  22  8  0  67  4  0  21  5  0   -  -  -  158 20  1
Aug. 12   -  -  -  16 11  3  35 26  2  21 84  0  62  0  0  119 27  2
Aug. 14  13  0  0  21  9  0  40 21  0   -  -  -  16  0  0   -  -  -
Aug. 17  29  0  0  15  6  0  70 10  0  36  5  0  12  0  0  55 11  0
Aug. 19   7  0  0  18  8  0  43 17  0  12  0  0   3  0  0  127 25  0
Aug. 21  30  3  0   -  -  -  60 18  0   -  -  -   -  -  -  195 37  1
*****
    
```

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

Locations: Woodland, Conway, Galatia, Seaboard, Gaston and Jackson
Monitored by: L. Culpepper, K. Edwards, B. Harris, T. Flythe,
D. Grant and B. Bryant

From: Melissa Evans, Agricultural Extension Agent, Onslow County

Light Trap Data from Onslow County

```

*****
                        Number of Adult Insects
*****
Date           Bollworms   GSB     BSB   Hornworms
*****
June 24         -           -       -       -
June 26         2          10      0       0
June 29         7           5       0       0
July 1           -           -       -       -
July 3           -           -       -       -
July 6           -           -       -       -
July 8           -           -       -       -
July 10          -           -       -       -
July 13          -           -       -       -
July 15          -           -       -       -
July 17         21          10      -       -
July 20         30          12      -       -
July 22         45           3       -       -
July 24         80           3       -       -
July 27        105           5       -       -
July 29        100           0       -       -
July 31        146           5       -       -
August 3       215          15      -       -
August 5       148           7       -       -
August 7        80            1       -       -
August 10      120           8       -       -
August 12       40            5       -       -
*****

```

GSB = green stinks bugs; BSB = brown stink bugs

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

From: Everett Davis, County Extension Director, Robeson County

Light Trap Data from Robeson County

```

*****
                        Number of Adult Insects
*****
Date          BW      GSB      BSB      FAW
*****
July 16             9        -        -        -
July 17            13        -        -        -
July 18-19         34        -        -        -
July 20            32         4        -        -
July 21            29         3        -        -
July 22            31        -        -        -
July 23            24         4        -        -
July 24            17        -        -        -
July 25-26         49        -        -        -
July 27            29        -        -        -
July 28            19         0         0         0
July 29            16         2         0        -
July 30            18         1         0         0
*****
    
```

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

Trap location: Rowland; Cooperator: Kay McGirt

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 10         7   10   -   -         3   3   -   -         5   1   -   -
July 13        27   33   -   -         7   9   1   -         2   0   -   -
July 15        16   11   1   -        35   1   -   -        17   1   -   -
July 17        14   21   -   -         -   -   -   -        17   1   -   -
July 20        23   22   -   -        23   6   -   -        72   2   -   -
July 22        25    9   -   -        49   4   -   -        78   3   -   -
July 24        66   24   -   -       247  18   1   -       153  15   -   -
July 27       176   21   -   -       718  18   4   -       436   9   -   -
July 29       98   19   3   -       338   1   4   -       343   7   -   -
July 31       77    7   -   -         -   -   -   -       101   1   -   -
Aug. 3        72   24   -   -       462  34   2   -       187   2   -   -
Aug. 5       101    8   4   -       117   8   1   -       205   3   -   -
Aug. 7        44    4   -   -       138   9   -   -       201   3   -   -
Aug. 10       103    8   -   -       228  17   -   -       326   4   -   -
    
```

Aug. 12	143	4	-	-	134	18	1	-	225	2	-	-
Aug. 14	111	3	-	-	101	1	-	-	136	1	-	-
Aug. 17	108	6	-	-	266	7	-	-	187	6	-	-
Aug. 19	122	21	2	-	272	8	-	-	135	2	-	-
Aug. 21	140	14	2	-	357	12	-	-	185	9	-	-

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

From: Shannon Braswell, Agricultural Extension Agent, Stanly County

Light Trap Data from Stanly County

Adult Insects

Stanly County
 Richfield

Date	CEW	GSB	BSB
July 30	15	2	0
August 3	10	2	0
August 5	12	0	0
August 7	16	0	0
August 10	24	0	0
August 12	10	1	0
August 14	18	0	0
August 17	43	0	0
August 20	28	0	0

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

From: Andrew Gardner, Agricultural Extension Agent, Union County

Light Trap Data from Union County

Number of Adult Insects

Date	Union Co. North New Salem			Union Co. South Marshville		
	CEW	GSB	BSB	CEW	GSB	BSB
July 24	6	2	0	76	14	0
July 27	25	3	1	75	10	0
July 29	10	2	0	136	10	0
July 31	30	0	0	51	1	0
August 3	13	1	5	60	3	1

August 5	15	2	2	26	2	0
August 7	21	0	0	22	2	0
August 10	21	2	2	75	10	0
August 12	17	3	3	136	10	0
August 14	18	6	0	51	1	0
August 17	15	6	2	128	15	0
August 19	0	0	0	80	12	0
August 21	4	0	0	27	6	0

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

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 13	-	-	-	-	5	1	0	1
July 15	-	-	-	-	1	0	4	2
July 17	-	-	-	-	0	0	2	2
July 20	-	-	-	-	6	0	4	9
July 22	-	-	-	-	0	1	13	4
July 24	-	-	-	-	2	0	20	3
July 27	-	-	-	-	3	3	90	-
July 29	-	-	-	-	2	5	87	-
July 31	-	-	-	-	6	4	26	1
August 3	-	-	-	-	10	-	73	-
August 5	-	-	-	-	8	7	35	1
August 10	-	-	-	-	4	-	26	2
August 12	-	-	-	-	10	1	16	-
August 14	-	-	-	-	-	-	54	-
August 17	-	-	-	-	6	6	52	-

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
                *****
                Pender's Xrds  Fountain
                *****
Date            CEW    GSB    CEW    GSB
*****
August 3       6     1     14     9
August 5       7     0     8     5
August 7       6     1     12     3
August 10      2     0     12     2
August 12      4     0     9     10
August 14      5     0     11     5
August 17      4     0     -     -
August 19      1     0     5     5
August 21      2     0     0     1
*****

```

CEW = corn earworms; GSB = green stink bugs

Locations: Pender's Crossroads and Fountain
Monitored by: Adam Gardner and Barbara Smith

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.