

# Pest & Crop newsletter

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

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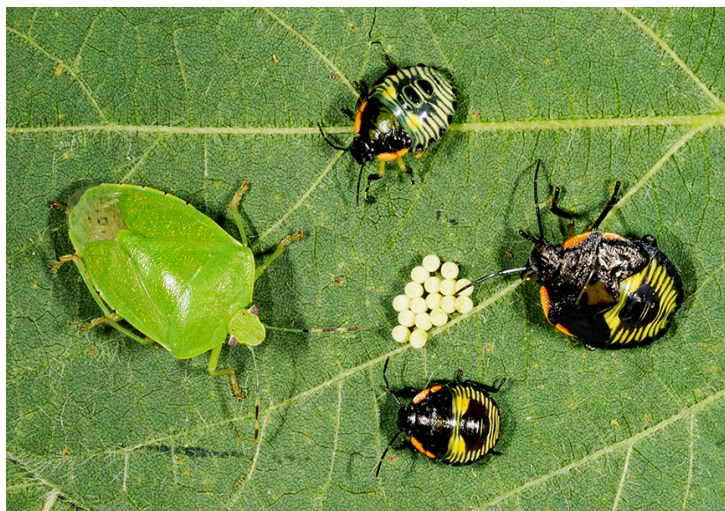
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## Green Stink Bug, Worth a Look in Seed-Filling Soybean Fields

(John Obermeyer) & (Christian Krupke)

With this season's planting delays, soybean growth stages are anywhere from beginning pod development to near maturity. For the last couple of years, especially last season, there has been a noticeable population of green stink bug in some Indiana soybean fields. Both green stink bug adults and nymphs feed using their piercing-sucking mouthparts. They cause injury to soybean by puncturing pods and sucking fluid from the developing beans. This feeding also introduces bacteria, fungi and yeasts that may cause further damage. Seeds that do develop despite stink bug pod feeding may be smaller, shriveled, and/or discolored. This damage may lower quality, and ultimately reduce yields. Green stink bug may appear in soybean fields from mid-July through harvest time.



Green stink bug adult, eggs, and nymphs



Close-up of an adult green stink bug feeding on a pod

Last year, several factors (e.g., heavy rains, warm day/night temperatures, multiple fungal diseases, etc.) combined late in the season to cause an inordinate number of damaged soybean seed at harvest. Many samples were sent to the Purdue Plant & Pest Diagnostic Lab, and all were found to have multiple factors causing the damage. Meaning...green stink bug feeding was one of several contributing causes to shriveled and/or discolored seed.



Stink bug damage on the left, bean leaf beetle damage to middle and right seeds





Damaged seed from multiple factors, including stink bug

In sweep-net surveys of soybean fields last season, it was very obvious that green stink bug prefer feeding on pods with well-developed seeds, especially growth stage R6, aka "butter beans." Currently, there are many fields in the seed-fill stages, more so than normal in early September. However, in our random observations, there doesn't appear to be as large a population of stink bugs present this year. Because populations vary from county to county and field to field, we recommend sampling soybean in the seed-fill stages. Although sweep-net sampling is ideal for this purpose, just getting out and looking for adult and nymph stink bugs on or around pods is sufficient. A threshold of 40 stink bugs (adult and nymphs) per 100 sweeps is considered a treatment level. Should an insecticide treatment be justified, consider the product's pre-harvest interval (PHI), that is the number of days from treatment to harvest, label ranges from 14 to 45 days. Recommended insecticides, with PHI's, can be found [HERE](#). Happy scouting!

## 2019 Corn Earworm Trap Report

(Laura Ingwell)

## 2019 Corn Earworm Trap Report

**Click here for recent catch information**



## Indiana Climate and Weather Report - 9/06/2019

(Beth Hall)

Welcome to September! Are we in the home stretch for the growing season? Precipitation has been falling intermittently throughout the state, but nothing compared to what Hurricane Dorian is sharing. Expect increased possibilities of above normal precipitation through the mid-September, particular in northern regions of the state. Above-normal temperatures should continue throughout most of the month (Figure 1). Drought conditions continue to hang around the southeastern and northwest parts of Indiana but there are no strong indications these abnormally dry regions will worsen.

As we start thinking about the risk for an early fall freeze, early September is still too soon to predict. From a climatological perspective, the median first 28°F freeze (1980/1981 - 2009/2010 climate period) in Indiana occurred between mid-October to early November (Figure 2). Over this 30-year period, these dates indicate that half the years had the first 28°F freeze occur before the date shown on the map; half the years had the first 28°F occur after the date shown. To see the climatological probability of the first freeze occurring before or after a particular date for your local area, log into the Midwestern Regional Climate Center's online data and tools portal, [cli-MATE](#). Once logged in, you can find your nearby station of interest (near the top of the web page click the "Select Daily Station" button). The freeze probabilities can be found along the left-hand navigation list under "Charts and Graphs" > "Freeze Probability Graphs".

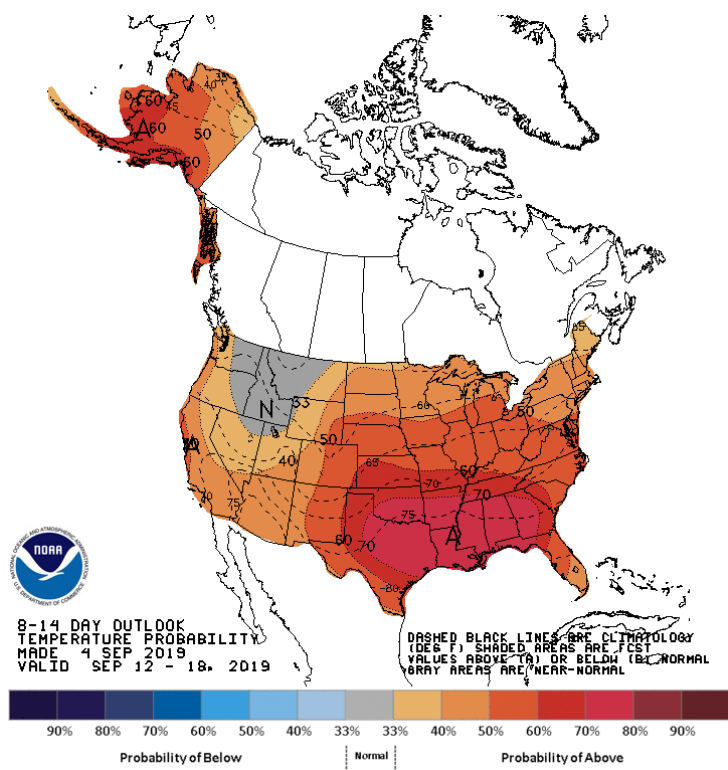


Figure 1. 8-14 Day Outlook

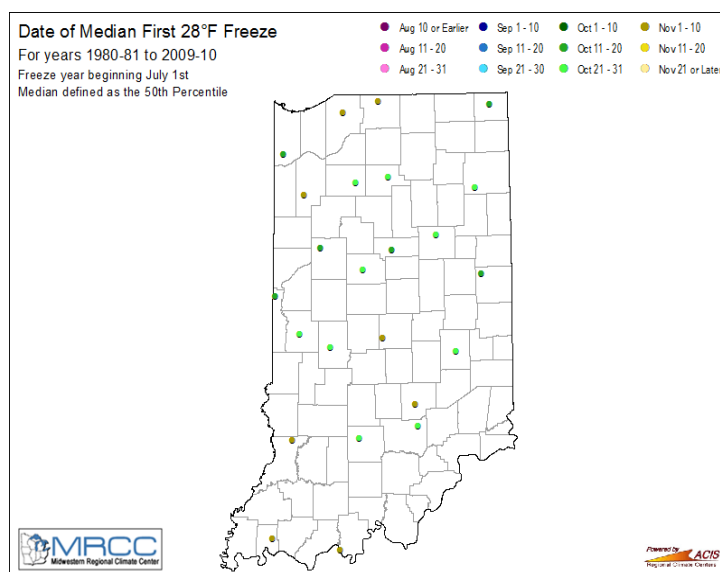


Figure 2. Date of Median First 28F Freeze

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