



# Entomological Notes

Department of Entomology

## MAGNOLIA SCALE

*Neolecanium cornuparvum* (Thro)

The magnolia scale is one of the largest scale insects in the United States. It feeds only on magnolia. This species is native to the United States and is widely distributed throughout the eastern United States.

### DESCRIPTION

Adult females are about 12 mm in diameter, smooth, elliptical, convex, pinkish-orange to brown insects that are covered with a white, waxy coating (Fig. 1). The overwintering nymphs are dark gray with a red-brown median ridge.

### LIFE HISTORY

Magnolia scale overwinters as nymphs on one- or two-year-old twigs. Nymphs mature in late July through early August. Males emerge about the same time as small fly-like insects which mate with females and then die. Females later give birth to living young called crawlers in late August or early September. These nymphs or crawlers wander about for a short period of time prior to settling down on the young twigs where they overwinter. There is only one generation produced each year in Pennsylvania (Fig. 2).

### DAMAGE

Magnolia scale prefers attacking star magnolia, *Magnolia stellata*, cucumbertree magnolia, *M. acuminata*, lily magnolia, *M. liliiflora* and saucer magnolia, *M. soulangeana*. They also attack other cultivars but usually with less frequency. Scale insects damage plants by removing plant fluids. Heavily infested trees can be seriously injured or killed by this species. A

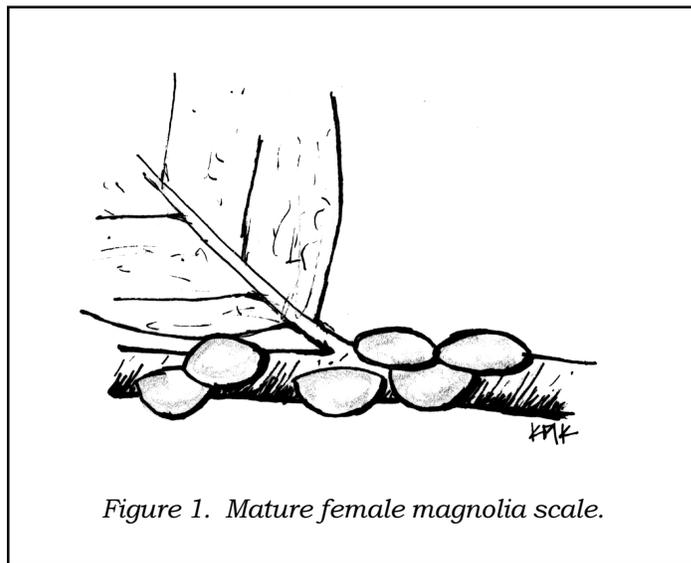


Figure 1. Mature female magnolia scale.

reduction in foliage and flower production may result from an infestation. Twig and branch dieback may also occur. Twigs of the host plant that are normally light green appear enlarged and purple from a massive magnolia scale infestation. This soft scale also secretes large amounts of honeydew which gives the plant an unsightly appearance; black sooty mold develops on the sticky honeydew. The honeydew attracts large numbers of ants, wasps, yellowjackets, and other noxious insects.

### MANAGEMENT

Larvae and adults of certain lady beetles feed on this scale insect, exercising some natural control in late summer. Pesticide applications may interfere with this natural event. An early spring application of dormant horticultural oil will help reduce an infesta-

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
EGG												
CRAWLER								██████████	██████████			
NYMPH	██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████	██████████
ADULT FEMALE								██████████	██████████			
ADULT MALE							██████████	██████████				

Figure 2. Life history of magnolia scale in Pennsylvania.

tion if applied after the danger of freezing nights has passed, but before the buds have opened. Late August through September is the time to apply a registered insecticide to manage the crawler stage. Follow all label directions to avoid damage to the plant or applicator.

## **WARNING**

Pesticides are poisonous. Read and follow directions and safety precautions on labels. Handle carefully and store in original labeled containers out of the reach of children, pets, and livestock. Dispose of empty containers right away, in a safe manner and place. Do not contaminate forage, streams, or ponds.

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