

# Calico Scale

## *Eulecanium cerasorum*

### HOST PLANTS

- Buckeye
- Crabapple
- Dogwood
- Elm
- Hackberry
- Hawthorn
- Honeylocust
- Magnolia
- Maple
- Oak
- Pear
- Redbud
- Sweetgum
- Tuliptree
- Yellowwood
- Zelkova
- Many other trees

## Description

Calico scale is a type of soft scale. Adult females are about the size of a pencil eraser, round, white and dark brown to black in color. They are named after the calico pattern of color on their shell. Adult males can look so different from females that identifying them as the same species can be difficult. Crawlers are very tiny starting out being pinkish in color and later turning yellow.



## Life Cycle

In the spring, mature female calico scale swell, then turn brown and die just before egg hatch. Eggs hatch into crawlers, which crawl up the trunk to the canopy of the host plant and neighboring plants. Crawlers settle near veins and begin feeding. They move back to the bark to overwinter as flattened, grayish nymphs. Calico scale has one generation per season.

## Monitoring

In April and May, wrap double-sided tape or electrical tape coated with petroleum jelly around the trunk above swelling females to detect egg hatch and crawler movement. This also helps monitor the efficacy of insecticide applications made targeting the adult female before egg hatch. Look for honeydew on leaves and branches below the pests. Ant activity is a good indicator of scale pests because they feed on the honeydew produced by scale. Another indicator is dark sooty mold, which is a fungus that grows on the honeydew. Monitor downwind of existing infestations. In May and June, look for crawlers on the undersides of leaves along the veins.

# Damage Symptoms

Common symptoms include black sooty mold or a clear, sticky substance (honeydew) on leaves. Calico scale have needle-like mouthparts that feed on tree sap. The primary injury to the host plant is the extraction of huge quantities of sap from feeding. Heavy infestations can result in premature leaf drop, stunting, branch dieback and death of the host plant. Damage from sap feeding can yield severe crop losses. Because crawlers blend in with the bark fall thru early spring, take care not to sell or buy plants that are infested.



## Integrated Pest Management

### BIOLOGICAL CONTROL

Ladybeetles (Coccinellidae) feed on eggs, crawlers, young nymphs and adults. Several parasitic wasp species can aid in population outbreaks as do birds.

### CULTURAL CONTROL

Keep trees in vigorous growing conditions through proper planting, balanced fertilization and adequate irrigation during drought periods will promote a healthy plant and reduce attack by this and other pests.

### CHEMICAL CONTROL

Please refer to [http://eppserver.ag.utk.edu/redbook/sections/trees\\_flowers.htm](http://eppserver.ag.utk.edu/redbook/sections/trees_flowers.htm) for the most up to date recommendations.

## Resources

Photo credits: Dr. Amy Fulcher, University of Tennessee

Lambdin, Paris., Bill Klingeman, and Frank Hale. "Pests in the Spotlight Top Tips for Managing Scales and Mealybugs on Ornamentals." *Tennessee Green Times*. Department of Plant Sciences, 2002. 34-37. Web. 1 July 2011. <<http://plantsciences.utk.edu/pdf/ManagingScalePests.pdf>>.

Potter, Michael F., and Daniel A. Potter. "Calico Scale Alert." *Kentucky Pest News Newsletter*. N.p., 21 May 2007. Web. 5 July 2011. <[http://www.uky.edu/Aq/kpn/kpn\\_07/pn070521.htm](http://www.uky.edu/Aq/kpn/kpn_07/pn070521.htm)>.