



Figure 1. Red gum lerp psyllid adult

Red Gum Lerp Psyllid

Glycaspis brimblecombei Moore
(Homoptera: Psyllidae)

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Introduction. Samples of eucalyptus leaves infested with white conical scale-like structures (fig. 2) were collected from Ulupalakua on Maui on March 7, 2001, by Hawaii Department of Agriculture (HDOA) Entomologist W. Nagamine. Subsequent examination revealed each structure to be a conical covering beneath which hides a tiny insect (fig. 1 & 3) identified as the red gum lerp psyllid, *Glycaspis brimblecombei* Moore. The identification was made by HDOA Taxonomist B. Kumashiro. According to Dahlsten (2000), *G. brimblecombei* is native to Australia.

Description. According to Paine (2000), the red gum lerp psyllid constructs a white conical cover of crystallized honeydew, called a lerp, and feeds concealed under this shelter (fig. 3). Immature *G. brimblecombei* (nymphs) resemble aphids and are yellowish orange with dark markings (fig. 1). Dahlsten (2000) provides additional photos of the life stages of the psyllids.



Figure 2. Eucalyptus leaves infested with conical coverings of red gum lerp psyllids.



Figure 3. Uncovered lerp (upper left) revealing psyllid nymph.

Distribution. On Maui, the only known infested site is at Ulupalakua, although it probably occurs elsewhere on the island. A light infestation of the psyllid was later uncovered at Waimanalo, Oahu, in July 2001.

Damage. Paine (2000) also notes that, although the psyllid feeds on plant fluids from a broad range of *Eucalyptus* species, it prefers to colonize members of the red gum species group, particularly river gum (*Eucalyptus camaldulensis*). Infested leaves are covered with the small white conical coverings along with sticky honeydew and black sooty mold. In California, high psyllid populations on susceptible *Eucalyptus* species have resulted in withering and dropping of the leaves along with dieback and death of weakened trees. Dahlsten (2000) also notes that the red gum lerp psyllid may stress trees and make them more susceptible to fatal attack by other insects. Vogel (1999) reports that this psyllid has also been known to defoliate sugar gums and coastal blue gums in California.

Management. Presumably, the psyllid will have some effect on *Eucalyptus* in Hawaii, particularly the preferred river redgum eucalyptus. According to Little (1989), river redgum eucalyptus is one of the most commonly planted eucalypts in Hawaii and is frequently planted for windbreaks. He also mentions that this eucalyptus was introduced in the 1880's and was first planted at Ulupalakua on Maui, the area where the psyllid was first found. Although relatively little is known about controlling this potentially new pest, Dreistadt (2000) suggests to minimize tree stress by providing eucalyptus with proper cultural care (e.g. providing supplemental water during periods of prolonged drought, water infrequently but with a sufficient amount which penetrates deeply, and avoid fertilizing eucalyptus to reduce new shoot growth which is preferred by the psyllid) and protecting trees from injury.

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