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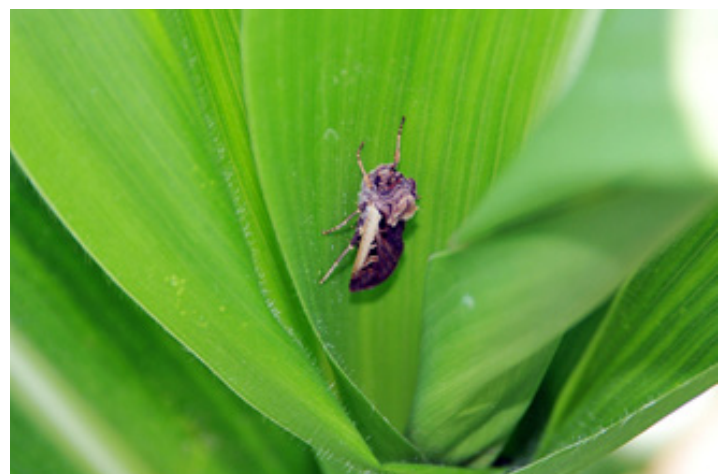
Insects, Mites, And Nematodes

Western Bean Cutworm Moth Flight Begins – (Christian Krupke and John Obermeyer)

- Moths have begun emerging from soil, soon mating and egg laying will begin.
- Scouting for egg masses should commence once moth captures are increasing daily (soon, but not yet).
- Most Bt corn is protected.

Pheromone trapping began for western bean cutworm moths on Thursday June 20, and several have been captured in northern counties since then, refer to “Western Bean Cutworm Adult Pheromone Trap Report.” This is just the beginning of an extended moth emergence and flight, with their peak presence expected 2-3 weeks from now. Those in high-risk areas, i.e., sandy soils, high moth flight and WBC history, should be gearing up for field scouting of vulnerable cornfields.

Scouting should begin once moths are being captured nightly. In five different areas of a field, inspect 20 consecutive plants for egg masses which are laid on the upper surface of the top leaves of corn and/or larvae that



Western bean cutworm moths are often found resting down in the corn whorl during the day

may have hatched and crawled to the whorl and begun to feed. Usually the newest, vertical leaf is the best place to look for egg masses. Young larvae need pollen to survive, and female moths are most attracted to cornfields that are

just about to pollinate. Moths will lay eggs on whorl stage corn when pre-tassel/pollinating corn is not available. Given our slightly later planting this year (vs. 2011 and 2012), there should be plenty of corn at that stage when moth flight peaks. Larvae may initially be found in leaf axils, feeding on pollen that has accumulated there. Later damage from larvae, as they feed deep in the whorl (attacking the tassel to get at pollen), will resemble corn borer or fall armyworm damage. Initially the damage will be subtle and not economically important (or even noticeable). Later stage larvae feed on

corn kernels and can cause economic damage, and also can exacerbate ear rots, including Gibberella ear rot. In fields where Bt corn is planted, scouting and supplemental control should not be necessary. The proteins expressed in most currently available Bt corn hybrids (including Herculex, Smartstax, and Viptera hybrid lines) have been shown to be highly effective in controlling this cutworm species, although very light surface scraping will be seen on a few kernels at harvest time.



Black Light Trap Catch Report - (John Obermeyer)

County/Cooperator	6/11/13 - 6/17/13							6/18/13 - 6/24/13						
	VC	BCW	ECB	WBC	CEW	FAW	AW	VC	BCW	ECB	WBC	CEW	FAW	AW
Dubois/SIPAC Ag Center	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Jennings/SEPAC Ag Center	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Knox/SWPAC Ag Center	0	0	0	0	0	0	0							
LaPorte/Pinney Ag Center	0	0	7	0	0	0	9							
Lawrence/Feldun Ag Center	0	0	0	0	0	0	0	0	1	0	0	0	0	4
Randolph/Davis Ag Center	0	0	0	0	0	0	4	0	0	0	0	0	0	4
Tippecanoe/TPAC Ag Center	0	0	0	0	0	0	9	0	0	0	0	0	0	4
Whitley/NEPAC Ag Center	0	0	0	0	0	0	0	0	0	0	0	0	0	8

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



**Western Bean Cutworm Adult Pheromone Trap Report
Week 1 = 6/20/13 - 6/26/13**

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								
Adams	Roe/Mercer Landmark - Pleasant Mills	0							
Allen	Anderson/Syngenta - Churubusco	0							
Allen	Gynn/Southwind Farms - Ft. Wayne	0							
Benton	Babcock/Ceres Solutions - Boswell								
Boone	Neal Campbell/Beck's Hybrids	0							
Boone	Dennis Carrell/Lamb Farms - Lebanon	0							

County	Cooperator	WBC Trapped							
		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8
Clay	Bower/Ceres Solutions - Brazil	0							
Clay	Bower/Ceres Solutions - Clay City								
Clinton	Foster/Purdue Entomology - Rossville	0							
DeKalb	Hoffman/ATA Solutions	0							
DuBois	Eck/Purdue CES - Jasper	0							
Fayette	Schelle/Falmouth Farm Supply - Falmouth								
Fountain	Mroczkiewicz/Syngenta - Rob Roy	0							
Fulton	Jenkins/North Central Co-op - Kewanna	7							
Fulton	Jenkins/North Central Co-op - Rochester	5							
Hamilton	Campbell/Beck's Hybrids	0							
Hendricks	Nicholson/Nicholson Consulting	0							
Henry	Schelle/Falmouth Farm Supply								
Jasper	Overstreet/Purdue CES - Wheatfield	0							
Jasper	Ritter/Brodbeck Seeds	1							
Jay	Shrack/Ran Del Agri Svc	0							
Jennings	Bauerle/SEPAC - North Vernon	0							
Knox	Bower/Ceres Solutions - Vincennes								
Knox	Bower/Ceres Solutions - Westphalia	0							
Knox	Hoke/SWPAC - Vincennes N	0							
Lake	Kleine/Kleine Farms - Cedar Lake	2							
Lake	Moyer - Shelby	2							
Lake	Moyer - Schneider	6							
Lake	Rocke/Agri Mgmt Solutions - Hobart	0							
LaPorte	Barry/Kingsbury Elevator	1							
LaPorte	Rocke/Agri Mgmt Solutions - Wanatah	1							
Miami	Early/Pioneer	0							
Newton	Moyer - Lake Village	6							
Porter	Leuck/PPAC - Wanatah N	2							
Pulaski	Rocke/Agri Mgmt Solutions - Francesville	1							
Putnam	Nicholson/Nicholson Consulting - Greencastle	0							
Randolph	Boyer/DPAC - Farmland	0							
Rush	Schelle/Falmouth Farm Supply								
Starke	Wickert/Wickert Agronomy Services								
Sullivan	Bower/Ceres Solutions - Sullivan E	0							
Sullivan	Bower/Ceres Solutions - New Lebanon	0							
Sullivan	Bower/Ceres Solutions - Farmersburg	0							
Tippecanoe	Bower/Ceres Solutions - Lafayette	4							
Tippecanoe	Nagel/Ceres Solutions - Otterbein	1							
Tippecanoe	Obermeyer/Purdue Entomology - Agry Farm	0							
Tippecanoe	Westerfeld/Monsanto	4							
Whitley	Walker/NEPAC - Columbia City	4							

Weeds

Palmer Amaranth Update – (Travis Legleiter and Bill Johnson) -

There have been confirmed populations of Palmer amaranth in thirteen counties in the state of Indiana as of June 26, 2013. These counties are no longer confined to just northwestern Indiana as reported last fall and earlier this spring. We have recently confirmed populations in Adams and Henry counties on the eastern side of the state as well as Clay County in western Indiana. If you suspect that you have found Palmer amaranth in your fields, please contact Bill Johnson (wgj@purdue.edu or 765-494-4656) or Travis Legleiter (tlegleit@purdue.edu or 765-496-2121).

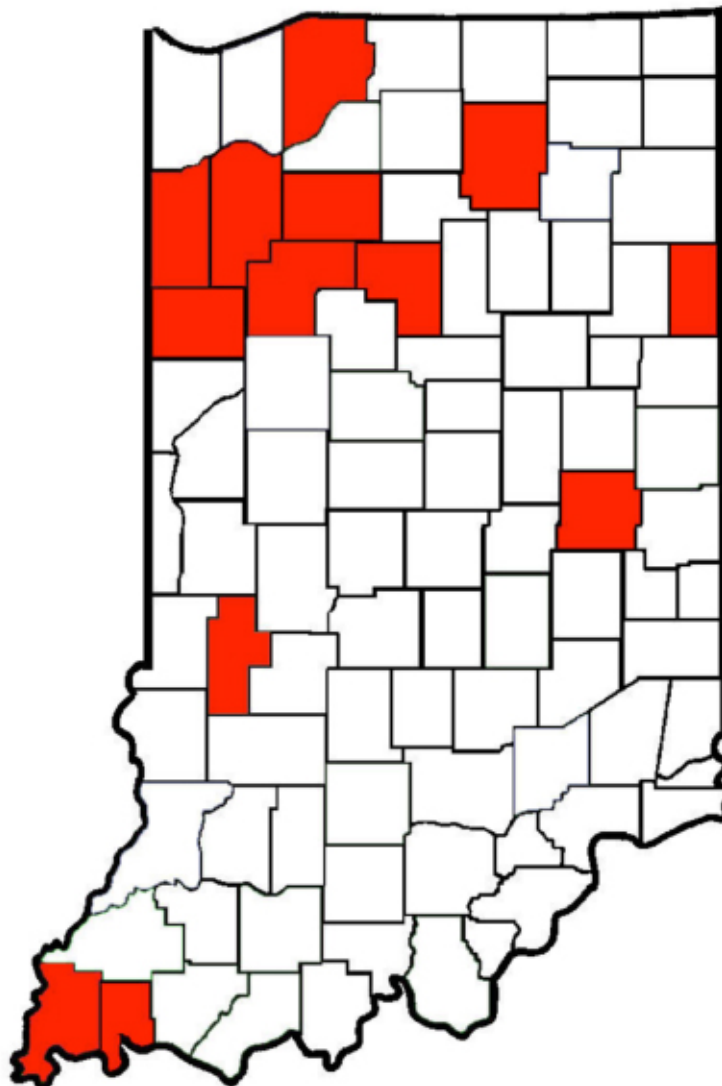
Links to recent Palmer publications from Purdue Weed Science:

<https://ag.purdue.edu/btny/weedscience/Documents/Palmer_ID.pdf>

<<http://www.youtube.com/watch?v=wNgRvvnPQJ8>>

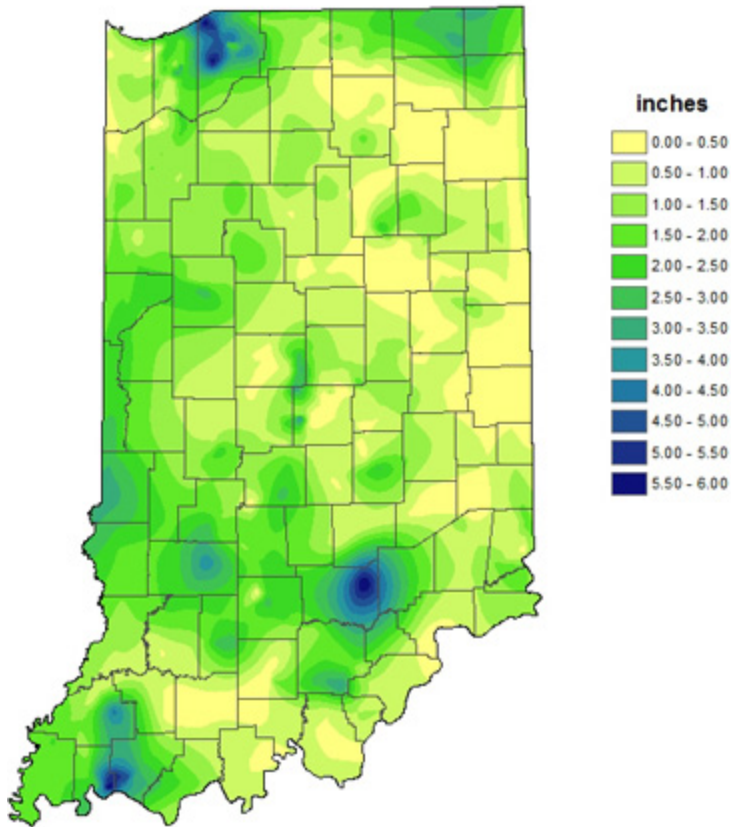
<<https://mdc.itap.purdue.edu/item.asp?itemID=21061>>

Counties in red have been confirmed to have populations of Palmer amaranth present within the county.
(As of 6/26/13)



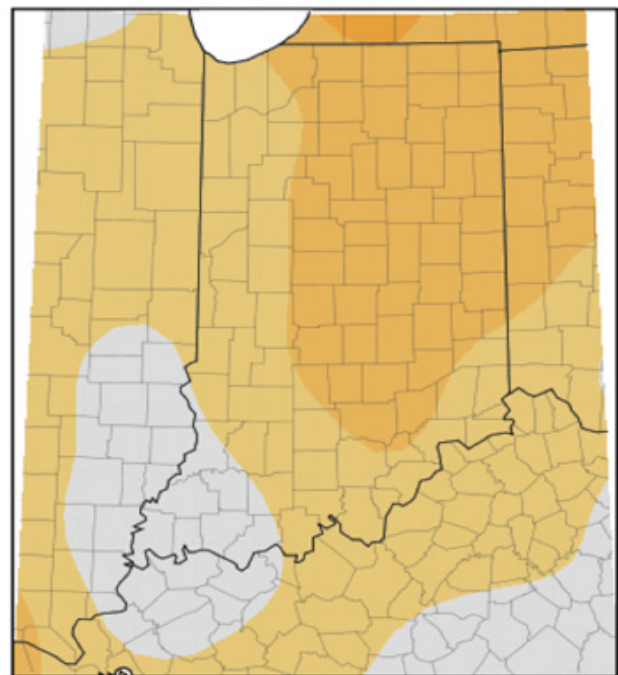
Weather Update

Total Precipitation June 20 - 26, 2013 CoCoRaHS network (475 stations)



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

Average Temperature (°F): Departure from Mean June 19, 2013 to June 25, 2013



Mean period is 1981-2010.



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

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