

Top Ten Insect Pests of Woody Ornamentals

Jerry Goodspeed, JayDee Gunnell and Erin Hodgson
Utah State University Extension

Most insects are beneficial; however, a few can cause serious injury to plants if left unchecked. Insects feed on or damage plants in three basic ways: 1) Chewing on the leaves, which reduces the plant's ability to produce energy; 2) Piercing/sucking on the internal fluids of the plants, which reduces plant vigor; and 3) Boring, which disrupts water and nutrient flow. Here are ten of the more common insect pests associated with woody ornamentals in the Intermountain area. While healthy plants can tolerate some insect feeding or damage, control of certain insect pests may become necessary. Control should be based on correct identification and by incorporating integrated pest management (IPM) practices.

Aphids

Description

- Small (1/16" to 1/4"), soft bodied
- Vary in color
- Two "tailpipes" on anterior end
- Usually wingless

Hosts

- Most plants, especially rose, maple, linden plum, cherry, apple etc.
- Damage plants by sucking plant fluids

Symptoms & Signs

- Sticky 'honeydew' on leaf surface
- Curling, cupping leaves
- Presence of ants, wasps and/or ladybird beetles

Remedies

- Healthy plants can tolerate some feeding
- Strong jet of water to dislodge insects
- Insecticidal soap
- Horticultural oils



(Beneficial ladybird beetle larvae)

Scales

Description

- Insect with hard or soft covering
- Immobile at maturity
- Appear as bumps
- Plant genus specific

Hosts

- Most plants, especially apple, pine, maple, elm etc.
- Damage plants by sucking plant fluid

Symptoms & Signs

- Sticky 'honeydew' on leaf surface
- Reduced plant vigor
- Spots with halos on fruit

Remedies

- Early spring sprays targeting mobile 'crawlers'
- Dormant/summer oils
- Systemic insecticides



Cankerworms

Description

- Small caterpillars (1/2" to 1")
- Also called inchworms or loopers
- Damages plants by larvae chewing leaves

Hosts

- Common on Gambel oak, maple and elm
- Prevalent in early spring

Symptoms & Signs

- Defoliated trees
- Silken threads
- Shredded leaves

Remedies

- Most trees will re-leaf and recover
- Bacillus thuringiensis (Bt)
- Other registered insecticides



Spider Mites

Description

- Extremely small (barely visible)
- Eight-legged arachnid

Hosts

- Most plants, especially Dwarf Alberta spruce, honeylocusts, junipers, fruit trees
- Damage by sucking plant fluids

Symptoms & Signs

- Mottled bronzing on leaves
- Small, thin webbing under leaf
- Reduced plant vigor

Remedies

- Healthy plants can tolerate some feeding
- Strong jet of water to dislodge insects
- Insecticidal soap
- Miticides (may cause future flare-ups, use sparingly)



Ash / Lilac Borer

Description

- Clear-winged moth
- Looks like a wasp in appearance
- Larvae bore deep into wood, weakening trees

Hosts

- Ash, lilac trees

Symptoms & Signs

- Branch die back
- Oval-shaped exit holes usually near branch crotches
- Sawdust may be present

Remedies

- Proper plant selection
- Protective trunk sprays may reduce damage



Flat-headed Borers

Description

- Metallic-colored beetles
- Somewhat flattened / boatshaped
- Larvae are hammer-headed
- Larvae attack just under the bark (cambium)

Hosts

- Quaking aspen, birch, poplar, willow
- Damage plants by disrupting nutrient flow

Symptoms & Signs

- Branch die back
- D-shaped exit holes
- Sawdust may be present

Remedies

- Proper plant selection
- Healthy plants are less prone to damage
- Systemic insecticides



Round-headed Borers

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 & Signs

- Branch die back
- Oval-shaped exit holes
- Sawdust may be present
- Feeding can be heard in firewood

Remedies

- Proper plant selection
- Solarization of wood pile
- Chemical control not recommended



Bark Beetles (Ips)

Description

- Small black/brown beetle
- Larvae attack small diameter branches first
- Larvae attack just under the bark (cambium)
- Stressed /crowded trees more susceptible

Hosts

- Pine and spruce

Symptoms & Signs

- Branch die back (top attacked first)
- Pinhead-sized exit holes
- Sawdust may be present
- Galleries directly under bark

Remedies

- Keep trees sufficiently irrigated
- Cut and remove infested trees
- Protective spray in early spring



Gall-forming Insects

Description

- Several small insects (aphids, beetles, flies, etc)
- 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 & Signs

- Presence of abnormal growths (galls)
- Form in response to chemical changes within the plant
- Provide physical protection from predators

Remedies

- Tolerate the aesthetic damage
- Prune out galls



Lilac Root Weevil

Description

- Black weevil, including other related root weevils
- Nocturnal
- Adults notch leaves
- Larvae feed on roots

Hosts

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

Symptoms & Signs

- Notched leaves
- Reduced plant vigor
- Damaged root system

Remedies

- Allow dry periods between watering
- Systemic insecticides
- Registered insecticides



For more information, go to
utahpests.usu.edu



Utah State University is committed to providing an environment free from harassment and other forms of illegal discrimination based on race, color, religion, sex, national origin, age (40 and older), disability, and veteran's status. USU's policy also prohibits discrimination on the basis of sexual orientation in employment and academic related practices and decisions. Utah State University employees and students cannot, because of race, color, religion, sex, national origin, age, disability, or veteran's status, refuse to hire; discharge; promote; demote; terminate; discriminate in compensation; or discriminate regarding terms, privileges, or conditions of employment, against any person otherwise qualified. Employees and students also cannot discriminate in the classroom, residence halls, or in on/off campus, USU-sponsored events and activities. This publication is issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Noelle E. Cockett, Vice President for Extension and Agriculture, Utah State University.