



# Impact of stink bugs on field crops

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The slide contains two columns of text. The left column is preceded by an illustration of a red turkey standing next to a large maroon 'V' logo. The right column is preceded by a small illustration of a brown stink bug.

- Have beaks
- Can fly/disperse
- Likelier to be found on field borders
- Wary of humans
- Unpredictable

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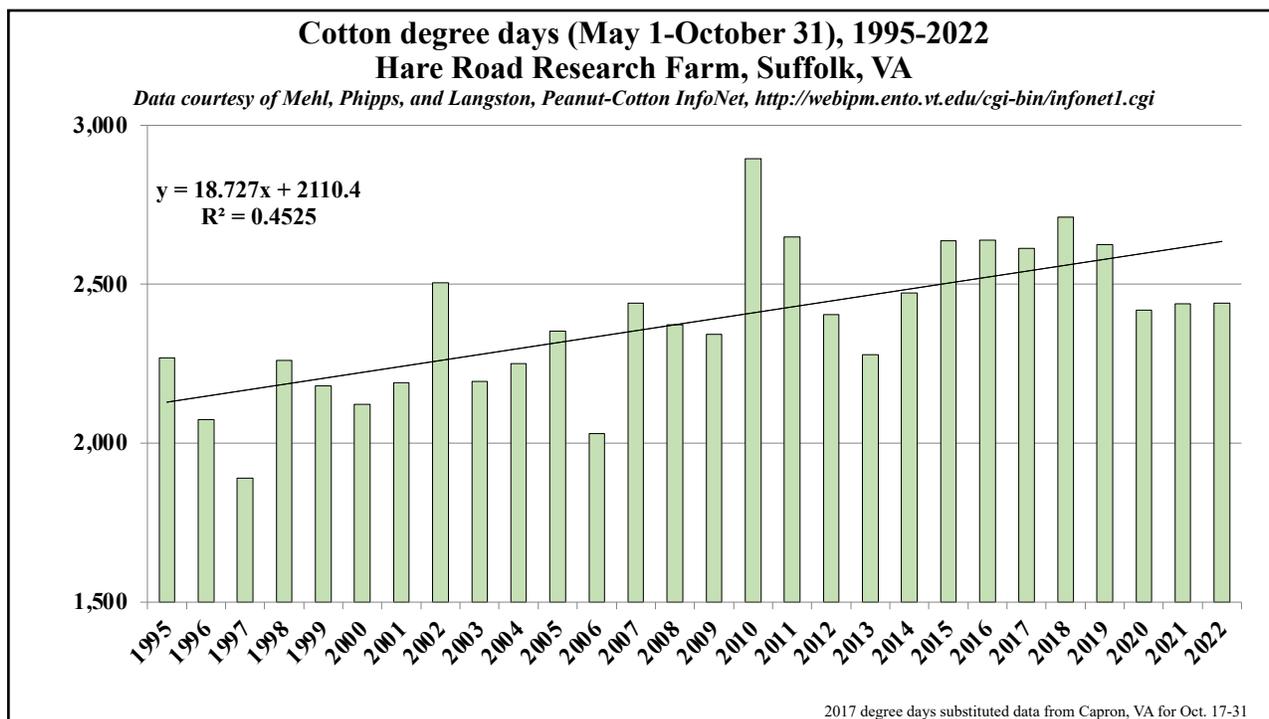
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NOT A PEST  
From: TAMU

From: UC ANR

From: <https://extension.entm.purdue.edu/fieldcropsipm/insects/greenstinkbug.php>

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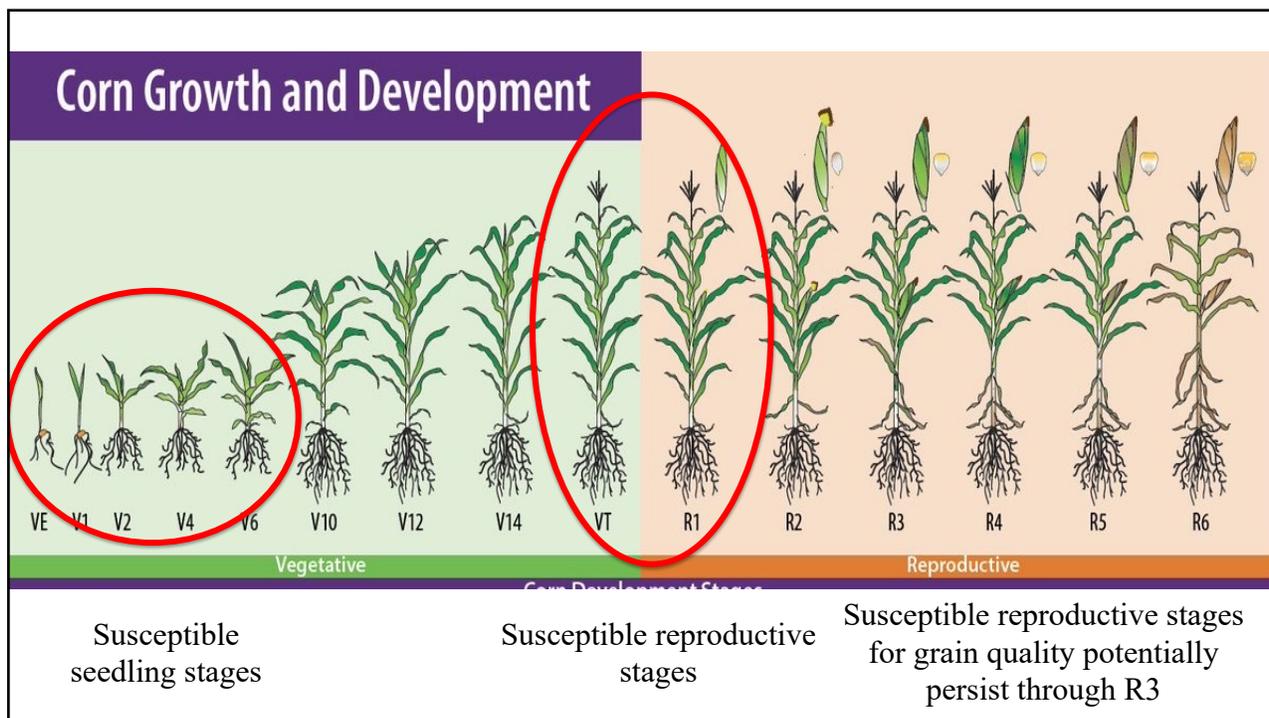
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## “High-risk” fields

- No-till with heavy cover
- Wheat-corn interfaces
- Corn planted behind soybeans



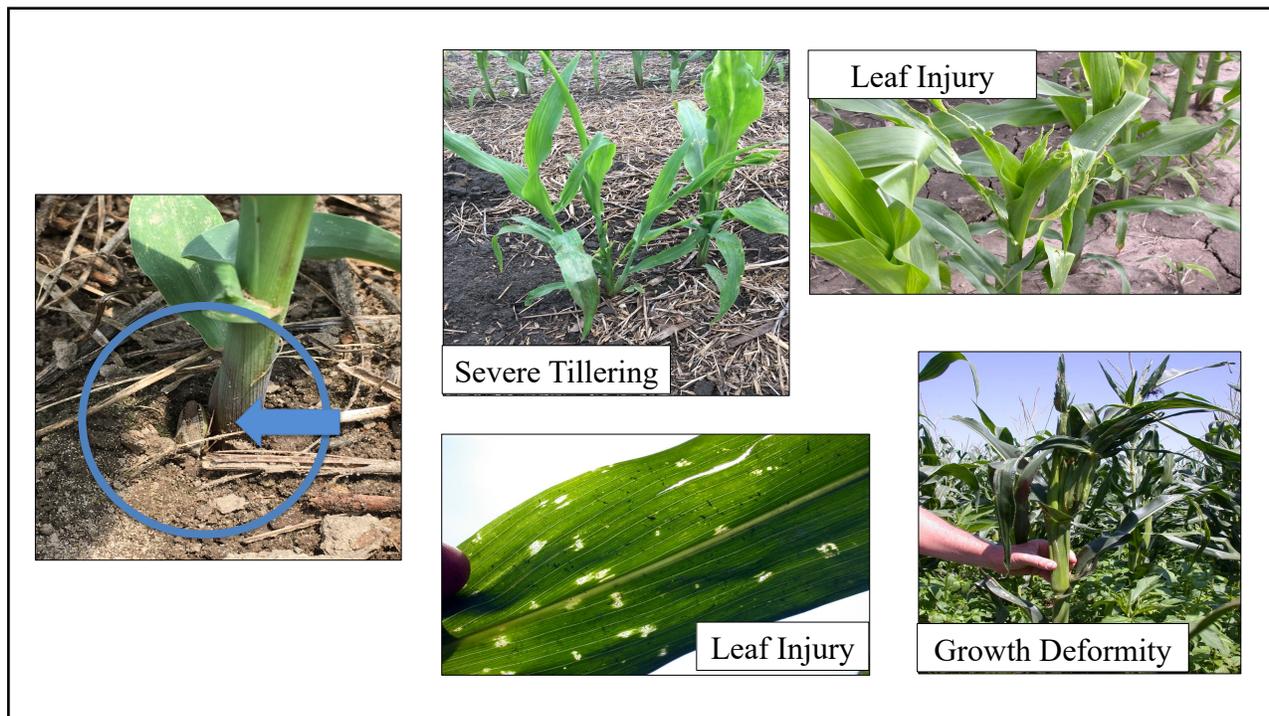
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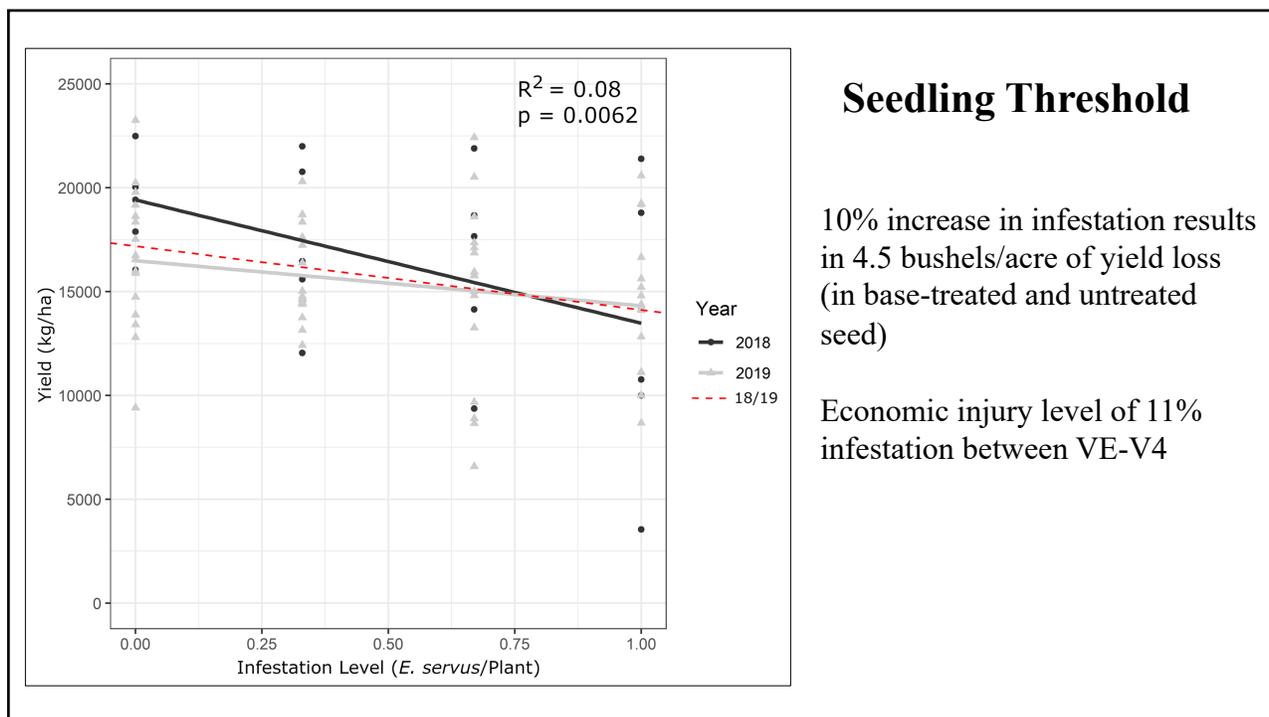
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### Seedling Threshold

10% increase in infestation results in 4.5 bushels/acre of yield loss (in base-treated and untreated seed)

Economic injury level of 11% infestation between VE-V4

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## Seed treatments and in-furrow applications

- Corn seed is treated with neonicotinoids at three rates – 0.25, 0.50, and 1.25 mg a.i./seed
- In-furrow applications made for soil pests – most commonly bifenthrin and terbufos

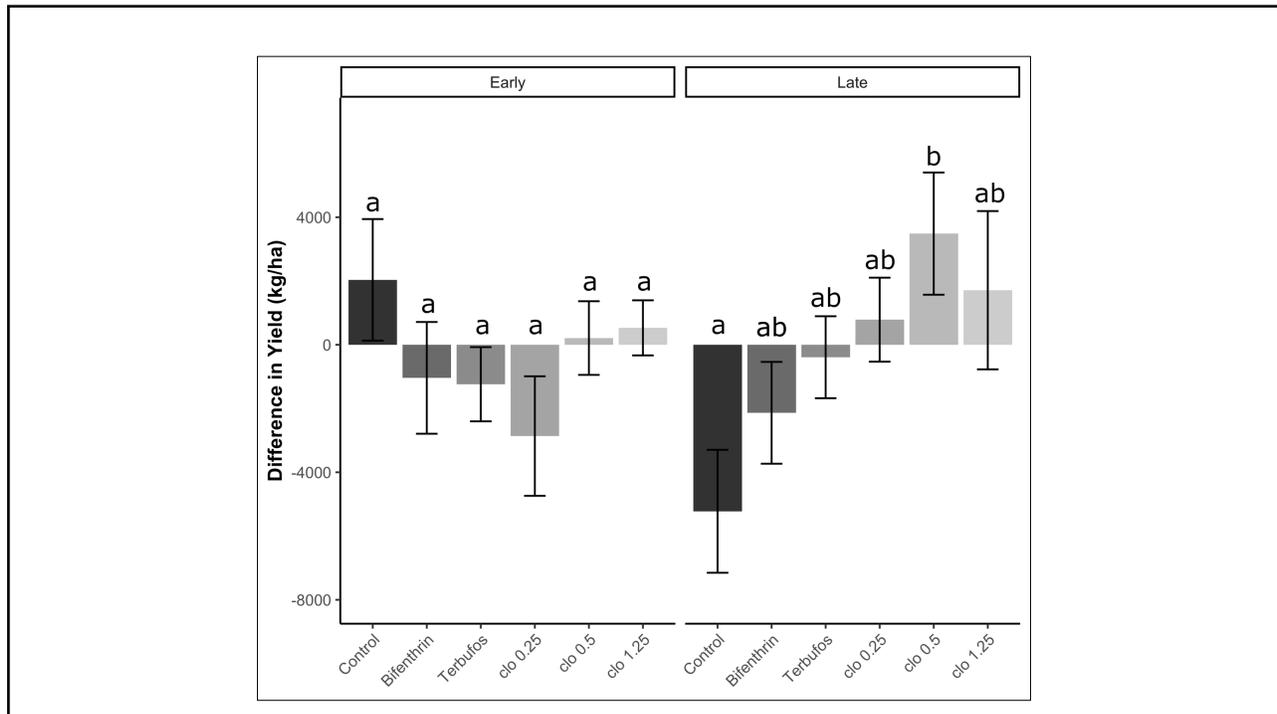


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Difference in Leaf Height/Yield = Average of cage without insects  
– average of cages with insects



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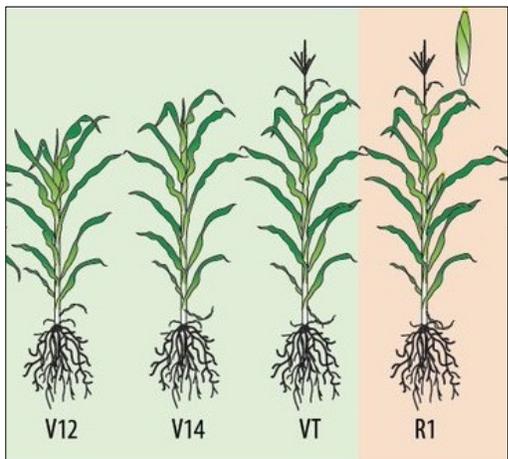
## Recommendations

- High rate (0.5-1.25 mg a.i./seed) seed treatment provided control
- Later planted corn more susceptible to injury
- Early plant injury is often compensated for in yield



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# Reproductive Threshold



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## Corn – Stink bug reproductive injury



Ear deformity\*



Poor pollination/small ear weight\*

\*Can be confused with nutrient and moisture stress



Fungal contamination

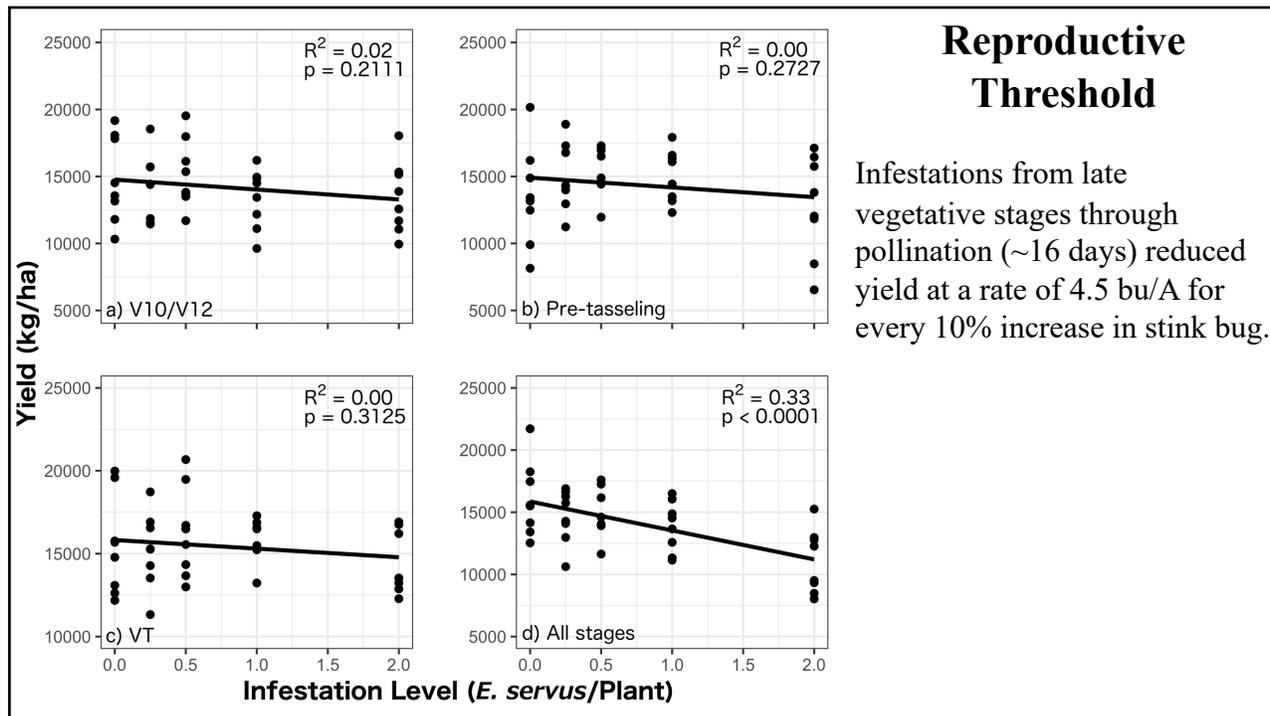
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## Sprayed vs. Unsprayed



Quality issues?

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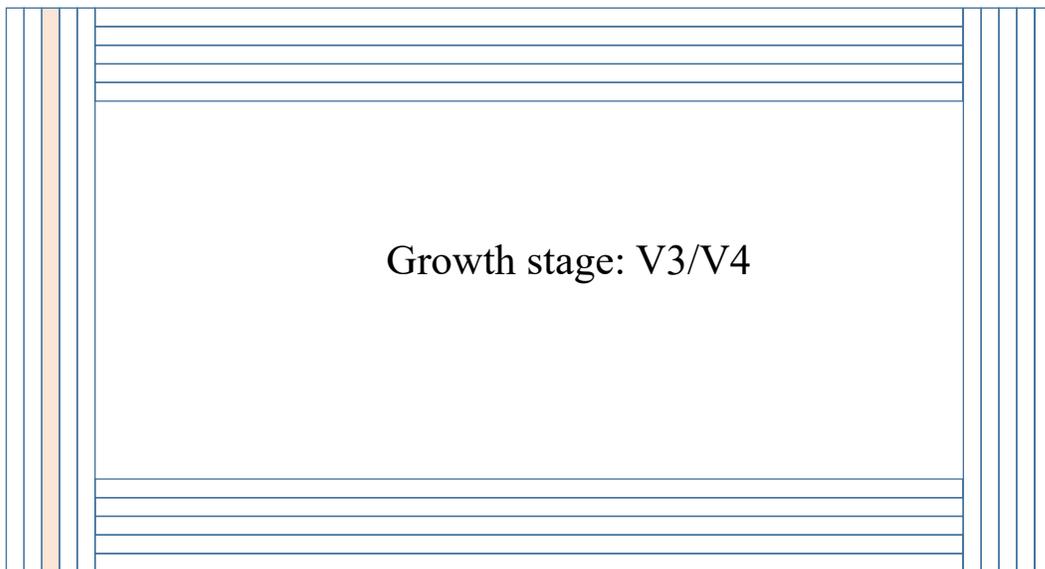
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# In-field distribution – What is the best way to scout?

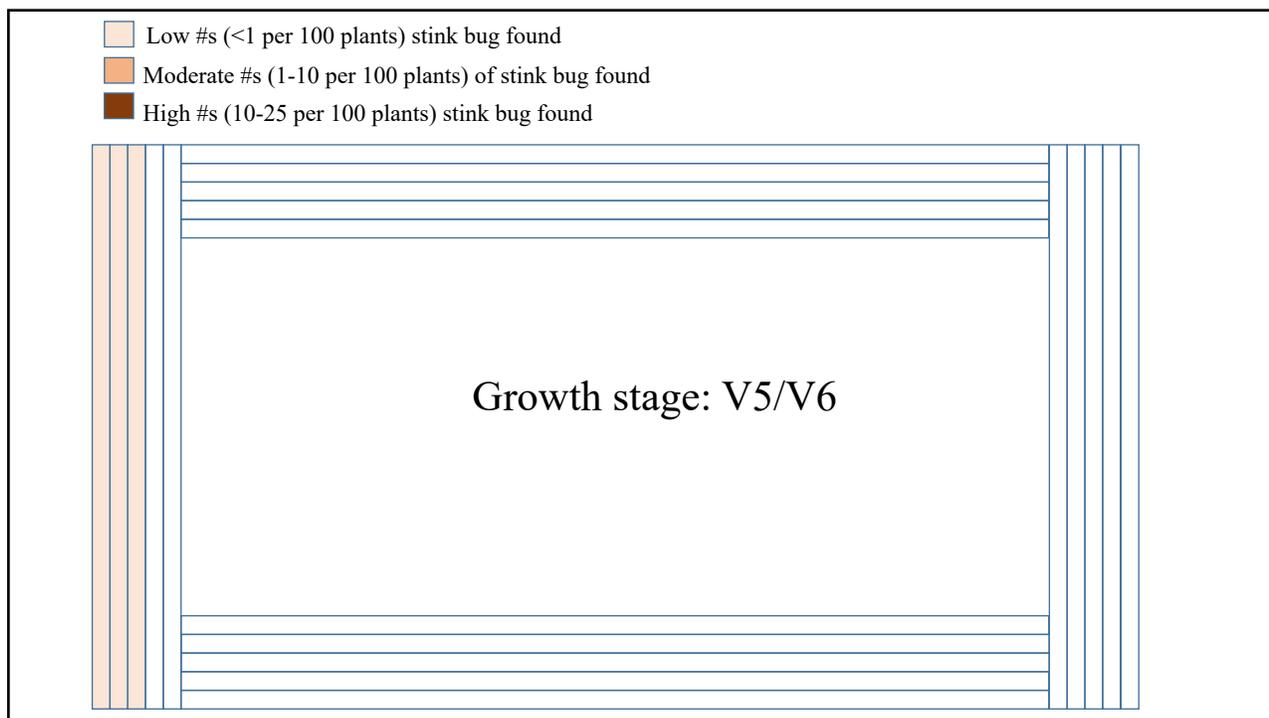


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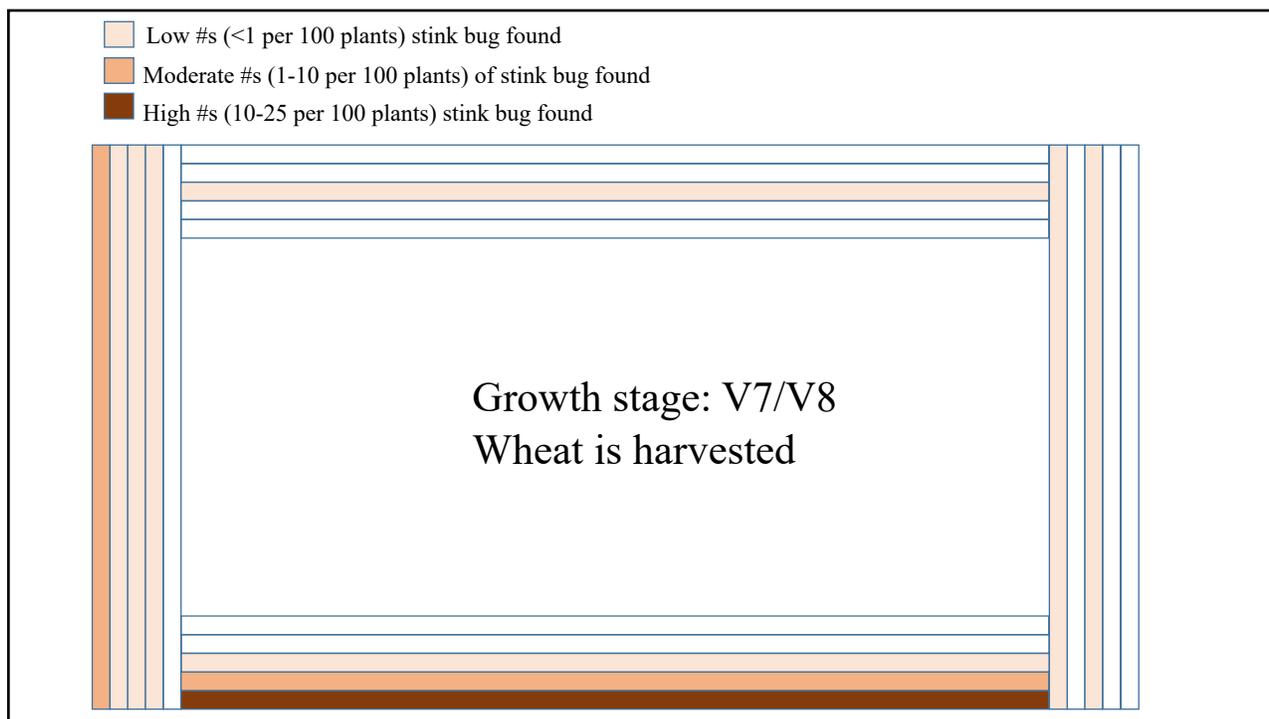
- Low #s (<1 per 100 plants) stink bug found
- Moderate #s (1-10 per 100 plants) of stink bug found
- High #s (10-25 per 100 plants) stink bug found



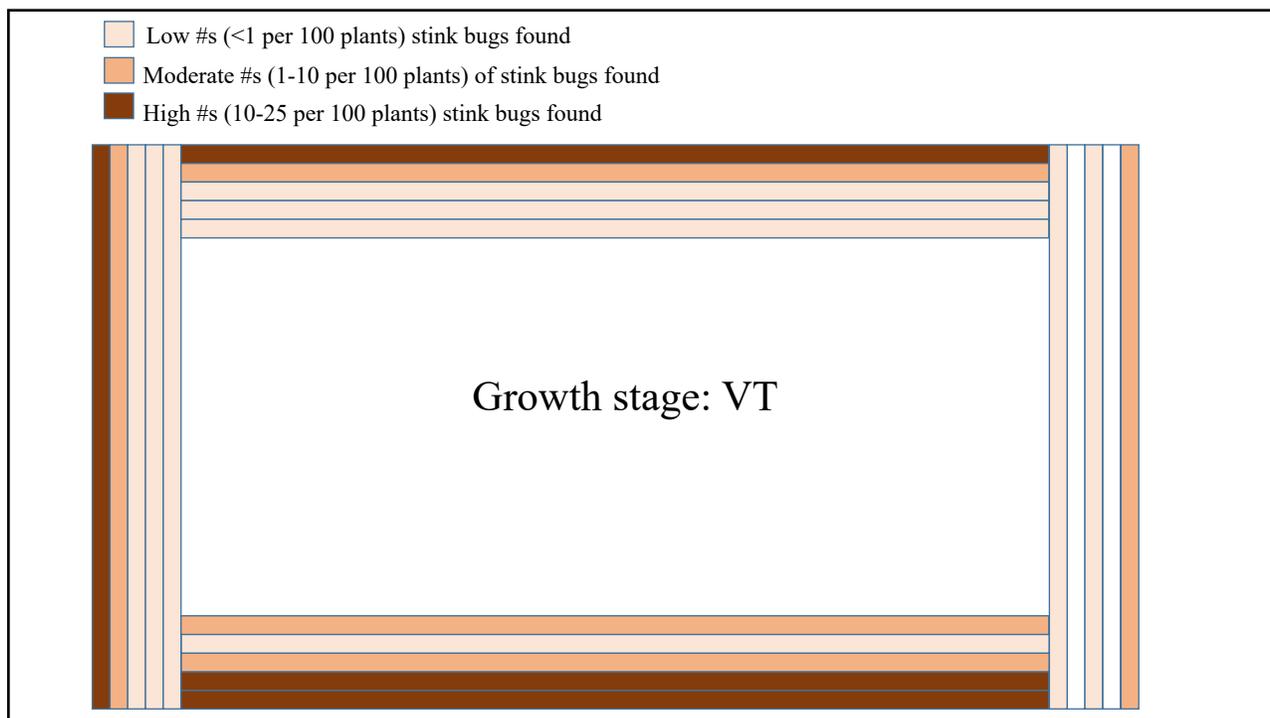
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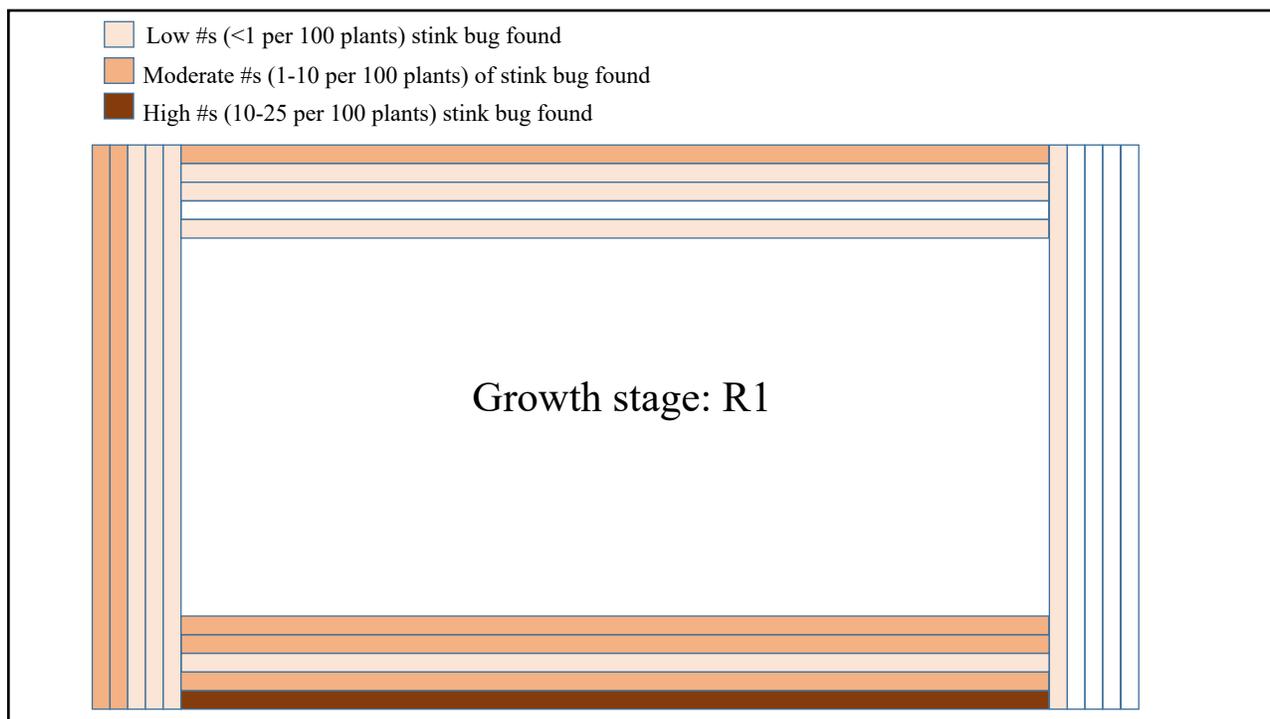
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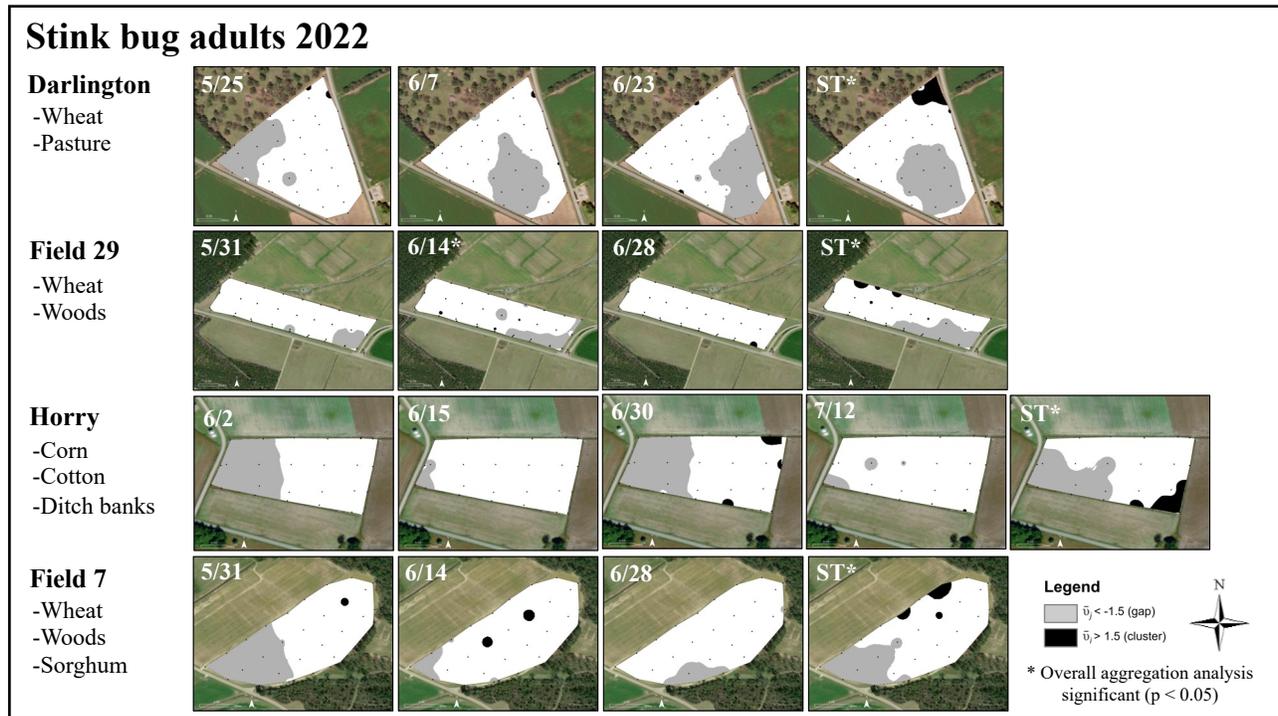
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## Conclusions

- Spatial aggregation patterns of stink bugs and their injury are identifiable
- Spatial patterns are dependent on surrounding landscape
- Sampling during late vegetative stages of corn provides best insight for ear injury potential

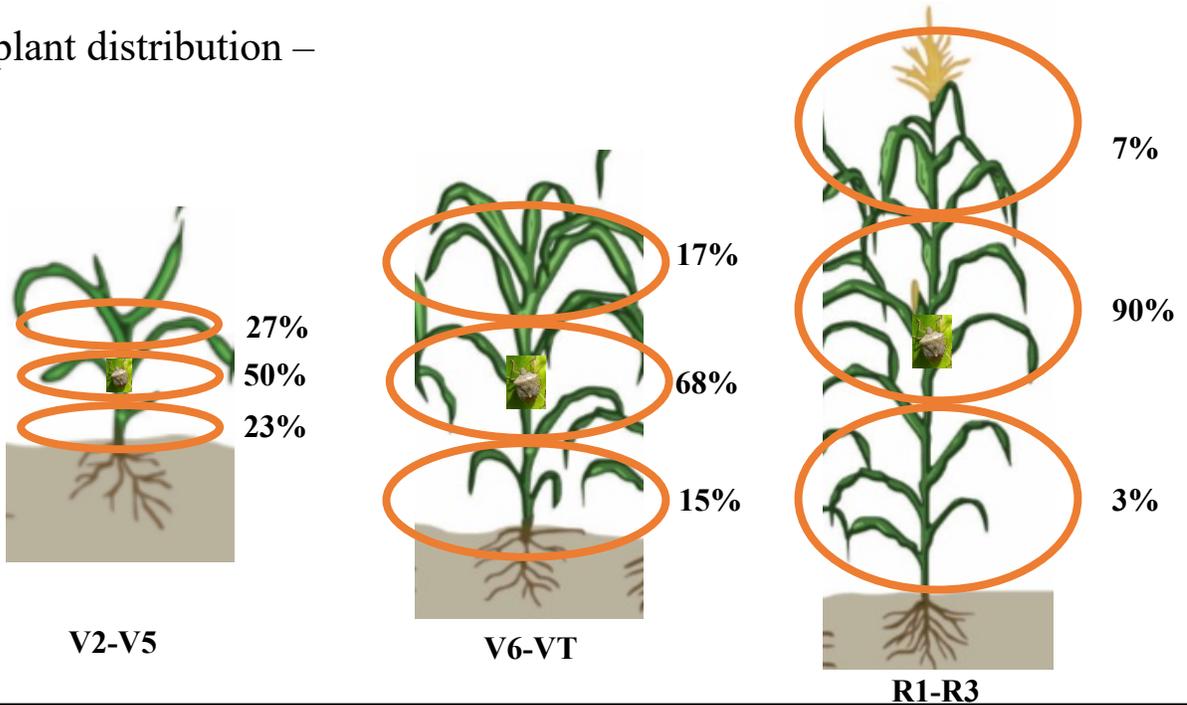






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On plant distribution –



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## Sample-based thresholds

- Check 10 places per field, 10 plants per stop
- Count # of stink bugs

Growth Stage	Area to sample	Do not treat	Take more samples	Treat
Or 1 per 10 plants				
Or 1 per 8 plants				
Or 1 per 4 plants				

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## Insecticides

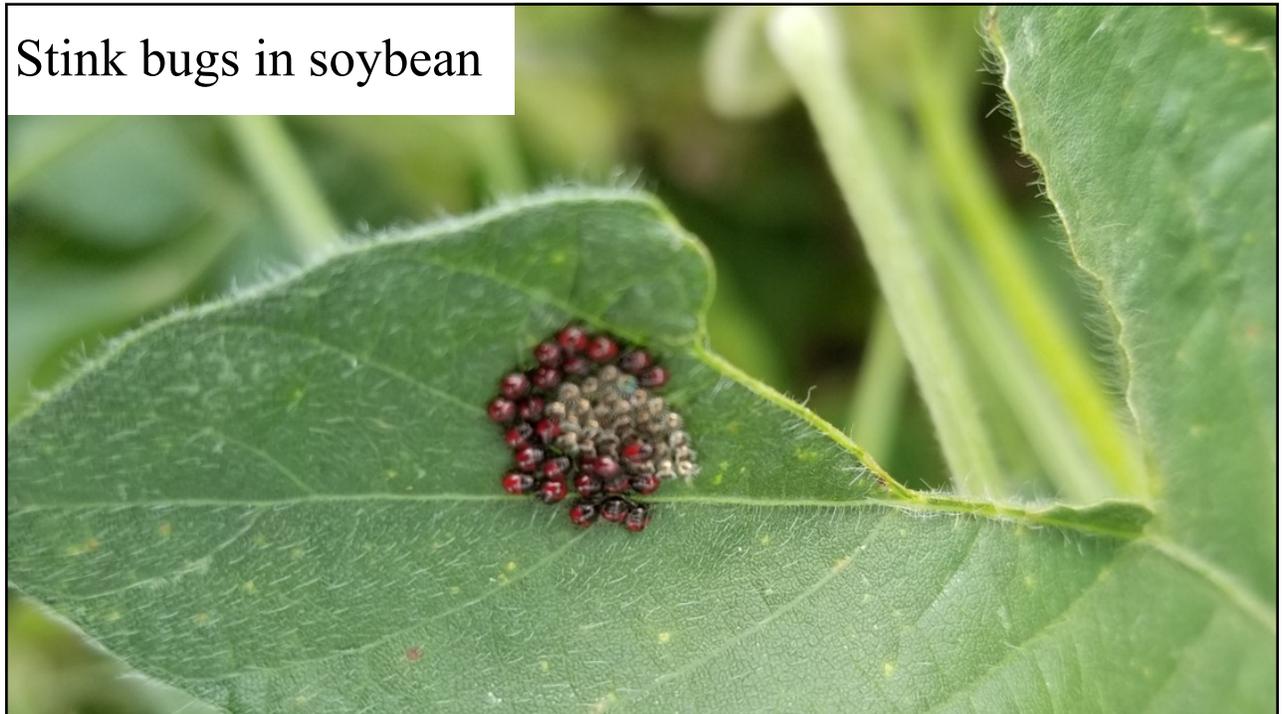
- Pyrethroids are labeled for stink bug control in corn.
- Communicate with your applicator – nozzle selection, pressure, and volume are important.

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## Recommendations for current scenario

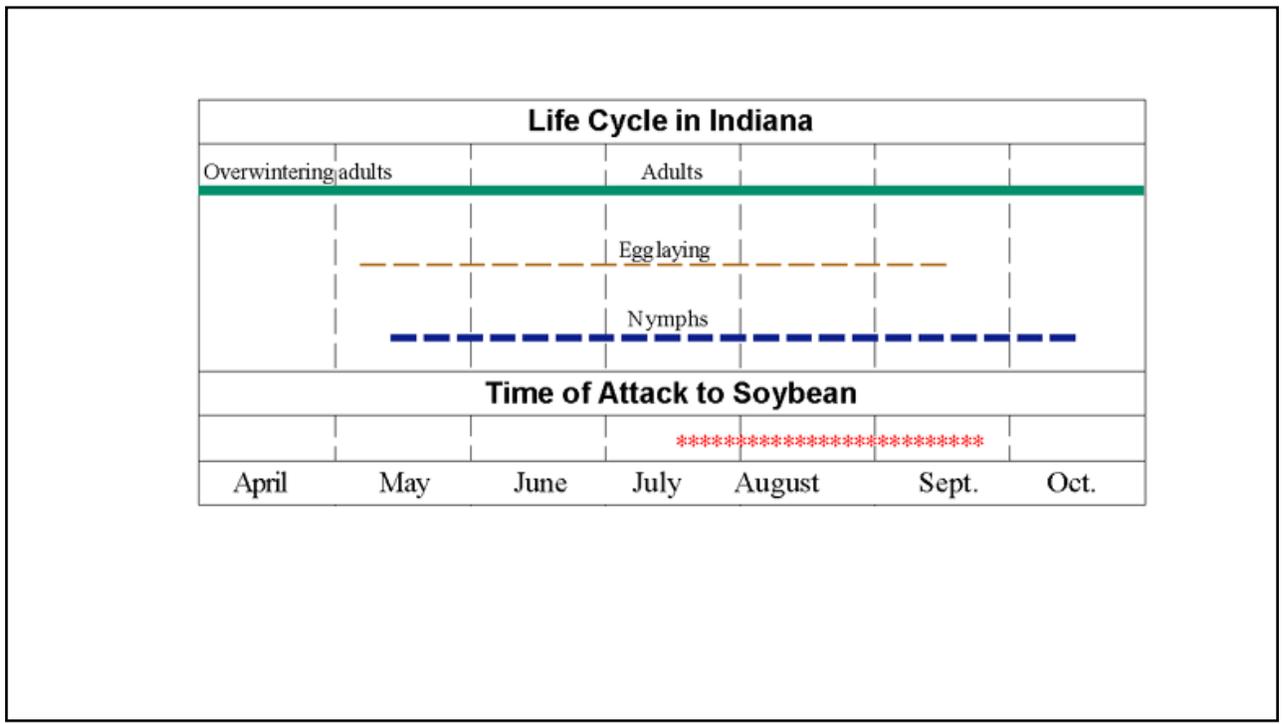
- Scout fields if you suspect stink bug injury
- Make appropriate spray decisions based on growth stage, number of bugs, and how much of the field is affected.

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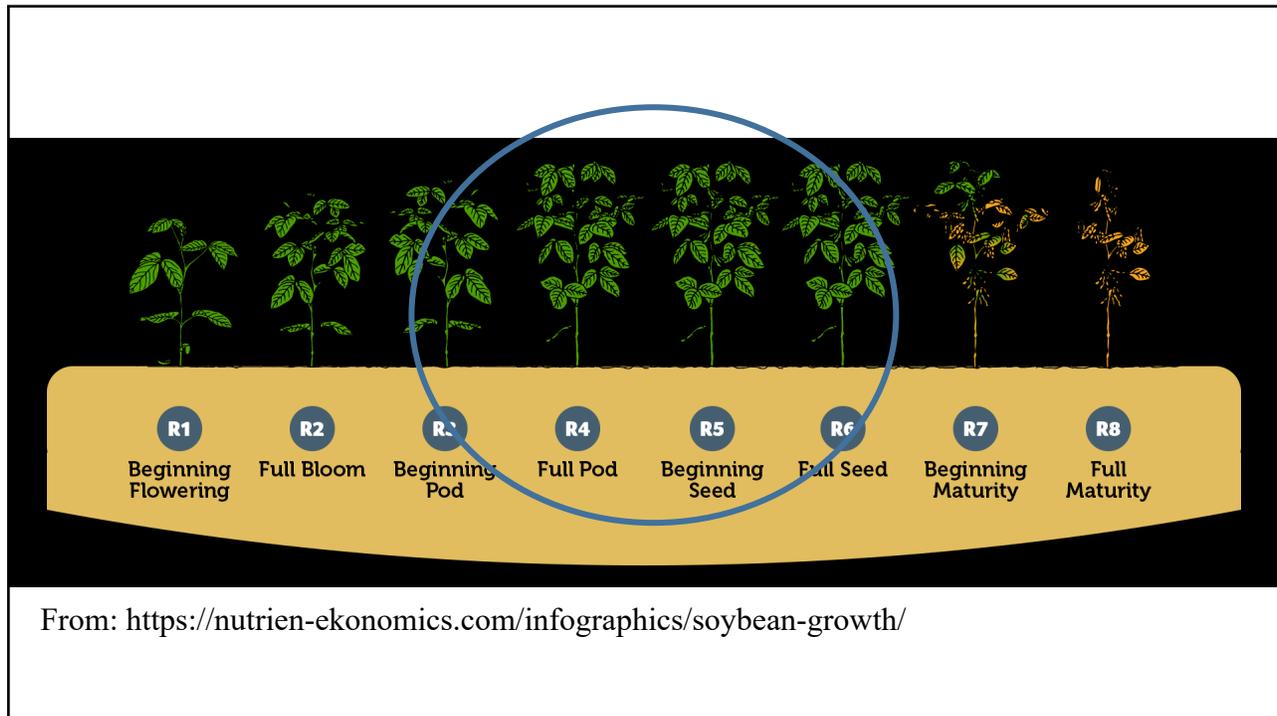


Stink bugs in soybean

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Thresholds –

R4 most sensitive stage, followed by R5

Damage can occur at R6, but likely requires larger populations

Damage can occur at R7, but likely requires very high populations

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### Thresholds –

Beat cloth: 0.5/row ft. seed  
1.5/row ft. grain

Sweep net: 2.5/15 sweeps seed  
5/15 sweeps grain

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### Maturity delays



- Some maturity delay with high populations (4-8 bugs/row foot), but only in R4

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## Scouting

- Scout 10 locations per field using 1 beat sheet sample or 15 sweep samples per stop
- Count nymph groups as 1 adult
- Count large nymphs as 1 adult



<https://www.morningagclips.com/video-corn-earworm-in-soybean/>

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## Insecticides

- Pyrethroids and acephate are labeled for stink bug control in soybean.
- Spraying too early (>2 weeks before infestation) will not provide control.
- If corn earworm co-infest, the best product do not overlap.

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## Recommendations for current scenario

- Unlikely to need treatment before R4
- Use best judgement when treating pests past R 5.5.
- Pyrethroids and orthene work best for stink bug, but do not provide lasting control

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### MyIPM for Row Crops App



**Southern**  
**IPM Center**

**UNIVERSITY OF DELAWARE**  
**UF FLORIDA**

**LSU** **VT**  
**MARYLAND** **CLEMSON**

**S** **A** **G**  
**VIRGINIA TECH**

The MyIPM for Row Crops app is now available on Apple and Android devices! This app was developed at Clemson University with the support of the Southern Region IPM Center and collaborators at Universities across the Mid-Atlantic, Southeastern, and Mid-Southern United States. The app provides pest management information for insects and diseases of corn, cotton, sorghum, soybean, and peanut, including labeled pesticides and rates, photos of pests and diseases, life cycle information, and non-chemical control strategies.

**Contact:** Tim Bryant, [timb@clemson.edu](mailto:timb@clemson.edu)



**Download for Android**

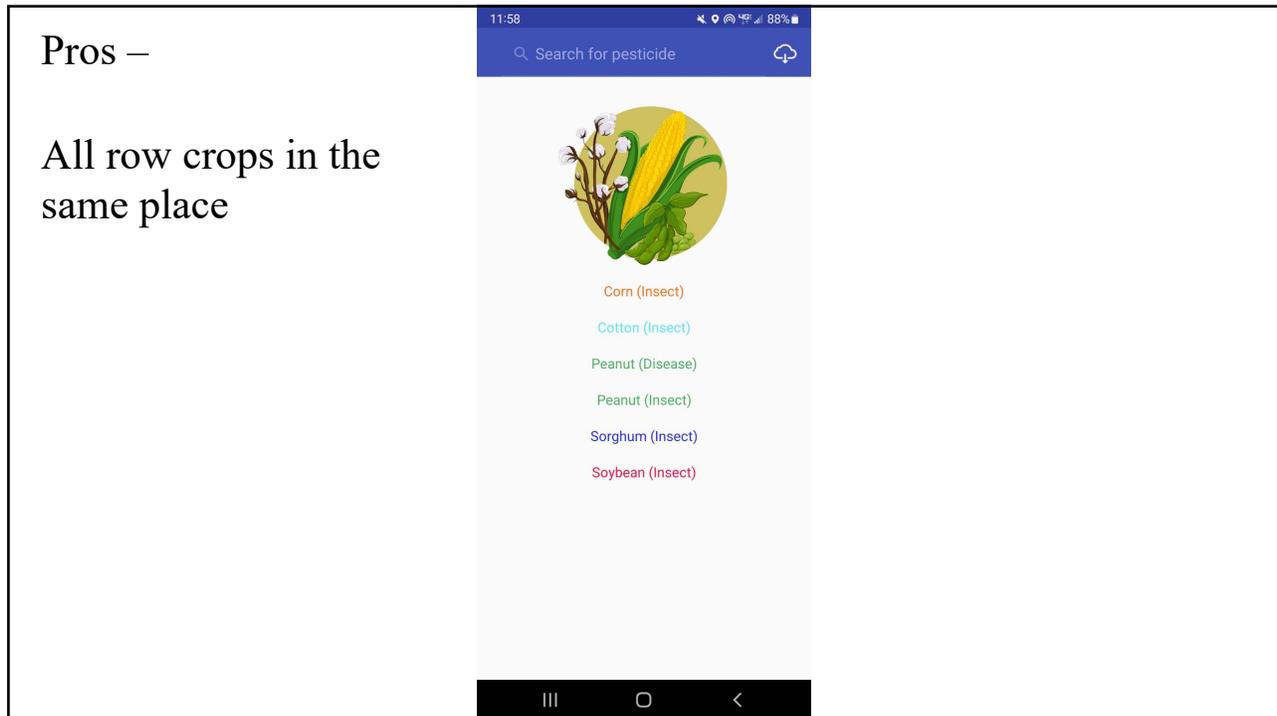


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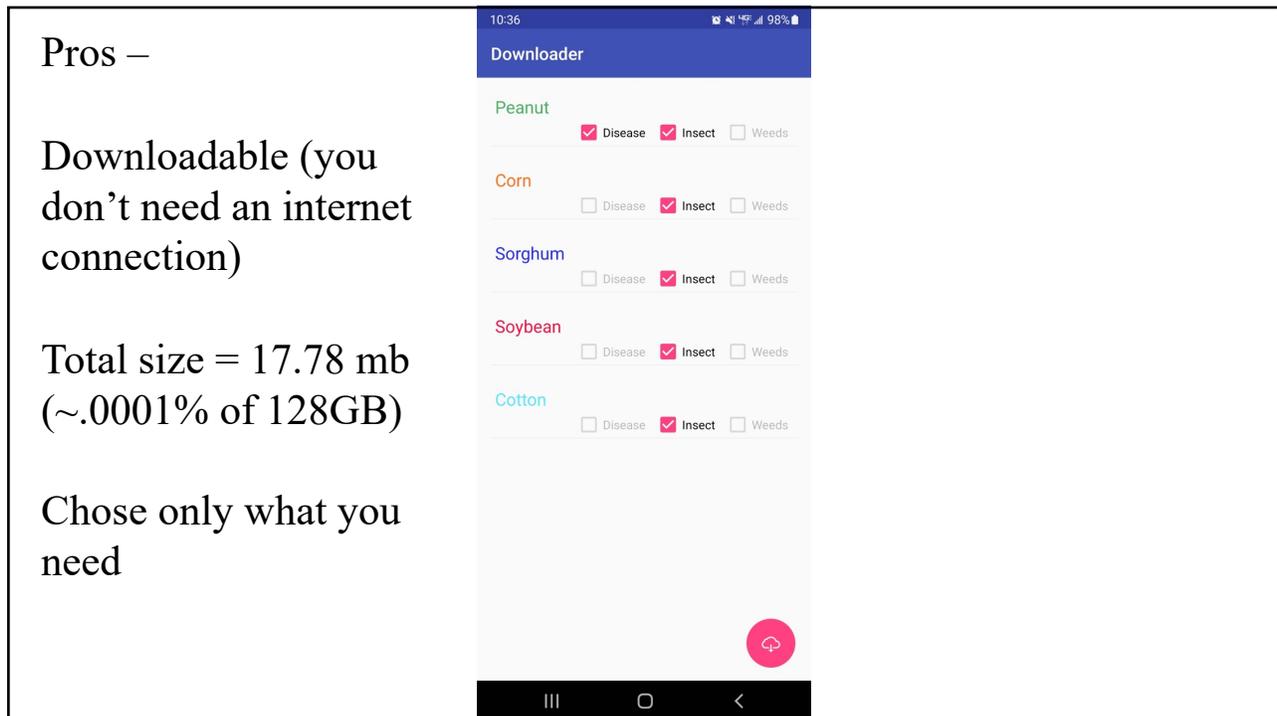





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## Questions?

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