



Purdue Cooperative Extension Service
USDA-NIFA Extension IPM Grant

July 19, 2013 - Issue 16

In This Issue

Insects, Mites, and Nematodes

- Soybean Aphid: Something to Consider in Future Weeks
- 2013 Corn Earworm Trap Report
- Black Light Trap Catch Report
- Western Bean Cutworm Catch Trap Report

Weeds

- VIDEO: Identifying Palmer Amaranth in The Field

Weather Update

- Moisture and Temperature Accumulations

Insects, Mites, And Nematodes

Soybean Aphid: Something to Consider in Future Weeks – (Christian Krupke and John Obermeyer)

- Currently, our soybean aphid numbers are at low levels BUT...
- Above threshold levels in Eastern Michigan soybeans are something to watch.
- Treating now will do NOTHING to control aphids that MIGHT arrive in 3 weeks.
- Scouting is the proactive approach to preventing potential damage.

We appreciate the spotty reports of low densities of soybean aphid being found in northern Indiana counties. This confirms what we have seen in our visits to fields, and matches up with the lack of winged aphid movement detected by the soybean aphid suction trap network (including four traps in Indiana). In contrast, Chris Difonzo, Michigan State University field crops entomologist, has just declared an outbreak of soybean aphid in the “thumb” of Michigan. This doesn’t have immediate impact on Hoosier growers, but it is something for consideration in the next few weeks.



Soybean aphid infestations are first detected on the backside of the newest, fully unrolled leaves

Early soybean aphid activity in northern part of soybean-growing regions (i.e. not any of the “I-states”) is a common occurrence, and is directly related to the abundance of buckthorn in those areas, the aphid’s overwintering host. Historically, our soybean aphid outbreaks occur weeks after outbreaks in these northern areas, if they happen at all. In response to overcrowding, a portion of the soybean aphids will produce wings in order to migrate and infest low-density fields. Soybean aphids fly up into the jetstream, where they are passively carried along for great distances, including to other states. Should prevailing winds, or storms, “rain” aphids into Indiana, and environmental conditions are hospitable (75-85°F) and without heavy, pounding rains, our populations could surge. The time to really be vigilant will be the end of July and first 2 weeks of August, a key period for soybean pod development.

The populations building in areas north of us does suggest that scouting should commence. Use the 250-aphid/plant threshold. There are some non-data based claims out

there that recommend growers treat when levels are as low 10 aphids per plant on R-stage beans! If our soybeans were that sensitive we would be in big trouble, every year. This ultra-low threshold is based on some convoluted logic that includes aphids continuously doubling every day and being reproductively mature instantly. This is pure fiction and not based on any science. Stick with what works and what has the statistical support of years of research across the Midwest. Use the 250 aphids/plant threshold and spray when necessary. Soybean aphids are still easy to manage – we have many registered products that are effective. Spraying when it is not necessary not only wastes time, money and product, more importantly it can reduce the longevity of these compounds - aphids are among the most likely pests to develop insecticide resistance.

In summary, no big Indiana outbreaks yet and very hot weather will keep them down. But we will keep watching the situation as it develops over the next several weeks. Stay tuned, and Happy Scouting!



Black Light Trap Catch Report - (John Obermeyer)

County/Cooperator	7/2/13 - 7/8/13						7/9/13 - 7/15/13					
	VC	BCW	ECB	WBC	FAW	AW	VC	BCW	ECB	WBC	FAW	AW
Dubois/SIPAC Ag Center	0	1	0	0	0	2	2	0	0	0	0	4
Jennings/SEPAC Ag Center	1	0	0	0	0	4	0	0	0	0	0	7
Knox/SWPAC Ag Center	0	1	0	0	0	5	0	1	0	0	0	1
LaPorte/Pinney Ag Center	3	1	5	2	0	33	3	2	0	17	0	11
Lawrence/Feldun Ag Center	1	0	0	0	0	6	1	0	0	0	0	13
Randolph/Davis Ag Center	0	3	0	0	0	31	2	2	0	1	0	63
Tippecanoe/TPAC Ag Center	1	2	2	1	0	27	1	6	0	4	0	30
Whitley/NEPAC Ag Center	0	1	0	6	0	7	1	6	0	33	0	47

VC = Variegated Cutworm, BCW = Black Cutworm, ECB = European Corn Borer, WBC = Western Bean Cutworm, FAW = Fall Armyworm, AW = Armyworm



Western Bean Cutworm Adult Pheromone Trap Report**Week 1 = 6/20/13 - 6/26/13, Week 2 = 6/27/13 - 7/3/13, Week 3 = 7/4/13 - 7/10/13, Week 4 = 7/11/13 - 7/17/13**

County	Cooperator	WBC Trapped							
		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
Adams	Kaminsky/New Era Ag - Monroe	0	1	0	2				
Adams	Roe/Mercer Landmark - Pleasant Mills	0	0	0	1				
Allen	Anderson/Syngenta - Churubusco	0	3	14	29				
Allen	Gynn/Southwind Farms - Ft. Wayne	0	0	6	11				
Benton	Babcock/Ceres Solutions - Boswell								
Benton	Lakin/Speciality Hybrids - Fowler	4	5	0	38				
Boone	Neal Campbell/Beck's Hybrids	0	0	0	0				
Boone	Dennis Carrell/Lamb Farms - Lebanon	0	1	0	0				
Carroll	Lakin/Speciality Hybrids - Delphi	1	1	1	0				
Cass	Lakin/Speciality Hybrids - Royal Center	2	42	144	165				
Clay	Bower/Ceres Solutions - Brazil	0	0	0	0				
Clay	Bower/Ceres Solutions - Clay City		0		0				
Clinton	Foster/Purdue Entomology - Rossville	0	0	1	4				
DeKalb	Hoffman/ATA Solutions	0	0	7	61				
DuBois	Eck/Purdue CES - Jasper	0	0	0	0				
Fayette	Schelle/Falmouth Farm Supply - Falmouth	0	0	0	0				
Fountain	Mroczkiewicz/Syngenta - Rob Roy	0	0	3	31				
Fulton	Jenkins/North Central Co-op - Kewanna	7	8	388	255				
Fulton	Jenkins/North Central Co-op - Rochester	5	26	209	192				
Hamilton	Campbell/Beck's Hybrids	0	0	0	1				
Hendricks	Nicholson/Nicholson Consulting	0	0	0					
Henry	Schelle/Falmouth Farm Supply	0	0	0	0				
Jasper	Lakin/Speciality Hybrids - Fair Oaks	4	28	47	119				
Jasper	Overstreet/Purdue CES - Wheatfield	0	2	2	48				
Jasper	Ritter/Brodbeck Seeds	1	0	33					
Jay	Shrack/Ran Del Agri Svc	0	0	0	2				
Jennings	Bauerle/SEPAC - North Vernon	0	0	0	0				
Knox	Bower/Ceres Solutions - Vincennes		0	0	0				
Knox	Bower/Ceres Solutions - Westphalia	0		0	0				
Knox	Hoke/SWPAC - Vincennes N	0	0	0	0				
Lake	Kleine/Kleine Farms - Cedar Lake	2	3	4	14				
Lake	Moyer - Shelby	2	4	6	86				
Lake	Moyer - Schneider	6	16	37	243				
Lake	Rocke/Agri Mgmt Solutions - Hobart	0	1	9	16				
LaPorte	Barry/Kingsbury Elevator	1	0	18	7				
LaPorte	Rocke/Agri Mgmt Solutions - Wanatah	1	4	8	75				
Miami	Early/Pioneer	0	0	51	48				
Newton	Lakin/Speciality Hybrids - Goodland	9	28	7	68				
Newton	Moyer - Lake Village	6	13	74	273				

County	Cooperator	WBC Trapped							
		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
Porter	Lakin/Speciality Hybrids - Hebron	1	1	16	152				
Porter	Leuck/PPAC - Wanatah N	2	0	1	17				
Pulaski	Lakin/Speciality Hybrids - Winamac	0	16	119	99				
Pulaski	Rocke/Agri Mgmt Solutions - Francesville	1	4	42	132				
Putnam	Nicholson/Nicholson Consulting - Greencastle	0	0	1	1				
Randolph	Boyer/DPAC - Farmland	0	1						
Rush	Schelle/Falmouth Farm Supply	0	0	0	0				
Starke	Wickert/Wickert Agronomy Services	0	1	18					
Sullivan	Bower/Ceres Solutions - Sullivan E	0	0	1	0				
Sullivan	Bower/Ceres Solutions - New Lebanon	0	0	2	1				
Sullivan	Bower/Ceres Solutions - Farmersburg	0	0	0	0				
Tippecanoe	Bower/Ceres Solutions - Lafayette	4	34	32	18				
Tippecanoe	Nagel/Ceres Solutions - Otterbein	1	0	2	13				
Tippecanoe	Obermeyer/Purdue Entomology - Agry Farm	0	0	0	1				
Tippecanoe	Westerfeld/Monsanto	4	4	1	8				
White	Lakin/Speciality Hybrids - Monon	13	20	57	55				
White	Lakin/Speciality Hybrids - Monticello	3	49	101	70				
Whitley	Walker/NEPAC - Columbia City	4	1	4	39				

Weeds

VIDEO: Identifying Palmer Amaranth in The Field - (Bill Johnson and Travis Legleiter) -

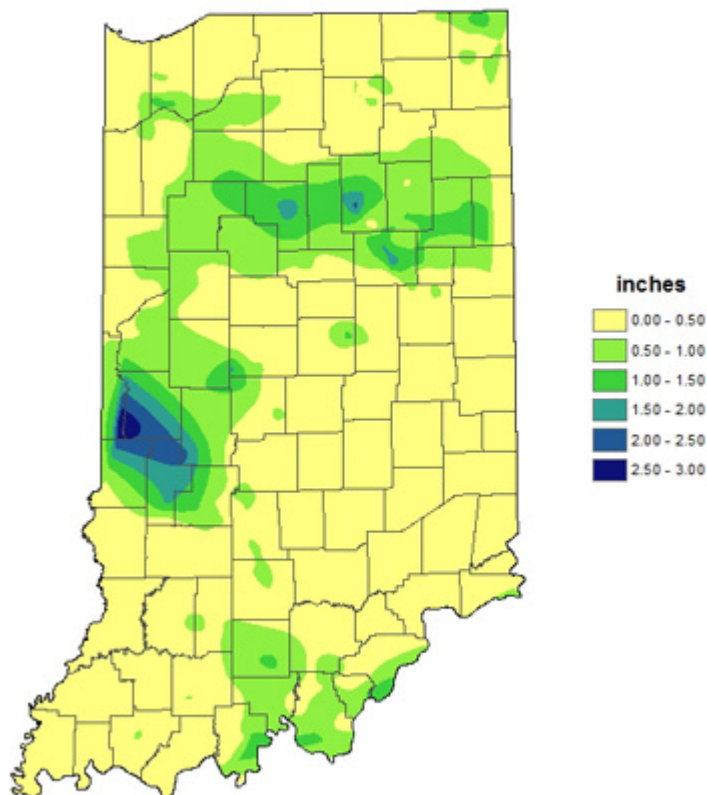
This video was shot near Twelve Mile, IN (Cass County) on July 11, at a field heavily infested with Palmer Amaranth. This location allowed us to capture the various growth stages and identifying characteristics of this very aggressive weed. We encourage you to view this video in order to distinguish Palmer from other pigweed species, especially common water hemp. If you think you have found an infestation of Palmer Amaranth in Indiana, take multiple, in-focus, photos of the plant's characteristics outlined in this video along with location information and email to Bill Johnson (wgj@purdue.edu) or Travis Legleiter (tlegleit@purdue.edu). This will help us assess and share the extent of this weed's presence in the state.



Click above to see the video.

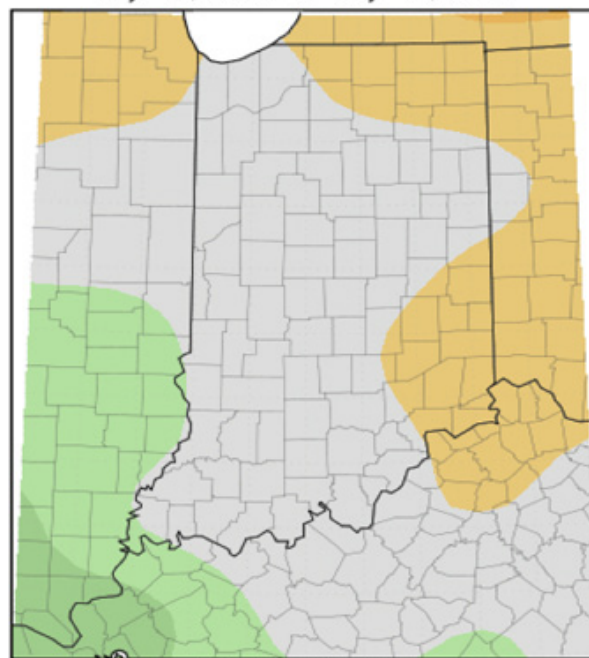
Weather Update

Total Precipitation July 11 - July 17, 2013 CoCoRaHS network (458 stations)



Analysis by Indiana State Climate Office
Web: <http://www.iclimat.org>

Average Temperature (°F): Departure from Mean July 10, 2013 to July 16, 2013



-3 -2 -1 0 1 2 3

Indiana State Climate Office www.iclimat.org
Purdue University, West Lafayette, Indiana
email: iclimat@purdue.edu