

# Pest & Crop newsletter

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

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## “April Showers Bring...” Black Cutworm

As I write this, spotty showers are moving through the state. At this time of the year, my interest is where those fronts are moving from. Strong fronts, especially from the southwestern part of the country, pickup and carry winged insects into the Midwest, most notably black cutworm. It is still believed that this pest, of many plants, does not overwinter in the Corn Belt, but rather arrives on these storms and literally “rains” moths. So, every year is a reset with this pest.

Black cutworm does not instill fear into corn producers as it did for decades, probably for two main reasons, planting date and seed-applied insecticides. Because black cutworm’s egg hatch and larval development is triggered by heat accumulation (50°F threshold), it takes some time for them to reach the size to damage, and/or cut, corn seedlings. The trend with earlier/more planting and the improved hybrid’s early vigor has likely allowed corn to outgrow any damage. Too, with virtually all corn seed treated with a seed-applied insecticide, there is systemic protection within the corn seedling. Though this translocated insecticide is short-lived, it is enough for early developing black cutworm larvae. It is important to note that this is not true with mid-later developed larvae. Think...black cutworm initially feeding and developing on weeds/cover crops and then shifting to emerging corn after herbicide application.

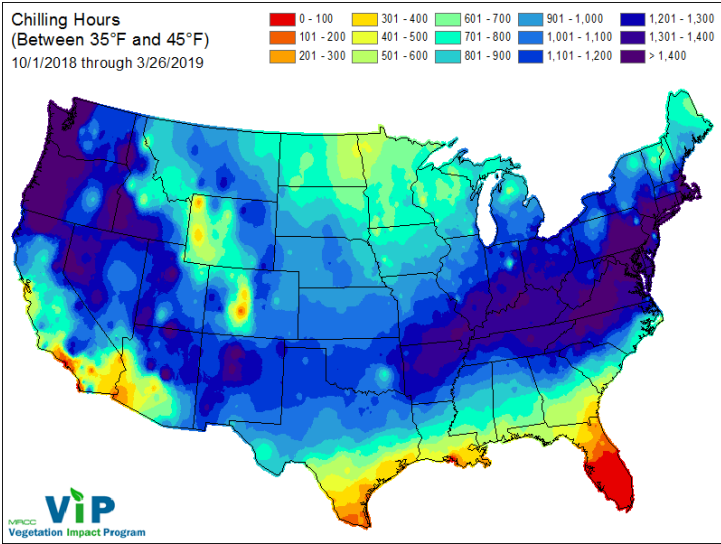
Today, March 28, cooperators throughout the state will place their pheromone traps out and begin to monitor, on a daily basis, for black cutworm. Good timing, as we have rains originating from the southwest and temperatures into the 50’s and 60’s. Timing, and intensity, of moth captures allows us to begin tracking heat unit accumulations and anticipating larval development. A late-planting spring and numerous arriving moths, along with delayed weed/cover crop termination, could set the stage for significant field damage. Will it happen this year? I hope not. But, I sure am grateful to trappers from Posey to St. Joseph Counties that are watching and counting. Look for their report in upcoming issues of the Pest&Crop.



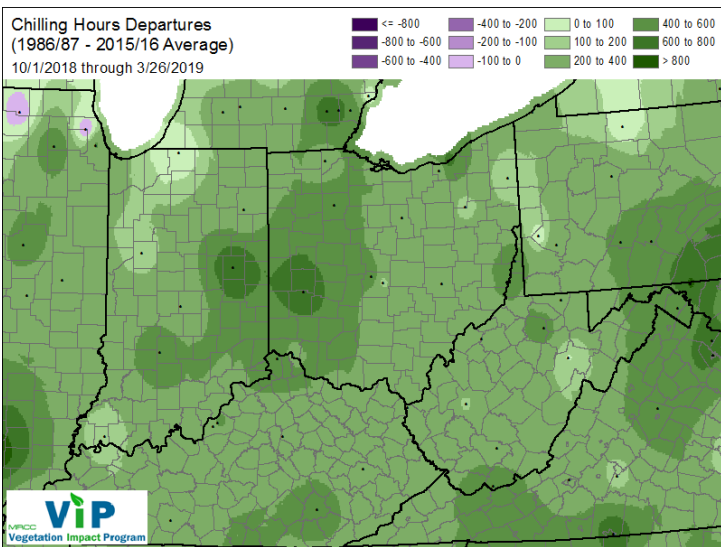
One cooperator’s pheromone trap up and ready. (Picture submitted by Larry Temple)

## Indiana Climate and Weather Report 3/27/2019

As March wraps up, both temperature and precipitation appear to be near normal for the month. This is hard to imagine given the variability experienced throughout the month! The days either felt colder or warmer than normal, but rarely normal. There were some precipitation events that caused flooding – particularly in southern Indiana, but overall the dry days seemed to offset the wet days. There have been very few growing degree-days accumulated across the state in March, so using April 1 as a start date for accumulating GDDs (base 50°F) should be reasonable. Accumulated chilling hours (for temperatures between 35°F and 45°F) are slightly above normal across most of the state (see Figure 1; <https://etweather.tamu.edu/chill/>), which will hopefully be a good sign for perennial fruit yields and quality in 2019. The region is still drought free and is anticipated to remain so due to more precipitation in the 1-2 week forecasts. Temperatures are expected to stay cooler than normal for the next 6-10 days with some confidence of above normal precipitation over the next 8-14 days. The risk for spring freezes still exists across the state. Figure 2 shows the 75th percentile date of the last 32°F freeze across the state, indicating 75% of the years from 1981-2010 had a 32°F freeze event on or before the date indicated (i.e., 25% of the years had a 32°F freeze event after the date shown).

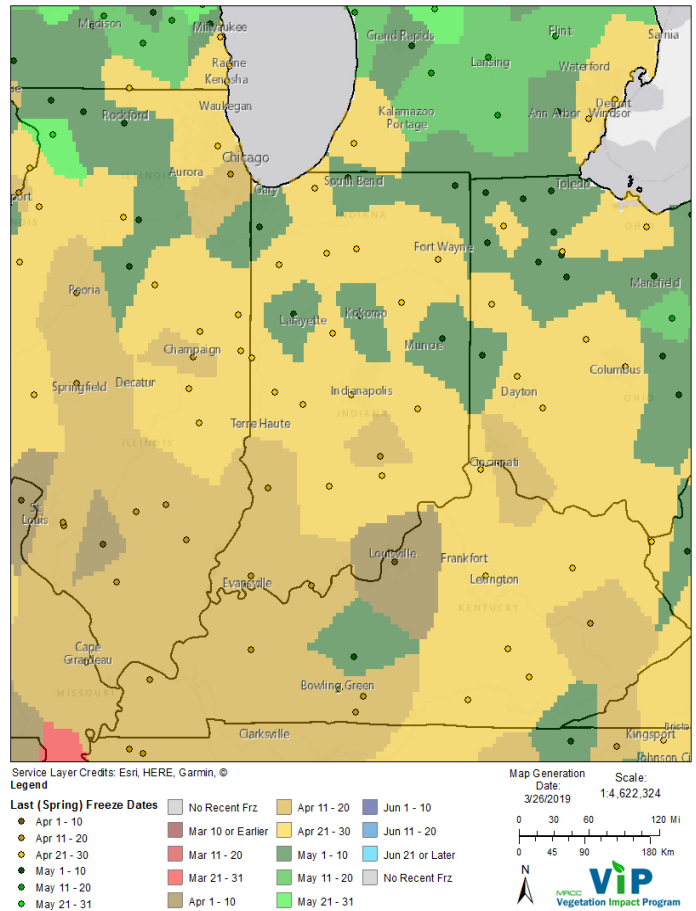


Chilling hours (between 35 and 45 F) 10/1/2018 through 3/26/2019



Chilling Hours Departures (1986/87 - 2015/16 Average) 10/1/2018 through 3/26/2019

Climatology: Late (75th percentile) Last (Spring) 32°F Freeze, based on 1981-2010 data



Climatology: Late (75th percentile) Last (Spring) 32 F Freeze, based on 1981-2010 data

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