



## Obscure scale

*Melanaspis obscura*

Order Hemiptera, Family Diaspididae; armored scales  
Native pest

**Host plants:** Oaks and pecan

**Description:** Adult female covers are circular, slightly convex, gray to black in color, and up to 3 mm in diameter. They have black shed skins attached centrally to the covers. Male covers are smaller and oval.

**Life history:** Eggs are deposited in early summer, and crawlers hatch in July. They settle close together, so that they overlap in layers. There is one generation a year.

**Overwintering:** Immatures on bark.

**Damage symptoms:** Stressed oaks used as street trees in urban areas are susceptible. Heavily infested trees are weakened, and dieback may occur on branches of smaller diameter. Honeydew is not produced by this or other armored scales.

**Monitoring:** Look for gray scale covers on branches that are 3 to 4 years old. Remove some of the covers to see if live scales are present. Live females are a light purple in mid summer. Look for crawlers appearing in July. Look for yellow immatures under covers in late fall to determine whether a dormant spray will be necessary. Also check for holes in scale covers that would indicate the presence of natural enemies.

**Cultural control:** Do not over fertilize. Over fertilization can lead to increased scale populations.

**Chemical control:** *General information.*

*Conservation of beneficial insects:* Use short duration, low residual insecticides, such as horticultural oil, insecticidal soap, and insect growth regulators (IGR).

*Foliar applied broad spectrum insecticides, such as acephate, carbaryl, and pyrethroids:* Use only when scale populations are high to rescue trees; beneficial insects will also be killed.

*Dormant season oil treatments:* Use for armored scales that overwinter as eggs under female covers (delayed dormant).

*Summer oil treatments:* Oil smothers exposed eggs, crawlers, and immature females.

*Insect growth regulators (IGR), such as pyriproxifen:* Use for crawlers as they disrupt molting.

*Soil applied systemic insecticides or trunk injections, such as imidacloprid:* Not effective against armored scales, which feed at different sites than soft scales.



Obscure scale on twig of pin oak. (182)  
Photo: Cliff Sadof



Close-up of obscure scale on pin oak. (182)  
Photo: John Davidson

**Biological control:** Several parasitoids and predators attack this pest.

**Plant mortality risk:** Low

**Biorational pesticides:** horticultural oil, insecticidal soap, pyriproxifen

**Conventional pesticides:** acephate, bifenthrin, carbaryl, chlorpyrifos (nursery only), deltamethrin, fluvalinate, lambda-cyhalothrin, malathion, permethrin