

# Home and Horticultural

# PESTS



## Hackberry Nipplegall Maker (Psyllids)

Hackberry nipplegall makers, also known as psyllids, resemble miniature cicadas because of the way they hold their wings over their bodies (Figure 1). Psyllids are small, about 2 to 5 mm long, and inconspicuous with long antennae and hind legs adapted for jumping. They are commonly called jumping plant lice. Nipplegalls appear on lower leaf surfaces (Figure 2) and contain a single psyllid nymph.

**Seasonal life cycle:** Hackberry nipplegall psyllids have a one-year life cycle. Adult psyllids overwinter in protective sites such as cracks and crevices of hackberry tree bark as well as other nearby tree species, stacked wood, lumber, and beneath soil debris and litter. They can become a nuisance when they seek protection indoors in homes and garages, outbuildings and sheds.

Hackberry nipplegall psyllids become active in the spring. Females deposit eggs on lower surfaces of new foliage. Eggs hatch in 7 to 10 days. As nymphs feed, they stimulate abnormal growth of leaf tissues surrounding an individual nymph and eventually form nipple-shaped galls. After feeding throughout the summer, mature nymphs emerge through a slit in the gall and drop to the ground where they undergo a final molt before overwintering as adults.

**Objections to hackberry nipplegall psyllids:** A major objection to hackberry psyllids is the presence of nipplegalls on tree foliage. While the galls are not detrimental to overall tree health, some people consider them unsightly and become alarmed when heavily-galled leaves drop to the ground. In spring, a flush of new foliage replaces prematurely shed leaves. New foliage is gall-free because egg-laying psyllids have died.

Hackberry nipplegall psyllids become a nuisance in the fall when temperatures drop and adults seek overwintering sites. Their small size allows them to penetrate mesh screens and invade homes.

**Control procedures against home invasions:** Tree removal is a method for eliminating production of hackberry nipplegall psyllids. But if a neighborhood has many hackberries, removing trees from an individual property will not prevent invasions of migrating psyllids.

Homeowners wanting to preserve hackberry trees for landscape purposes should use exclusionary tactics to prevent home invasions. Caulk foundation cracks and crevices. Repair or install weather stripping around windows and doors. Install small mesh screening to cover soffit, louver and air-exchange openings. Install storm doors and windows before cool weather that stimulates psyllid movements. Within reason, reduce use of lights over doorways and windows during active flight periods. Replace ordinary light bulbs with special non-insect attracting yellow bulbs. Eliminate psyllids from homes by vacuuming.



Figure 1

Whitney Cranshaw, Colorado State University



Figure 2

Whitney Cranshaw, Colorado State University

**Prevent nipplegall formation** by applying insecticides to reduce or eliminate psyllids before they deposit eggs. Treatments must be applied to new foliage in the spring. Homeowners should look for products containing either the active ingredient acephate or carbaryl. Products containing the systemic active ingredient imidacloprid can be applied as a soil drench treatment around the tree base. Systemic insecticide drench treatments should be applied in mid to late fall or as sap begins to move in the spring to ensure reaching new leaf tissue. Licensed arborists can administer imidacloprid and dicrotophos formulations as trunk injections.

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