

Pest & Crop newsletter

Purdue Cooperative Extension Service and USDA-NIFA Extension IPM Grant

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2019 Western Bean Cutworm Pheromone Trap Report

(John Obermeyer)

County	Cooperator	WBC Trapped						
		Wk 1 6/20/19- 6/26/19	Wk 2 6/27/19- 7/3/19	Wk 3 7/4/19- 7/10/19	Wk 4 7/11/19- 7/17/19	Wk 5 7/18/19- 7/24/19	Wk 6 7/25/19- 7/31/19	Wk 7 8/1/19- 8/7/19
Adams	Roe/Mercer Landmark	0	0	0	7	0	2	0
Allen	Gynn/Southwind Farms	0	0	1	0	20	4	0
Allen	Kneubauer/C&K Concepts	0	0	0	1	0	0	0
Bartholomew	Bush/Pioneer Hybrids	0	0	0	3	0	2	2
Boone	Emanuel/Boone Co. CES	4	2	7	8	8	3	1
Clay	Fritz/Ceres Solutions/Clay City	0	3	0	0	0	0	0
Clay	Mace/Ceres Solutions/Brazil	0	0	8	0	0	0	0
Clinton	Emanuel/Boone Co. CES	0	2	3	5	1	0	0
Clinton	Foster/Purdue CES	0	0	4	0	0	0	0
Dubois	Eck/Dubois Co. CES	0	1	3	3	2	0	3
Elkhart	Kauffman/Crop Tech Inc.	1	2	28	118	184	5	1
Fayette	Schelle/Falmouth Farm Supply Inc.	0	0	1	0	0	2	0
Fountain	Mrozakiewicz/Singenta	9	1	115	65	4	0	1
Fulton	Jenkins/Ceres Solutions	1	0	15	96	151	0	0
Fulton	Randstead/Ceres Solutions	0	0	23	17	27	22	0
Hamilton	Campbell/Beck's Hybrids	0	1	3	1	0	0	4
Hendricks	Nicholson/Nicholson Consulting	0	0	1	3	0	0	0
Hendricks	Tucker/Bayer	2	1	2	6	4	3	0
Howard	Shanks/Clinton Co. CES	0	0	0	0	0	0	0
Jasper	Overtree/Jasper Co. CES	0	1	31	252	1152	142	1
Jasper	Ritter/Dairyland	5	3	7	114	76	0	0
Jay	Boyer/Davis PAC	0	0	6	8	5	2	0
Jay	Shrack/Ran-Del Agri Services	0	0	2	1	2	0	0
Jay	Temple/Jay Co. CES/Pennville	1	1	2	2	11	9	4
Jay	Temple/Jay Co. CES/RedKey	3	3	9	6	10	4	2
Jennings	Bauer/SEPA	0	0	0	0	0	0	0
Know	Clinkenbeard/Ceres Solutions/Freelandville	0	0	0	0	0	0	0
Kosciusko	Klotz/Etna Green	0	1	4	10	32	12	2
Lake	Kleine	0	1	12	16	189	15	11
Lake	Moyer/Dekalb Hybrids/Shelby	0	0	0	19	140	36	9
Lake	Moyer/Dekalb Hybrids/Scheider	1	0	0	19	140	36	9
LaPorte	Rocke/Agri-Mgmt. Solutions/Wanatah	4	1	40	45	555	57	7
Marshall	Harnell/Harnell Ag Services	1	5	16	34	1	7	0
Marshall	Klotz/Nappanee	0	0	8	105	0	0	0
Miami	Early/Pioneer Hybrids	0	2	25	82	25	5	0
Montgomery	Delp/Nicholson Consulting	0	0	14	2	0	0	1
Newton	Moyer/Dekalb Hybrids/Lake Village	1	0	11	48	307	29	2
Porter	Tragesser/PPAC	0	0	1	9	24	4	4
Posey	Schmitt/Posey Co. CES/Cynthiana	0	0	0	6	5	4	3
Pulaski	Capouch/M&R Ag Services	6	0	0	30	84	10	15
Pulaski	Leman/Ceres Solutions	2	0	0	1	3	0	1
Putnam	Nicholson/Nicholson Consulting	1	1	0	2	1	0	0
Randolph	Boyer/PPAC	0	1	20	12	2	3	1
Rush	Schelle/Falmouth Farm Supply Inc.	0	2	1	0	0	0	0
Shelby	Fisher/Shelby County Co-op	0	0	0	0	0	0	0
Shelby	Simpson/Simpson Farms	0	0	4	15	1	0	0
St. Joseph	Carlsener/Breman	0	0	2	41	9	41	4
St. Joseph	Deutscher/Helena Agri-Enterprises	0	0	5	10	47	19	6
Starke	Capouch	0	0	1	21	11	8	7
Sullivan	Baxley/Ceres Solutions/Sullivan	0	0	0	0	0	0	0
Sullivan	Baxley/Ceres Solutions/New Lebanon	0	0	3	0	0	0	0
Sullivan	McCullough/Ceres Solutions/Farmersburg	0	0	0	0	0	3	0
Tippecanoe	Bower/Ceres Solutions/Lafayette	0	5	34	3	0	0	0
Tippecanoe	Nagel/Ceres Solutions	0	0	1	1	3	1	0
Tippecanoe	Obermeyer/Purdue Entomology	0	0	0	0	0	0	0
Tippecanoe	Westerfield/Monsanto Research Farm	1	1	2	6	6	2	0
Tipton	Campbell/Beck's Hybrids	0	0	1	8	1	0	0
Vermillion	Lynch/Ceres Solutions/Clinton	0	0	0	0	0	0	0
Wabash	Enyeart/Ceres Solutions	0	2	3	4	4	1	0
White	Foley/Conagra	0	1	2	0	0	0	0
Whitley	Boyer, Richards/NEPAC/Schrader	0	0	1	8	9	17	1
Whitley	Boyer, Richards/NEPAC/Kyler	0	0	2	11	11	1	0

* = Intensive Capture...this occurs when 9 or more moths are caught over a 2-night period

2019 Corn Earworm Trap Report

(Tammy Luck, luck@purdue.edu)

2019 Corn Earworm Trap Report

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recent catch
information



A Rough Season Can Lead To Invaluable Information On Hemp Production

(Marguerite Bolt, mbolt@purdue.edu)

As the season progresses, hemp farmers in Indiana are learning what it is like to grow hemp compared to their other crops. While this growing season has not been ideal, and growers have expressed disappointment with how their hemp fields look, we can all learn from this year.

I have tried to frame this growing season in a positive light where we will all be better positioned for next year. Because of the rain and delayed planting we will start to develop planting windows, which will likely differ for our three types of hemp-fiber, grain, and CBD. We will have a better understanding of how certain cultivars perform across the state. We will gain an understanding of how a wet spring and a dry summer can affect hemp health, specifically, how this stress could impact THC content. By having hemp farmers across the state, we getting a breadth of useful information based on their research projects and observations.

We are also learning where gaps exist in hemp production. Some of

these gaps include poor quality seed and cuttings, how to dry CBD hemp, and who to sell biomass to (for those who did not get a buy back agreement). The hemp industry is in its infancy and we still have a lot to learn.

I could not end without giving an insect update. We are observing flea beetle damage, corn earworm, European corn borer, cannabis aphid, and oblique banded leaf roller in the fields. This is the first time I have seen oblique banded leaf roller larvae eating hemp leaves and doing their characteristic leaf roll on large fan leaves and new growth at the top of plants. As we continue to produce hemp, we will see in more insects on the plants. If insect damage is observed, clear photos of damage and of the insects causing damage will help us document pests across the state.



Figure 1. Flea beetle found feeding on CBD hemp.



Figure 2. Corn earworm found on a CBD hemp plant.



Figure 3. European corn borer found in hemp grown for fiber. I have also received reports of ECB in hemp grown for CBD.



Figure 4. Oblique banded leaf roller raised in the lab from a larva collected feeding on CBD hemp.

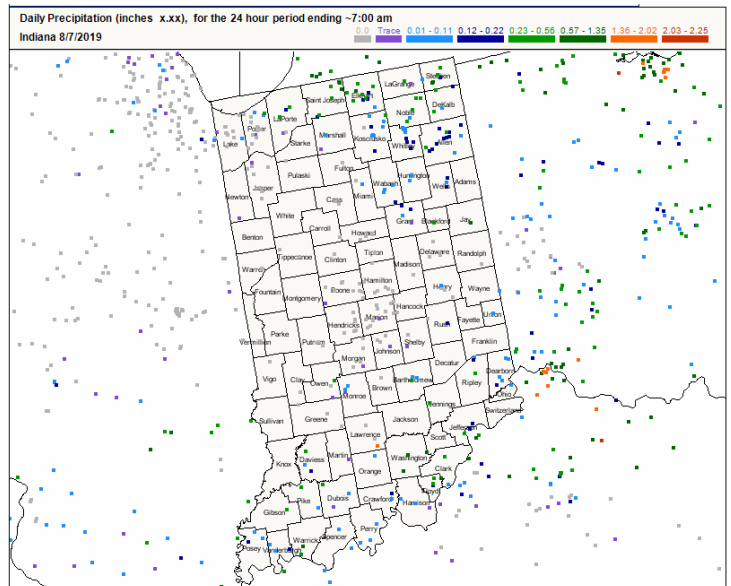


Figure 1. Daily precipitation for the 24 hour period ending 7 AM on 8/7/2019.

Regardless of the rain, drought is continuing to spread across the state with anticipated expansion this week. The National Aeronautical and Space Administration (NASA) produces maps that combine satellite information, ground observations, and modeled output shows how Indiana and surrounding states are experiencing reduced shallow soil moisture. The August 7th map for 10-40cm relative soil moisture (available water; %) shows the increasing dryness for northwest and southeast Indiana (Figure 2). Fortunately, the 7-day precipitation forecast is suggesting some more rain (1.5"-2.5" in the central and southern counties) could be on the way, however this is not likely until the middle of next week (Figure 3).

Indiana Climate and Weather Report – 8/8/2019

(Beth Hall)

Another period of rain passed through the state earlier this week, providing limited rain to the northeast and southern counties (Figure 1). Note the map showing the measurements taken by volunteers for the Community Collaborative Rain, Hail, and Snow (CoCoRaHS) program. If you're a weather enthusiast and would like to participate in this program, please let me know (bethhall@purdue.edu) or go to www.cocorahs.org! The National Weather Service, climate centers, and private business use and depend on this data to improve forecast models and better understand the moisture available in the ground and atmosphere.

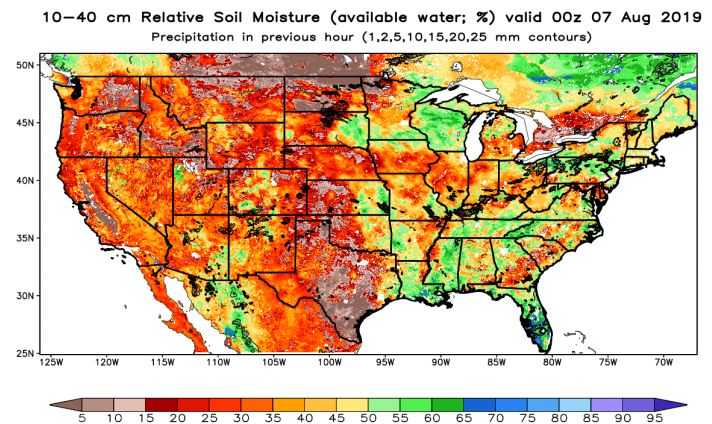


Figure 2. Relative soil moisture.

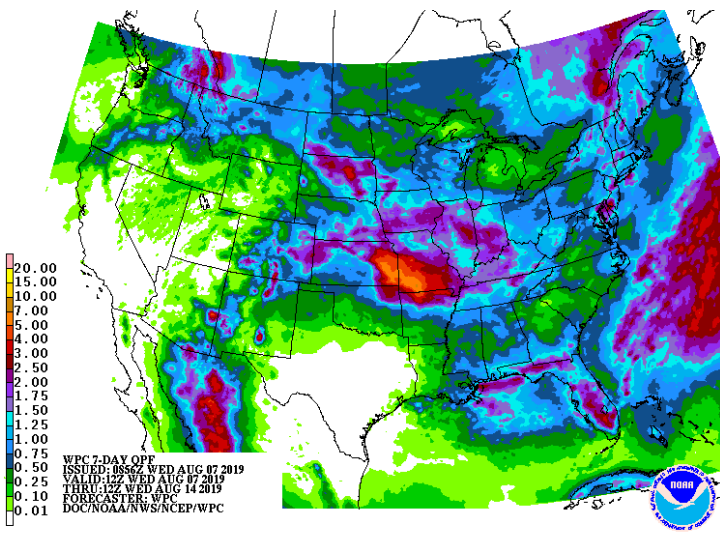


Figure 3. 7-day.

Temperatures have remained rather mild for this time of year (0°F to 3°F below normal over the past week), which has reduced the rate of modified growing degree-day accumulations. Climate outlooks for August 14-20 suggest insufficient confidence about whether temperatures and precipitation will be above or below normal. Could Indiana experience an earlier-than-normal “first freeze” this year? It is simply too early to know and while climate prediction outlooks can provide some guidance on whether or not temperatures are likely to be above or below normal, they are unable to predict the date of the first freeze event.

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 Editor: Tammy Luck | Department of Entomology, Purdue University, 901 W. State St., West Lafayette, IN 47907