



Purdue Cooperative Extension Service
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Insects, Mites, And Nematodes

Western Bean Cutworm Flight Intensifying - (*Christian Krupke and John Obermeyer*)

- Moth counts starting to spike this week.
- Egg laying and egg hatch is occurring.
- Scout for egg masses and hatched larvae ASAP in high-risk fields

The western bean cutworm (WBC) trapping season continues, it looks like we are approaching the peak in emergence, with one Newton County trap having over 1,000 moths! Not too surprising that many counts are surging – our recent weather of very high temperatures along with rains helped pupae finish off development and emerge from the soil. Currently, clear nights with light breezes (i.e. no storms) are absolutely perfect for moth flight, mate-finding and egg-laying.

A large percentage of this year's eggs will be laid over the next 2 weeks. Use this year's trap catches (see following trap report) and recent history as your guide for prioritizing scouting areas. As you view the "Western Bean Cutworm



Some trappers have been truly dedicated to count their nightly western bean cutworm catch.

Adult Pheromone Trap Report”, notice the variability of moth captures, even within close proximity of each other. Although the relationship between trap catches and damage is not particularly strong (i.e., high trap counts does not always mean high damage), traps are a good timing mechanism and presence/absence indicator. When they spike suddenly, it’s time to scout. A larger number should be prioritized for scouting over a smaller one. But that’s about as far as we can take trap counts in assessing damage potential. Areas/fields with damage last year will likely be at most risk this year, but damage will spread to adjacent counties to the south and east of the corn northwestern “hot zone” for WBC.

Many Bt corn hybrids offer excellent control of WBC and will not require scouting for foliar insecticide treatment. However, some Bt hybrids do not offer any protection, as well as specialty corn, e.g., popcorn, high-oil, etc. Scouting is straightforward - a matter of walking fields and looking for egg masses, generally laid on the top surface of the plant’s upper, most upright leaves. Concentrate your efforts on pre-tassel corn, this growth stage is preferred by female moths as the young larvae initially feed on pollen. If more than 5% of plants surveyed have egg masses, treatment is advised. If needed, early insecticide applications are better than late ones – pyrethroid insecticides will offer enough residual activity in most cases for a few days of killing hatching larvae as they travel on their way into the plant’s whorl or leaf axils. Once they get inside the whorl/ear of the plant they cannot be contacted with insecticides, so get them early. Happy Scouting!



Soybean Aphid Update – (Christian Krupke)

Reports from northern and central Indiana Counties, including our scouting efforts at the Diagnostic Training Center reveal that soybean aphid are present, but in very low numbers. We are finding infestations of just 1-5 aphids on a plant (and most plants have no aphids), usually a female surrounded by offspring. The timing of late July/early August is not unusual, as soybean growth is typically entering the early pod-development growth stages (R3-R4) and this is when soybean aphid infestations have peaked in the past in Indiana. It has been several years since Indiana producers have had to manage this pest, but this may be a year where we break the trend in some fields. The dry and cooler temperatures we are experiencing presently favor soybean aphid reproduction, so soybean fields should be scouted very soon. Happy Scouting!



Black Light Trap Catch Report - (John Obermeyer)

County/Cooperator	7/9/13 - 7/15/13						7/16/13 - 7/22/13					
	VC	BCW	ECB	WBC	FAW	AW	VC	BCW	ECB	WBC	FAW	AW
Dubois/SIPAC Ag Center	2	0	0	0	0	4						
Jennings/SEPAC Ag Center	0	0	0	0	0	7	0	0	0	0	0	0
Knox/SWPAC Ag Center	0	1	0	0	0	1	0	2	0	0	0	1
LaPorte/Pinney Ag Center	3	2	0	17	0	11	0	0	0	11	0	1
Lawrence/Feldun Ag Center	1	0	0	0	0	13	0	0	0	0	0	0
Randolph/Davis Ag Center	2	2	0	1	0	63	0	0	0	0	0	2
Tippecanoe/TPAC Ag Center	1	6	0	4	0	30	0	0	0	0	0	2
Whitley/NEPAC Ag Center	1	6	0	33	0	47	0	0	0	1	0	3

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,
Week 5 = 7/18/13 - 7/24/13

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	2			
Adams	Roe/Mercer Landmark - Pleasant Mills	0	0	0	1	0			
Allen	Anderson/Syngenta - Churubusco	0	3	14	29	34			
Allen	Gynn/Southwind Farms - Ft. Wayne	0	0	6	11				
Benton	Babcock/Ceres Solutions - Boswell								
Benton	Lakin/Speciality Hybrids - Fowler	4	5	0	38	21			
Boone	Neal Campbell/Beck's Hybrids	0	0	0	0	0			
Boone	Dennis Carrell/Lamb Farms - Lebanon	0	1	0	0	0			
Carroll	Lakin/Speciality Hybrids - Delphi	1	1	1	0	0			
Cass	Lakin/Speciality Hybrids - Royal Center	2	42	144	165	115			
Clay	Bower/Ceres Solutions - Brazil	0	0	0	0	0			
Clay	Bower/Ceres Solutions - Clay City		0		0	0			
Clinton	Foster/Purdue Entomology - Rossville	0	0	1	4	2			
DeKalb	Hoffman/ATA Solutions	0	0	7	61	18			
DuBois	Eck/Purdue CES - Jasper	0	0	0	0	0			
Fayette	Schelle/Falmouth Farm Supply - Falmouth	0	0	0	0				
Fountain	Mroczkiewicz/Syngenta - Rob Roy	0	0	3	31	1			
Fulton	Jenkins/North Central Co-op - Kewanna	7	8	388	255	402			
Fulton	Jenkins/North Central Co-op - Rochester	5	26	209	192	413			
Hamilton	Campbell/Beck's Hybrids	0	0	0	1	0			
Hendricks	Nicholson/Nicholson Consulting	0	0	0	1	0			
Henry	Schelle/Falmouth Farm Supply	0	0	0	0				
Jasper	Lakin/Speciality Hybrids - Fair Oaks	4	28	47	119	139			
Jasper	Overstreet/Purdue CES - Wheatfield	0	2	2	48				
Jasper	Ritter/Brodbeck Seeds	1	0	33	34	88			
Jay	Shrack/Ran Del Agri Svc	0	0	0	2	0			
Jennings	Bauerle/SEPAC - North Vernon	0	0	0	0	1			
Knox	Bower/Ceres Solutions - Vincennes		0	0	0	0			
Knox	Bower/Ceres Solutions - Westphalia	0		0	0	0			
Knox	Hoke/SWPAC - Vincennes N	0	0	0	0	12			
Lake	Kleine/Kleine Farms - Cedar Lake	2	3	4	14	57			
Lake	Moyer - Shelby	2	4	6	86	110			
Lake	Moyer - Schneider	6	16	37	243	646			
Lake	Rocke/Agri Mgmt Solutions - Hobart	0	1	9	16	53			
LaPorte	Barry/Kingsbury Elevator	1	0	18	7	10			
LaPorte	Rocke/Agri Mgmt Solutions - Wanatah	1	4	8	75	128			
Miami	Early/Pioneer	0	0	51	48	52			
Newton	Lakin/Speciality Hybrids - Goodland	9	28	7	68	46			
Newton	Moyer - Lake Village	6	13	74	273	1194			

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	100			
Porter	Leuck/PPAC - Wanatah N	2	0	1	17	33			
Pulaski	Lakin/Speciality Hybrids - Winamac	0	16	119	99	196			
Pulaski	Rocke/Agri Mgmt Solutions - Francesville	1	4	42	132				
Putnam	Nicholson/Nicholson Consulting - Greencastle	0	0	1	1	0			
Randolph	Boyer/DPAC - Farmland	0	1	2	3	0			
Rush	Schelle/Falmouth Farm Supply	0	0	0	0				
Starke	Wickert/Wickert Agronomy Services	0	1	18	29	65			
Sullivan	Bower/Ceres Solutions - Sullivan E	0	0	1	0	4			
Sullivan	Bower/Ceres Solutions - New Lebanon	0	0	2	1	3			
Sullivan	Bower/Ceres Solutions - Farmersburg	0	0	0	0	0			
Tippecanoe	Bower/Ceres Solutions - Lafayette	4	34	32	18	0			
Tippecanoe	Nagel/Ceres Solutions - Otterbein	1	0	2	13	14			
Tippecanoe	Obermeyer/Purdue Entomology - Agry Farm	0	0	0	1	0			
Tippecanoe	Westerfeld/Monsanto	4	4	1	8	11			
White	Lakin/Speciality Hybrids - Monon	13	20	57	55	134			
White	Lakin/Speciality Hybrids - Monticello	3	49	101	70	94			
Whitley	Walker/NEPAC - Columbia City	4	1	4	39	20			

Plant Diseases

Soybean Vein Necrosis Virus Confirmed in Indiana – (Kiersten Wise, Gail Ruhl, Christian Krupke) -

The Purdue Plant and Pest Diagnostic Lab (PPDL) confirmed Soybean Vein Necrosis Virus (SVNV) this week in Indiana. The virus was first detected in Indiana in 2012, but was not detected until late August. Currently, the virus has only been confirmed in LaPorte County (northwest IN), but it is likely that other fields may be affected. It is important to accurately diagnosis SVNV since it can resemble other diseases and disorders, including herbicide injury.

Symptoms caused by this virus include light green patches or mottled green and brown speckled areas associated with veins (Figure 1). As symptoms progress, affected leaf tissue may die, and leaves will appear scorched.

SVNV is a member of the Tospovirus family, which are vectored by thrips. These are tiny, winged insects that are present in all soybean fields, every year. They feed on plant juices and pollen, but they are not considered pests and have not caused damage to Indiana soybeans in the past. Although growers may be tempted to apply an insecticide to reduce thrips populations “just in case”, at this point in time we do not recommend insecticide applications in response to detection of SVNV, for two reasons: 1) the disease is not yet found widely in the state, and 2) we don’t know what,

if any, effect disease may have on yield. For now, we will continue to keep an eye on this disease, and assess its potential impact so that we can make more informed future management recommendations. We encourage growers and consultants to inspect fields for symptoms of SVNV and send samples to the PPDL for diagnosis so we can gather information on the extent of this new disease in Indiana.



Weather Update

Weather Outlook by NWS OHRFC – (James Noel, NOAA/NWS/Ohio River Forecast Center) –

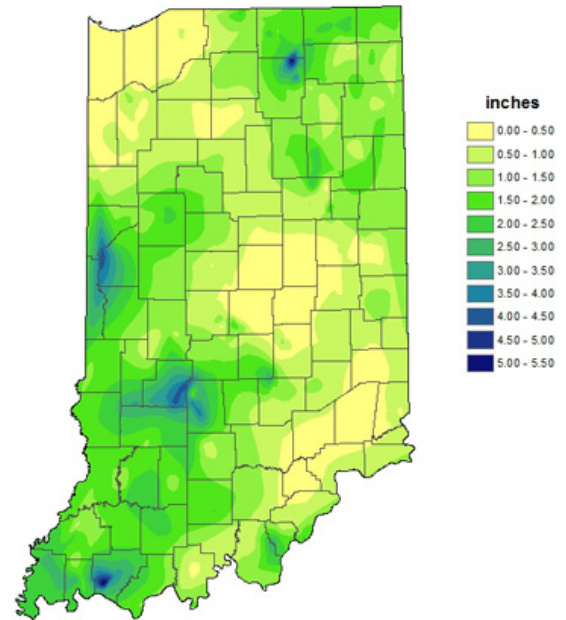
Fairly good growing conditions will continue across Indiana the into early August.

Temperatures and rainfall will be slightly below normal through August 3. From August 4-15, more summer-like weather will build in with a return of a tropical air-mass. This will allow temperatures to return to normal or above normal and rainfall to normal or above normal.

The latest 2 week rainfall map is located here: <<http://www.erh.noaa.gov/ohrfc/HAS/images/NAEFS16day.pdf>>.

Right now, August is shaping up to be about normal from all the latest indications.

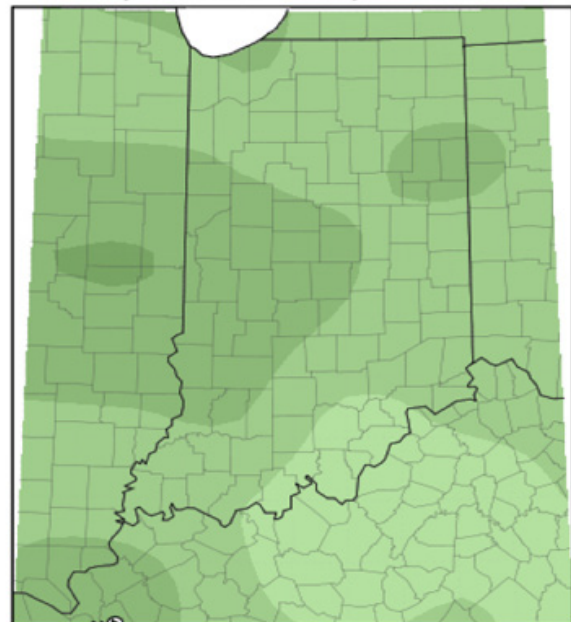
**Total Precipitation
July 18 - July 24, 2013
CoCoRaHS network
(475 stations)**



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



**Average Temperature (°F): Departure from Mean
July 20, 2013 to July 26, 2013**

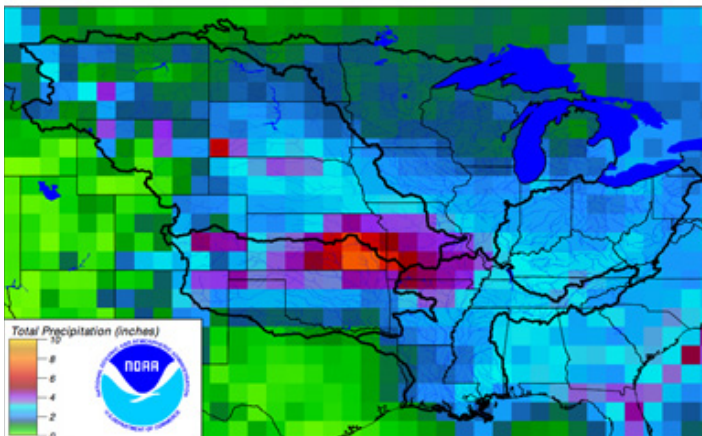


Mean period is 1981-2010.



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

NAEFS 16-day Ensemble Mean Total QPF from 07/28/2013 12Z
Creation datetime: Sun Jul 28 19:30:16 EDT 2013



For individual location specifics visit water.weather.gov



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