



K-STATE
Research and Extension

Sedgwick County

WELCOME TO
VICTORY GARDEN 101
Common Insect Problems

Please mute your microphone and turn your camera off.
Thank you!

The slide features a header with the K-State logo and Sedgwick County name, a central title area with the event name, and a footer with a request to mute the microphone. The background is decorated with images of various vegetables like tomatoes, cabbages, and leafy greens.

VICTORY GARDEN 101 PLAN

- Apr. 7: Preparing Your Garden Site & Soil
- Apr. 14 - Basic Garden Planning for Success
- Apr. 21 - Grow Your Own Salad
- Apr. 28 - Tips for Great Tomatoes
- May 5 - Using Your Vertical Space
- May 12 - Water, Weather & Weeds
- **Today - Common Insect Problems**
- May 26 - Common Disease Problems

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GENERAL PEST CONTROL PRACTICES

- Sanitation
- Appropriate Plant Spacings
- Crop Rotation/Cover Crops

GENERAL PEST CONTROL PRACTICES

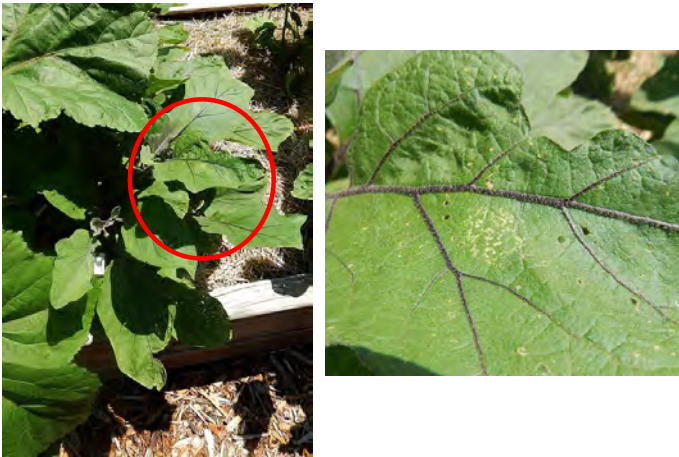
- Mulching & Watering Practices
- Minimize Plant Stress
- Regular Scouting!

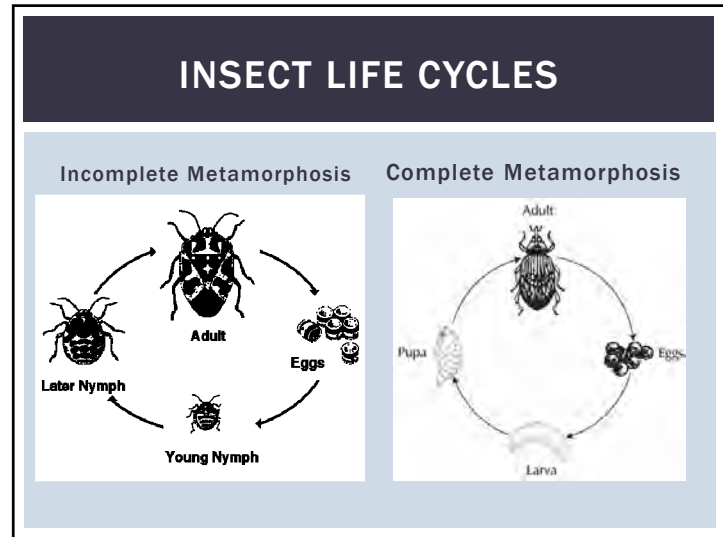
WHAT ABOUT COMPANION PLANTING?

- Not research-based
- Too many variables to account for
- Encourage plant diversity, including habitat for beneficial insects

TIPS FOR SCOUTING

- Walk & Look - regularly
- Observe carefully
- Assess the threat
- Determine action





TYPES OF INSECT DAMAGE

- **Chewing**
 - Holes
 - Parts are missing
- **Sucking**
 - Discoloration – large areas or spots
 - Leaves yellow and die over time
- **Boring (subset of chewing)**
 - Holes in stems
 - Often notice generalized plant wilting first



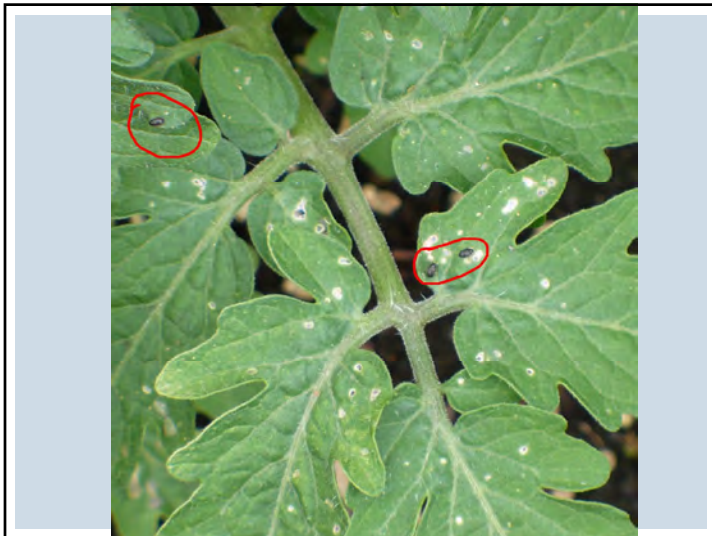
SPIDER MITES

- Suck the juices out of plant leaves
- Stippled appearance
- Horticultural oils and insecticidal soaps
- Hard stream of water



APHIDS

- More common in the early summer
- Damage plants by sucking juices
- Most common garden insecticides will kill aphids



FLEA BEETLES

- Tiny black beetles
- Very small holes in the leaves in the early spring
- Tomatoes usually outgrow damage
- Controlled with neem oil or permethrin.

CUCUMBER BEETLE




CUCUMBER BEETLE

- Young seedlings are especially susceptible
- Eat holes in leaves, or whole leaves!
- Can damage fruit
- Striped and Spotted types
- Permethrin, pyrethrin, neem oil?

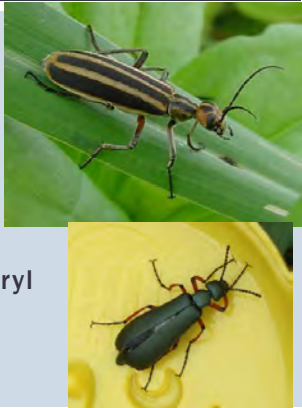
GRASSHOPPERS

- Can be very destructive
 - Often worst during droughts
- Best to control when immature
 - Wingless stages
- Permethrin, Cyfluthrin, carbaryl
 - Retreatment is necessary often
 - Contact is necessary to kill
 - Apply before sunrise for best results



BLISTER BEETLES

- Very destructive
- Chewing insects
- Adult stage is damaging
- Eat grasshopper eggs!
- Permethrin, cyfluthrin, Lambda-cyhalothrin, carbaryl





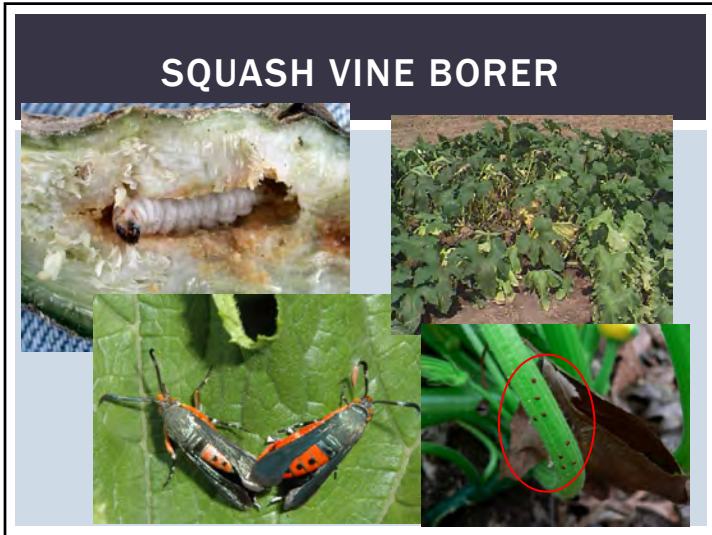
TOMATO HORNWORM

- Green caterpillar with characteristic “horn”
- One caterpillar can be very damaging
- Find it and squash it!



CUTWORMS

- Early season cutworms often chew a plant off at the soil level.
- Later season cutworms can eat leaves.
- If the plant is totally cut off, replanting is necessary.



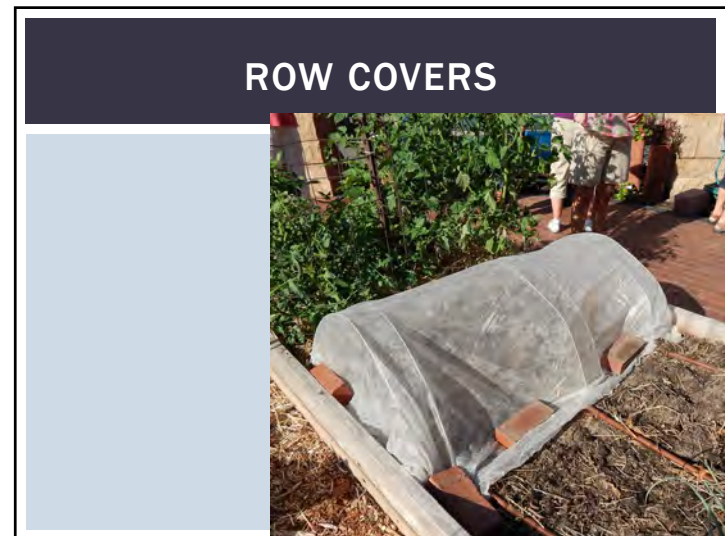
SQUASH VINE BORER

- Larvae bore into the stems near the crown
- Causes the plant to wilt, especially in heat
- Decreases plant vigor
- Hard to control
 - Apply insecticide after egg hatch but before larvae bore into stems – only a few hours!

SQUASH VINE BORER

- Row Cover + Parthenocarpic Squash
- Row Cover (removed)
- “Collars” around the stems

- Insecticides: Permethrin, Sevin, Spinosad



PARTHENOCARPIC VARIETIES

- Pollination not required!



RESISTANT VARIETIES

- Squash Vine Borer - *C. moschata* & *C. mixta*
 - Tromboncino, Butternut, Cushaw, others
- Powdery Mildew Resistance
 - Many options, read descriptions
- Squash Bug Resistance
 - Butternut, Royal Acorn, Sweet Cheese, Cushaw



SQUASH BUG



SQUASH BUG

- Cause wilted leaves, low vigor
- Scout for eggs under the leaves
- Easiest to kill when they are young
- Use permethrin, pyrethrin

BEAN LEAF BEETLE & MEXICAN BEAN BEETLE

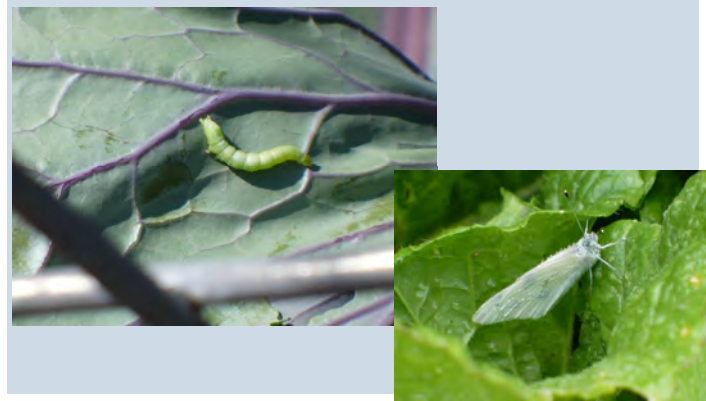


BEAN LEAF BEETLE

- Carbaryl
- Permethrin
- Pyrethrin?



CABBAGE LOOPER & IMPORTED CABBAGE WORM



CABBAGE LOOPER & IMPORTED CABBAGE WORM

- Dipel Dust or Thuricide Spray
- Carbaryl
- Soaps & oils
- Permethrin
- Pyrethrin
- Spinosad



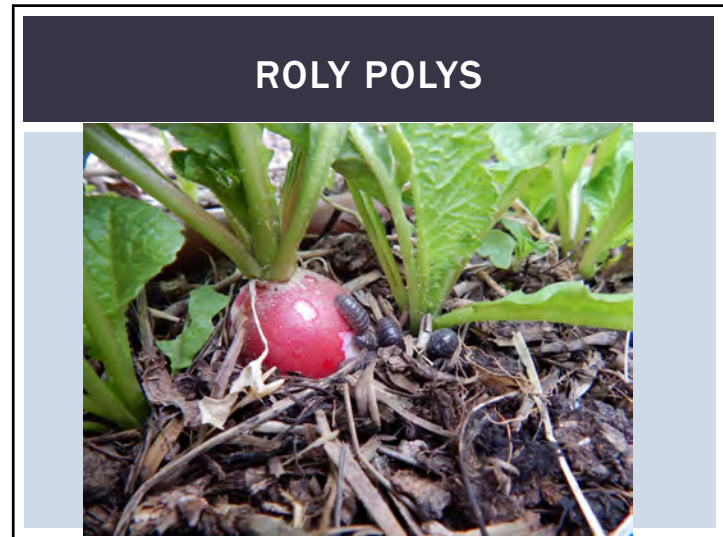
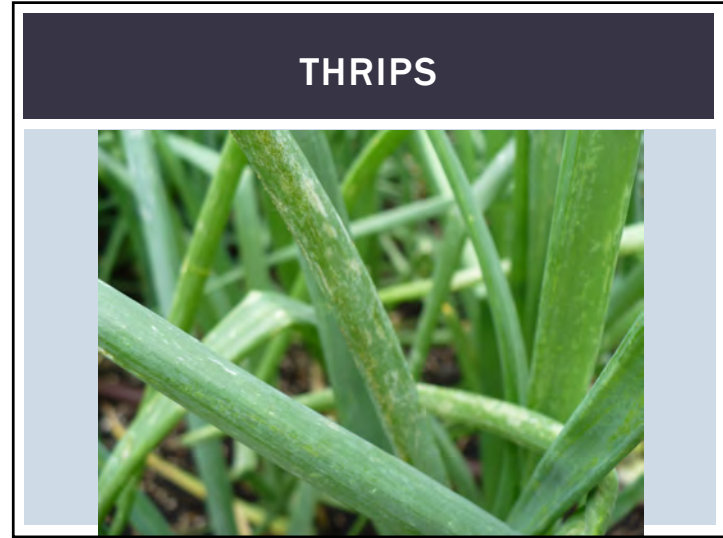
CORN EARWORM

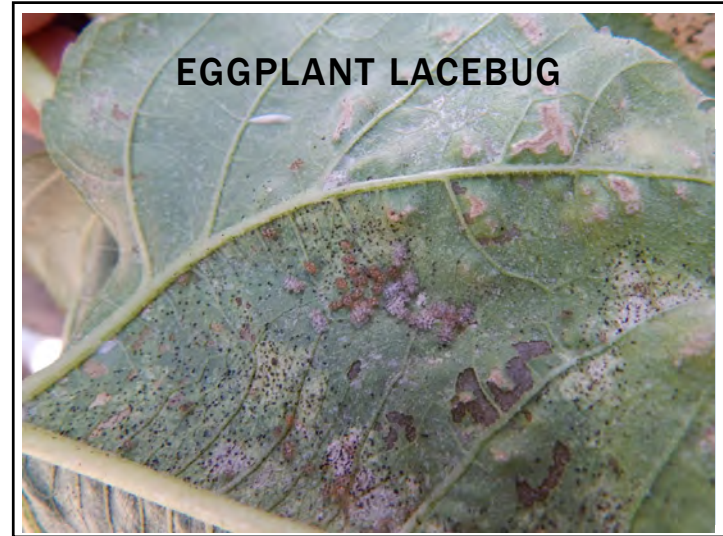
- Eggs laid on green silks
- Larvae crawl into tip of ear and eat
- Permethrin, Cyfluthrin
- Spinosad
- Mineral oil & Bt?



HARLEQUIN BUG







QUESTIONS?

■ For More Information:

- Master Gardener Hotline
 - sgemghotline@gmail.com - preferred
 - 316-660-0190
 - M-F, 9-12 and 1-4
 - Walk-In Clinic (not right now, but eventually)
- Extension E-Newsletter
 - Text: EXTENSION to 42828
- Horticulture Information Center:
 - <http://hnr.k-state.edu/extension/info-center/>

SOCIAL MEDIA

- Facebook Page:
<http://facebook.com/sedgwickextension>
- Facebook Group:
<https://www.facebook.com/groups/victorygarden101/>
- Instagram: @ksresedgwickco
- The Demo Garden blog:
<http://thedemogarden.org>