Stink Bug Identification & Management

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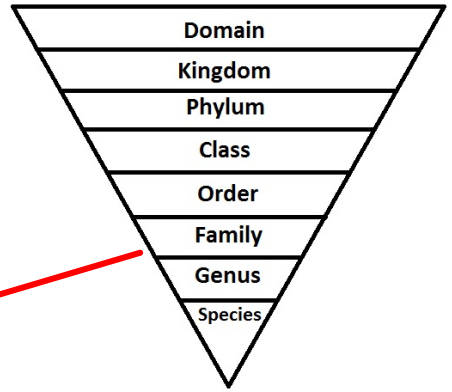
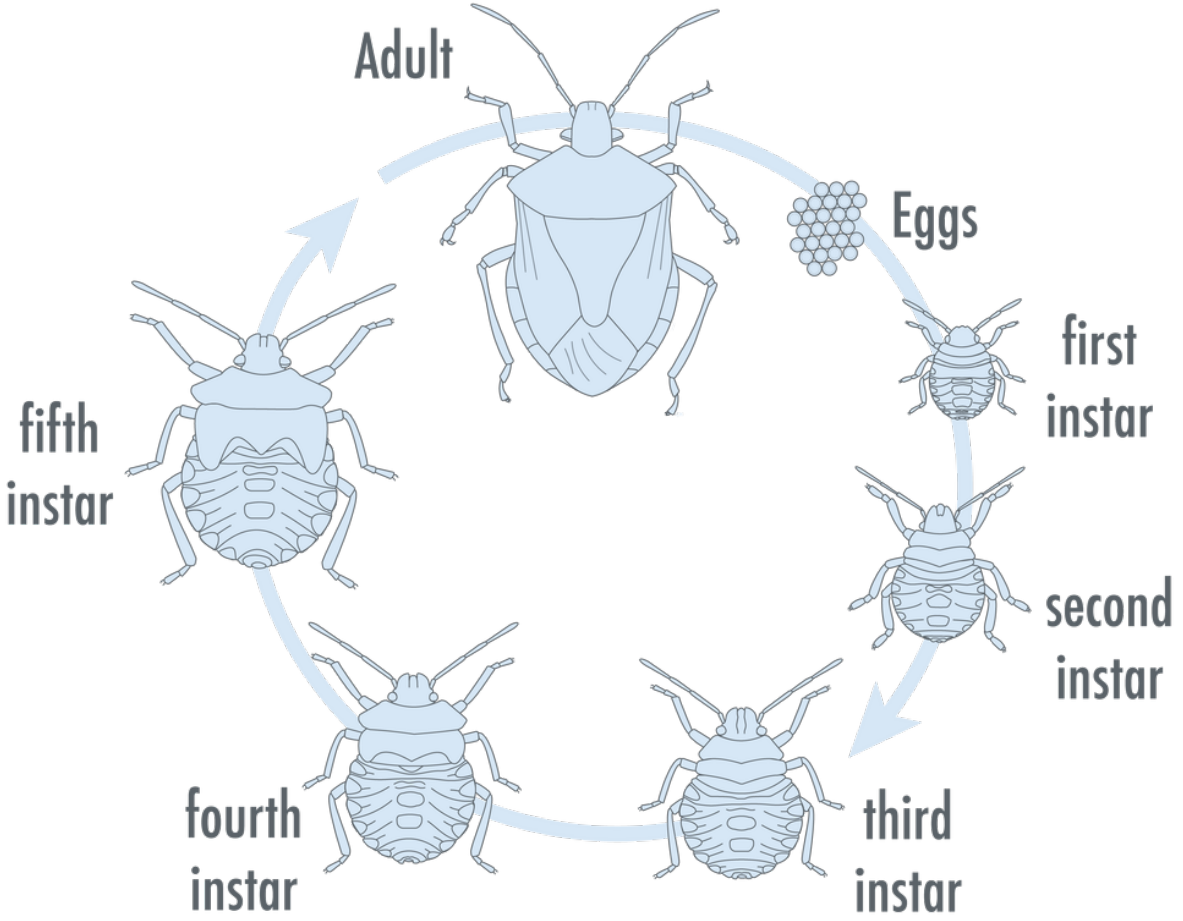
What is a Stink Bug?

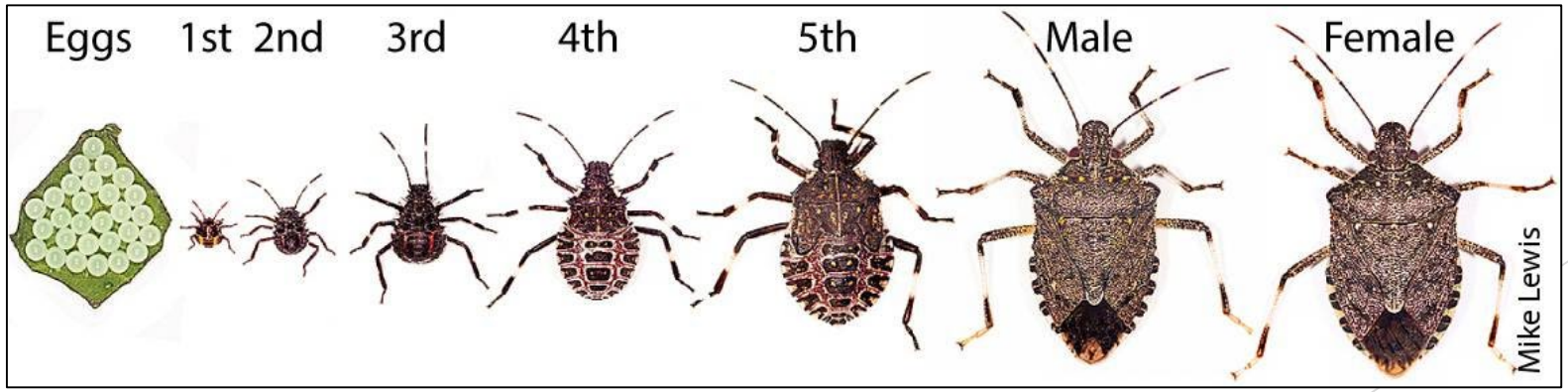


- Insect family group Pentatomidae
- Most species are herbivorous though there are many examples of predatory stink bugs
- Most native stink bugs in Utah feed on ornamental or native plant vegetation
- Several native and recently exotic species are known to feed on agriculturally significant plants like apple, peach, tomato, etc.
- Feed with a straw-like mouthpart called a proboscis

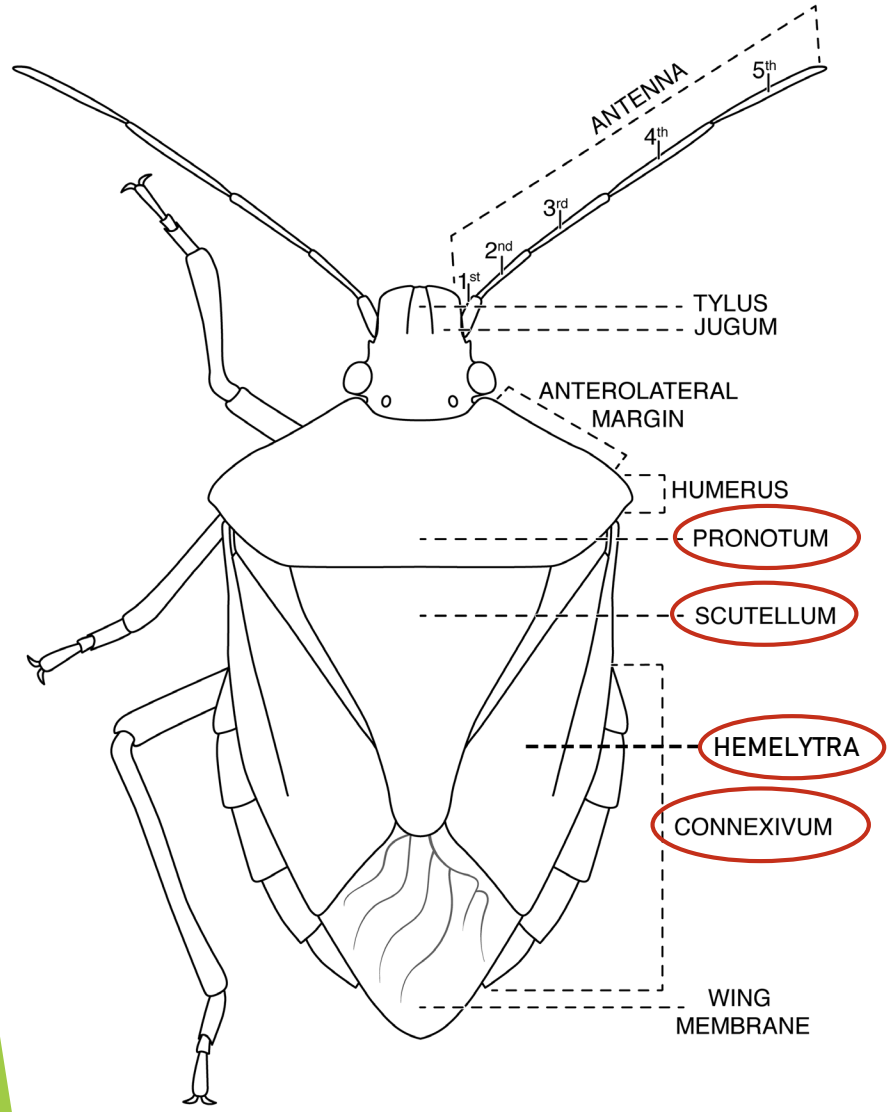
Life Cycle

- Incomplete or gradual metamorphosis



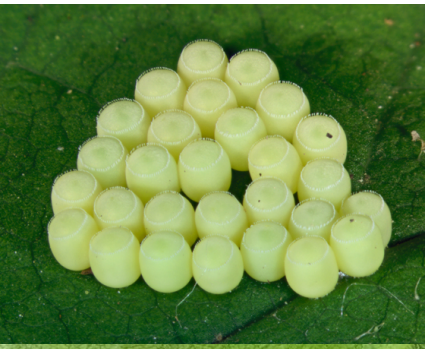


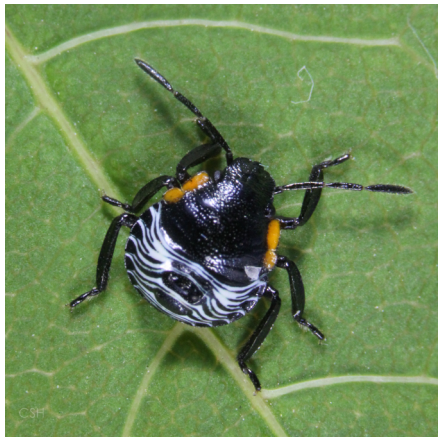
Basic Anatomy



Common Stink Bugs of Utah

- Green Stink Bug (*Chinavia hilaris*)





Common Stink Bugs of Utah

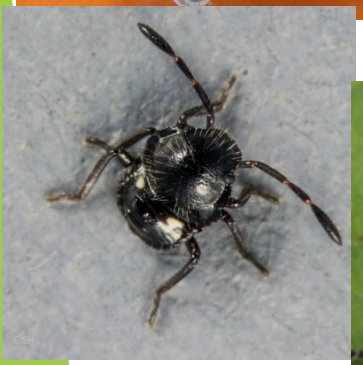
- Conchuela Bug or Conchuela Stink Bug (*Chlorochroa ligata*)

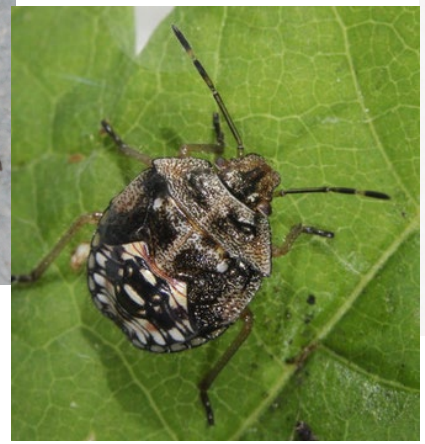
Common Stink Bugs of Utah

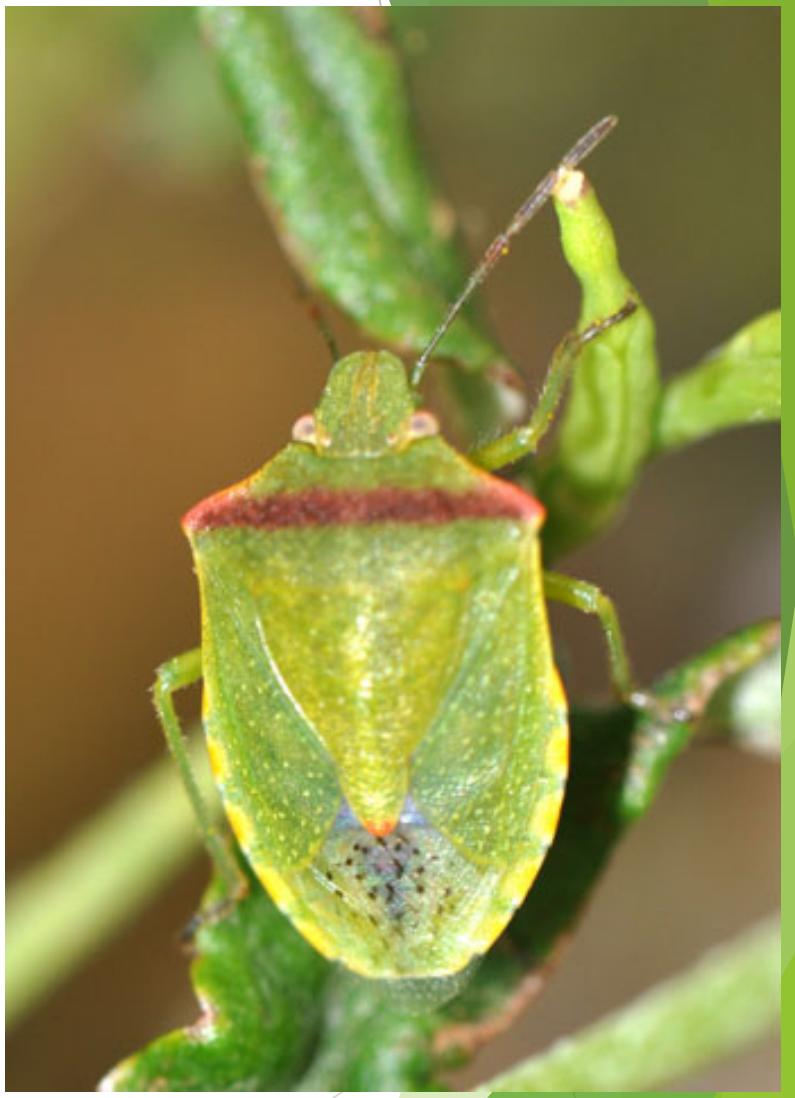
- Say or Say's Stink Bug (*Chlorochroa sayi*)

Common Stink Bugs of Utah

- *Thyanta spp.*







Common Stink Bugs of Utah

- Brown Marmorated Stink Bug (*Halyomorpha halys*)

Common Stink Bugs of Utah

- Rough Stink Bug (*Brochymena sulcata*)
  - Several other species with similar morphology in North America
  - Uniquely omnivorous

Common Stink Bugs of Utah

- Onespotted Stink Bug (*Euschistus variolarius*)

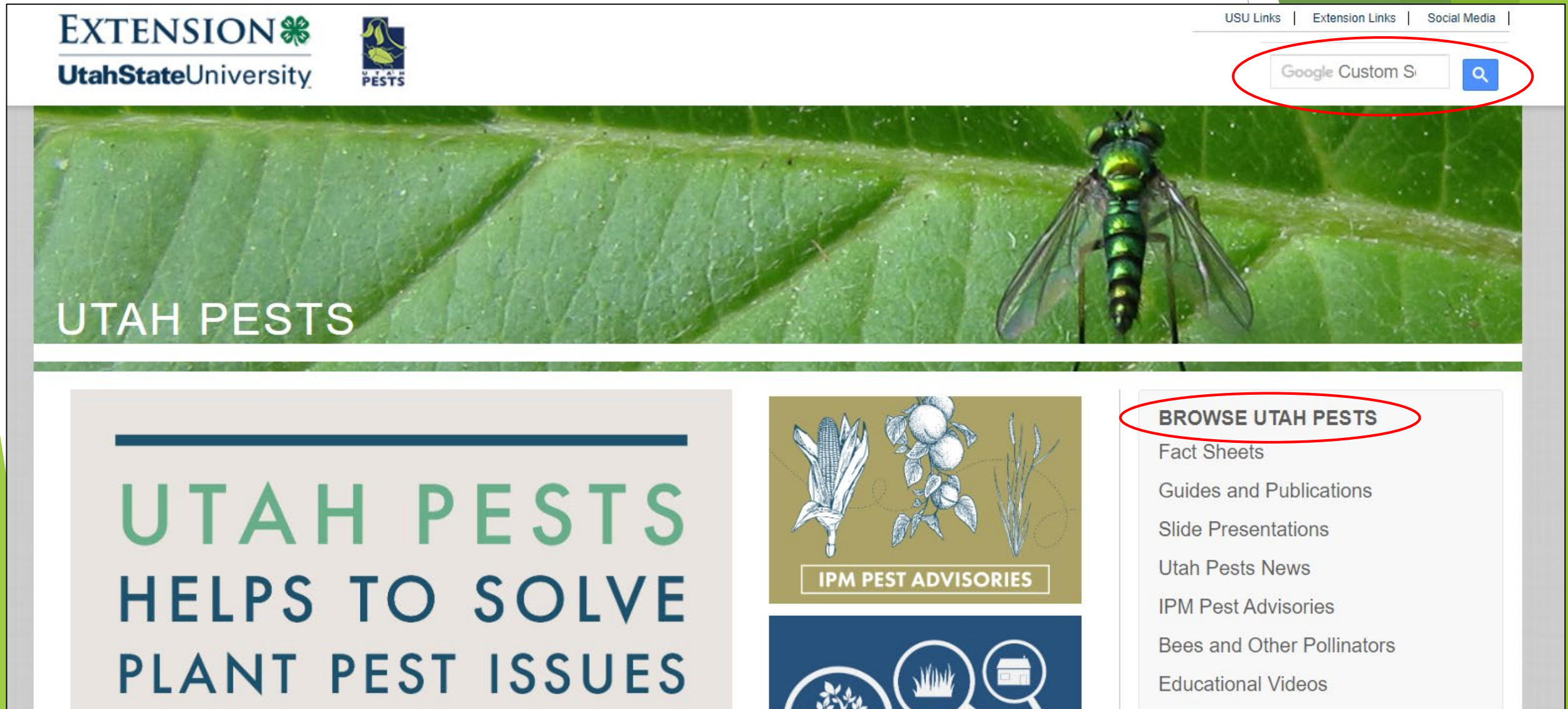
Common Stink Bugs of Utah

- *Menecles insertus*

Common Stink Bugs of Utah

- *Holcostethus abbreviatus*

Additional Resources



Additional Resources

UTAH PESTS fact sheet

EXTENSION
UtahStateUniversity

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Common Stink Bugs of Utah

Mark Cody Holthouse • Zachary R. Schumm •

Do You Know?

- There are over 300 species of stink bugs in North America.
- Stink bugs only fly as adults and not in the juvenile or 'nymph' stage.
- When feeding on plants, stink bugs release tissue dissolving enzymes that cause scarring and cat-facing on leaves, stems, and fruiting structures.
- Though most are herbivorous (plant feeding), some stink bugs are predatory and help control pest insect populations, including other stink bugs.

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Background

The term "stink bug" most commonly refers to a group of insects in the Family Pentatomidae, within the Order Hemiptera (the "true bugs"). As the name suggests, stink bugs exude foul smelling odors from glands on their thorax as a means of defense. Pentatomidae comes from the Greek terms pente- meaning "five" and –tomos, or "section". They have five

PLANT FEEDING STINK BUGS

Onespotted Stink Bug

Latin Name: *Euschistus variolarius* **Status:** Native

Size: 11-15 mm (0.4-0.6 inch)

Description: The dorsal side of the body is primarily light brown with a dark speckling pattern. The wing membrane is entirely dark brown in color (Fig. 11). Adults are also recognized by their cinnamon colored ventral side, antennae, and legs (Fig. 12). Though the connexivum pattern is similar to other stink bugs with its display of black bands, the alternating cinnamon/brown color is unique to this species.

Habitat: These stink bugs are found on ornamental shrubs and trees.


Fig. 11


Fig. 12

Stink Bugs as Pests

Management and control

Stink Bugs Make the News in Utah

Stink Bugs in St. George
Which one is it?
Southern Green Stink Bug *Nezara viridula*

-First photo courtesy of Shakespeare Pest Control, Article by St. George News 2019
-Second photo courtesy of Omar Torres, Article by Newsweek in 2019, photo is from 2016

Say Stink Bugs in Smithfield

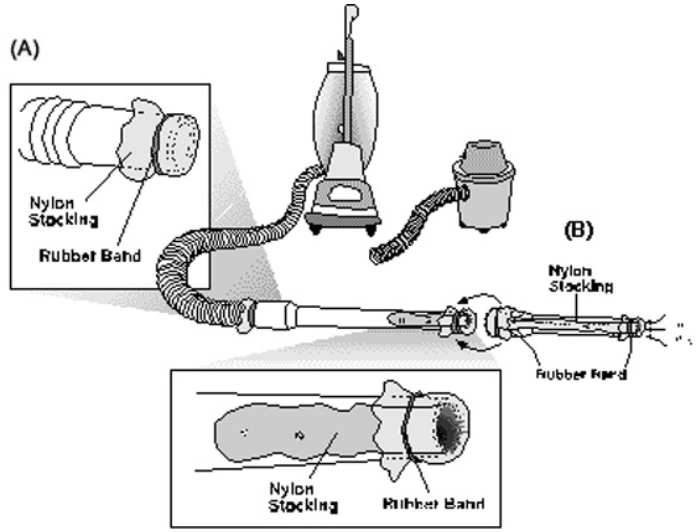
Photo courtesy of Herald Journal News, Eli Lucero 2019

Prevention

- Preventing stink bug pest problems is a good first step
  - Keep them from coming into your home
    - Caulking, plugging, and covering holes in building exterior
    - Repair window screens
  - Understand what kind of host plants attract potential stink bug pests
  - Learn about stink bug pests in your area on the Utah Pests website

UTAH PESTS
HELPS TO SOLVE
PLANT PEST ISSUES
THAT CONCERN UTAH CITIZENS EVERY DAY

Indoor Management



- If you already have stink bugs in your home
  - Mechanical removal
  - Attract and kill
  - Insecticide treatments by exterminator: may not always be effective due to high numbers, kills beneficial insects, and makes a large mess

Plant Damage

- Cat-facing
- Necrotic tissue
- Corking damage

Outdoor Management

- Monitor for Stink Bugs
  - Collect specimens and send them to USU Extension or other local professionals
  - Traps offer a great indicator of pest status in the yard or garden, many stink bug pheromone bait traps on the market
  - Use online resources to estimate times during the season that may present more risk of pest problems
    - USU Extension factsheets along with other state fact sheets

Outdoor Management

- Pesticides and Chemical Control
  - Usually reserved for commercial control of stink bugs
    - Most effective insecticides include broad spectrum chemicals such as neonicotinoids, pyrethroids, and carbamates
    - Border sprays found to be most effective
  - Less toxic chemical options include neem oil, pyrethrins, and insecticidal soaps
  - Note: native stink bug damage is many times negligible

Outdoor Management

- Cultural Control
  - Keep garden free of weeds and other possible host plants
  - Home gardeners may be best suited in mechanical exclusion
    - Floating row covers
    - Mesh bags over fruit tree branches

Outdoor Management

- Biological Control
  - Parasitoid wasps can be particularly effective in destroying stink bug eggs
  - The Samurai Wasp, *Trissolcus japonicus*, was found June 2019 in Utah

Acknowledgements

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