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.
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
‘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

1st – 3rd Instar ‘Sorghum Headworms’

Various sizes of headworms
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.
SUGARCANE APHID - AS OF NOV. 11 2018

https://www.myfields.info/pests/sugarcane-aphid
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**

- Identification guides
- Biology
- Damage/Thresholds
- Management options

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