

## 2025 Corn Stunt Update

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### Questions that Needed Answers

Can corn leafhoppers overwinter in Kansas?

If they do not overwinter, when will corn leafhoppers migrate into Kansas?

### Corn Leafhopper ID

- Order – Hemiptera
  - “true bugs”
  - Piercing-sucking mouthparts
- Family – Cicadellidae
  - Leafhopper family
  - Tens of thousands of leafhopper species

- “splinter-like” body
- Approx. 1/8 inch long at maturity
- Tan to yellow in color
- 2 dark spots between eyes

### Question #1

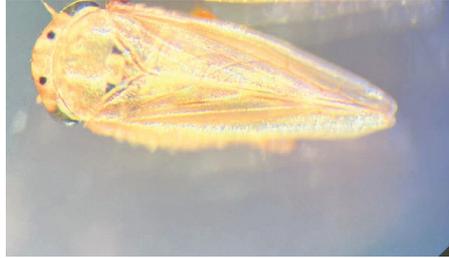


Is this a corn leafhopper?

A. Yes

B. No

### Corn Leafhopper vs. Other Leafhoppers



### Corn Leafhopper vs. Other Leafhoppers



### Corn Leafhopper vs. Other Leafhoppers



Corn Leafhopper



Corn Leafhopper



Aster Leafhopper



Aster Leafhopper

### Corn Leafhopper vs. Other Leafhoppers



Corn Leafhopper



Corn Leafhopper



Black-Faced Leafhopper

## Corn Leafhopper vs. Other Leafhoppers

### Corn Leafhopper



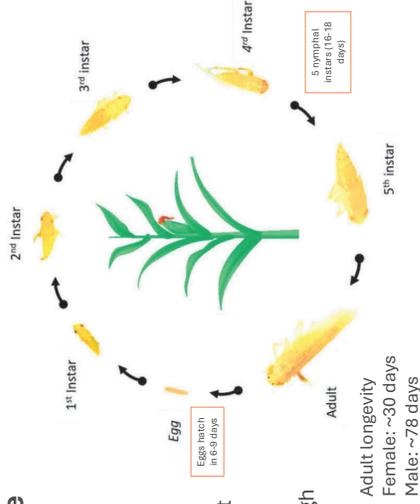
### Unknown Leafhopper



## Corn Leafhopper Life Cycle

### Incomplete Metamorphosis

- Eggs laid inside host leaf tissue
- Nymphal instars resemble adults, but are wingless
- Shed exoskeleton as they grow through 5 instars
- All stages cause damage

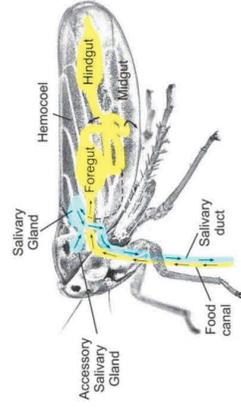


## Why do we care about CLH?

### Disease Transmission

The MOST significant risk from leafhoppers

Pathogens delivered into plant tissue through saliva of infected leafhoppers



Anthony Zukoff  
Southwest Research and Extension

Pathogen persists in the leafhopper until death

## *Spiroplasma kunkelii*

- Bacterial mollicute
- Restricted to the phloem
- Can be detected in roots, leaves, and the tassel
- NOT transmitted from corn plants to its seeds
- NOT transmitted from leafhopper females to their spawn
- Does NOT survive in crop residue



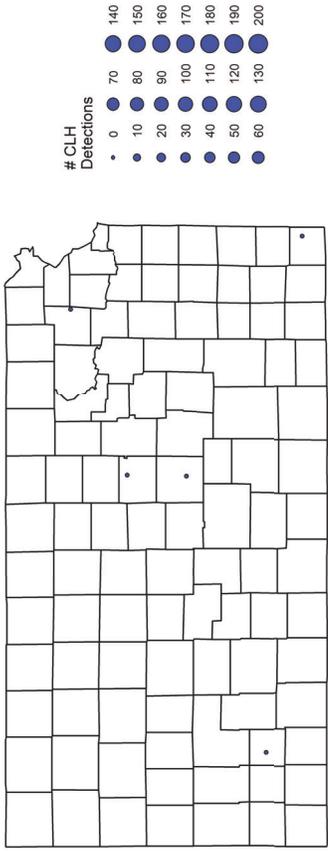
## 2025 In-Season K-Trapping

### Weekly In-Season K-Trap Monitoring

- Stricter trapping protocol
- Sticky traps are being collected weekly
- Traps are placed in growing corn crop
- Even trap distribution across the state
- 31 trap locations

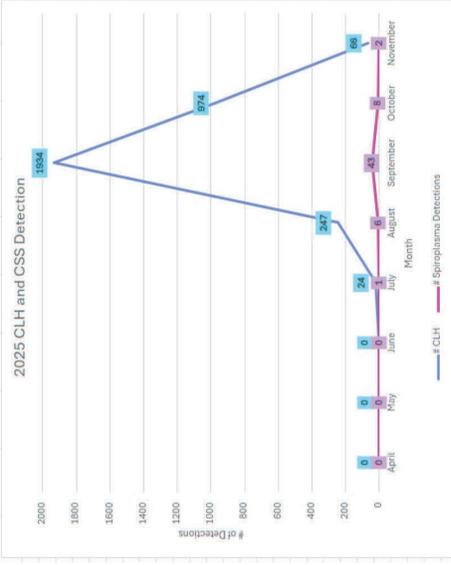
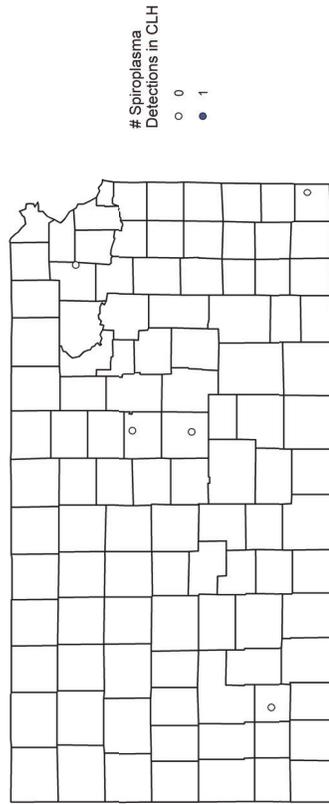
## 2025 In-Season CLH Population Growth

2025-04-21

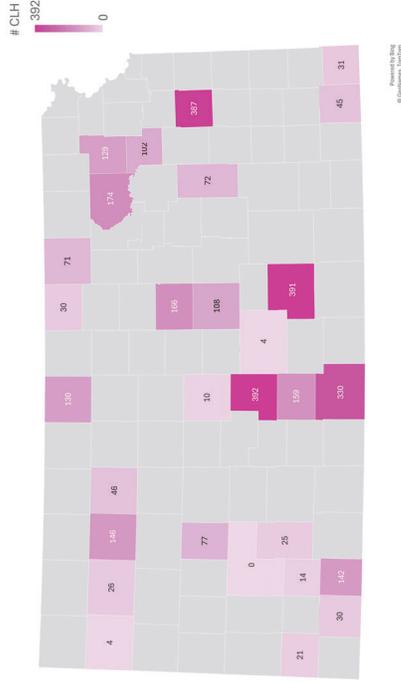


## 2025 CSS Detections in CLH

2025-04-21



### Total CLH Trapped by County



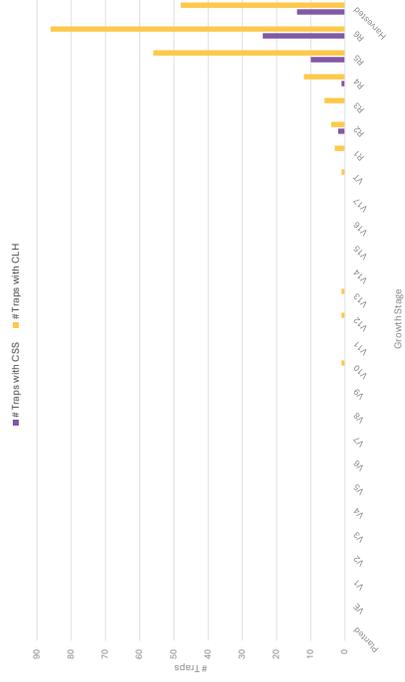
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### Question #2

At what growth stage were the most corn leafhoppers trapped in 2025?

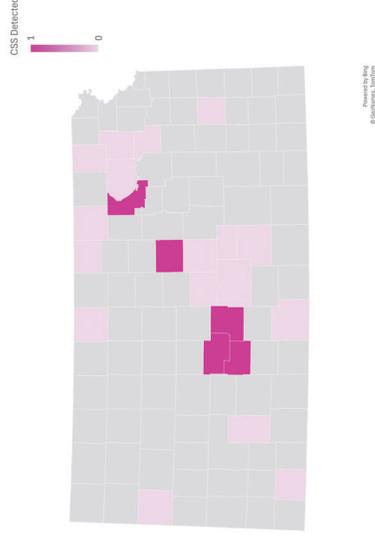
- A. R2
- B. R3
- C. R4
- D. R5
- E. R6

### # Traps with CLH and CSS by Growth Stage Trapped



### 2025 Tissue Sample Testing Summary

- 54 tissue samples tested
- 6 samples tested positive for CSS in 5 different counties:
  - Edwards
  - Pawnee
  - Riley
  - Saline
  - Stafford



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### CSS Symptoms Seen in 2025



### CSS Symptoms Seen in 2025



### CSS Symptoms Seen in 2025



CSS Infected Ear



Healthy Ear

### Other Purple Corn...



## Other Purple Corn...



## Other Purple Corn...



## Key Takeaways

- Not all leafhoppers are corn leafhoppers
- Not all purple corn is corn stunt
- 07/09/2025 – first CLH found by a consultant (Reno)
- 07/14/2025 – first CLH trapped in KS (Cherokee)
- 07/28/2025 – first CSS detection in CLH in KS (Saline)
- 08/18/2025 – first CSS detection in tissue in KS (Stafford and Edwards)
- CLH in 31 KS counties – based on traps
- CSS in 25 KS counties – based on traps
- Real-time updates provided on Kansas Corn Disease Resource Center
- Weekly reports were sent throughout the season

## What are our next steps?

