# **Problematic Privets**

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Privet (*Ligustrum* spp.) is widely used as a landscape hedge and for the most part seems to tolerate life in a wide range of sites. Recently, we've heard of occasionally heavy infestations of privet rust mite and white prunicola scale on privet but there are also other pests that are commonly seen on this host. They include privet thrips, twobanded Japanese weevil and lilac/ash borer. In addition, there are some privet diseases including alternaria leaf spot and anthracnose. Below is an introduction to these common privet problems.

### Privet Rust Mite (Aculus ligustri) (231)

**Description and Life Cycle:** Adult privet rust mites are less than 0.5 mm in length. These eriophyid mites are white to yellow and spindle shaped with four short anterior legs. Even when viewed with a hand lens, they are so small that they appear as specks of dust or pollen. Immatures are very similar but smaller. Mites may be present from May through November.

**Damage:** The immature mites feed on leaf juices with piercing-sucking mouthparts and introduce toxins that cause leaves to cup downwards, turn olive green and become stunted. Premature leaf drop and silvery stippling of foliage are also symptoms.

**Hosts:** Amur privet (*L. amurense*), California privet (*L. ovalifolium*) and regal privet (*L. obtusifolium 'Regelianum'*)

**Management:** Predaceous mites are the most effective natural enemies of these pests, but horticultural oil or other registered pesticides can be used to fight these pests in the last 10 days of May through Mid-June ( $298-802 \text{ GDD}_{50}$ ) and mid-July ( $1266-1515 \text{ GDD}_{50}$ ). Whichever product is used, good coverage improves control; treat both sides of foliage.

**Additional Notes:** Lately privet rust mites have become important pests in both landscapes and nurseries. In landscapes, the defoliation on heavily pruned shrubs can cause an unacceptable aesthetic damage; in nurseries where privet is less strongly pruned the curling and bronzing of new growth can be somewhat tolerated except during years of sale or if it leads to defoliation or severe stunting.



Heavy infestation of privet rust mites look like dust on the leaves. Inset: Close-up of privet rust mites (highly magnified)

## White Prunicola Scale (Pseudaulacaspis prunicola) (188)

**Description and Life Cycle:** White prunicola scale overwinters as an adult female. Light orange eggs are laid in April and salmon colored crawlers hatch in mid-June through early July. There are two generations per year. Males are bright white, narrow and fuzzy. Females are dull white, cylindrical with a yellow center. This pest causes a white coating on the trunk and twigs of its host plant.

**Damage:** This scale feeds on the plant sap which reduces plant vigor. The leaves yellow and drop prematurely. Dieback may occur.

**Hosts:** *Prunus*, lilac, privet, willow, and catalpa

**Management:** Treat in April  $(35-145 \text{ GDD}_{50})$  for a dormant treatment. Treat crawlers in mid-June through early July  $(707-1151 \text{ GDD}_{50})$ . Late-summer applications of insecticidal soap are reported to work well. Scrubbing off heavy infestations with a brush is also an effective management strategy on small trees.





White prunicola scale (males on left, females on right) on privet © Dan Gilrein

#### Privet Thrips (Dendrothrips ornatus) (208)

**Description and Life Cycle:** The adults are black with white wings that have two cross bands and are <sup>1</sup>/<sub>16</sub> inch long. The larvae are smaller, yellowish-white, and wingless.

**Damage:** The larvae and adults of the privet thrips cause conspicuous chlorotic flecks (coarse stippling) on the leaves that may give a dusty grayish appearance to the infested privet. This damage is caused by the insect using its rasping/sucking mouth parts to puncture plant cells and extract the fluids. The leaves become whitish, and speckled on the underside with specks of dark excrement.

Hosts: California (L. ovalifolium) & regal L. obtusifolium 'Regelianum'

**Management:** To scout for thrips sharply tap leaves over white paper to dislodge them. Damage is rarely severe enough to warrant application of a pesticide but if it has become intolerable, registered pesticides should be applied in mid-May through the first 10 days of June (192–618  $\mathrm{GDD}_{50}$ ) and again in early July (1029–1266  $\mathrm{GDD}_{50}$ ). An additional control strategy is to remove and destroy the leaf litter. Privet thrips thrive in hot, dry summers because they are easily washed off by rain or overhead watering.

**Additional Notes:** A single one is still called thrips, not thrip.



Privet thrips damage. © D.D. O'Brien Inset: A privet thrips adult. © Dan Gilrein

#### Lilac/Ash Borer (Podosesia syringae) (122)

**Description and Life Cycle:** The adults of this clearwing moth are ½ inch long and metallic brownish-black. The larvae are white or yellowish with dark brown heads. The larvae damage the plant by boring into the stems.

**Hosts:** Lilac, privet, fringetree, and ash.

**Damage:** Look at the bark for holes (circular, clean, and ½ inch in diameter), sawdust, and cracks. With a heavy infestation, branches dieback; the plant may be killed.

**Management:** Woodpeckers are the most important predators. If they are not sufficiently reducing borer populations, an insecticide may be needed. Treat in mid-May (200–299 GDD<sub>50</sub>) and again in early June (400+ GDD<sub>50</sub>), with a third treatment two weeks later. Spray timing can also be determined by using pheromone traps (Make an application ten days after the first male moth is caught. If additional males are captured 6 weeks following initial spray a second spray may be needed) Prune and destroy infested canes. However, avoid pruning when moths are present.



Ash/Lilac borer adults © Whitney Cranshaw, Colorado State University, Bugwood.org

Twobanded Japanese weevil © Michael C. Thomas, Florida Dept. of Agriculture and Consumer Services, Bugwood.org

# Two-banded Japanese Weevil (Callirhopalus bifasciatus) (114)

**Description and Life Cycle:** The adult weevil is ½ inch long, and its color varies from light to dark brown, with mottled color bands on the wing covers. There are no males and that females can produce viable eggs without mating.

**Damage:** Notches of various depths in leaves. This damage can be differentiated from the damage caused by the black vine weevil since the twobanded Japanese weevil makes notches that are more variable in shape and size. Hosts may be badly injured by the adult weevil, particularly new shoots and leaves. In the course of feeding, it chews notches in leaves until eventually only the petiole is left.

Foliage damage becomes more evident by late summer as the growth rate of the plant slows down and the effect of continuous feeding by the adult accumulates. Larvae feed on roots.

**Hosts:** Host plants are numerous and some common ones are privet, rhododendron, azalea, mountain laurel, hemlock, rose, viburnum, lilac, dogwood, holly, and ash.

**Management:** Treat in late July through late August, 1644–2271 GDD<sub>50</sub>. Natural enemies have not been studied.

#### Alternaria Leaf Spot (Alternaria alternata)

**Description and Life Cycle:** The fungus overwinters in plant debris and in or on bark and is dispersed by wind or locally by water. The fungus enters plants through stomata or wounds.

**Hosts:** California privet (*L. ovalifolium*)

**Damage:** Leaf spot, yellowing and leaf drop. Concentric rings of darker brown within the leaf lesion are often apparent when the necrotic spots are magnified. Thinning of the foliage seems to start in the center of the privet plant.

**Management:** Several fungicides are registered for leaf spot diseases on privet and may be useful in managing the disease where it has become severe. See the Cornell Guidelines for specifics. Make applications at 7-28 day intervals during the first half of the growing season as directed on product labels.

**Additional Notes:** Alternaria leaf spot was found to be prevalent on California privet on Long Island during the 2009 and 2010 growing seasons. However, it is not yet known if other factors are contributing to this problem.



Alternaria leaf spot on privet © Alexis Alvey

#### Anthracnose (Glomerella cingulata) (56)

**Description and Life Cycle:** This disease attacks weakened plants during warm weather and spreads by splashing rain.

**Damage:** The fungus causes leaf spot and twig cankers. Affected leaves dry out and hang from the stem. Infected stems and twigs have sunken cankers with pinkish fruiting bodies and result in twig death when the cankers cause girdling.

**Hosts:** Common privet (*L. vulgare*) is susceptible; Privets which are listed as resistant or less susceptible include Amur (*L. amurense*), Ibota (*L. obtusifolium*), Regal (*L. obtusifolium* 'Regelianum' and California (*L. ovalifolium*)

**Management:** The use of resistant varieties appears to be the most effective method of control. Prune and destroy infected branches during dry weather. Spray with registered fungicides weekly as long as disease is active, or per label directions.