



Euonymus Scale

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Plants Attacked: Euonymus, bittersweet, pachysandra.

Description of Damage: Plants lose vigor and become spindly. The leaves turn yellow and fall prematurely. Heavy infestations can kill the plants. All stages damage plants.

Identification: Female scales have a pear-shaped, dark brown scale covering. Males are more slender than the females and are white with a yellow cap on one end. The male scale covering has three ridges running its length. Both sexes are easily observable on plants and are normally 1/16 inch long. All stages are yellow when observed beneath the scale covering. Homoptera: Diaspididae, *Unaspis euonymi* (Comstock)

Life History: Eggs are laid early in the spring and hatch in late May or early June. The crawlers settle quickly and produce a second brood by mid-July. A third brood is produced in October. There is continuous overlapping of broods, so that all stages may be found during favorable conditions. Two to three-plus generations per year may occur in Virginia. The overwintering stage is the adult female.

Control: Dormant oil sprays in late winter directed at both the undersides of the leaves and at the branches and trunk will often provide effective control. Tender new growth may be damaged by dormant oil and its application should be avoided during the growing season. If the winter spray is missed then sprays of insecticides (not dormant oil) applied at time of hatch in late May and repeated in 7-10 days should control crawlers. For heavy infestations spray in early June, mid July, and early October as stated above. Severely infested shrubs can be pruned to the ground and the new shoots can then be treated to protect them from infestation. Mulch and water drought stressed shrubs to reduce the impact of scale damage. Avoid applying too much fertilizer as this can trigger a growth in the pest population. A biological control agent, *Chilocorus kuwanae*, which is a small lady beetle, has been released in Virginia for control but at this time has had limited impact on pests populations. This lady beetle can be recognized by its black color and two distinctive red spots on the back. Insecticides, other than horticultural oils during the dormant period, should not be used when *Chilocorus* are present.

Remarks: We still lack a thoroughly effective control. Most difficult are scales at the base of the plant near the ground, particularly on the vine type of euonymus.



Euonymus scale. Photos by Eric Day, Virginia Tech