**Calico scale**
*Eulecanium cerasorum*
Order Hemiptera, Family Coccidae; soft scales
Native pest

**Host plants:** Crabapple, dogwood, elm, firethorn, honeylocust, maple, sweetgum, star magnolia, zelkova, and all stone fruit trees

**Description:** Mature female scales have distinctive white and black markings and are 6-8 mm in diameter. As they age, females lose the black and white patches and turn dark brown. Crawlers are white.

**Life history:** Crawlers appear in June, move to leaves, and feed throughout the summer along leaf veins before moving back to twigs prior to leaf drop in the fall. Males are unknown. There is one generation a year.

**Overwintering:** Immatures on bark.

**Damage symptoms:** Large amounts of honeydew are produced in the spring by developing adult females. Sooty mold fungi grow on the honeydew. Stunted leaves may occur where heavy infestations are present on twigs. Leaves may yellow and drop prematurely. There may be no damage symptoms with light to medium infestations.

**Monitoring:** Look for black and white mature females on twigs and branches in May and June. Look for honeydew and sooty mold. Also look for crawlers during summer on the undersurface of leaves.

**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 be also 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.

**Biological control:** Two parasitic wasps, *Prospaltella* sp., and *Physcus varicornis*, can exert significant control.

**Plant mortality risk:** High

**Biological control:** In cases of light infestation, allow beneficial insects to exert control over the scale by taking no action. Common soft scale predators are minute pirate bugs, lacewings, lady beetles, and predaceous midges. Parasitoids are also important. The yellow-rumped warbler has been observed as an important predator of this scale.

**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