

KEY PESTS- KEY PLANTS

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KEY PESTS

The following key pests, listed by insect order/disease type, occur frequently and do the most damage to landscape plants. Target plants should be monitored for infestation or infection. Insects with a complete metamorphosis change from egg to larva to pupa to adult. The adult looks nothing like the larva. Insects with an incomplete metamorphosis change from egg to nymph to adult. The larva generally looks like a smaller wingless version of the adult.

INSECTS

COLEOPTERA (beetles and weevils. Complete metamorphosis, larva is a grub, chewing mouthparts.)

- ◆ **Weevils** (black vine, two-banded Japanese, white pine)
- ◆ **Beetles** (Japanese, Asiatic garden, Oriental)

HEMIPTERA (true bugs. Incomplete metamorphosis. Immature is a nymph. Piercing-sucking mouthparts.)

- ◆ **Lacebug**

HOMOPTERA (aphids, scales, adelgids. Incomplete metamorphosis, piercing-sucking mouthparts)

- ◆ **Adelgids** (woolly hemlock, Cooley gall, spruce gall)
- ◆ **Aphids**
- ◆ **Scale insects** (euonymus, globose, magnolia, oystershell, pine needle)

LEPIDOPTERA (moths and butterflies. Complete metamorphosis, larval stage-caterpillar- has chewing mouthparts. Adults have siphoning mouthparts.)

- ◆ **Bagworm**
- ◆ **Borers** (clearwing borers of rhododendron, peach, lilac, ash, dogwood)
- ◆ **Caterpillars** (gypsy moth, cankerworm, tent, fall webworm)
- ◆ **Nantucket pine tip moth**

HYMENOPTERA (bees, ants, wasps, sawflies. Complete metamorphosis. Grub-like (ants, bees, wasps) or caterpillar-like (sawflies) larvae. Biting-chewing mouthparts.)

- ◆ **Pine sawfly**
- ◆ **Leafminer** (birch)

DIPTERA (flies. Complete metamorphosis. Larva is a maggot)

- ◆ **Leafminer** (holly, boxwood)

Other Arthropods: mites (spruce, spider, eriophyid)

DISEASES (biotic)

Fungal (such as anthracnose, apple scab, rust, black spot, Diplodia tip blight, botryosphaeria canker, cytospora canker, phytophthora canker, Dutch elm disease and many leaf spots.) Viral

and bacterial are not as common as fungal diseases, but some, such as bacterial leaf scorch and fireblight, are very serious.

KEY PLANTS

In the landscape of the Northeast the following key plants are the most likely to attract pests that cause serious problems and should be monitored regularly for infestation or infection:

Arborvitae (*Thuja* spp.) common problems include bagworm, mites, deer damage

Birch (*Betula* spp. esp. white barked) common problems include leaf miner, bronze birch borer

Dogwood (*Cornus* spp. -especially *florida*) common problems include borers, *Discula* and spot anthracnose, phytophthora crown canker

Euonymus (*Euonymus* spp. esp evergreen species) common problems include euonymus scale, aphids, deer damage

Crabapple (*Malus* spp.) common problems include scab, rust, fireblight, Eastern tent caterpillar, deer damage

Juniper (*Juniperus* spp.) common problems include mites, bagworm, tip blight, juniper scale, vole damage, root rots

Pine (*Pinus* spp.) common problems include (2-needle) pine sawfly, Nantucket pine tip moth, pine needle scale, botryosphaeria canker, diplodia tip blight and (5-needle) white pine weevil, giant aphid, white pine bark adelgid

Purple leaf plum, Cherry et. al. (*Prunus* spp) common problems include Japanese beetle, black knot, peach tree borer, white peach scale, globose scale

Azalea (*Rhododendron* spp.) common problems include azalea bark scale, lace bug, pinxterbloom gall, vole damage

Rhododendron (*Rhododendron* spp.) common problems include rhododendron borer, black vine weevil, lace bug, rhododendron tip midge, phytophthora and botryosphaeria canker,

Hemlock (*Tsuga canadensis* and *T. caroliniana*) common problems include hemlock woolly adelgid, mites, fiorinia and hemlock scale

Also:

Maple (*Acer* spp.) common problems include scale, cankerworms, aphids

Boxwood (*Buxus* spp.) common problems include boxwood psylla, mites, canker

Cotoneaster (*Cotoneaster* spp.) hawthorn lacebug, fireblight, scale insects

Hawthorn (*Crataegus* spp.) lacebug, aphids, rust, fireblight

Honeylocust (*Gleditsia* spp.) common problems include plant bug, webworm, spider mite, pod gall midge, cankers

Holly (*Ilex* spp.) common problems include leaf miner, mites

Spruce (*Picea* spp.) common problems include mites, gall adelgid, cytospora canker, white pine weevil, bagworm (**Dwarf Alberta spruce** especially susceptible to mite infestation)

Purple leaf Plum (*Prunus cerasifera*) common problems include globose scale, Japanese beetle, black knot

Andromeda (*Pieris japonica*) common problem in sun is lacebug

Sycamore (*Platanus* spp.) common problems include plant bug, aphids, scale, anthracnose

Firethorn (*Pyracantha* spp.) common problems include lacebug, bagworm, scab, fireblight

Oak (*Quercus* spp.) common problems include leaf and stem galls, gypsy moth, cankerworm, mites, anthracnose, scale, bacterial leaf scorch

Roses (*Rosa* spp.-esp. hybrid teas) common problems include Japanese beetles, aphids, thrips, rose midge, mites, leafhoppers, powdery mildew, black spot

Yew (*Taxus* spp.) problems include black vine weevil, scale, *Taxus* mealybug, root rot

Elm (*Ulmus* spp.) common problems include leaf beetle, bark beetle, various diseases.