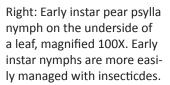
Identification...

Still continued

Scouting should be aimed at determining the presence of eggs and young juveniles when insecticides are to be applied.



Left: Early instar pear psylla nymph, magnified 100X. All instars have characteristic red eves.







Sooty mold grows in honeydew secreted by nymphs which pools on leaf and fruit surfaces reducing photosynthetic capacity and fruit marketability.

Resistance Management

Due to the pear psylla's many overlapping generations, insecticide resistance can readily develop. Prevent resisitance by using:

- kaolin clay
- seasonal oils
- Rotate IRACs

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Additional resources:

New England Tree Fruit Management Guide netreefruit.org

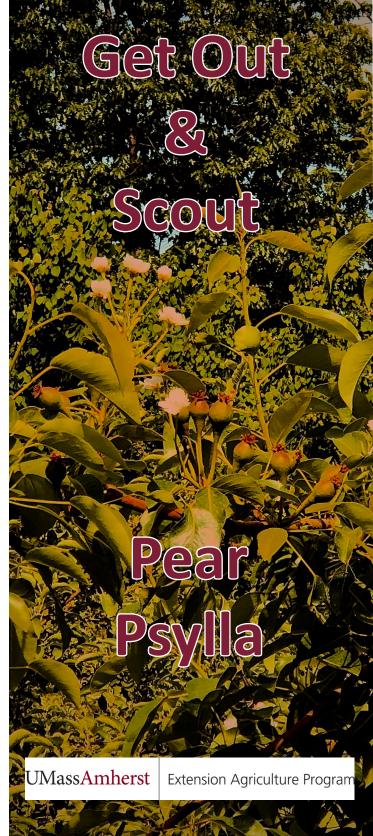
MyIPM App Series apps.bugwood.org/apps/myipmseries

UMass Extension Fruit Team Fact Sheets ag.umass.edu/fruit/fact-sheets

YouTube Channels UMass Extension Fruit Team Cider Chick007

(All Photos: E. Garofalo, UMass Extension)

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Pear psylla

Cacopsylla pyricola

Pear psylla is one of the more problematic insect pests of pear. It is widely distributed, has several generations and life stages, has an unusual ability to develop chemical control resistance, and where left unchecked, secretes copious amounts of honeydew that grows a black fungus making fruit unmarketable. Heavy infestation can also result in tree stunting (psylla shock), reduced fruit set and size, and even death with prolonged infestation.



The sooty mold fungus grows on honeydew secreted by pear psylla nymphs.

Monitoring

Look for pear psylla adults on the first nice sunny day of spring before bud break.

- winter-form adults;
 use a beating tray and threshold of an average of 0.2 adults per 10 samples in an acre or less (20 samples in blocks larger than an acre). Adult psylla can also be monitored using sticky traps.
 - summer treatment threshold for pear psylla is one nymph/ three leaves. Examine 25 spurs (one per tree) and terminal shoots per orchard to determine the threshold average.

Identification and Life Cycle

Pear psylla is a cicada like insect that, as you might guess by its name, feeds exclusively on pear trees. It overwinters as an adult. This adult form is slightly different from its summer form. At a quick glance an adult could be mistaken for a largish gnat.

- The winter adults are black and slightly larger than summer adults
- Summer adults are striped and reddish-brown.
- Psylla's tented wings show their close kinship to cicadas
- Eggs are laid in rows and are small and ovoid
- Eggs appear creamy white when first laid but become yellow to yellow orange at maturity.

- overwintered adults emerge from hibernation when spring temperatures warm to 45-50°F
- egg laying can occur as soon as budswell if temperatures are favorable
- Before tissue growth occurs these eggs can be found at the base of buds but may be laid along shoots as well.
- Later eggs are laid along leaf mid-viens



Adult pear psylla (orange circles) and lines of recently laid eggs (green arrows).

Identification... Continued



Adult pear psylla: overwintering form. Winter adults are darker than the summer form adults.



Adult pear psylla: summer form. Summer adults have lighter alternating abdominal bands than the winter form adults.



Late instar or "hardshell" nymph. Hardshell stage is less scusceptible to insecticides.