



Magnolia Scale

Magnolia scale is the largest soft scale insect found in the United States. The female can measure 13mm or longer. It is known to occur only on magnolia.

Symptoms

Unless one inspects trees up close and on a regular basis, this scale will likely go unnoticed until large amounts of honey dew drip from the tree, which gives rise to sooty mold that grows on the honey dew. This gives the plant and anything planted below the magnolia an untidy, dirty appearance. Honey dew attracts insects such as yellow jackets, wasps, and ants. The sooty mold fungi reduces the plant's ability to manufacture food through photosynthesis. Branch dieback, rapid plant decline, and plant death will result from heavy, unchecked populations.

Life Cycle

Overwintered nymphs begin feeding in the spring, developing a white waxy covering over their bodies. The male scale is much smaller than the female, about 1/8" in size. After two molts, the male nymph becomes a translucent white color and develops into a tiny, pink to yellow gnat-like insect. The males mate with females and then die. Females continue feeding, sloughing off the white covering as they mature into a yellow colored adult with a clear, waxy covering. Females give birth to live crawlers in early fall. The timing of this is dependant on temperatures. The crawlers are red and magnification is helpful in identifying the active crawler stage. Crawlers are active for approximately three to four weeks before they settle on the underside of one or two year old twigs, where they overwinter.

Management

Control efforts will be more effective if the scale population is first physically reduced by having heavily infested branches professionally pruned from the tree.

Horticultural oil sprays can provide effective control in cases of minor infestation and are a nice alternative to insecticide sprays. Oil sprays work by smothering the insect and will kill all stages of scale that are present at time of application as long as the spray contacts the insect; therefore, oils will be less effective against scale that are crowded together or occur in layers on the plant. A single dormant season application made before bud break may alleviate minor scale populations. An insecticide soil application can be applied in spring. An Insect Growth Regulator (IGR) spray application made during the summer when scale are active will disrupt their reproduction process. A spray application during the active crawler stage in August/September can be very effective in helping to manage severe infestations. Magnolia scale tend to crowd together and are often found stacked in layers. Adult scale and immature crawlers that do not come in contact with the insecticide spray (as can be the case with those that are on the bottom layer) will not be controlled. An Imidacloprid fall soil application is an excellent application for control during the following season.

