



Top 10 Insect Pests -Woody Ornamentals-

JayDee Gunnell / Jerry Goodspeed

Horticulturists

Utah State University

UtahState
UNIVERSITY

COOPERATIVE
extension

How Insects Injure...

- Piercing / Sucking
- Chewing
- Wood Boring
- Gall Forming



3 Steps in Identifying Insect Pests...

- 1- Know the plant affected / attacked.
- 2- What are commonly reported insects to that plant?
- 3- Recognize beneficial insects



USU Extension - Helps



- Utah Plant Pest Diagnostic Lab (UPPDL)
 - Located on Logan campus
- Sample submission is only \$5.⁰⁰
 - Insect pest identification
 - Plant diseases identification

<http://utahpests.usu.edu>

Symptoms vs. Signs

Symptom - plants response to stress.

- die-back
- wilting
- yellowing leaves
- tattered leaves

Sign - evidence of the insect.

- frass
- holes
- sawdust
- honeydew
- webbing



Top 10 Insect Pests

- Aphids
- Spider Mites
- Scale
- Cankerworms
- Lilac / Ash Borer
- Borers (flat-headed)
- Borers (round-headed)
- Bark Beetles (IPS)
- Gall Forming Insects
- Black Vine Rootweevil

Aphids

Description:

- small ($\frac{1}{16} \rightarrow \frac{1}{4}$ "), soft bodied
- vary in color
- two "tailpipes" on anterior end
- damage plants by sucking plant fluids

Hosts:

- most plants including:
rose, maple, linden, plum,
cherry, apple etc.

Symptoms:

- sticky "honeydew" on leaf surface
- curling, cupping leaves
- presence of ants, wasps and/or lady bugs

Remedies:

- healthy plants can tolerate some feeding
- strong jet of water to dislodge insects
- insecticidal soap
- other registered chemicals



Spider Mites

Description:

- extremely small (barely visible)
- eight legged arachnid
- damage by sucking plant fluids

Hosts:

- most plants including:
 - Dwarf Alberta Spruce, Honeylocusts, junipers, fruit trees
- prefer hot, dry, dusty environments

Symptoms:

- mottled bronzing on leaves
- small, thin webbing under leaf
- reduced plant vigor

Remedies:

- healthy plants can tolerate some feeding
- wash plant with strong jet of water
- insecticidal soap
- miticides may cause future flare-ups (use sparingly)



Scale

Description:

- insect with hard or soft covering
- immobile at maturity
- appear as bumps
- damage plants by sucking plant fluids

Hosts:

- most plants including:
apple, pine, maple, elm etc...

Symptoms:

- sticky “honeydew” on plant surface
- reduced plant vigor
- spots with haloes on fruit

Remedies:

- early sprays targeting “crawlers”
- dormant / summer oils
- systemic insecticides



Cankerworms

Description:

- small (1/2 → 1") caterpillars
- also called inchworms or loopers
- damages plants by chewing leaves

Hosts:

- common on Gambel oak, maple, and elm
- prevalent in early spring

Symptoms:

- defoliated trees
- silken threads
- shredded leaves

Remedies:

- most tree will re-leaf and recover
- Bacillus thurengiensis (Bt)
- other registered chemicals



Ash / Lilac Borer

Description:

- clear winged moth
- looks like a wasp in appearance
- larvae attacks deep into wood
- tunneling larvae weaken plants



Hosts:

- ash, lilac trees

Symptoms:

- branch die back
- oval shaped exit holes usually near branch crotches
- sawdust

Remedies:

- proper plant selection
- protective trunk sprays may reduce damage



Borers (flat-headed)

Description:

- metallic-colored beetles
- somewhat flattened / boatshaped
- larvae are hammer-headed
- larvae attack just under the bark (cambium)
- damage plants by disrupting nutrient flow

Hosts:

- Quaking aspen, birch, poplar, willow

Symptoms:

- branch die back
- D-shaped exit holes
- sawdust and /or oozing
- stressed induced problems

Remedies:

- proper plant selection
- systemic insecticides
- healthy plants are less prone to damage



Borers (round-headed)

Description:

- long-horned beetles (long antennae)
- larvae attack deep into wood
- usually attack stressed plants

Hosts:

- common in poplar, willow, and black locust
- fire wood, stressed plants

Symptoms:

- branch die back
- oval shaped exit holes
- sawdust
- feeding can be heard in firewood

Remedies:

- proper plant selection
- solarization of wood pile
- chemical control not recommended





Bark Beetles (IPS)

Description:

- small black beetle
- larvae attack small diameter branches first
- larvae attack just under the bark (cambium)
- stressed / crowded trees more susceptible

Hosts:

- pine and spruce

Symptoms:

- branch die back (top attacked first)
- pinhead sized exit holes
- sawdust
- galleries directly under bark

Remedies:

- keep trees healthy
- cut and remove infested trees
- protective sprays in early spring



Gall Forming Insects

Description:

- several small insects
- insect eggs laid under bark

Hosts:

- Spruce (Cooley Spruce Gall Adelgid)
- Honeylocust (Honey Locust Pod Gall Midge)
- Oak (Oak Gall wasp)
- Quaking aspen (wasp)

Symptoms:

- presence of abnormal growths(galls)
 - form in response to chemical changes within the plant
 - provide physical protection from predators
 - provide nutrients to insects

Remedies:

- tolerate the damage (does little damage)
- prune out galls
- registered chemicals



Black Vine Rootweevil

Description:

- black weevil (snout-nosed)
- also called strawberry root weevil
- nocturnal
- adults notch leaves
- larvae feed on roots

Hosts:

- common on lilac, privet, euonymus, laurel etc...

Symptoms:

- notched leaves
- reduced plant vigor
- damaged root system

Remedies:

- allow dry periods between watering
- systemic insecticides
- other registered insecticides



A close-up photograph of a green leaf covered in water droplets. The leaf is the central focus, with its veins and the texture of the water droplets clearly visible. On the right side of the leaf, there is a small, dark insect with orange markings. The background is a soft, out-of-focus green, suggesting a natural outdoor setting. The word "Questions?" is overlaid in a black, serif font in the upper right quadrant of the image.

Questions?