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## Problem: Magnolia Scale - Neolecanium cornuparvum



Hosts: Saucer and Star Magnolia

**Description:** Magnolia scale is the largest scale insect in the United States. Crawlers are primarily located on the undersides of 1- to 2-year old twig growth. They eventually produce a powdery, waxy, white covering over their bodies. Magnolia scale overwinters as a first-instar crawler or nymph, with one generation per year in Kansas. Magnolia scale females are 1/2-inch long and red-brown in color. They are initially covered with a white, waxy powder. During August and September, females deposit eggs, which hatch into crawlers/nymphs that are oval in shape and gray to red in color with a ridge extending down the back. Double-sided tape or electrical tape smeared with petroleum jelly can be used to capture crawlers making them more easily seen. Use a magnifying lens to identify the very small crawlers. If nothing is moving, crawlers are not active yet. Magnolia scale is a soft scale and produces copious amounts of honeydew, which may result in shiny, sticky leaves, as well as sticky sidewalks and vehicles (e.g., cars and trucks) located underneath infested trees.

**Recommendations:** Although insecticides are effective against magnolia scale—especially the crawlers or nymphs—the primary means of dealing with magnolia scale is by promoting plant health through proper watering, fertility, mulching, and pruning practices. These practices may decrease susceptibility or limit the amount of injury when plants are infested with low to moderate populations of magnolia scale. Another option, if feasible, is to use a forceful water spray to physically remove magnolia scales from infested plants. This method removes all the life stages...quickly. There are a number of natural enemies including ladybird beetles that feed on magnolia scales; however, they are usually not abundant enough to provide adequate suppression/regulation of magnolia scale populations.

If the use of insecticides is deemed necessary, the crawler or nymphal stage is very susceptible to applications of insecticides including acephate (Orthene), potassium salts of fatty acids (Insecticidal Soap), petroleum oils (horticultural or summer oils), malathion, and pyrethroid-based insecticides {e.g., bifenthrin (Bug Blaster II), cyfluthrin (BioAdvanced Vegetable & Garden Insect Spray), and lambda-cyhalothrin (Spectracide Triazicide)}. All plant parts must be thoroughly covered with the

spray solution. Since magnolia scale is a soft scale, soil applications of imidacloprid (e.g. Merit and many generics) may be effective if applied early enough.

## **References:**

1. Magnolia Scale, Kansas Insect Newsletter, August 20, 2010, No. 22

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