

Scale insects

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Scale insects in the superfamily *Coccoidea* lead strange lives. Adult females are covered in white waxy tendrils or hidden under hard covers. They remain in place sucking sap and laying eggs under their bodies. Female nymphs crawl a short distance, settle, lose their legs and stay where they are for life excreting honey dew. Ants help themselves and sooty mould grows on the leaves. The males of many of these waxy species are pretty short-lived winged insects.

Soft scale



Soft scale insects of the same species on a guava leaf.

The large 10 mm female on the left is three months old and settled in place. Her body under the waxy protrusions is bright orange. The circular inset shows a 2 mm male above a tiny partly obscured virgin female. Males do not feed. They are seldom seen on plants and visit a colony of young females for only one or two days. The males of large species like this one are relatively easy to photograph when found. The Guava was left with scale in place and was watched closely for weeks before a male was spotted. Next day it was gone.

Another species



A giant female scale insect on a mango leaf tended by ants.

We do not have an image of the male of this species, but comparing this image with images on the web, we expect the male to be about 3 mm long and to resemble the red male above with elaborate antennae and dark wings.

Males of the larger species are easier to find. There are images on flickr and in other places on the web but identification is difficult and no general reference material is available. Males of the smaller species, and of the many species of armoured scale insects are tiny at one mm or less. There are a few images on the web, but the males of many species are unknown.

Wax scale



There are many species of soft wax scale. This one was frequently found on the leaves of an ageing white Frangipani in the garden, that has since been removed.



Juvenile pink wax scale at the crawler stage, with legs and tiny eyes (inset) lurching like heavy plates on six pins to find a place to settle. We were unable to find a male.

Armoured scale: *Diaspididae*



Tough hard plates 2 mm in length sealed firmly to the leaves of our Boxwood. The covers conceal and protect soft female scale insects busy sucking sap and excreting honeydew.



The 1 mm males of this species are covered in waxy foam and line up like sheep in a field. Commonly called *minor snow scale* they cover parts of old shaded leaves on the boxwood. We do not find them on other plants nearby.

More species of armoured scale are found on the boxwood and occasionally on other plants.



The image below shows what appears to be a field of recently settled armoured scale. The fuzzy yellow lines on the leaf are associated with each scale but their cause is unknown.



Once you start looking, scale is everywhere!



An unidentified species of soft scale.



Black scale and juveniles on a dying Frangipani leaf.



Unidentified scale found in low numbers on our Banana leaves



... and more active colonisation of old leaves on our Mango.

There is much to learn and many surprises in a study of these silent suckers that date back to the Triassic, long before their modern host plants had evolved. They come in many shapes and sizes. An article with information is linked below.

<https://www.cabi.org/wp-content/uploads/DI-photo-guide-AUG-2020-FINAL-1.pdf>