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W289-N IPM QuickFacts Series: Obscure Scale

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Obscure Scale

Melanaspis obscura



Description

Obscure scale is an armored scale insect that attacks the trunk and large limbs of both young and mature trees. Infestations result in branch and limb dieback and can eventually kill trees. Female scale are about 3 millimeters long and are difficult to detect.

Host Plants

- Dogwood
- Hackberry
- Hickory
- Maple
- Oak

Life Cycle


Adult female scale lay their eggs from early summer into August. Peak crawler activity occurs in mid-July to early August. Newly emerged crawlers settle nearby, often under the waxy covering of the mature scale. Crawlers, nymphs and adults feed on sap. Scale extract host plant sap through their long piercing-sucking mouthparts, which can be several times longer than the scale itself. Obscure scale produce one generation per year, and length of development time can be affected by the host species.

Monitoring


Careful inspection is necessary to detect this pest. Obscure scale form a dingy gray/brown wax cover as they develop that allows them to blend in extremely well with the bark. Gently scrape the bark of 3- to 4-year-old infested branches with a knife to remove the scale covers to reveal any live scale beneath. On established infestations, several layers of scale may be present. Around midsummer, female crawlers will appear light purple.



Damage Symptoms



Landscape trees with obscure scale may become generally weak and may have premature leaf drop as well as branch dieback. This scale seldom kills but may predispose plants to other harmful pests, which can cause more serious damage. Note that honeydew is not produced by armored-scale species as it is with soft-scale species. Thus, black sooty mold is not associated with obscure scale. If sooty mold is detected, look for the presence of aphids or a soft scale insect such as oak lecanium scale.



Integrated Pest Management

BIOLOGICAL CONTROL

Ladybird beetles, predatory mites and small parasitic wasps are natural enemies of this pest. Look for small holes in scale covers, indicating that insect parasitoid wasps are active.

CULTURAL CONTROL

Scale insects should be managed as soon as detected to avoid population explosions. Scale thrive on stressed plants. Proper fertilization and irrigation will promote a healthy plant. Do not over fertilize, though, because excessive fertilizer can increase scale populations, injure foliage and roots, and cause other problems.

CHEMICAL CONTROL

Please refer to http://eppserver.ag.utk.edu/redbook/sections/trees_flowers.htm for the most up-to-date recommendations.

Resources

Photo credits: James Solomon, USDA Forest Service, Bugwood.org

Laura Lazarus, North Carolina Division of Forest Resources, Bugwood.org

United States National Collection of Scale Insects Photographs Archive, USDA Agricultural Research Service, Bugwood.org

William Fountain, University of Kentucky, Bugwood.org

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