

Calico Scale

Calico scale, *Eulecanium cerasorum* (Cockerell) is a pest of a variety of woody landscape plants. The scale is believed to have been introduced into the San Francisco area in the early 1900's and subsequently spread throughout the United States. It does not usually kill its host plant, however, it can severely weaken the plant, making it more susceptible to woodborers and drought and other stresses. Calico scale can be spread by windblown crawlers, carried on the feet of birds between plants, and also spread through infested nursery stock.

Plants Attacked

Calico scale's host range includes dogwood (*Cornus*), honeylocust (*Gleditsia*), magnolia (*Magnolia*), maple (*Acer*), sweetgum (*Liquidambar styraciflua*), tuliptree (*Liriodendron tulipifera*) and ornamental fruit trees.

Insect Identification

This colorful white and dark brown calico scale is about 1/4 inch in diameter. It is brightest at maturity and darkens with age. The first-instar nymphs are pinkish in color becoming yellowish as they enlarge. Throughout the winter the immature females are oval, flattened, and light to dark brown with a hard waxy coating.

Life History

Over-winter	In late winter/early spring they molt to the third instar stage. The nymphs feed heavily on tree sap and molt into the adult stage.
Spring/Summer	In April, the females continue to feed, producing eggs beneath them, and eventually turn brown and crusty. After egg hatch occurs in late May, crawlers move to the leaves and settle to feed for the summer months.
Summer/Fall	The nymphs move back to the woody tissue where they molt to the second instar, which is black and has a harder waxy coating.

There is one generation each year in Pennsylvania.

Damage Symptoms

Calico scale covers the branches and leaves of the host plant feeding on the phloem tissue. The plant may be covered in sooty mold as a result of the large quantities of honeydew produced by the calico scale. In large numbers, feeding can result in branch dieback.

Management Options

Biological Some birds are predators of Calico Scale.

Chemical Settled crawlers may be managed by applying ghf

Control measures for Calico scale in Pennsylvania

<http://woodypestguide.cas.psu.edu/Control/Dogwood.html>

Authored by: Katherine Mazzezy, Penn State Extension Program Assistant

Michael Masiuk, Extension Agent, Penn State University – Allegheny County

Sources:

Insect and Mite Activity Noted in Ohio Nurseries and Landscapes: 2001. Ornamental Plants Annual Reports and Research Reviews 2001. Special Circular 186-02. Ohio State University.

http://ohioline.sou.edu/sc186_sc186_7g.html.

Hubbard, J. L. & Potter, D. A. (2002). Biology and Management of Calico Scale, a Severe Pest of Trees in Kentucky Landscapes. UK Nursery and Landscape Research Rep. PR-468.

Hubbard, J. L. & Potter, D. A. (2002). Calico Scale Research Update. UK Kentucky Turfgrass Research Report.

Hubbard, J. L. & Potter, D. A. (2001). Biology and Management of Calico Scale, a Severe Pest of Trees in Kentucky Landscapes. UK Nursery and Landscape Research Rep. PR-437.

Hoover, G.A. (2000). Woody Ornamental Insect, Mite, and Disease Management.

Penn State College of Agricultural Sciences. pp.27

<http://woodypestguide.cas.psu.edu>

Johnson, W.T. & Lyon, H.H. (1976). Insects That Feed On Trees and Shrubs, pp.354.

Comstock Publishing Associates. Cornell University Press.