

# Insect Digest

February 4 2015. Kowen reserve. Grassy box woodland merging into low forest with extensive regrowth of young eucalypts and wattles that attract herbivorous insects.

## Beetles (Coleoptera)



Leaf beetle, *Calomela* sp (Chrysomelidae) on its host plant silver wattle. The globose larvae also feed on silver wattle pinnae.



Leaf beetle *Ellopidia* sp (Chrysomelidae), feeding on the pinnae of silver wattle. Length 4 mm. The larvae are soil dwellers.



Newly hatched leaf beetle larvae, *Paropsisterna* sp (Chrysomelidae). They are consuming the remains of the eggs before starting on the yellow box leaf.



Soldier beetle *Chauliognathus* sp. (Cantharidae) on silver wattle. Length 6 mm. Not the common soldier beetle, *C. lugubris*, found in large numbers on flowers in summer. The larvae are soil predators. The adults contain cantharidine an unpleasant chemical that protects them from predators.



*Ecnolagria grandis* (Tenebrionidae). A very common and distinctive non-feeding beetle seen climbing on vegetation. The larva feeds on detritus on the soil surface and is attended by meat ants.



A longicorn beetle (Cerambycidae) mating on silver wattle and distinguished by its long antennae. Note the whiskers on the antennae of the larger female. The adults probably do not feed. The larvae are wood borers in acacias.

## Moths and Caterpillars (Lepidoptera)



A tiger moth, *Amata* sp. (Erebidae:Arctiinae). A day-flying moth protected by distasteful chemicals and advertising itself through warning colouration (aposematic). The larvae are polyphagous.



Cup moth larva, *Doratifer quadriguttata*, (Limacodidae). It is well defended by four rosettes of stinging spines at the head end (right) but is susceptible to virus attack. The name comes from the cup shaped pupal case. It feeds on a range of eucalypt species and note how it consumes the square edge of the leaf. There are several species of similar looking larvae.



Painted apple moth larva, *Teia anartoides* (tussock moths, Lymantriidae) feeding on silver wattle but it has a wide host plant range as its name suggests. It is well-defended by spines and hairs. The adult female is wingless see below.



Azure hairstreak larva, *Jalmenus icilius*, (Lycaenidae, the blues) feeding on silver wattle. Like many in this family it is attended by meat ants that protect it from predators and in return the ants receive secretions from a special gland. Identified by Michael Braby.



Nearby pupa of the azure hairstreak.



Egg mass of the painted apple moth. The shrunken, wingless female is faintly visible in the middle. This egg mass is on cypress pine, *Callitris endlicheri* and is covered with irritating hairs.



## Bugs (Hemiptera)



Sugary lerps, *Glycaspis* sp (Psyllidae) feeding from the leaf veins of yellow box. Each nymph lives beneath a protective shell or lerp made of polysaccharide. The adults are winged and free-living dispersing widely.



A white lace lerp, *Cardiaspina tenuitela*, living on yellow box. The nymph is just visible below the lerp and injects toxins causing leaf necrosis. Each species of *Cardiaspina* is specific to one species of *Eucalyptus*. *C. albitextura* is found on Blakely's red gum, *E. blakelyi*, and causes extensive leaf necrosis and dieback of the host tree.



Cottony cushion scale, *Icerya purchasi* (Monophlebidae). The whitish, ribbed mass below is an egg sac. This scale was accidentally introduced to California where it became a major pest on Citrus. The cardinal ladybird was introduced from Australia to help control it which has been successful.



A witches broom gall induced by an armoured scale, *Maskellia globosa*, (Diaspididae) on yellow box. Named after a NZ farmer, politician and entomologist, WM Maskell. A noted advocate of biological control he helped find a ladybird predator of cottony cushion scale shown above.



The female galls are represented by the pale conical structures on the host stem that have an apical pore. The males are the red cones on the deformed leaves. The winged males emerge and mate with the females that never leave their gall.



Plant hoppers, *Brunotarsessus* sp, (Cicadellidae) surrounding a moribund cup moth larva affected by a virus. These hoppers feed on sap from the leaf veins and all stages live on the foliage.



A membracid tree hopper, *Sextus virescens*, (Membracidae) feeding on silver wattle. Note the curious protruding horns of unknown function. The white blob below the horn is a sugary secretion that attracts ants that in turn protect the treehopper from predators.



Another tree hopper, *Ceraon* sp. In Greek mythology Ceraon is the mixer of the wine, perhaps he had two horns. Also note the characteristic long, backward-pointing, pronotal spine



A seed bug, *Spilostethus* sp (Lygaeidae) feeding on the seed heads of *Cassinia longifolia*.

## Grasshoppers, katydids and crickets (Orthoptera)



Gumleaf torbia, *Torbia viridissima* (Tettigoniidae). This well-camouflaged insect feeds on eucalypt leaves. Normally found in the tops of trees this one was unusual in being found on a juvenile yellow box at 50 cm.

## Spiders (Araneae)



Jewel spider, *Austracantha minax* (Gasteracanthinae). This small spider exists in a variety of exquisite colour forms and builds a strong web between plants. It is often seen in colonies.

