



Woolly apple aphid

Eriosoma lanigerum

Order Hemiptera, Family Aphididae; aphids or plant lice
Native pest

Host plants: Apple is preferred, but elm, hawthorn, mountainash, and pear are also susceptible.

Description: Adult aphids are approximately 1.5 mm long and wingless in summer. They are reddish-purple but usually covered completely by a white waxy material.

Life history: This aphid usually has a summer host of apple, hawthorn, pear, mountainash, or serviceberry and a winter host of elm, but this is not an obligate relationship. Eggs hatch in spring, as buds unfold, and nymphs feed on new growth of elms. Later in the season, a winged generation develops which migrates to the summer host where it feeds on the roots or around trunk wounds. Winged females return to elms in the fall and lay one egg each. There are several generations a year.

Overwintering: Eggs in bark cracks.

Damage symptoms: This insect feeds on new terminal leaves, causing them to curl or form rosettes. Heavy infestations may cause deformed twigs and branches, which can stress trees.

Monitoring: Look for aphids under a covering of white waxy material.

Chemical control: Horticultural oil and soap sprays can assist natural enemies when aphid populations are high enough to justify control efforts. Apply imidacloprid as a soil treatment by early summer to control heavy infestations of this pest.

Biological control: There are numerous natural enemies of this aphid. Ants, yellow jackets, lacewings, lady beetles, ground beetles, hover fly and predaceous midges are all important predators. The parasitic wasp *Aphelinus mali* is also an important parasitoid. A mirid predator, *Deraeocoris nitenatus*, whose nymphs have a waxy covering, feed in curled leaves. Ants may tend the aphids for honeydew, protecting them from natural enemies.

Plant mortality risk: Low

Biorational pesticides: insecticidal soap, horticultural oil

Conventional pesticides: chlorpyrifos (nursery only), deltamethrin, imidacloprid



Curling of elm leaf caused by woolly apple aphid. (W86)
Photo: Whitney Cranshaw



Woolly apple aphids on a branch. (W85)
Photo: Whitney Cranshaw



Woolly apple aphids on a crabapple branch. When parasitized by wasps, the aphid turns black. (275)
Photo: John Davidson