

# Blue gum Psyllid



## Number 1

Revised May 1992

By Charlma Phillips, Principal Forest Health Scientist

Psyllids are tiny sap-sucking insects which attack a wide range of eucalypts and other native plants.

In most species the immature nymphs construct a covering called a "lerp", under which all nymphal stages feed and shelter. Thus psyllids are often called "lerp insects".

Nymphs of other species of psyllids do not construct lerps but move freely about the leaf surface. These are called 'free-living' psyllids and are generally found on the growing tips of young eucalypts – particularly eucalypts with blue juvenile foliage such as *Eucalyptus globulus*, (Tasmanian blue gum); *E. nitens*, (shining gum) and *E. leucoxylon*, (South Australian blue gum).

There are several genera of free living psyllids e.g. *Eucalyptolyma spp*, *Phellopsylla spp* and *Psylla spp*, but the most common species is the Blue Gum Psyllid, *Ctenarytaina eucalypti* (Froggatt).

## Description



The minute eggs are pale yellow or cream and spindle shaped (ie elongated and cylindrical, tapering at both ends). Nymphs are pale yellow in the early stages and become marked with grey and brown in later stages (or instars). The nymphs produce white woolly filaments and masses of powdery, waxy material on the leaves as protection when they are feeding.

The winged adults resemble miniature

cicadas in appearance. They are brownish in colour with orangey patches on the thorax but may appear white if covered with waxy secretions. They are approximately 3mm in length.

Details of the different stages can only be seen with a microscope or hand lens – especially the first nymphal stages – as they are so small. Many people mistake them for "aphids" on the tips of plants.



## Life History

The adult psyllid lays eggs on the young, actively growing tips and shoots of seedlings and small trees (ie on new juvenile foliage). Eggs may also be deposited in crevices between the axillary bud and petioles of young leaves.

Nymphs feed on the shoots and may congregate at the base of the leaflets. They envelop themselves in large quantities of white waxy secretions.

All nymphal stages and adults can be found together on the shoots. Nymphs pupate on the leaves.

There may be up to five generations per year with the life cycle taking approximately 18-22 days at temperatures of 20°C.

Adults are relatively long lived but no detailed studies have been done on the life histories of free-living psyllids.

### **Blue Gum Psyllid late instar nymph:**



### **Forewing of adult Blue Gum Psyllid:**



## **Damage**

Both nymphal and adult stages of these insects are sap suckers. They feed on the new juvenile shoots and leaves on young trees (generally 0-2 years old). They are not often seen on older trees and have never been recorded on mature foliage.

If population numbers are very high new shoots may become distorted and deformed but, in general, free-living psyllids do not seem to have any serious effect on young trees and do little damage despite their abundance and the production of large amounts of waxy secretions around the growing shoots.

## **Control**

### **Parasites:**

The nymphal and egg stages of free-living psyllids are often parasitised by minute wasps. The adult wasps lay eggs in the eggs or nymphs of the psyllid. The wasp larvae feed on the psyllid, thereby killing it and then pupate to emerge later as adult wasps.

These wasps (1.5mm long) can be seen (with the naked eye or with a hand lens) as tiny black flying insects amongst the colonies of psyllids. Parasitism rates for *C. eucalypti* are frequently 50% or higher.

### **Predators:**

Most psyllid species are preyed upon by birds, spiders and predatory insects such as ladybird beetles, hoverflies, lacewings and assassin bugs.

However, because *C. eucalypti* is so small and well hidden amongst the waxy secretions, some populations appear to be free of predation. In these cases parasitism rates are usually very high.

### **Chemical:**

Generally, chemical control of the Blue Gum Psyllid is not necessary. However, in severe infestations where foliage is badly distorted, control can be achieved by spraying with a systemic insecticide such as dimethoate.

## Summary

**When to look:** From October on throughout the summer – in some areas all year round.

**Where to look:** On the tips of new actively growing shoots on young eucalypts that have blue/green juvenile foliage.

**What to look for:** White woolly or waxy secretions on the terminal shoots: - tiny brownish oval shaped insects amongst the secretions (nymphs) – whitish tent shaped adults that hop or fly when disturbed.

### For further information contact:

**PIRSA Forestry**  
**PO Box 2124**  
**MOUNT GAMBIER SA 5290**

**Phone: (08) 8735 1232**

**Fax: (08) 8723 1941**

**E-mail: [pirsaforestry@sa.gov.au](mailto:pirsaforestry@sa.gov.au)**

**Website: [www.pir.sa.gov.au/forestry](http://www.pir.sa.gov.au/forestry)**

**Disclaimer:** While this publication may be of assistance to you, the Government of South Australia and its officers do not guarantee that it is without flaw of any kind or is wholly appropriate for your particular purpose. The Government therefore disclaims all liability for any error, loss or other consequence that may arise from you relying on any information in this publication.