

NC Cooperative Extension - Hertford County Center

July 21, 2022

Hertford Crop News

Corn Earworm Flight Has Started

Light trap catches across the state are up this week and have been highest in Wilson and southern Edgecombe counties. Trap data to monitor corn earworm flight can be found <u>here</u>. I hope to have a blacklight trap up in the county by the first of next week and will keep growers updated if flights increase in our area.

The flight increase is an indication that a flight is on in the southern part of our state and that cotton at bloom should be <u>scouted for bollworm</u>.

There has also been widespread unexpected injury in corn expressing the Vip3A toxin (Leptra and Trecepta are common names). We aren't sure why this is the case and bollworm numbers have been <u>extremely high in corn this year</u>. However, given this observation in corn, it is imperative that **all cotton (including varieties that express the Vip3A toxin- Bollgard 3, TwinLink Plus, and WideStrike 3) is scouted for bollworm this year**. We are not recommending any changes to thresholds or management this year. Be sure to use an insecticide with chlorantraniliprole (Prevathon or Besiege which is Prevathon + pyrethroid) as the active ingredient.

Our thresholds are:

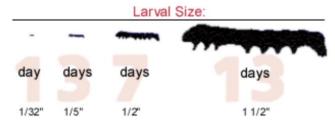
Bollgard II, TwinLink, WideStrike:

• 25 total eggs on 100 leaves or fruiting structures (search throughout the canopy on multiple plants)

Bollgard 3, TwinLink Plus, WideStrike 3:

- 4% damaged bolls (**this is the preferred threshold**) OR
- 3 live second-stage bollworms (1/8 inch or longer) per 100 fruit (pay particular attention to bollworms in or under yellow, pink, or dried blooms stuck to young bolls), or
- 2 second-stage bollworms on 2 consecutive scouting trips, or

• 1 second-stage bollworm on 3 consecutive scouting trips



This article can be found on the NC State Cotton Portal here.

Corn Earworm & Stinkbug in Soybean Information

While knowing we have a large corn earworm flight this year, this is not a guarantee that they will be high in soybeans (see this article), but we should definitely be scouting. Note that previous research <u>does not support treating corn earworm in flowering soybeans</u>. Therefore, it's important to hold off until pods are present to make a treatment decision. <u>Spraying insecticides at flowering can kill beneficial insects</u>.

When soybeans begin to pod, earworm management will be critical. For determining corn earworm threshold, use the <u>soybean threshold calculator</u> to input the information below. Find an example here:

Corn Earworm Economic Threshold Calculator

Use the calculator below to estimate an economic injury level for corn earworm in soybean. You'll need to know the samplin soybeans.

Sampling Method	Sweep Net (7 - 21 inch rows)				
Control Costs (\$) (Product + Application)	18.00				
Price of Soybean (\$)	13.00 per bushel				
Row Width	14 inches ~				
EIL: Update	2.65 caterpillars per 15-sweep sample				

Beat cloth: sample two rows, 3 feet on each side, for a 6 row-foot sample

Sweep net: each sweep should cover 5, 3, or 2 rows of 7 inch, 14 inch, or 21 inch rows, respectively

Rigid beat cloth: sample two 7" rows simultaneously (side by side rows) or one row if at, or above, 14 inch row width

With a potential high corn earworm year, it will be important to keep beneficial insects in the system. Worm specific insecticides like Intrepid Edge, Steward, or Blackhawk are recommended when reaching threshold for corn earworm in podding soybeans. Make sure stinkbug thresholds are met before adding a pyrethroid to the tank to avoid killing necessary beneficials.

It is also recommended to not use insecticides like Prevathon or Besiege in soybeans to preserve its effectiveness in controlling bollworm in cotton. See the <u>article</u> from Dr. Reisig for a further explanation.

Stink Bug Economic Threshold Calculator

> en Español

Use the table below to estimate an economic injury level for stink bug in soybean. You'll need to know the sampling method and row spacing.

Producer Type	Seed and Edible				Grain			
Row Width (in)	7	14	21	30-40	7	14	21	30-40
Beat Cloth (per row foot)				0.5				1
Sweep Net (15 Sweep SAMPLE)	2.5	2.5	2.5		5	5	5	
Rigid Beat Cloth (per row foot)	0.2	0.2	0.3		0.4	0.4	0.6	

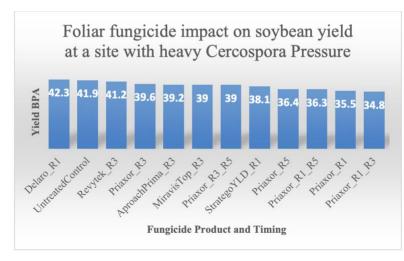
Double these thresholds when soybean reaches growth stage R6.5.

Fungicides in Soybean

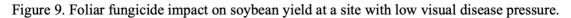
As insecticide applications are being made in soybean, you may be considering whether or not to add in a fungicide. An <u>analysis or 877 entries</u> into the NC Soybean Yield Contest indicated that foliar fungicide use was a strong predictor of high soybean yield in the state. <u>Small-plot research</u> from Dr. Dunphy's program from several years ago found that on average single MOA foliar fungicides protected yield by 1-2 bu/A and multi-MOA foliar fungicides protected yield by 2-3 bu/A. Below you will find results from <u>Dr. Vann's 2021 foliar fungicide testing program</u> from multiple locations with varying levels of disease:

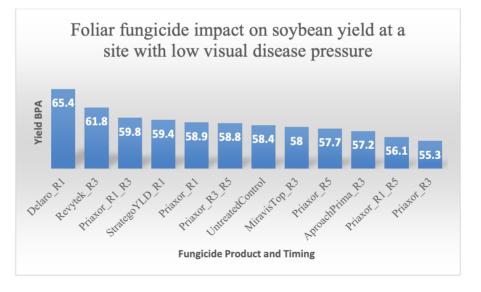
Yield: No impact of foliar fungicides on soybean yield at this location (Table 3). Previously literature has reported inconsistent impact of foliar fungicides on Cercospora pressure.

Figure 6. Fungicide impact on soybean yield at the Union County location with heavy Cercospora pressure.



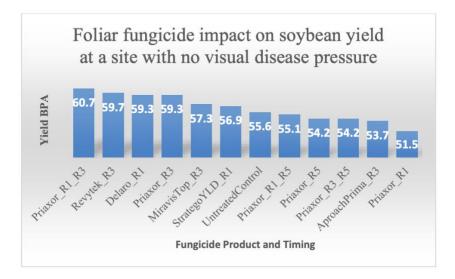
Yield: Foliar fungicides trended towards impacting yield at this site, but there were not statistical differences between treatments (Table 3).



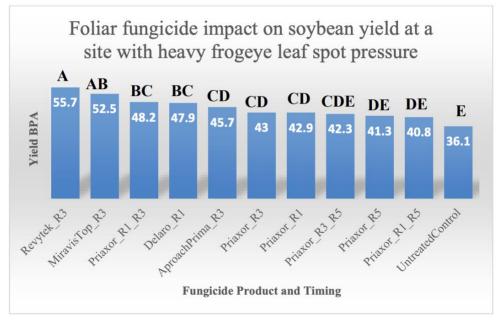


Yield: Foliar fungicide did not impact soybean yield at this site (Table 3).

Figure 11. Foliar fungicide impact on soybean yield at a site with no visual disease pressure.



Yield: Fungicides had a large impact on soybean yield at this location (Table 3). Figure 4. Fungicide impact on soybean yield at the Edgecombe County location with heavy frogeye leaf spot pressure.



*Values with the same letter are not significantly different at a 90% confidence level. *Stratego YLD yield not reported due to an error in the field by the Soybean Extension Team

It is important to know the disease resistance packages of your variety. If dry weather ensues, disease presence will likely be low. If disease is detected, a fungicide between <u>R1-R3</u> with <u>multiple MOA</u> is recommended.

Century Farm Photo Request

The Museum of the Albemarle has been selected by the Smithsonian Institution and the NC Humanities Council to be a host site for the traveling exhibit *Crossroads: Change in Rural America* (<u>https://museumonmainstreet.org/content/crossroads</u>). The exhibition will be on display from January 24, 2023 to March 8, 2023.

The Museum would like to have a photograph component to the exhibition focusing on the Century Farms of northeastern North Carolina. According to the <u>https://www.ncagr.gov/paffairs/Century/location.htm</u> website, farms that have filed for inclusion in North Carolina's Century Farm listing must have been owned by the same family for over 100 years. As of June 2022, more than 185 farms in the Albemarle region have been placed on the registry. Gates County has the largest number, with 49. The earliest on the registry in this region dates to 1735 in Hertford County. Over 90 farms in the state are registered as Bicentennial Farms, three registered within the Albemarle region.

If you are interested in participating, we would like to submit at least 3 images from individual Century Farms from Hertford County. The image can be historic or modern. Images with people are of particular interest, but not always available of course. If interested, please contact the Hertford County Extension Office at 252-358-7822.

CHROME Regional Ag Expo – August 16th



This year's CHROME Ag Expo is set for **Tuesday**, **August 16**, **2022** in Bertie County at the <u>Peanut Belt Research Station</u> in Woodville, NC. The field tour will feature several North Carolina State University Extension Specialists that will focus on corn, cotton, peanut, and soybean management.

Registration will begin at 3:00 p.m. with field tours starting at 3:30 p.m. A catered meal will follow after the conclusion of the tours. Local agriculture businesses will be present with displays.

2 hours of NCDA Pesticide N,O,D,X & CCA credits will be available.

RSVP requested online at: <u>go.ncsu.edu/2022chromeagexpo</u>

Click here to see field tour topics: 2022 CHROME Field Day Information

For any additional questions, contact Dylan Lilley, Hertford County Agriculture Agent, at 252-358-7822.

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