



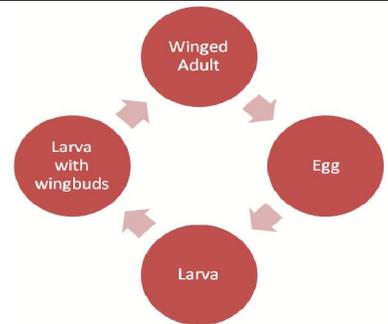
MISSOURI BOTANICAL GARDEN

William T. Kemper Center for Home Gardening

Visit us on the Web: www.gardeninghelp.org

Insect Order ID: Hemiptera (Psyllids, also called Jumping Plant Lice)

Life Cycle—Gradual metamorphosis (sometimes called incomplete or simple). Winged adults lay eggs. Larvae (nymphs) look more and more like adults as they grow and molt. Wings begin as tiny wingbuds on larvae and gradually grow larger and larger until fully developed and functional on adults.



Adults—Wedge-shaped or teardrop-shaped from above. The two pair of membranous wings are held like a tent over a narrow body, the peak of the tent running down the center of the back while the sides slant downward. As the name "jumping plant lice" implies, they jump with their enlarged hindlegs as do the visually similar to planthoppers or leafhoppers, but unlike hoppers, psyllids have long, swept-back antennae that are clearly visible. *(Click images to enlarge or orange text for more information.)*



Membranous wings



Wings held tent-like over body



Long, swept-back antennae



Usually gregarious

Eggs—Hard to find and hard to see, especially when laid within the folds of a bud, such as, on boxwood.

Larvae (nymphs)—Some look similar to adults. Others are flattened like the larvae of their very close relatives, whiteflies, except that psyllid larvae have wingbuds that whitefly larvae lack. Some produce copious amounts of white cottony material to hide under, while others construct domes of crystallized honeydew over themselves, called lerps, and still others produce ordinary liquid honeydew. After each molt, the larvae look more adultlike and the wings are larger and more developed than the previous instar (the stages between molts). Eyes are prominent. Like the adults, they can jump and may resemble planthoppers or leafhoppers, except, unlike hoppers, their antennae are prominent and visible. *(Click images to enlarge or orange text for more information.)*



Similar to adults



White, cottony wax



Wingbuds

Pupae—None. All go through gradual metamorphosis. Each larva (nymph) looking more and more adultlike.

Beneficial/Benign Aspects—Feeding damage from most hoppers is insignificant. Cicadas can spend up to 17 years underground feeding on tree roots without damaging them.

Damage—Both adults and nymphs have piercing/sucking mouthparts. They pierce plant tissues and suck out juices, sometimes transmitting diseases, such as, psyllid yellows. They do NOT make holes. Many are gall makers. Many have toxic saliva, so that the damage on leaves may appear as cupping, curling, distortion or stunting. Others cause yellowing and dropping leaves. They are phloem feeders and so produce honeydew. Some species use the honeydew to produce a crystalized dome to hide beneath, called a lerp. Sooty mold may also be present growing on the honeydew. *(Click images to enlarge or orange text for more information.)*



Nipple gall on hackberry



Cupped & curled leaves from boxwood psyllid



Benign, cottony secretions left behind on leaves and stems



Sooty mold growing on honeydew

Comments—Psyllids, also called jumping plant lice, were formerly classified in the order Homoptera. They are now classified in the order Hemiptera, Suborder Sternorrhyncha, Superfamily Psylloidea.