

The background features a dark blue gradient with faint, light blue circular patterns and a scale. The scale is a semi-circular arc with numerical markings from 160 to 260 in increments of 10. There are also several concentric circles and dashed lines with arrows, suggesting a technical or scientific theme.

SORGHUM INSECTS 2020-2021

JEFF WHITWORTH

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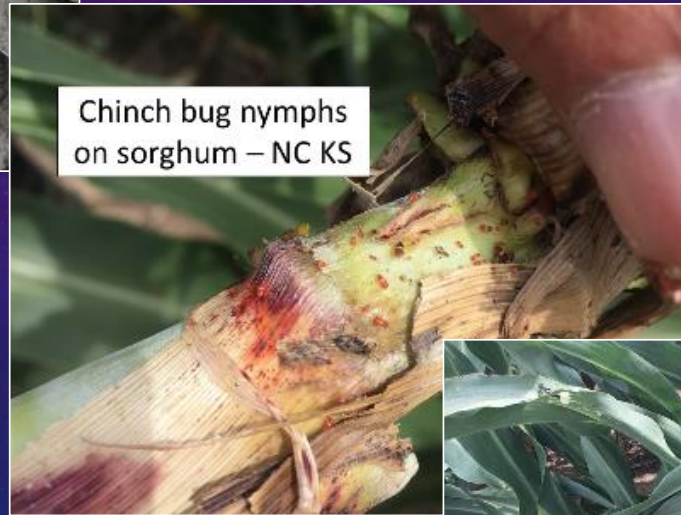
SORGHUM

- Chinch bugs
- Sugarcane Rootstock Weevil
- Grasshoppers
- “Ragworms”
- “Headworms”
- Aphids
- Sorghum midge

CHINCH BUGS 2018



Mating chinch bugs



Chinch bug nymphs
on sorghum – NC KS



Sorghum starting to lodge under hot/dry
conditions and large numbers of chinch bugs

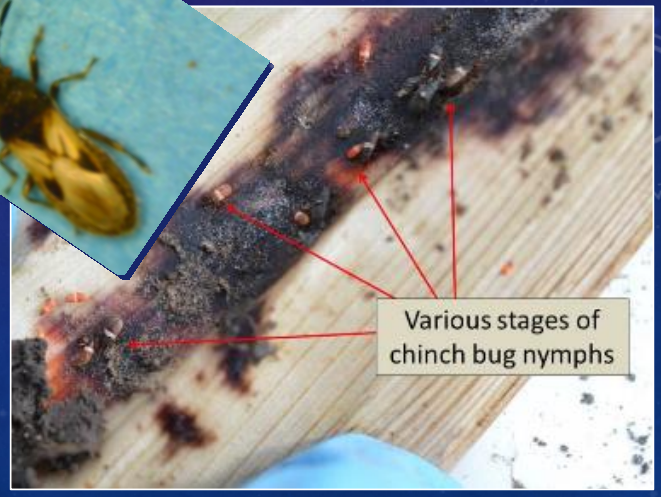
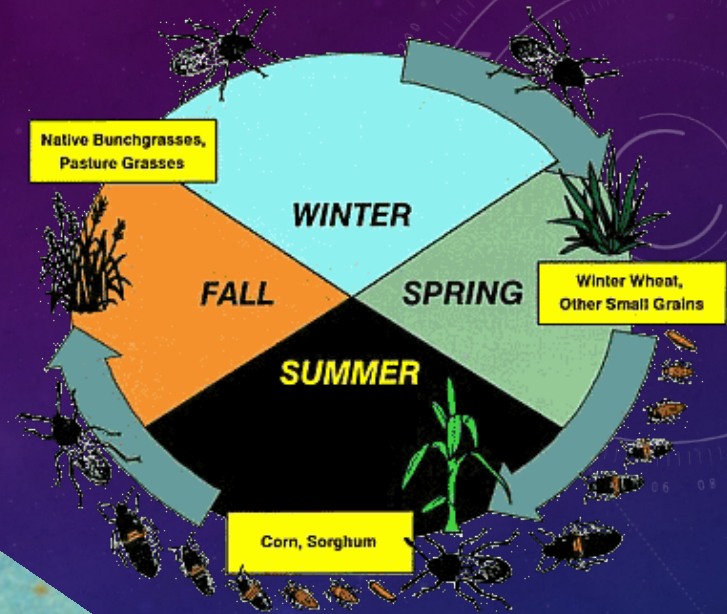
CHINCH BUGS

- Chinch bug control options:

Avoid planting sorghum next to wheat

Timing – plant sorghum after wheat harvest

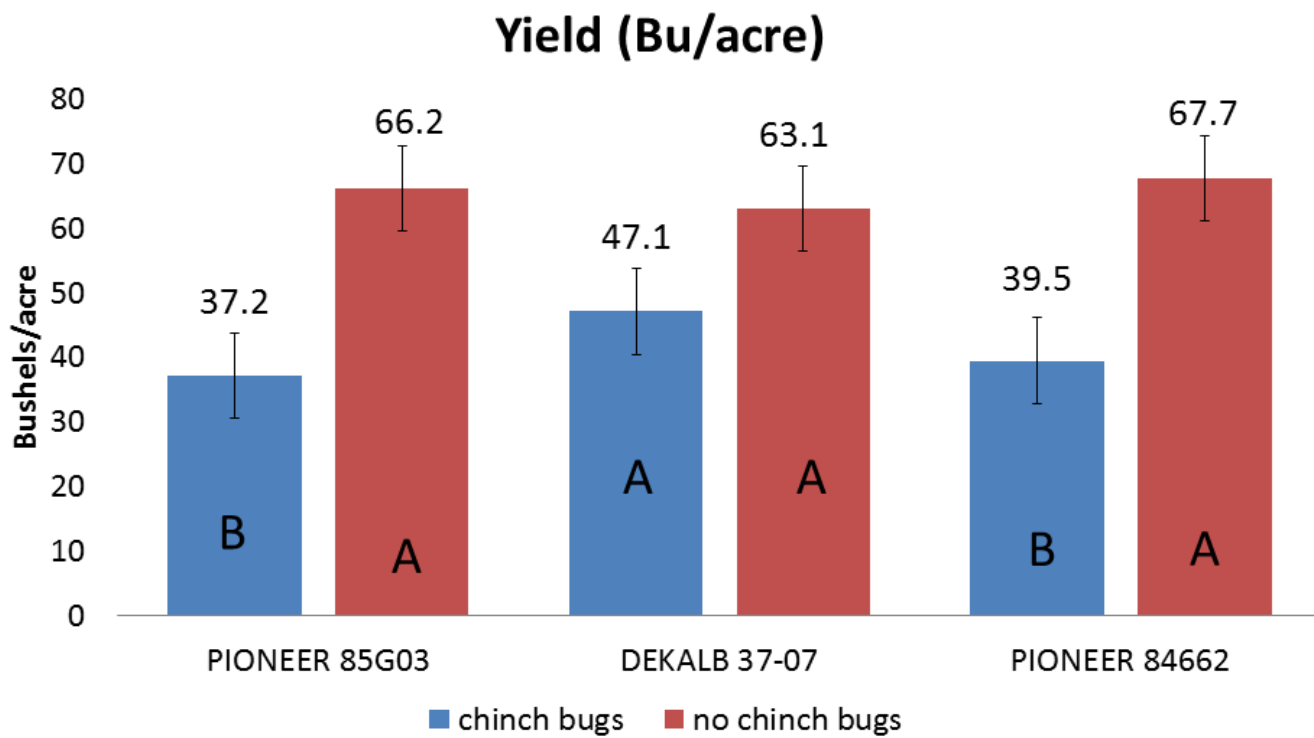
Insecticides – seed treatment vs. foliar application



Plants on the left ↓ were closest to wheat field, thus significantly infested with chinch bugs starting at about the heading stage



Whitworth/Davis. 2014. Dk Co. Natural Infestation at heading.



Sugarcane Rootstock Weevil



- Native to Kansas
- Can attack sorghum, field and sweet corn
- May cause lodging especially under dry conditions

GRASSHOPPERS

- Scout borders in early summer to prevent migration into sorghum
- 15-20 nymphs / sq yd in **borders** or 5-8 nymphs / sq yd in **field** may justify treatment



Foliar Damage



'Ragged' Foliar Feeding on Young Sorghum

Typical of:

- Fall armyworm
- Corn earworm



Fall Armyworm

(4 spots on last segment)



Corn Earworm

‘RAGWORMS’

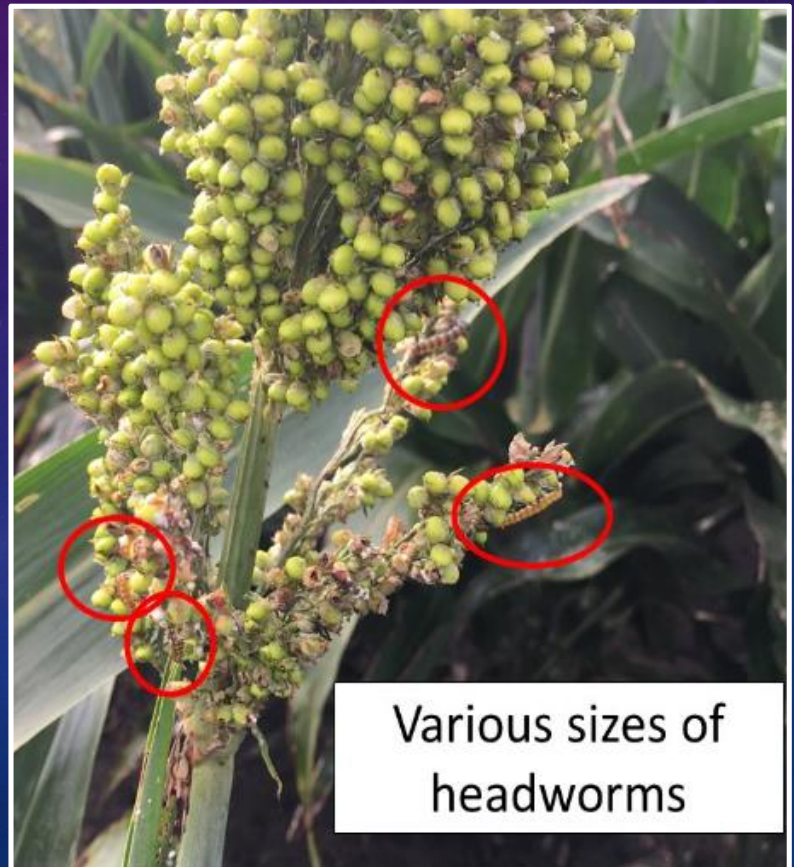
- Showy feeding by worms in the whorl
- Does not impact yield
- Contact insecticides are not recommended

“HEADWORMS”



- Plants vulnerable from bloom to milk stage
- Check sorghum when it begins to head.
- 1-2 worms per head can justify control.
- **Generally consider 5% loss per worm per head.**

CONSIDERABLE POPULATIONS IN 2018



SORGHUM APHIDS



Corn Leaf Aphids



Greenbug



Yellow Sugarcane Aphid



Sugarcane Aphid (SCA)

CORN LEAF APHIDS

Corn Leaf aphids common this year and provided food source for beneficials



Corn leaf aphids

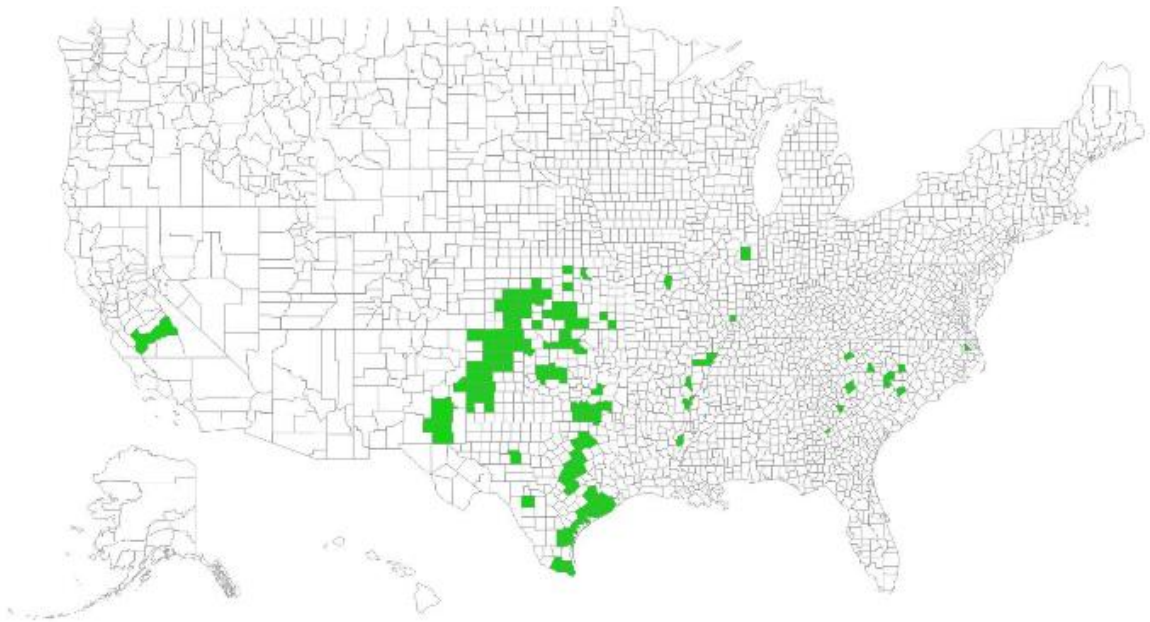


Lady beetle feeding on corn leaf aphids

SUGARCANE APHID - AS OF NOV. 11 2018

sugarcane aphid (*Melanaphis sacchari*) in 2018

EDDMapS



<https://www.myfields.info/pests/sugarcane-aphid>

Map created : 11/2/2018

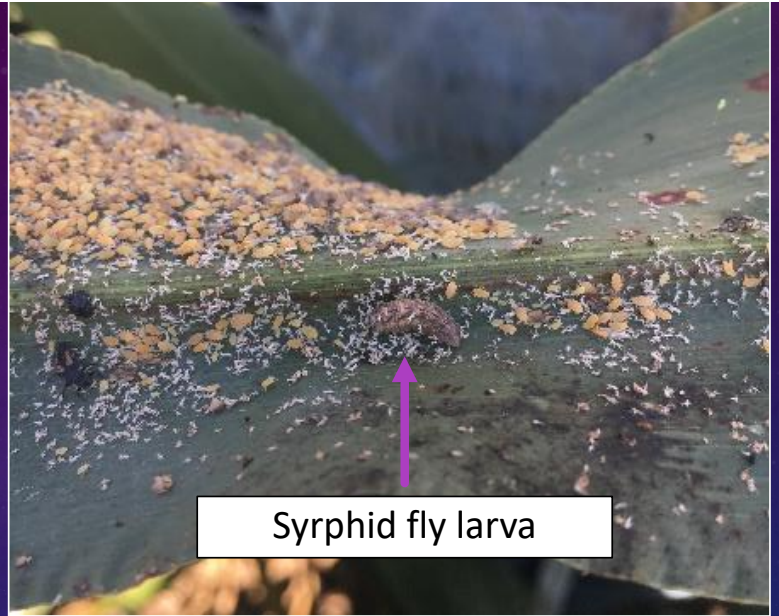
Legend
□ No Data
■ Species Reported

SCA 2018 - MOSTLY
CONTROLLED BY
BENEFICIALS

Lady beetle larvae



Syrphid fly larva

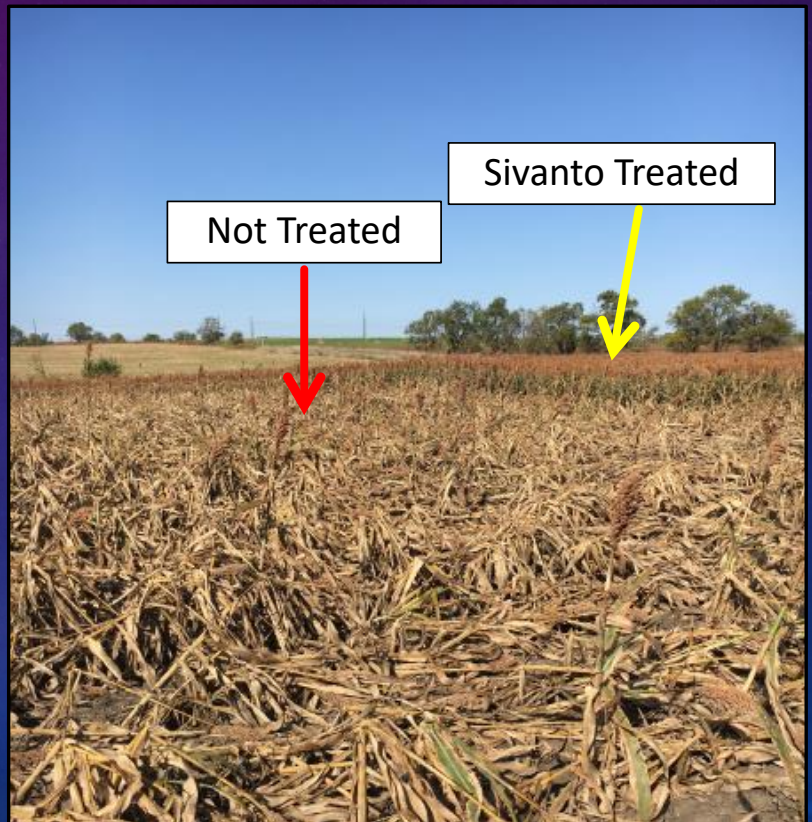


Aphid mummies



SUGARCANE APHID DAMAGE - 2016

- Produce LARGE quantities of honeydew, can cause problems during harvest
- Heavy feeding causes plants to dry down rapidly
- Weakened stems = plant lodging prior to harvest



SUGARCANE APHID DAMAGE - 2016

- Fusarium infected stalks from the lodged area (not treated)
- Non-infected stalks from the Sivanto treated area

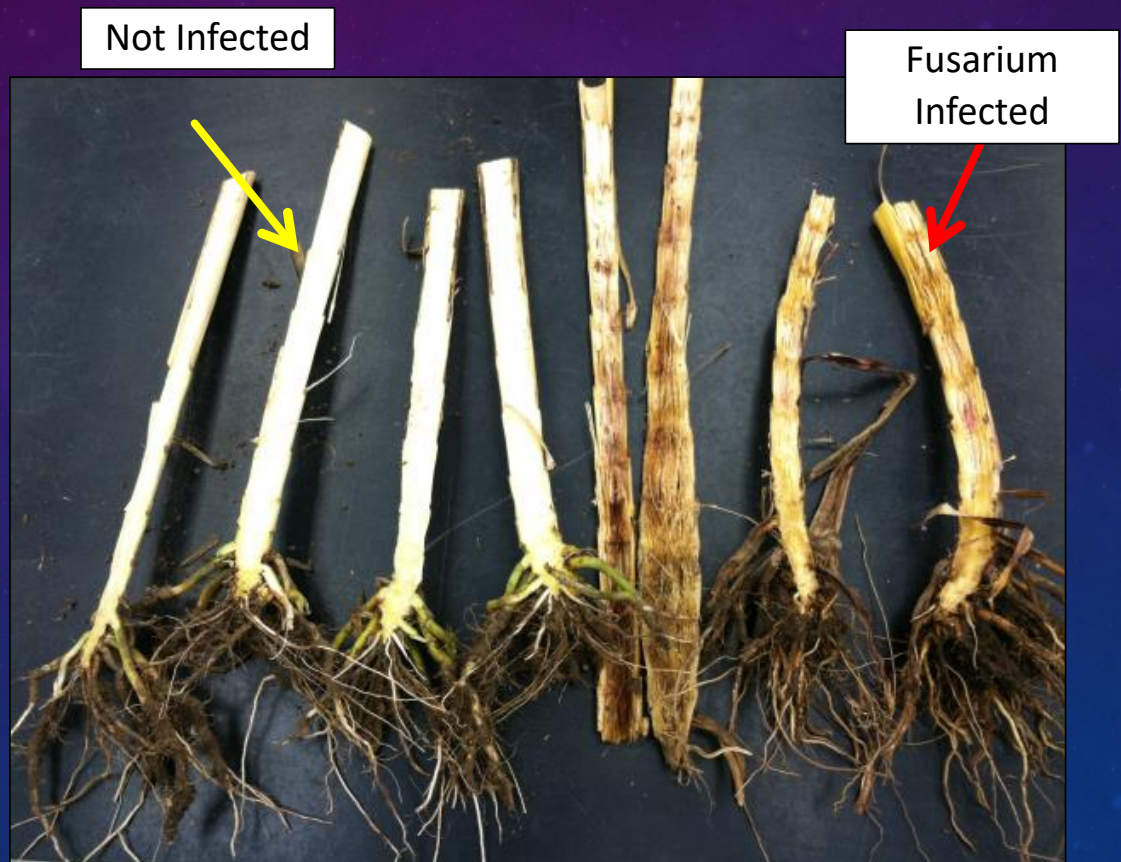
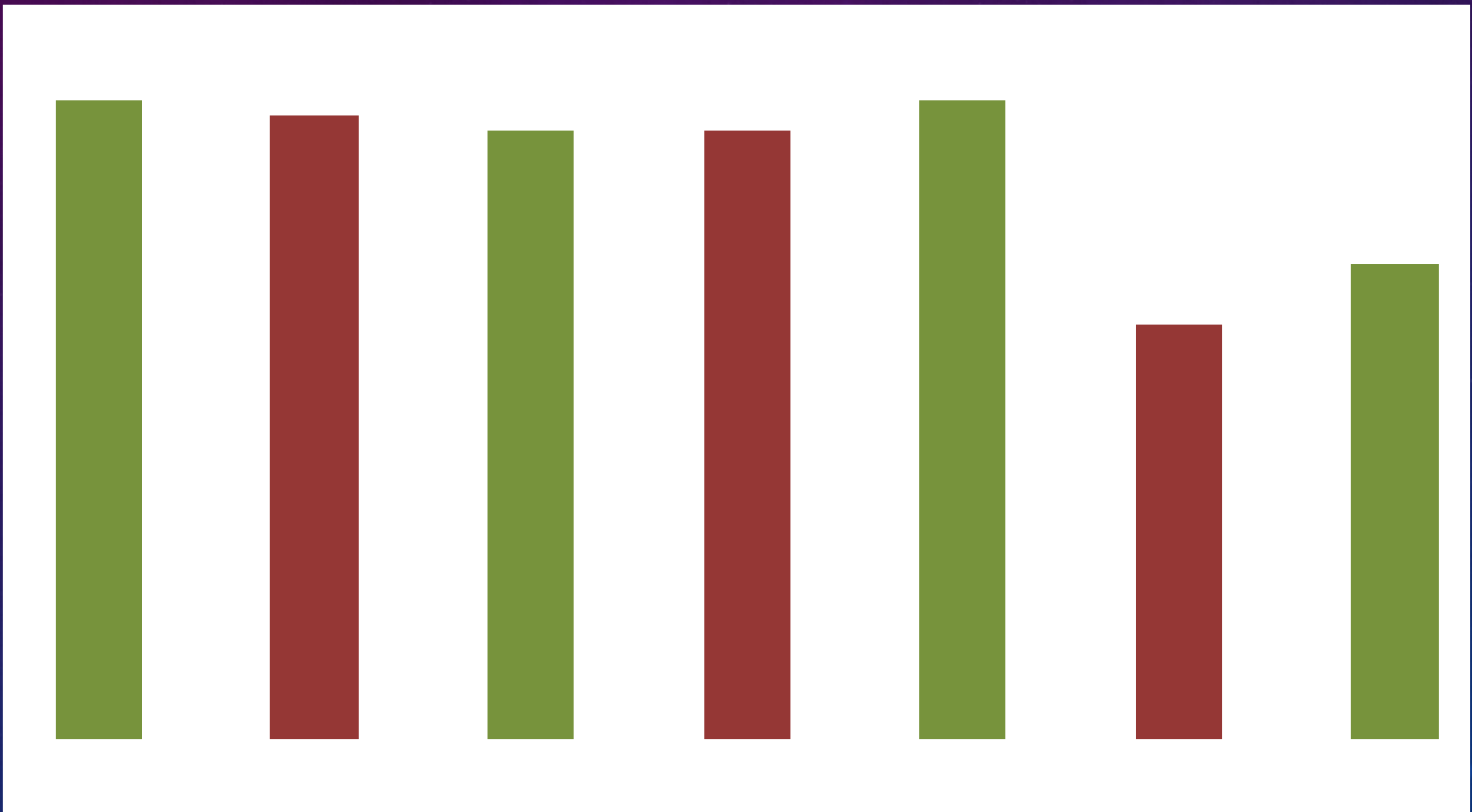


Photo courtesy of Judy O'Mara

GYPSUM, KS - SPRAYED FOR SCA ON 13 SEPT. WITH SIVANTO PRIME@4OZ/A + INTERLOCK@2OZ/A



Data provided by Tom Maxwell Saline Co. Ag. Agent

SORGHUM MIDGE

- Do not overwinter in KS – subtropical insect
- Last generation diapause where larvae fed – between bracts
- Occasional pest in Kansas
 - Normally confined to SE and SC parts of the state
 - Numbers usually too low to detect or to justify insecticide treatment in Kansas
- Usually noticed after fly emergence because of remaining pupal cases



SORGHUM MIDGE DAMAGE

- Detection occurs after damage - “blasted” heads (small malformed kernels)
- Late planted sorghum most at risk in KS
- Will not cause economic damage after flowering (pollination)
- Sorghum heads must pollinate = developing kernels are what the larvae feed on



SORGHUM MIDGE 2018

- Significant #'s of blasted heads this year
- We have been, and are in the process of, examining “blasted” heads to determine midge vs. other damage
- If consistent across the field, probably due to environmental conditions
- NO midge damage positively identified yet



BOOKS:

Crop Insects *of* Kansas

R. Jeff Whitworth
Phillip E. Sloderbeck
Holly N. Davis

Department of Entomology



Kansas State University Agricultural Experiment Station
and Cooperative Extension Service

Identification guides

- Biology
- Damage/
Thresholds
- Management
options

K-STATE
Research and Extension

Household Pests *of* Kansas

Holly N. Davis, Ph.D.
R. Jeff Whitworth, Ph.D.
Department of Entomology



Kansas State University Agricultural Experiment Station
and Cooperative Extension Service

Available from the KSRE Bookstore: <https://www.bookstore.ksre.ksu.edu/>