

Issue: 2018.3
April 20, 2018

Pest&Crop newsletter

Purdue Cooperative Extension Service and USDA-NIFA Extension IPM Grant

In This Issue

- [Black Cutworm Adult Pheromone Trap Report](#)
- [Black Cutworm and Armyworm Moths Active, Regardless of Harsh Spring Conditions](#)

- [Armyworm Pheromone Trap Report](#)
- [Total Snowfall April 12-18, 2018](#)
- [Maximum Weekly Planting Progress for Corn and Soy in Indiana: Has It Increased Over Time?](#)

It is the policy of the Purdue University that all persons have equal opportunity and access to its educational programs, services, activities, and facilities without regard to race, religion, color, sex, age, national origin or ancestry, marital status, parental status, sexual orientation, disability or status as a veteran. Purdue is an Affirmative Action Institution. This material may be available in alternative formats. 1-888-EXT-INFO Disclaimer: Reference to products in this publication is not intended to be an endorsement to the exclusion of others which may have similar uses. Any person using products listed in this publication assumes full responsibility for their use in accordance with current directions of the manufacturer.

Pest&Crop newsletter © Purdue University - extension.entm.purdue.edu/newsletters/pestandcrop
Editor: Tammy Luck | Department of Entomology, Purdue University, 901 W. State St., West Lafayette, IN 47907

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 5/16/18
Adams	Mrs. Anderson's/2nd Grade School/Decatur		0	0	4			
Adams	Roe/Mercer Landmark	0	0	0	0			
Allen	Anderson/Syngenta	0	0	0	0			
Allen	Gynn/Southwind Farms	0	0	0	0			
Allen	Kneubuhler/G&K Concepts	0	0	0	1			
Bartholomew	Bush/Pioneer Hybrids	0	1	2	2			
Clay	Bower/Ceres Solutions/Clay City	0	0	0	0			
Clay	Bower/Ceres Solutions/Bowling Green	0	0	0	0			
Clay	Bower/Ceres Solutions/Brazil	0	0	4	2			
Clinton	Emanuel/Boone Co. CES	0	0	6	0			
Clinton	Foster/Rossville	0	0	0	0			
Daviess	Venard/Venard Agri-Consulting/Washington	1	2	2	0			
Daviess	Venard/Venard Agri-Consulting/Elnora	0	0	2	1			
DeKalb	Hoffman/ATA Solutions		0	0				
Dubois	Eck/Dubois Co. CES	0	0	0	3			
Elkhart	Kauffman/Crop Tech Inc.	0	0	0	1			
Fayette	Schelle/Falmouth Farm Supply Inc.	0	0	5	17			
Fountain	Mroczkiewicz/Syngenta	0	0	0	7			
Fulton	Ranstead/Ceres Solutions/Rochester		0	0	0			
Fulton	Jenkins/Ceres Solutions/Talma	0	0	0	0			
Greene	Venard/Venard Agri-Consulting/Newberry	1	4	5	0			
Hamilton	Campbell/Beck's Hybrids	0	0	0	4			
Hendricks	Nicholson/Nicholson Consulting	0	0	0	0			
Jasper	Overstreet/Jasper Co. CES	0	0					
Jasper	Ritter/Brodbeck Seeds	0	0	0				
Jay	Boyer/Davis PAC	0	0	0				
Jay	Shrack/Ran-Del Agri Services	0	0	4	2			
Jay	Temple/Jay Co. CES/Redkey	0	0	3	1			
Jay	Temple/Jay Co. CES/Pennville	0	0	3	1			
Jennings	Bauerle/SEPAC	0	1	0	3			
Knox	Bower/Ceres Solutions/Freelandville	0	0	0	0			
Knox	Bower/Ceres Solutions/Vincennes	0	0	0	0			
Kosciusko	Klotz/Etna Green	0	0	0	0			
Lake	Kleine	0	0	2	3			
Lake	Moyer/Dekalb Hybrids/Shelby	0	0	0	0			
Lake	Moyer/Dekalb Hybrids/Scheider	0	0	4	0			
LaPorte	Rocke/Agri-Mgmt. Solutions/Wanatah	0	0	0	1			
Marshall	Harrell/Harrell Ag Services/Trap 1	0	0	0	0			
Marshall	Harrell/Harrell Ag Services/Trap 2	0	0	0	0			
Marshall	Klotz/SR 10 & SR 331		0	0	0			
Marshall	Miller/Ceres Solutions		0	0	8			
Miami	Early/Pioneer Hybrids	0	0	0	1			
Montgomery	Delp/Nicholson Consulting	0	0	0	2			
Newton	Moyer/Dekalb Hybrids/Lake Village	0	0	2	0			
Porter	Leuck/PPAC	0	0		0			
Posey	Schmitz/Posey Co. CES/Cynthiana	0	0	0				
Posey	Schmitz/Posey Co. CES/St. Phillips W.	0	0	0				
Pulaski	Capouch/M&R Ag Services						0	
Pulaski	Leman/Ceres Solutions	0	0	0	3			
Putnam	Nicholson/Nicholson Consulting	0	0	1	8			
Randolph	Boyer/DPAC	0	0	0	4			
Rush	Schelle/Falmouth Farm Supply Inc.	1	0	3	2			
Shelby	Fisher/Shelby County Co-op	0	0	0				
Shelby	Simpson/Simpson Farms						2	
Starke	Capouch/M&R Ag Services							
St. Joseph	Barry/Helena						0	
St. Joseph	Carbiener	0	0	0				
Sullivan	Bower/Ceres Solutions/Farmersburg	0	0	0	0			
Sullivan	Bower/Ceres Solutions/Sullivan	0	2	4	2			
Tippecanoe	Bower/Ceres Solutions/Lafayette	0	0	0	1			
Tippecanoe	Nagel/Ceres Solutions	0	0	3	17			
Tippecanoe	Obermeyer/Purdue	0	0	0	1			
Tippecanoe	Ensign/Hoy Monsanto Research Farm	0	0	0				
Tipton	Campbell/Beck's Hybrids	0	3	0	1			
Vermillion	Bower/Ceres Solutions/Clinton	0	0	0	0			
Wabash	Enyeart/Ceres Solutions	0	0		1			
Whitley	Boyer, Richards/NEPAC/Schrader	-	0	0	2			
Whitley	Boyer, Richards/NEPAC/Kyler Farm	-	0	1	0			

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

It is the policy of the Purdue University that all persons have equal opportunity and access to its educational programs, services, activities, and facilities without regard to race, religion, color, sex, age, national origin or ancestry, marital status, parental status, sexual orientation, disability or status as a veteran. Purdue is an Affirmative Action Institution. This material may be available in alternative formats. 1-888-EXT-INFO Disclaimer: Reference to products in this publication is not intended to be an endorsement to the exclusion of others which may have similar uses. Any person using products listed in this publication assumes full responsibility for their use in accordance with current directions of the manufacturer.

Pest&Crop newsletter © Purdue University - extension.entm.purdue.edu/newsletters/pestandcrop
 Editor: Tammy Luck | Department of Entomology, Purdue University, 901 W. State St., West Lafayette, IN 47907

Black Cutworm and Armyworm Moths Active, Regardless of Harsh Spring Conditions

Author: John Obermeyer

Storm systems from the Southwestern portions of the country have brought more than rain showers. Many of our pheromone trap cooperators captured black cutworm moths over the last week...though numbers are relatively low. Most surprising was the number of armyworm moths captured in East Central Indiana at the Purdue Davis Ag Research Center. It is as though these insects are trying to will Spring upon us!



Soon fields will be alive with the winter-annual hosts for black cutworm egg laying.

How do they do it? It continues to amaze me, because insects in general are inactive when temperatures dip below 50F. These moths, somehow, have the ability to sustain flight during these continual frigid nights in search of a mate. Remember, these are all male moths being captured in pheromone traps, as the volatile released mimics a calling female. Low captures, here and there, can be explained away with a “unique micro environment,” or such. However, over 250 moths, indicates how strong these urges are and why these insects are a perennial pest!

Bottom line...other than biologically fascinating, at least to me, with slow (or mostly NO) crop development, these early moths probably mean very little. Flying in these cold conditions is one thing, but successful mating and subsequent egg deposition on a host plant is very unlikely. Fortunately, our network of trap cooperators will provide us continual moth arrival and densities for weeks to come!

It is the policy of the Purdue University that all persons have equal opportunity and access to its educational programs, services, activities, and facilities without regard to race, religion, color, sex, age, national origin or ancestry, marital status, parental status, sexual orientation, disability or status as a veteran. Purdue is an Affirmative Action Institution. This material may be available in alternative formats. 1-888-EXT-INFO Disclaimer: Reference to products in this publication is not intended to be an endorsement to the exclusion of others which may have similar uses. Any person using products listed in this publication assumes full responsibility for their use in accordance with current directions of the manufacturer.

Pest&Crop newsletter © Purdue University - extension.entm.purdue.edu/newsletters/pestandcrop
Editor: Tammy Luck | Department of Entomology, Purdue University, 901 W. State St., West Lafayette, IN 47907

Armyworm Pheromone Trap Report

Armyworm Pheromone Trap Report

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				
Jennings/SEPAC Ag Center	0	0	2	5				
Knox/SWPAC Ag Center	0	27	44	45				

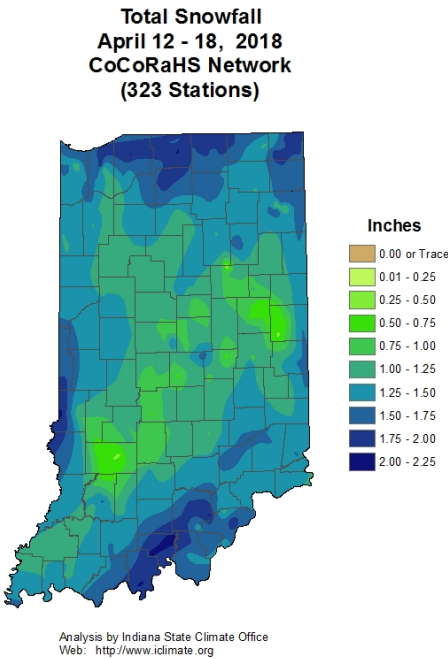
LaPorte/Pinney Ag Center	0	0	3	3
Lawrence/Feldun Ag Center	0	28	89	144
Randolph/Davis Ag Center	0	0	273	80
Tippecanoe/Meigs	0	0	1	5
Whitley/NEPAC Ag Center		0	22	22

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 = 4/19/19=4/25/18

It is the policy of the Purdue University that all persons have equal opportunity and access to its educational programs, services, activities, and facilities without regard to race, religion, color, sex, age, national origin or ancestry, marital status, parental status, sexual orientation, disability or status as a veteran. Purdue is an Affirmative Action Institution. This material may be available in alternative formats. 1-888-EXT-INFO Disclaimer: Reference to products in this publication is not intended to be an endorsement to the exclusion of others which may have similar uses. Any person using products listed in this publication assumes full responsibility for their use in accordance with current directions of the manufacturer.

Pest&Crop newsletter © Purdue University - extension.entm.purdue.edu/newsletters/pestandcrop
Editor: Tammy Luck | Department of Entomology, Purdue University, 901 W. State St., West Lafayette, IN 47907

Total Snowfall April 12-18, 2018



It is the policy of the Purdue University that all persons have equal opportunity and access to its educational programs, services, activities, and facilities without regard to race, religion, color, sex, age, national origin or ancestry, marital status, parental status, sexual orientation, disability or status as a veteran. Purdue is an Affirmative Action Institution. This material may be available in alternative formats. 1-888-EXT-INFO Disclaimer: Reference to products in this publication is not intended to be an endorsement to the exclusion of others which may have similar uses. Any person using products listed in this publication assumes full responsibility for their use in accordance with current directions of the manufacturer.

Pest&Crop newsletter © Purdue University - extension.entm.purdue.edu/newsletters/pestandcrop
Editor: Tammy Luck | Department of Entomology, Purdue University, 901 W. State St., West Lafayette, IN 47907

Maximum Weekly Planting Progress for Corn and Soy in Indiana: Has It Increased Over Time?

Author: Bob Nielsen

The number of 30-, 40-, and 60-ft wide (or larger) field crop planters across the U.S. Midwest is greater today than, say, twenty years ago. Certainly, individual farmers can plant more acres of corn and soybean per day with today's large field equipment than they could twenty years ago. This fact encourages optimism that planting season delays can be overcome by the capability of today's modern planters to plant a greater percent of the state's crop per week when "push comes to shove."

As is often the case with "logical conclusions", the historical data do not necessarily support the logic. Historical planting progress data suggest that the maximum number of acres of corn and soybean planted per week has not changed much over the past 20 years. The accompanying figures illustrate the number of acres and percent of total acres planted during the respective weeks of maximum planting progress for corn (Fig. 1), soybean (Fig. 2), and the two crops combined (Fig. 3) for Indiana during the past twenty years.

The most corn acres planted per week in Indiana during the past twenty years occurred in 2001 when 2.9 MILLION acres or 50% of the total acreage for that year were planted in a single week (Fig. 1). To most of us, such a planting pace borders on phenomenal. The closest Indiana farmers have come to matching that progress was during the 2014 planting season, when 41% of the total crop or 2.4 million acres were planting during a single week.

The most soybean acres planted in a single week in Indiana during the past twenty years also occurred in 2001 when 2.4 million acres or 42% of the total acreage for that year were planted in a single week (Fig. 2). Since then, the closest Indiana farmers have come to matching that progress was during the 2016 planting season, when 32% of the total crop or 1.8 million acres were planting during a single week.

Looking at the historical planting progress of each crop individually (Fig's 1 and 2) suggests that little improvement has been made in our ability to plant a lot of crop acres quickly. Some have countered that the potential TOTAL number of combined crop acres planted per week has increased because farmers are increasingly planting soybean at the same time as they are planting corn, when historically soybean planting occurred near the end of corn planting. Well, that turns out to be a bit of "fake news", also.

During the past twenty years in Indiana, the greatest number of corn AND soybean acres planted in a single week was also 2001 (no surprise), when 5.25 million acres of the two crops were planted in a single week, or 46% of the total number of corn and soybean acres planted that year (Fig. 3). During the past 20 years, the historical planting progress data suggests that the combined maximum weekly planting progress of the two crops has increased slightly, but not to any appreciable degree.

So, given the realities of ever larger planting equipment and the fact that farmers are frequently planting both crops at the same time these days, the conundrum is this... Why has the actual weekly planting progress of the two crops changed very little over the past 20 years? The answer does not appear to be related to changes in total crop acres planted in Indiana because that number has remained fairly constant in during that time period (Fig. 4).

One answer to the large planter vs. planting progress conundrum may be the fact that the number of corn and soybean growers in Indiana has

decreased over time and those remaining are farming more acres than they did twenty years ago. Even though farm machinery is larger today and cover more acres per day than twenty years ago, fewer farmers are farming more acres and so total planting progress in terms of percent of total acres per week remains fairly unchanged. Coupled with that thought is the reality that weather and soil conditions dictate the number of days available during any given week for field work and planting.

For what it's worth, that's my opinion and you are entitled to it.

Related reading

Irwin, Scott and Todd Hubbs. 2018. How Many Days Does It Take to Plant the U.S. Corn Crop? farmdocDAILY, Univ. of Illinois. <http://farmdocdaily.illinois.edu/2018/04/how-many-days-does-it-take-to-plant-us-corn-crop.html> [URL accessed Apr 2018].

Nielsen, RL (Bob). 2018. The Planting Date Conundrum for Corn. Corny News Network, Purdue Univ. <http://www.kingcorn.org/news/timeless/PltDateCornyId.html> [URL accessed Apr 2018].

USDA-NASS. 2018. Quick Stats. USDA Nat'l Ag. Statistics Service. http://www.nass.usda.gov/Quick_Stats [URL accessed Apr 2018].

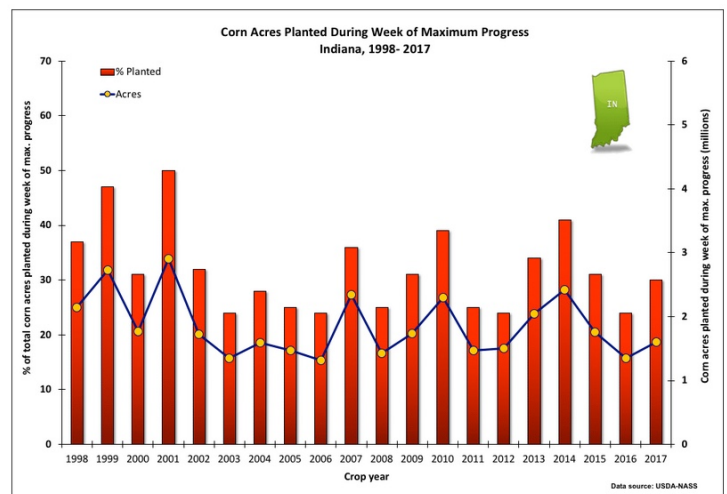


Fig. 1. Acres (actual and percent of total) of field corn planted during the week of maximum planting progress in Indiana, 1998 - 2017. Data source: USDA-NASS. Note that the exact weeks of maximum soybean planting progress may not be the same weeks as those of maximum corn planting progress.

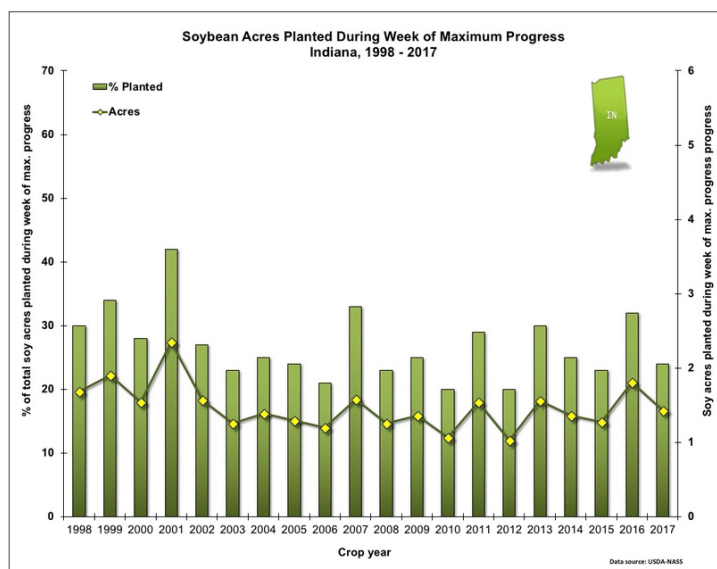


Fig. 2. Acres (actual and percent of total) of soybean planted during the week of maximum planting progress in Indiana, 1998 - 2017. Data source: USDA-NASS. Note that the exact weeks of maximum soybean planting progress may not be the same weeks as those of maximum corn planting progress.

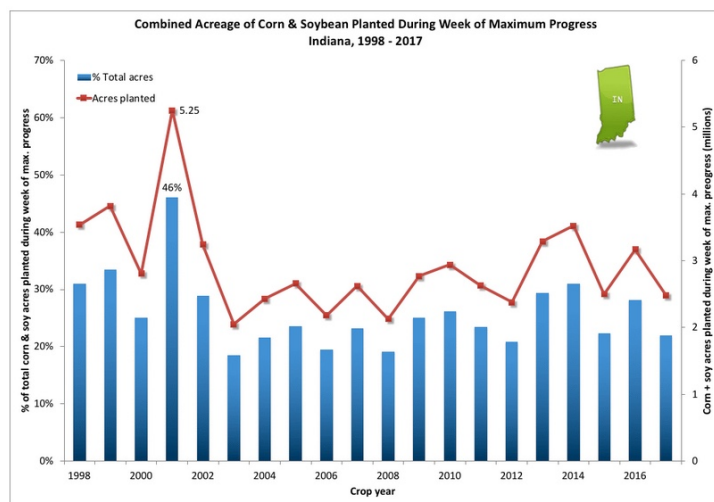


Fig. 3. Acres (actual and percent of total) of field corn plus soybean planted during the week of maximum planting progress (both crops total) in Indiana, 1998 - 2017. Data source: USDA-NASS. Note that the exact weeks of maximum single crop progress may differ from the weeks of maximum two-crop progress.

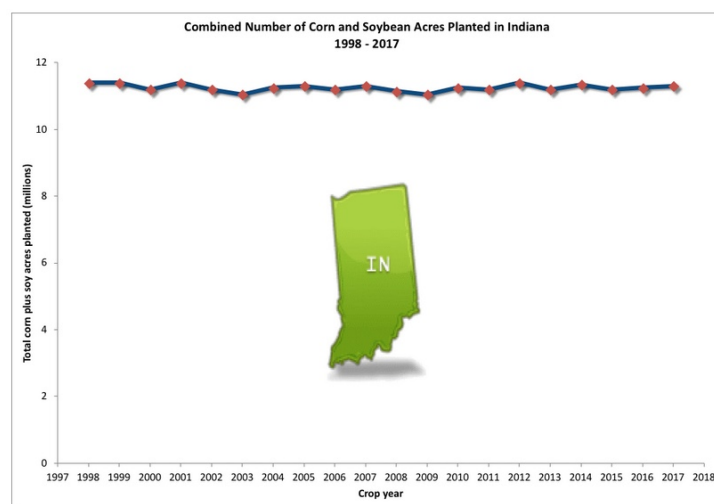


Fig. 4. Combined number of acres planted to corn and soybean in Indiana, 1998 - 2017. Data source: USDA-NASS.