



Entomological Notes

Department of Entomology

EUONYMUS SCALE

Unaspis euonymi (Comstock)

INTRODUCTION

The euonymus scale is a key pest of deciduous and evergreen euonymus, *Euonymus* spp., pachysandra, *Pachysandra* spp., and bitterweet, *Celastrus* spp. Vine-type euonymus are extremely susceptible to attack by this scale. This armored scale insect is native to Japan and China. It is now established in the United States and Canada.

DESCRIPTION

The male's white, narrow, waxy cover is about 0.8 mm long (Fig. 1a). Adult males emerge as tiny wasp-like insects. The waxy cover of a mature female is approximately 2 mm long, grayish-brown, flattened, and pear-shaped (Fig. 1b). The crawler stage of this key pest is about 0.3 mm long and yellowish-orange.

LIFE HISTORY

This armored scale overwinters as fertilized females. They begin laying eggs beneath their protective cover in late April and May. Eggs hatch over a 2-3 week period into first instar nymphs called crawlers. The crawlers wander over the bark and foliage for a short time, settle, and then begin to feed. Four to six weeks are usually required to complete development to adults. Males feed and develop under their waxy covers, mate with the females, and die. A second generation of crawlers is produced during late July through August.

DAMAGE

This key pest causes injury to host plants by removing fluid from non-vascular plant cells. It does this with its piercing-sucking mouthparts that results in a reduction of plant health and yellowish stippling or spotting of the foliage. Heavy infestations may occur on twigs or leaves that can cause defoliation of the plant. An infestation of this armored scale may result in twig dieback or death of the plant.

MANAGEMENT

This pest is most difficult to effectively manage at the base of infested plants near the ground. This is especially true with various vine types of euonymus.

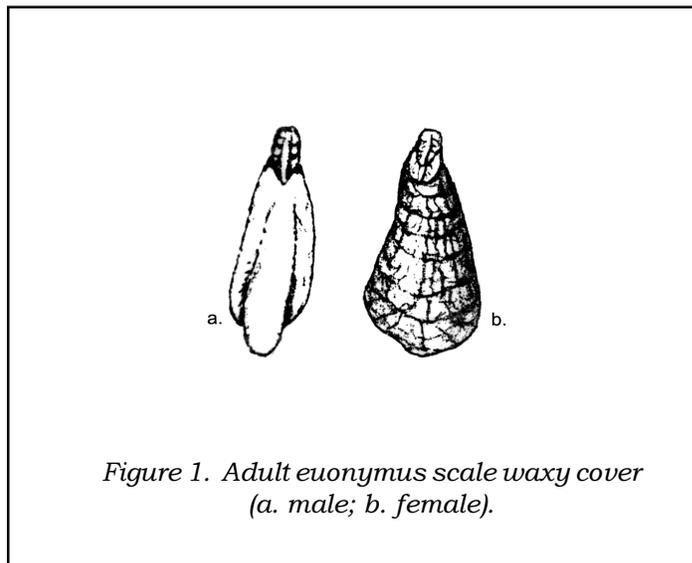


Figure 1. Adult euonymus scale waxy cover (a. male; b. female).

To reduce populations of first generation crawlers, apply a registered insecticide according to label directions during late May through June. Second generation crawlers should be managed with applications made during late July through August. Prune and destroy heavily infested branches or twigs when indicated.

The lady beetle, *Chilocorus kuwanae*, was introduced several years ago in the eastern United States to assist with the management of euonymus scale. This lady beetle is 3-4.5 mm long, black with two red spots on its wing covers.

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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