



## PRESS RELEASE

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### **Calico Scale - Insects Causing Sticky Lawns and Sparse Trees**

(Troy, MI) – Residents noticing a strange “sap” dripping from their trees can blame the situation on the Calico Scale insect infesting many trees in Michigan. While scale doesn’t usually kill trees, it may weaken them making the trees susceptible to other environmental stresses. Scale infestations run in 5-10 year cycles and the parasites and predators necessary to lower the scale population are slowly growing in number. Currently, heavy infestations are being reported in Canton and East Lansing.

Troy did inject trees for scale in 2007, 2008, and 2009 with little success. Troy’s 2010 management plan for the infestation is to stop all chemical treatments and encourage natural predators to bring the scale levels down. In the meantime, the City will continue to investigate and test alternative treatments.

The calico scale is a small pest that measures about a quarter of an inch in diameter and infects woody landscape plants. Calico scale can be spread by windblown crawlers or carried on the feet of birds. The first symptom is usually a “honeydew rain” that glistens on lawns and bushes below infested trees. The honeydew is a sugary liquid waste excreted by the calico scale.

Plants attacked include dogwood, redbud, crabapple, honeylocust, elm magnolia, maple, sweetgum, tulip tree, oak, zelkova, pear and many more.

The scale is believed to have been introduced into the San Francisco area in the early 1900s and subsequently spread throughout the United States. In recent years, the insect has become a problem in many urban areas. More information about the Calico Scale is available at [www.troymi.gov/trees](http://www.troymi.gov/trees).

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## Calico scale going wild in some places

posted on May 21, 2010 11:28

### Dave Smitley, Entomology

I received a few frantic phone calls this week about some serious infestations of calico scale. One call came from Canton, a suburb of Detroit, and another from East Lansing. Although calico scale has been a problem in California since 1960, it first came to our attention about five years ago when some localized heavy infestations were reported. It seems to be spreading to more places and causing more problems in Michigan now. A wide variety of tree types can become infested, but most of the problems tend to be reported on ornamental stone fruits (*Prunus* spp.), maples (*Acer* spp.), honeylocust, elm, pear, dogwood and crabapple. To give you an idea of how many types of trees may become infested, I asked Pete Murray (MSU Botanical Technician) to generate a list of the infested trees near the botanical gardens on the MSU campus. Here is a list of trees where scale insects were found on May 21 in the MSU Beal Garden area.

- All Maples (*Acer*)
- All Dogwoods (*Cornus*)
- Amelanchier
- All Magnolia
- Katsura (*Cercidiphyllum*)
- Musclewood (*Carpinus*)
- Viburnum
- Honeylocust (*Gleditsia*)
- Cherry (*Prunus*)
- Redbud (*Cercis*)
- Tulip Tree (*Liriodendron*)
- Sweetgum (*Liquidambar*)
- Buttonbush (*Cephalanthus*)
- Poplar (*Populus*)
- All Birch (*Betula*)
- Walnut (*Juglans*)
- Sycamore (*Platanus*)
- Paper Mulberry (*Broussonetia*)
- Only Bur Oak *Quercus macrocarpa*
- Willow (*Salix*)
- All Buckeye (*Aesculus*)
- Kentucky Coffee Tree (*Gymnocladus*)
- Hackberry (*Celtis*)
- Hickory (*Carya*)
- Ironwood (*Ostrya*)
- Sassafras
- Crab Apple (*Malus*)
- Hawthorn (*Crataegus*)
- Witch-hazel (*Hamamelis*)
- Paw Paw (*Asimina*)
- Spicebush (*Lindera*)
- Elm (*Ulmus*)

Infested trees may have dark trunks from the honeydew and a thin canopy (Photo 1). Closer examination reveals that twigs are covered with small brown to black and white bumps (Photo 2).

Each bump is a female scale insect. The black and white calico pattern is brightest in the spring as the females reach maturity, turning darker and more brown afterwards (Photo 3). Although heavy infestations can be a serious nuisance because of the dripping honeydew, trees rarely die due to the scale insect alone. Treatments for prize trees or trees growing over driveways or decks are **discussed later in this issue**.



**Photo 1.** Dark trunks from honeydew and a thin canopy are signs of an infested tree.



**Photo 2.** Twigs covered with small brown to black and white bumps.



**Photo 3.** Black and white calico pattern is brightest in the spring as the females reach maturity, turning darker and more brown afterwards.

## Treatments for Calico scale, cottony maple scale, and Lecanium spp. scales

posted on May 21, 2010 11:23

### Dave Smitley, Entomology

In most cases, it is not necessary to use an insecticide for soft scales on street trees. The outbreak should subside in a year or two when parasites and predators catch-up with the scale. However, some of the calico scale outbreaks are severe and seem to persist many years, and in some places where mosquito sprays are used, the outbreaks tend to persist longer and are more severe. In an outbreak area, it may be desirable to treat an individual tree over a deck or driveway to avoid the sticky mess from dripping honeydew.

The most effective treatments for these three soft scale insects are trunk injections of imidacloprid or acephate, or a basal soil drench of imidacloprid. Other systemic insecticides like dinotefuron and clothianidin are being evaluated at this time and may also be effective. Unfortunately, imidacloprid basal soil applications and imidacloprid trunk injections at this time (late May) work very well to prevent the development of the next generation of scale insects this summer, but they do not work fast enough to prevent the rain of honeydew in early to mid-June.

In contrast, trunk injections of acephate will be more effective now, but may not work as well on the next generation of young scales that will be developing in July and August. For large trees, it is best to contact a professional landscaper or arborist for a trunk injection treatment. Homeowners also have the option of using imidacloprid products that can be purchased at garden centers, like Bayer Tree and Shrub Insect Control. This product is mixed in a bucket of water at the rate of 1 oz per inch of trunk circumference, and then poured around the base of the trunk. When trees have a trunk diameter greater than 12 inches (greater than 38 inches circumference), two drenches at least a week are recommended. Basal drenches can be made any time from late May to early July, but they will not be effective for at least two weeks after the drenches are made.

For more information, visit: [www.tree-doc.com](http://www.tree-doc.com).