North Carolina Pest News



Departments of Entomology and Plant Pathology

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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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Internet at: http://ipm.ncsu.edu/current ipm/pest news.html



ANNOUNCEMENTS AND GENERAL INFORMATION

Reminder of Online Survey of North Carolina Pest News Readers

If you have already completed the online survey of *North Carolina Pest News* readers regarding the use and usefulness of the newsletter, then please accept our appreciation.

If you have not taken the opportunity to complete the survey, please take a few minutes to do so. The editor and authors of the *North Carolina Pest News* plan to use the information collected through the survey to document the usefulness of the newsletter to our readers and improve its quality in the future. The information in the survey is anonymous and confidential. You only need to complete the survey one time.

To complete the online survey, go to the following web page: http://www.ipmpipe.org/survey_ncpn/

Enter the following password: pestnews Click on the login button.

Once you have accessed the online survey questionnaire, please enter your answers to each question. You can change your answers by clicking on another selection. Once you have entered and are satisfied with your answers to the survey questions, click on the "Submit" button at the end of the questionnaire. Once you have clicked on the "Submit" button, your answers will be entered into a database with the answers of others that have completed the survey.

You can complete the survey online until Friday, September 28, when the site will be taken offline.

Thank you in advance for spending your valuable time completing the online survey and your interest in the *North Carolina Pest News*.

FIELD AND FORAGE CROPS

From: Jack Bacheler, Extension Entomologist

Cotton Insects Winding Down

We have finally reached the point when the vast majority of cotton fields are fully cut-out and opening, and are therefore no longer vulnerable to insect damage. Additionally, the remaining upper bolls that still can be picked off by a bollworm or stink bug typically contribute little to yield. For the few cotton fields that are still susceptible to stink bug damage, producers should be reminded that like bollworm moths, stink bugs can concentrate in the remaining late-maturing cotton fields in high numbers. These fields should be monitored for internal damage to quarter-sized bolls. However, at least 50% of these bolls should be damaged before a spray is considered. Even then, one must balance the protection of smaller bolls against the tire damage to bolls and branches from ground rigs. We'll begin our annual boll damage assessment next week to determine how this year's bollworm and stink bug damage compares with previous years.

Cotton Field Day Program

We hope that many of you can attend the Wednesday, September 12, Cotton Field Day near Rocky Mount. As can be seen from the program below, presenters will provide research updates on a wide variety of contemporary issues. The Cotton Field Day is open to the public: http://www.cals.ncsu.edu/agcomm/writing/Field_Days/cotton-program-2012.pdf

Soybean Insects Still a Threat?

Although podworm moths can concentrate in late-planted soybean fields, once blooming is over and pod fill is underway, little additional podworm establishment is likely. For the remaining light traps that are still reporting moth counts, this week's counts are down. Even much of our late planted bean crop is no longer susceptible to caterpillar damage. Still, be aware that stink bug concentrations can still be an economic problem in later maturing bean fields where filling pods are attractive feeding targets.

A few additional soybean fields reached the kudzu bug nymph threshold of 15 per 15 sweeps this past week. However, fields beyond the R-6 stage are probably not in danger of yield loss from this new pest and, fortunately, most soybean fields will not experience economic loss from kudzu bugs in 2012. Although we expect higher kudzu bug levels in North Carolina in 2013, the impact of the new invasive pest on next year's soybean crop is anyone's guess.

From: Dominic Reisig, Extension Entomologist

Managing Brown Marmorated Stink Bug in Soybeans

Brown marmorated stink bug is showing up at treatable levels in some soybean fields across many counties in the northern Piedmont of North Carolina. Stink bug thresholds in soybeans vary by row spacing and can be found at http://www.ces.ncsu.edu/plymouth/ent/soysbthreshold.html. Brown marmorated stink bugs are best sampled with a sweep net, but "best" is a relative term. These critters will evade your net as you pass through the field by hiding or dropping off plants. Dr. Ames Herbert, Virginia Tech University, Extension Entomologist, recommends spraying if you see five or six stink bugs on the plants surrounding you in all directions. Focus on R4-R6 stages to protect the yield and R7-R8 to protect quality. A rule of thumb may be to double the threshold for R7-R8 beans.

Dr. Herbert also recommends treating with pyrethroids, especially bifenthrin, pre-mixed combination products (such as Endigo and Cobalt Advanced) and Orthene at 12 ounces or higher. These recommendations are based on several trials in Virginia over the past two years. Remember that this pest is most prevalent on field edges. In 2011, border treatments seemed to manage this insect well. However, these edge treatments aren't working as well in all cases this year. I still think it's worth a shot trying to spray the edges of fields this year, especially when you take into account avoiding loss from driving over beans that have pods.



In addition to other characteristics, brown marmorated stink bug adults (pictured) and nymphs can be distinguished from our native stink bugs by the white bands in the antennae (the two appendages coming from the head). Image from D. Reisig.



Brown marmorated stink bug nymph aggregations are sometimes apparent on the top of the canopy. Image from D. Reisig.

ORNAMENTALS AND TURF

From: Steve Frank, Extension Entomologist

Yellownecked Caterpillars

Adult yellownecked caterpillars, *Datana minstra*, occur in June or July and lay eggs on deciduous shrubs and trees. They will feed on many fruit and ornamental trees including birch, elm, oak, maple, *Prunus* spp. and others. They feed gregariously in late summer. They consume entire leaves except large mid-veins and can rapidly defoliate trees or cause significant damage. I found the caterpillars pictured below in the forest on a bush I couldn't identify because every leaf was gone. Scouting for small caterpillars can help reduce damage and improve control if it is needed. Caterpillar management information is available: http://www.ces.ncsu.edu/depts/ent/notes/O&T/shrubs/note07/note07.html. See more caterpillars on my blog: http://ecoipm.com/.



Yellownecked caterpillars feeding on a forest shrub. Photo: S. D. Frank.

Redheaded Pine Sawfly

The redheaded pine sawfly, *Neodiprion lecontei*, is a pest of pines in ornamental landscapes, nurseries, and plantations. Adults emerge in spring and a second generation occurs in mid-summer. Eggs are laid on many 2 and 3 needled pine species such as Jack pine, loblolly pine, and red pine. Sawflies are not

flies and the larvae do not turn into butterflies. They are non-stinging herbivorous wasps. They can defoliate trees and bushes in the landscape. Since they are gregarious it is sometimes possible to prune off an infested branch and remove all the larvae. Management for sawflies is similar as for caterpillars though not all the insecticides will work so check the label. Horticultural oil is a good bet especially for small larvae. Formulations that contain azadirachtin or spinosad are also effective. For sawflies and caterpillars, management of full grown caterpillars is generally not warranted. The damage is already done and they are hard to kill.



Redheaded pine sawflies on Pinus uncinata. Photo: S. D. Frank.

From: Mike Munster, Ornamental Pathologist, Plant Disease and Insect Clinic, and Kelly Ivors, Extension Plant Pathologist

Poinsettia Scab

Poinsettia scab, caused by the fungus Sphaceloma poinsettiae, was found on a sample from a commercial greenhouse this week. It has been six years since the PDIC last diagnosed this disease in a North Carolina poinsettia crop. As the name implies, this fungus causes leaf spots and stem lesions, but the most noticeable effect is an abnormal elongation of the poinsettia stem. The purple leaf spots may develop a light tan center, and they sometimes have a yellow halo. The surface of the spot is characteristically puckered, which is best seen under magnification. An olive-colored, velvety layer of spores may be present on the spots and stem lesions. These spores are spread to other plants via water splash. Long-distance transport occurs on infected planting material. This disease cannot survive between seasons in North Carolina in the absence of a poinsettia crop. For a good summary of the disease. the 2001 **APSnet** publication by Mike Benson see (http://www.apsnet.org/publications/apsnetfeatures/Pages/PoinsettiaFlower.aspx). Growers should be sure they get clean stock and should scout points for leaf and stem symptoms. Keeping leaf wetness to a minimum will help reduce the advance of the disease. Apply azoxystrobin (Heritage), trifloxistrobin (Compass O), triflumizole (Terraguard) or triadimefon (Strike) to protect plants.



Rapid elongation of poinsettia stem infected with *Sphaceloma poinsettiae*.



Close-up of poinsettia stem showing scab lesions.



Scab lesions on poinsettia leaf, caused by the fungus *Sphaceloma* poinsettiae.

INSECT TRAP DATA

From: Andrew Baucom, Agricultural Extension Agent, Union and Stanly Counties

Light Trap Data from Anson, Stanly and Union Counties

***	*****	****	*****	****	****	* * * * *	*****	* * *
Number of Adult Insects								
	****	****	*****	****	****	****	*****	***
			Unic	n N	Stanl	y N	Anso	n W
	****	***	****	***	****	* * *	***	* * *
	CEW	GR	CEW	GR	CEW	GR	CEW	GR
* * * *	*****	****	*****	****	****	* * * * *	*****	* * *
5	4	21	-	-	-	-	-	-
3	3	20	_	-	_	-	14	3
)	6	15	_	-	0	3	11	8
3	11	28	_	-	0	3	38	11
5	23	35	_	-	1	2	42	6
7	25	23	_	-	2	2	54	4
)	14	11	_	-	1	0	31	8
1	17	5	-	_	0	0	27	0
3	9	7	-	-	0	0	5	0
6	12	4	-	_	6	1	8	2
8	18	3	_	-	1	1	31	0
10	20	5	_	-	0	2	27	2
13	75	17	279	0	4	2	34	2
15	55	10	289	0	1	0	30	1
17	70	7	195	0	2	0	34	0
20	58	6	260	0	3	1	42	0
22	33	3	263	0	2	0	39	0
23	32	4	120	0	2	0	30	0
27	21	3	270	0	2	0	31	0
29	22	2	80	0	1	0	32	0
	* * * * * * * * * * * * * * * * * * *	***** Unic ***** CEW ******* 6 3 11 5 23 7 25 14 1 17 3 9 6 12 8 18 10 20 13 75 15 55 17 70 20 58 22 33 23 23 21	**************************************	Number ********* Union S Unio ******** CEW GR CEW ********* 4 21 - 3 3 20 - 6 15 - 3 11 28 - 6 23 35 - 7 25 23 - 14 11 - 1 17 5 - 3 9 7 - 6 12 4 - 8 18 3 - 10 20 5 - 13 75 17 279 15 55 10 289 17 70 7 195 20 58 6 260 22 33 32 4 120 27 21 3 270	Number of Ad ***********************************	Number of Adult In: ***********************************	Number of Adult Insects ***********************************	**************************************

August 31	18	1	70	0	9	1	18	2
Sept. 3	19	5	-	-	0	0	19	3
Sept. 5	18	4	-	-	1	0	22	1
Sept. 7	13	6	_	_	0	0	20	1

CEW = corn earworm moths; GR = green stink bugs

Union County-South; Stanly County-North; Anson County-West

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

Light Trap Data from Bertie County

*****	*****	***	****	*****	****	*****	***
			dsor	Hex]			ian ods ****
Date		BW	GSB	BW	GSB	BW	GBS
*****	*****	***	****	*****	****	*****	***
July 22		10	9	-	_	-	_
July 23		3	14	_	_	_	-
July 25		1	3	-	_	_	_
July 29		25	3	-	_	_	-
July 30		18	0	_	-	2	0
July 31		15	2	_	-	-	-
August	1	10	0	11	0	3	0
August	2	8	0	10	0	0	0
August	3	7	2	9	0	-	-
August	4	-	-	-	_	12	0
August	5	29	2	-	-	5	0
August	6	23	4	_	-	-	-
August	7	20	2	13	0	-	-
August	8	17	0	4	0	_	-
August	9	-	_	5	0	-	-
August	10	62	8	_	_	5	-
August	11	17	3	-	_	_	-
August	12	14	6	7	0	_	-
August	13	23	2	-	_	9	0
August	14	32	1	-	_	_	-
August	15	62	8	5	0	37	0
*****	*****	* * *	****	*****	****	*****	***

BW = bollworms; GSB = green stink bugs

Indian Woods: Liberty Hall Farms

From: Mike Carroll, Agricultural Extension Agent, Craven County

Light Trap Data from Craven County

	Number	of Adult	Insect	S				
* * *	*****	*****	*****	****				
Date BW	GSB	BSB	FAW	THW				
*******	*****	*****	*****	****				
July 9 2	2	0	2	0				
July 12 2	2	1	0	0				
July 16 0	0	0	0	0				
July 20 41	3	2	0	1				
July 23 25	3	0	0	2				
July 25 34	2	0	0	1				
July 26 40	2	0	0	0				
July 27 106	2	1	2	0				
July 30 48	2	1	2	0				
August 1 55	0	0	2	1				
August 3 37	0	1	0	0				
August 6 42	0	1	0	1				
August 8 31	1	0	0	0				
August 10 37	2	0	0	0				
August 13 22	1	0	0	1				
August 15 44	2	0	0	0				
August 16 31	0	0	0	1				
August 17 32	0	0	2	0				
August 20 141	0	0	4	0				
August 22 35	0	0	2	0				
August 27 70	1	0	2	0				
August 31 12	0	0	0	0				
September 4 10	1	0	0	0				
******	*****	*****	*****	****				

BW = bollworms; GSB = green stink bugs; BSB = brown stink bugs;
FAW = fall armyworms; THW = tobacco hornworms

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

*****	****	******	******	****
	Nur	mber of Adı	ılt Insec	ts:
	****	*****	*****	****
Date	THW	CEW	GSB	BSB
******	*****	*****	*****	*****
July 11	4	11	1	1
July 13	0	5	1	0
July 20	0	30	6	0
July 23	0	47	9	1
July 26	0	41	3	0

July 27	0	57	7	2
July 30	1	63	1	0
August 2	0	42	4	0
August 6	0	15	3	3
August 9	1	27	3	0
August 13	6	80	3	0
August 15	1	39	2	1
August 20	7	96	3	0
August 22	5	56	2	0
August 24	3	85	1	0
August 27	1	62	3	1
August 29	1	51	2	0
August 31	0	26	2	1
September 4	ł 0	25	4	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: Arthur R. Bradley, Jr., County Extension Director, Edgecombe County

Light Trap Data from Edgecombe County

	Number of Adult Insects									

		Edgecon			oakle	-	Lawrence			
	****	*****	* * *	*****	****	****	****	****	***	
Date	CEW		GS	CEW	BS	GS	CEW	BS	GS	
*****	****	*****	***	******	****	****	****	****	***	
July 9	-	-	-	3	1	1	-	-	-	
July 11	-	-	-	8	1	3	-	-	-	
July 13	-	-	-	9	0	0	-	-	-	
July 16	-	-	-	17	0	5	-	-	-	
July 18	-	-	-	_	-	-		-	-	
July 20	-	-	-	10	0	1	-	-	-	
July 23	9	0	1	9	0	2	-	-	-	
July 25	18	0	2	_	_	-	0	0	2	
July 27	10	0	2	16	0	6	1	0	3	
July 30	19	0	0	10	0	4	0	0	2	
August 1	15	0	0	4	0	0	0	0	2	
August 3	9	0	0	1	0	0	0	0	0	
August 6	17	0	1	4	0	2	0	0	0	
August 8	7	0	1	5	0	2	0	0	4	
August 10	8	0	1	4	0	2	1	0	0	
August 13	12	0	0	23	0	0	0	0	1	
August 15	19	0	0	14	0	3	0	0	0	
August 17	15	0	0	_	_	-	0	0	0	
August 20	65	0	0	68	0	0	1	0	2	
August 22	36	0	0	37	0	0	13	0	1	
August 24	28	0	0	28	0	1	_	_	-	
August 27	25	0	0	7	0	1	_	-	-	

August	29	22	0	0	2	0	1	-	-	_
August	31	9	0	0	-	-	_	_	-	-
*****	*****	*****	****	*****	****	****	*****	****	***	* *

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

From: Upper Coastal Plains Research Station, Edgecombe County

Light Trap Data from Edgecombe County - Upper Coastal Plains Research Station

*****	****
Date	CEW
*****	****
July 24	3
July 25	2
July 31	19
August 1	3
August 2	1
August 7	16
August 8	3
******	****

Abbreviations: CEW = corn earworms

Locations: South East of Rocky Mount

From: Arthur Whitehead, Jr., County Extension Director, Halifax County

Light Trap Data from Halifax County

*****	**********								
						Daws	on		
		Hob	good	Wel	don	Cross	road		
		****	***	****	****	*****	***		
Date		CEW	STB	CEW	STB	CEW	STB		
*****	****	****	*****	*****	****	*****	***		
July 23	}	0	2	-	-	-	-		
July 30	1	0	2	15	1	_	-		
August	3	0	0	2	0	4	0		
August	6	0	0	5	0	33	0		
August	8	_	-	-	-	_	-		
August	10	_	-	-	-	_	-		
August	13	0	1	0	0	101	-		
August	15	_	-	48	0	75	0		
*****	****	****	*****	*****	****	*****	* * * *		

Abbreviations: CEW = corn earworms; STB = stink bugs

From: Alan A. Harper, Lenoir County

Light Trap Data from Lenoir County

June

			Number	of Adı	alt Ins	ects		
	***	******	******	*****	*****	******	*****	****
Date	HW	CEW	ECB	AW	AWC	GSB	BSB	TBW
******	****	******	******	*****	*****	******	*****	****
June 22	0	2	0	0	0	0	0	0
June 23	0	0	0	1	0	0	0	0
June 24	0	3	1	0	1	0	0	0
June 25	0	4	0	0	2	0	0	0
June 26	0	2	0	0	2	0	0	0
June 27	0	1	0	0	0	0	0	1
June 28	0	0	0	0	0	0	0	0
June 29	0	2	0	0	0	0	0	0
June 30	0	1	0	0	1	0	0	0
*******	****	******	******	*****	*****	******	*****	****

July

	Number of Adult Insects												
Date		HW	CEW	******* ECB	AW	******** AWC	GSB	BSB	TBW				
	*****			_		AWC ******							
July	1	0	2	0	1	1	0	0	0				
July		0	2	0	1	1	0	0	0				
July		0	1	0	0	0	0	0	0				
July	4	1	0	1	2	1	0	0	0				
July	5				Light	unplugged	l						
July	6				Light	unplugged	l						
July	7	0	0	0	3	6	1	0	1				
July	8	0	0	0	2	4	0	0	0				
July	9	0	1	0	5	3	0	1	0				
July		0	0	0	2	1	0	0	0				
July		0	2	0	1	1	0	0	0				
July		0	1	0	4	7	0	0	0				
July		2	4	0	13	4	. 0	0	0				
July					Light	unplugged							
July		0	7	0	11	6	1	0	0				
July		0	6	0	6	2	1	1	1				
July		0	4	1	2	4	0	2	0				
July July		0 0	8 5	0	1 4	3 3	2 0	1 0	0 1				
July		0	5	0	0	0	0	0	0				
July		0	11	0	1	3	1	0	0				
July		0	36	0	0	0	0	0	1				
July		0	25	0	1	3	2	0	3				
July		0	41	0	1	4	4	0	0				
July		0	29	0	1	7	0	0	0				
July		1	55	1	1	2	3	0	4				
July	27	0	16	0	6	1	1	2	0				
July	28	0	35	0	5	2	2	4	0				

July 29	0	32	0	2	6	0	0	0
July 30	0	20	0	0	2	0	0	0
July 31	0	17	0	0	1	0	0	0

August

Number of Adult Insects													
		***	****	*****	*****	*****	*****	*****	****				
Date		HW	CEW	ECB	AW	AWC	GSB	BSB	TBW				
*****	***	*****	*****	*****	*****	*****	*****	******	****				
	1	0	15	0	1	1	0	0	0				
August	2	0	5	0	1	0	0	0	0				
August	3	0	12	0	0	2	0	0	1				
	4	0	7	0	0	2	2	0	0				
August	5	0	14	0	0	0	2	0	0				
August	6	0	9	0	3	1	2	0	1				
August	7	0	2	0	0	0	4	0	0				
August		0	1	0	1	1	1	0	0				
_	9	0	4	0	1	1	2	1	1				
_	10	0	2	0	1	1	11	1	0				
August		0	2	0	0	1	0	0	0				
August		0	3	0	0	1	0	1	0				
August		1	8	0	4	0	5	8	0				
_	14	0	5	0	4	1	8	1	0				
_	15	0	5	1	2	2	6	1	0				
_	16	1	17	0	3	2	2	0	0				
August		0	17	0	1	3	2	0	0				
August		0	36	0	2	0	1	0	1				
August		0	34	0	1	1	0	0	0				
August		0	15	0	2	0	0	0	0				
August		0	42	0	2	0	0	0	0				
August		2	57	0	6	1	1	0	1				
August		0	68	1	4	0	0	0	1				
August		2	44	0	5	1	0	0	2				
August		0	41	1	4	0	0	0	0				
August		0	21	0	4	0	0	0	1				
August		0	33	0	0	0	0	2	0				
August		0	25	0	0	0	0	0	0				
August		0	38	0	0	1	0	0	0				
August		0	2	0	1	0	1	0	0				
August		0	16	0	0 ****	1 ******	0	0 *****	0				

September

		***	*****	Number	of Adu			****	****
Date		HW	CEW	ECB	AW	AWC	GSB	BSB	TBW
******	* * *	*****	*****	*****	*****	****	******	*****	****
September	1	0	15	0	0	0	0	0	0
September	2	1	26	0	0	0	2	0	0
September	3	0	2	0	1	0	1	0	0
September	4	0	9	0	1	1	1	0	0
September	5	0	11	1	1	0	0	0	0

September 6	0	6	0	1	1	0	0	0
September 7	1	4	0	3	2	0	0	2
and the state of the state of the state of the state of	and the standards	and the state of the state of	te de de de de de de de	and the state of the state of	and an area areas areas.	and the state of the state of	and an area areas are	to de de de

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: Craig Ellison, Agricultural Extension Agent, Northampton County

Light Trap Data from Northampton County

Number of Adult Insects																						

	W	lood.	lan	d	Cor	ıway	,	Ga.	lati	a	Seak	oai	rd	Gas	ton	L	W. G	ast	on	Jac	cksc	n
	*	***	* * *	* *	***			***	* * * *	**	***	***	***	***	* * *	**	***	* * *	**	***	***	**
Date	С	EW (GR	BR	CEW	GR	BR	CEW	GR	BR	CEW	GR	BR	CEW	GR	BR	CEW	GR	BR	CEW	GR	BR
*****	* *	***	* * *	* * *	****	***	* * *													****	***	**
July 18		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	9	16	_
July 20		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_		14	_
July 23		_	_	_	_	_	_	26	24	0	75	0	0	_	_	_	_	_	_	14	11	4
July 25		_	_	_	_	_	_	26	3	0	44	6	0	-	_	_	_	_	_	37	8	3
July 27		_	_	_	_	_	_	30	4	0	10	5	0	12	0	0	_	_	_	24	16	0
July 30		_	_	_	_	_	_	29	1	0	25	3	0	11	0	0	_	_	_	17	10	1
	1	_	_	_	_	_	_	24	1	0	22	4	0	2	0	1	_	_	_	5	1	0
August	3	_	_	_	_	_	_	6	_	_	12	0	0	_	_	_	_	-	_	6	1	0
August	5	_	_	_	_	_	_	7	0	0	12	0	0	_	_	_	_	_	_	58	3	0
August	7	1	4	0	_	_	_	7	0	0	14	7	0	_	_	_	_	_	_	58	2	0
August	10	2	0	0	_	_	_	4	0	0	12	8	0	_	_	_	_	_	_	64	8	0
August	13	2	0	0	5	2	0	19	0	0	60	5	0	_	_	_	_	_	_	84	2	0
August	15	1	0	0	16	4	0	9	0	0	45	6	0	_	_	_	_	_	_	70	3	0
August	17	_	_	_	15	4	0	8	0	0	20	0	0	_	_	_	_	_	_	37	3	0
August	20	_	_	_	10	3	0	27	5	0	35	2	0	_	_	_	_	_	_	102	4	0
August	22	0	0	0	18	2	0	8	0	0	44	0	0	_	_	_	_	_	_	84	3	0
August			0	0	14	2	0	49	3	0	65	2	0	_	_	_	_	_	_	69	4	0
August	27	5	0	0	15	4	0	24	2	0	25	0	0	-	_	-	-	-	-	84	1	0
August	29	1	1	0	18	1	0	69	11	0	17	2	0	-	_	-	-	-	-	294	7	3
August	31	_	-	_	12	0	0	35	0	0	31	0	0	-	-	-	-	-	_	142	2	2
*****	* *	***	* * *	* * *	****	* * * *	* * *	****	* * * *	* * *	****	* * *	***	****	* * *	***	****	* * *	* * *	****	***	**

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

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

From: Mac Malloy, Agricultural Extension Agent, Robeson County

Light Trap Data from Robeson County

******	*****	*****	*****	*****	*****	***
		Number	r of Adu	lt Insec	ts	
	*****	*****	*****	*****	*****	***
Date	THW	TBW	GSB	BSB	FAW	BW
*****	*****	*****	*****	*****	*****	***
July 25	2	_	1	1	-	-
July 27	-	2	5	1	-	5
July 30	-	_	_	_	-	2
August 1	-	-	_	_	-	5
August 3	_	_	_	_	_	-
August 6	-	1	1	2	1	2
August 8	-	-	_	_	-	1
August 10	1	_	2	6	_	-
August 13	_	_	_	2	1	1
August 15	-	1	3	4	_	11
August 17	1	1	2	_	3	15
August 20	1	_	5	_	2	24
August 22	1	_	3	1	1	31
August 24	2	_	1	1	-	28
******	*****	*****	*****	*****	*****	***

THW = tobacco hornworms; TBW = tobacco budworms; GSB = green stick bugs; BSB = brown stink bugs; FAW = fall armyworms; BW = bollworms

Location: Lumber Bridge; Collected by: Forbis Farms

From: Scotland County Extension Center

Light Trap Data from Scotland County

					Number	of A	dult	Insec	ets				
	* * *	****	****	****	*****	****	****	****	*****	****	****	***	
			bson				hns			Laurinburg			
	* * *	****	****	****	* * *	*********				****	****	****	
Date	BW	GSB	BSB	FAW	BW	GSB	BSB	FAW	BW	GSB	BSB	FAW	
*****	****	****	****	****	*****	****	****	****	******	****	****	****	
July 18	27	9	0	0	-	-	_	-	-	-	_	-	
July 20	52	10	2	0	-	-	_	-	54	3	0	0	
July 23	54	13	1	0	436	7	0	0	89	3	0	0	
July 25	16	3	0	0	189	4	1	0	21	2	1	0	
July 27	34	15	0	0	173	4	1	0	37	2	1	0	
July 30	21	3	0	0	85	3	0	0	26	0	1	0	
Aug. 1	18	1	0	0	35	0	0	0	18	0	0	0	
Aug. 3	21	2	1	0	10	0	0	0	7	0	0	0	
Aug. 6	30	4	0	0	_	_	_	_	17	0	1	0	
Aug. 8	48	2	0	0	63	0	0	0	28	0	0	0	
Aug. 10	86	8	3	0	-	-	-	-	33	1	0	0	
Aug. 13	367	4	0	0	493	3	1	0	117	1	1	0	
Aug. 15	138	5	0	0	297	2	1	0	304	0	0	0	

Aug.	17	52	0	0	0	220	0	2	0	38	0	0	0
Aug.	20	132	1	0	0	312	1	0	0	308	1	0	0
Aug.	22	101	1	0	0	472	2	0	0	252	0	0	0
Aug.	24	72	0	0	0	-	-	-	-	268	0	1	0
Aug.	27	24	0	0	0	172	0	0	0	21	0	0	0
Aug.	29	49	2	0	0	-	-	-	_	66	1	0	0
Aug.	31	54	0	0	0	127	0	0	0	39	0	1	0
****	* * * *	*****	****	****	****	*****	****	****	****	*****	****	****	***

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

From: John Sanderson, Agricultural Extension Agent, Wayne County

Light Trap Data from Wayne County

*****	******	*****	*****	***
	Number	of Adı	ılt Ins	ects
	*****	*****	*****	****
		Golds	boro	
	*****	*****	*****	****
Date	GSB	BSB	CEW	HW
*****	******	*****	*****	****
July 4	0	4	0	0
July 6	1	3	0	1
July 9	3	6	0	4
July 11	1	0	3	5
July 13	0	0	2	8
July 16	8	1	27	1
July 18	1	1	15	1
July 20	4	2	7	1
July 25	3	2	26	0
July 27	9	6	37	0
July 30	2	2	59	0
August 1	4	11	13	0
August 3	3	2	8	0
August 6	4	3	7	0
August 8	2	1	14	0
August 10	16	7	4	1
August 13	13	4	66	6
August 15	8	7	74	3
August 17	3	1	61	3
August 20	2	1	98	6
August 22	3	0	54	2
August 24	1	1	57	2
August 27	1	-	18	2
August 29	3	1	23	2
August 31	2	1	11	0
September 3	7	2	10	1
*****	******	*****	*****	***

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

Cooperator: Gerald and Willie Howell Farm (Goldsboro)

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

Light Trap Data from Wilson County

******	****	****	*****	****	*****	****
		Numbe	er of Adu	ılt I	Insects	
	***	*****	*****	****	*****	****
	Ken	ly	Fount	ain	Pend	er's
	***	****	****	***	***	***
Date	CEW	GSB	CEW	GSB	CEW	GSB
******	****	*****	*****	***	*****	****
July 16	5	0	_	-	_	-
July 18	3	2	_	-	_	_
July 20	2	3	5	1	_	_
July 23	7	4	18	11	_	_
July 25	5	9	8*	3	0	0
July 27	6	11	14	11	2	0
July 30	14	2	19	8	2	0
August 1	3	0	8	3	1	0
August 3	1	0	8	2	0	0
August 6	2	2	17	8	0	0
August 8	3	1	13	1	3	0
August 10	1	2	7	2	2	0
August 13	4	2	7	3	4	0
August 15	7	0	17	5	5	0
August 17	11	0	31	0	0	0
August 20	19	0	41	5	2	0
August 22	21	0	97	2	10	0
August 24	10	3	83	9	5	0
August 27	8	3	61	0	4	0
August 29	7	2	61	4	3	0
August 31	2	0	39	4	2	0
September 3	7	2	32	2	1	0
September 5	9	1	28	4	7	0
September 7			23	0	2	

CEW = corn earworms; GSB = green stink bugs

*= problems with blacklight bulb

Locations: Kenly, Fountain and Pender's Cross Roads Monitored by: Norman Harrell, Barbara Smith and Adam Gardner

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.