



Calico Scale

Hardwood, Stone Fruit, and Ornamental Fruit Trees

What is Calico Scale?

Calico scale, *Eulecanium cerasorum*, is a soft scale insect that attacks a large variety of woody plants. Calico scales produce large amounts of sticky sap called honeydew in the spring, which can coat tree leaves, branches, sidewalks, and cars. This sticky sap soon turns black from sooty mold fungi growing on it and in severe cases may interfere with the trees ability to photosynthesize, making it more susceptible to woodborers, drought, and other stresses.



Biology

Calico scale has one generation per year. Hatching in the late spring, crawlers move to the leaves where they settle and feed for the summer. In late summer, they move back to woody tissue where they molt and create a hard waxy coating. In very early spring, overwintering crawlers lay their eggs.

Susceptible Trees

Calico scale can be a pest to all stone fruit and ornamental fruit trees, elm, maple, zelkova, honeylocust, sweetgum, magnolia, pyracantha, dogwood, buckeye, Boston ivy, and tuliptree.



Signs and Symptoms

- Large amounts of honeydew in the spring.
- Sooty mold fungi growing on the honeydew.
- Stunted, yellowing leaves leading to premature leaf drop and dieback.

Photo, top right: Calico scales overwinter under hard waxy coverings on the twigs of affected leaves. This is the only life stage where they are easily visible on the tree. (United States National Collection of Scale Insects Photographs Archive, USDA Agricultural Research Service, Bugwood.org) **Below, top:** A common symptom of calico scale is the presence of sooty mold. This can be found on branches or on the leaves of affected trees, just about anywhere that the honeydew drips. (Elizabeth Bush, Virginia Polytechnic Institute and State University, Bugwood.org) **Bottom:** Sooty mold affects the leaves ability to photosynthesize; reducing the sugar production of a tree weakens its ability to resist damage caused by opportunistic insects. (Joseph O'Brien, USDA Forest Service, Bugwood.org)

Calico scale is most effectively treated with soil applied products such as **Xytect™** and **Transtect™**. These systemic products are applied to the soil at the base of the tree and are taken up by the root system, working to control insects from the inside of the tree. A contact insecticide, such as **Up-Star® Gold**, can be sprayed on the scales, but this is rarely used as the timing must coincide with crawler emergence, which only takes place for one week during the year.

Treatment Strategies

Transtect™

Transtect™ is applied to the soil and will provide a quick knockdown (within 2 weeks). It has a residual of at least 90 days, and should be applied in the spring.

Xytect™

Xytect™ is applied to the soil and has a long residual (1 year); however, it usually will take 30 – 60 days for the product to reach the leaves. Professional arborists will often apply Xytect™ in the fall of the year for control the whole next season. Early spring applications are also very effective.

Up-Star® Gold

Foliar spray products, like Up-Star® Gold, are not used very often anymore for larger trees as there are issues with drift and contact with beneficial insects. They are however still used on smaller plants that are easily treated with a hand sprayer. These products typically have a residual of 10 – 14 days and should be applied to coincide with egg hatch and crawler emergence to be effective. The hard shell of the adult scale protects the insect from sprays, so monitor your tree to determine when to spray.



DIY Shopping List

Option 1:

Application Type – Soil drench, Soil injection

DIY Product/Equipment Needed

- Transtect™ or Xytect™**
- Measuring or diameter tape
- Gloves
- Soil Drench:** Bucket or watering can
- Soil Injection:** HTI Soil Injection Kit



Option 2:

Application Type – Foliar spray

DIY Product/Equipment Needed

- Up-Star® Gold**
- Hand pump sprayer with wand
- Gloves/Safety glasses

