



European fruit lecanium

Parthenolecanium corni

Order Hemiptera, Family Coccidae; soft scales

Native pest

Host plants: Flowering fruit trees and maples are preferred, but a wide variety of trees and shrubs are also hosts.

Description: Identification of the European fruit lecanium is often difficult because its coloration and body shape vary according to the host. Females are initially flattened and brown in appearance, but as they mature, they become hardened and round. Mature females are about 6 mm long. Crawlers are initially white, but turn yellow as they mature.

Life history: Females mature in spring and lay eggs in May and June. Crawlers hatch in June and July and migrate to leaves to feed. In late summer, crawlers migrate back to twigs to overwinter. There is one generation a year.

Overwintering: Immatures.

Damage symptoms: Large populations produce considerable amounts of honeydew that support growth of a sooty mold fungus. Dieback of twigs and branches as well as host weakening are possible, depending on population levels.

Monitoring: Eggs hatch when Greenspire littleleaf linden and Northern catalpa bloom in mid to late June (Herms). A large number of natural enemies have been found associated with the European fruit lecanium and these enemies usually combine to control the pest. It is important therefore, to monitor for the presence of beneficials before any action is taken. From May through June look for adult females on twigs. Beginning in June look for honeydew and sooty mold and check for crawlers on leaf undersurfaces. Look for twig and branch dieback.

Chemical control: *General information.*

Conservation of beneficial insects: Use short duration, low residual insecticides, such as horticultural oil, insecticidal soap, and insect growth regulators (IGR).

Foliar applied broad spectrum insecticides, such as acephate, carbaryl, imidacloprid, and pyrethroids: Use only when scale populations are high to rescue trees; beneficial insects will also be killed.

Dormant season oil treatments: Use for soft scales that overwinter as immatures.

Summer oil treatments: Oil smothers exposed eggs, crawlers, and immature females.

Insect growth regulators (IGR), such as pyriproxifen: Use for crawlers as they disrupt molting.

Soil applied systemic insecticides or trunk injections, such as imidacloprid: Apply imidacloprid in fall for crawlers in spring. Less harmful to beneficial insects than foliar applied, broad spectrum insecticides.



European fruit lecanium scale adult females on twigs. (107)
Photo: John Davidson



European fruit lecanium scale immature females on twigs. (107)
Photo: OARDC Photo Lab



European fruit lecanium scale adult female with cover turned over to show eggs. (107)
Photo: OARDC Photo Lab

Biological control: Common soft scale predators are minute pirate bugs, lacewings, lady beetles, and predaceous midges. Parasitoids are also important. Beneficials usually control this scale. If beneficials are present, control crawlers with oil.

Plant mortality risk: Low

Biorational pesticides: horticultural oil, insecticidal soap, pyriproxifen

Conventional pesticides: acephate, bifenthrin, carbaryl, chlorpyrifos (nursery only), deltamethrin, fluvalinate, imidacloprid, lambda-cyhalothrin, malathion, permethrin