

Technical Guide about pest encountered in KAUST and how it is being controlled.

SCALE INSECTS: Facts and Notes | Control | Prevention

Facts and Notes

Scales rarely resemble insects. Their waxy, almost impermeable shell protects them. This shell protects the female's eggs. After hatching, the "crawler" stage is motile and will move about the host plant to find a feeding location, making it easy to control.

Except for males of some species, adult scales are permanently fastened to a place chosen during the crawler stage. Scale infestations often go undetected until plants are totally coated. Scales extract sap from host plants with needle-like mouthparts. Honeydew from scales coating items underneath afflicted plants. Honeydew feeds sooty mold.

Scale insects differ in size, shape, color, host preference, and lifespan.

Types of Scale Insects Commonly Found in KAUST



Euonymus scale



Fletcher scales



Oystershell scales



Pine needle scale

Pest Control procedures in managing pests

1. Look for signs of scale presence, including: (1) scale and mealybug adult males on sticky cards, (2) ant activity on plants, (3) honeydew and sooty mold on the topside of leaves, and (4) especially on young leaves, look for distortion and discoloration resulting from feeding.
2. Implement control following the applicable IPM principles, starting with:
 - **Cultural Control** - Remove all weeds from within and around the garden, along with plant debris and other waste. Plant scale-resistant plants to avoid significant infestation.
 - **Mechanical Control** - When scale insects appear, trim and discard infested branches and foliage.
 - **Chemical Control** - If other methods fail, apply approved insecticides in a highly diluted mixture as a spot treatment to the affected area in accordance with the instructions provided by the manufacturer. Use Sumithion 50 EC - Fenirothion 50% w/v (WHO Class. III, Local Reg.: 118-50-889), or Cythrin 10 EC - Cypermethrin 10% (WHO Class: II, Local Reg.: 72000-1065).
3. Monitor the plants condition after the treatment. Keep record for future evaluation.

What you can do to prevent Scale Insects in your garden

- Maintain good sanitary conditions, remove any garbage and debris from your backyards and gardens.
- Cut the scale insects-forming you found in the leaves, stem, or short branch.
- Cooperate with the service provider during treatment activities by keeping yourself and your pets in a safe place.