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# Pest&Crop newsletter

**Purdue Cooperative Extension Service and USDA-NIFA Extension IPM Grant**

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

# Extremely Low Black Cutworm Moth Catches, Hopefully Good News

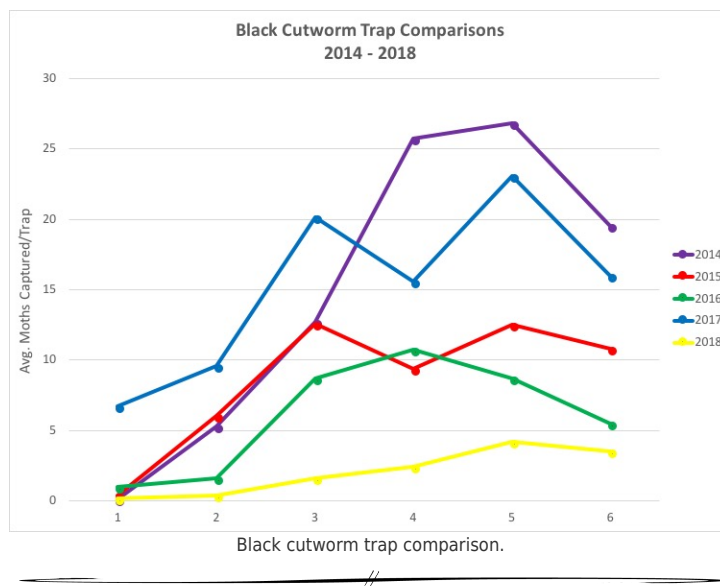
**Author: John Obermeyer**

Black cutworm pheromone trap cooperators have faithfully reported their week's catches, but most haven't been numerically challenged. Refer to this week's trap report and see very few captures; that has been the case throughout the spring. Comparing moth captures from the previous four years, see graph, it is obvious that black cutworm moth arrival into Indiana has almost been non-existent.

This certainly has not been a "normal" year for weather patterns. Normally, moist (i.e., rain) air current sweeping up from the Gulf States, Texas, and Mexico (i.e., warm) literally lifts these moths into the upper atmosphere and carry them into the Midwest. The direction that these weather systems move and the number of moths captured soon afterward give us an idea of when and how much black cutworm damage will occur. Obviously, this is not an exact science, considering all the possible errors with traps numbers, etc., but it has worked nicely in the past. Will there be any black cutworm damage to corn this spring? We continue to advocate scouting, especially in those late-emerging fields, to "ground truth" the science.

Our thanks to the many that participate in this trapping network. Soon they will get another opportunity with the western bean cutworm moth

flight...stay tuned.



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# Black Cutworm Adult Pheromone Trap Report

County	Cooperator	BCW Trapped						
		Wk 1 3/29/18-4/4/18	Wk 2 4/5/18-4/11/18	Wk 3 4/12/18-4/18/18	Wk 4 4/19/18-4/25/18	Wk 5 4/26/18-5/2/18	Wk 6 5/3/18-5/9/18	Wk 7 5/10/18-5/16/18
Adams	Mrs. Anderson's/2nd Grade		0	0	4	1	1	2
	School/Decatur							
Adams	Roe/Mercer Landmark	0	0	0	0	0	0	3
Allen	Anderson/Syngenta	0	0	0	0	0	0	0
Allen	Gynn/Southwind Farms	0	0	0	0	0	0	1
Allen	Kneubuhler/G&K Concepts	0	0	0	1	0	1	7
Bartholomew	Bush/Pioneer Hybrids	0	1	2	2	2	7	5
Clay	Bower/Ceres Solutions/Clay City	0	0	0	0	0	0	1
Clay	Bower/Ceres Solutions/Bowling Green	0	0	0	0	0	0	0
Clay	Bower/Ceres Solutions/Brazil	0	0	4	2	0	0	0
Clinton	Emanuel/Boone Co. CES	0	0	6	0	0	2	0
Clinton	Foster/Rossville	0	0	0	0	0	0	0
Daviess	Venard/Venard Agri-Consulting/Washington	1	2	2	0	0	0	0
Daviess	Venard/Venard Agri-Consulting/Elnora	0	0	2	1	0	1	0
DeKalb	Hoffman/ATA Solutions		0	0		0	0	1
Dubois	Eck/Dubois Co. CES	0	0	0	3	4	0	1
Elkhart	Kauffman/Crop Tech Inc.	0	0	0	1	1	1	3
Fayette	Schelle/Falmouth Farm Supply Inc.	0	0	5	17	4	2	
Fountain	Mroczkiewicz/Syngenta	0	0	0	7	13	16	13
Fulton	Ranstead/Ceres Solutions/Rochester		0	0	0	0	3	0
Fulton	Jenkins/Ceres Solutions/Talma	0	0	0	0	2	6	2
Greene	Venard/Venard Agri-Consulting/Newberry	1	4	5	0	0	1	0
Hamilton	Campbell/Beck's Hybrids	0	0	0	4	2	5	0
Hendricks	Nicholson/Nicholson Consulting	0	0	0	0	1	1	0
Jasper	Overstreet/Jasper Co. CES	0	0	0	0	2	2	12*
Jasper	Ritter/Brodbeck Seeds	0	0	0	3	17	12	5
Jay	Boyer/Davis PAC	0	0	0	0	3	1	2
Jay	Shrack/Ran-Del Agri Services	0	0	4	2	5	8	1
Jay	Temple/Jay Co. CES/Redkey	0	0	3	1	14	10	11
Jay	Temple/Jay Co. CES/Pennville	0	0	3	1	7	10	2
Jennings	Bauerle/SEPAC	0	1	0	3	2	1	0
Knox	Bower/Ceres Solutions/Freelandville	0	0	0	0	0	0	1
Knox	Bower/Ceres Solutions/Vincennes	0	0	0	0	2	4	3
Kosciusko	Klotz/Etna Green	0	0	0	0	0	0	2
Lake	Kleine	0	0	2	3	12	25*	20
Lake	Moyer/Dekalb Hybrids/Shelby	0	0	0	0	0	1	0

Lake	Moyer/Dekalb Hybrids/Scheider	0	0	4	0	1	0	8
LaPorte	Rocke/Agri-Mgmt. Solutions/Wanatah	0	0	0	1	1	5	5
Marshall	Harrell/Harrell Ag Services/Trap 1	0	0	0	0	0	0	7
Marshall	Harrell/Harrell Ag Services/Trap 2	0	0	0	0	0	0	5
Marshall	Klotz/SR 10 & SR 331		0	0	0	2	2	2
Marshall	Miller/Ceres Solutions/Plymouth		0	0	8	0	0	1
Miami	Early/Pioneer Hybrids	0	0	0	1	0	2	0
Montgomery	Delp/Nicholson Consulting	0	0	0	2	2	2	0
Newton	Moyer/Dekalb Hybrids/Lake Village	0	0	2	0	2	1	0
Porter	Leman/PPAC	0	0		0	0	1	2
Posey	Schmitz/Posey Co. CES/Cynthiana	0	0	0	0	0	0	0
Posey	Schmitz/Posey Co. CES/St. Phillips W.	0	0	0	0	0	2	1
Pulaski	Capouch/M&R Ag Services				0	0	2	1
Pulaski	Leman/Ceres Solutions	0	0	0	3	13	22*	10
Putnam	Nicholson/Nicholson Consulting	0	0	1	8	6	6	0
Randolph	Boyer/DPAC	0	0	0	4	1	1	10
Rush	Schelle/Falmouth Farm Supply Inc.	1	0	3	2	0	0	
Shelby	Fisher/Shelby County Co-op	0	0	0	0	1	0	0
Shelby	Simpson/Simpson Farms				2	1	13	
Starke	Capouch/M&R Ag Services		0	0	1			
St. Joseph	Barry/Helena				0	0	3	5
St. Joseph	Carbiener	0	0	0	0	0	0	0
Sullivan	Bower/Ceres Solutions/Farmersburg	0	0	0	0	0	3	3
Sullivan	Bower/Ceres Solutions/Sullivan	0	2	4	2	4	7	4
Tippecanoe	Bower/Ceres Solutions/Lafayette	0	0	0	1	3	0	0
Tippecanoe	Nagel/Ceres Solutions	0	0	3	17	24*	75*	44*
Tippecanoe	Obermeyer/Purdue Entomology	0	0	0	1	1	0	0
Tippecanoe	Westerfield/Monsanto Research Farm	0	0	0	3	2	0	2
Tipton	Campbell/Beck's Hybrids	0	3	0	1	0	2	4
Vermillion	Bower/Ceres Solutions/Clinton	0	0	0	0	0	1	0
Wabash	Enyeart/Ceres Solutions	0	0	0	1	1		
Whitley	Boyer, Richards/NEPAC/Schrader Farm	-	0	0	2	2	8	5
Whitley	Boyer, Richards/NEPAC/Kyler Farm	-	0	1	0	1	0	3

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

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# Armyworm Pheromone Trap Report

## Armyworm Pheromone Trap Report

Lawrence/Feldun Ag Center	0	28	89	144	74	43	30
Randolph/Davis Ag Center	0	0	273	80	340	68	72
Tippecanoe/Meigs	0	0	1	5	5	23	0
Whitley/NEPAC Ag Center	0	0	22	22	86	94	9

County/Cooperator	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8
Dubois/SIPAC Ag Center	0	0	11	3	136	19	18	
Jennings/SEPAC Ag Center	0	0	2	5	8	1	0	
Knox/SWPAC Ag Center	0	27	44	45	25	11	15	
LaPorte/Pinney Ag Center	0	0	3	3	14	9	13	

Wk 1 = 3/29/18-4/4/18; Wk 2 = 4/5/18-4/10/18; Wk 3 = 4/11/18-4/18/18; Wk 4 = 4/19/18-4/25/18; Wk 5 = 4/26/18-5/2/18; Wk 6 = 5/3/18-5/9/18; Wk 7 = 5/10/18-5/16/18

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# Purdue Offers Herbicide Resistant Weed Screening

**Authors: Joe Ikley and Bill Johnson**

The Purdue Weed Science group is again offering herbicide resistance screening for Palmer amaranth, waterhemp, and giant ragweed for the 2018 growing season. For Indiana residents, the resistance screens include ALS-inhibitor (group 2) assays for giant ragweed, as well as glyphosate (group 9) and PPO-inhibitor (group 14) resistance screening for waterhemp and Palmer amaranth. We test for the most common mechanism of PPO-inhibitor resistance in waterhemp and Palmer amaranth. We will not screen for glyphosate resistance for non-Indiana residents.

PLEASE READ THE FINE PRINT: An important point to mention here is that researchers are discovering new mechanisms of resistance to these herbicides. New mechanisms of resistance require us to develop new assays to test for these mechanisms. At the current time we do not have the capability to test for all of the known resistance mechanisms, but we can test for the mechanisms that are currently occurring most frequently in the field. Please be sure to read the submission form and results form closely when you submit samples and receive results.

Leaf tissue samples can be submitted for molecular DNA analysis that will allow results to be generated within a few weeks of submission. It is important to follow the directions on the submission form for collecting, storing, and shipping leaf tissue samples as this can have a large

impact on the accuracy of the results. A video demonstrating the proper sample collection and shipping process can be found at the following link: [https://www.youtube.com/watch?v=Vn6z\\_boDxns](https://www.youtube.com/watch?v=Vn6z_boDxns).

Seed samples can also be submitted for analysis of herbicide resistance. This allows us to also screen for glyphosate (group 9) resistance in giant ragweed. It is also important to follow the directions on the submission form for seed collection from the appropriate number of plants to assure quality results. The seed samples will take several months to return results as plants will need to be grown from seed in the greenhouse.

The submission form with instructions for collection, storage, and shipping can be found at the following link: <https://ag.purdue.edu/btny/weedscience/Documents/HerbicideResistanceScreeningForm.pdf>.

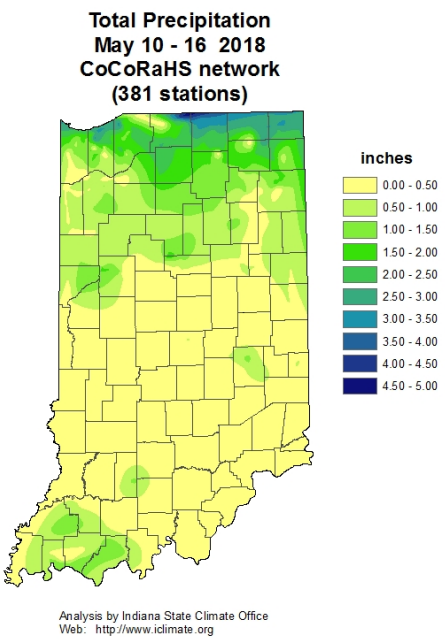
The submission form can also be found on the front page of the Purdue Weed science website: <https://ag.purdue.edu/btny/weedscience/Pages/default.aspx>.

Please contact Julie Young ([young294@purdue.edu](mailto:young294@purdue.edu), 765-494-0891) or Todd Abrahamson ([abraham15@purdue.edu](mailto:abraham15@purdue.edu), 765-494-7071) with any questions or concerns you have when sampling or shipping a sample.

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# Total Precipitation May 10-16, 2018



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# Average Temperature Departure from Mean May 8-14, 2018

Average Temperature (°F): Departure from Mean  
May 8, 2018 to May 14, 2018

