

PEST ALERT:

Glycaspis brimblecombei

Red Gum Lerp Psyllid

The red gum lerp psyllid, *Glycaspis brimblecombei* (Psyllidae, Hemiptera), was first detected in South Africa in 2012. The first detection was in Pretoria, with many subsequent detections, mainly in the Gauteng province and on street or ornamental trees. *Glycaspis brimblecombei* was reported in *Eucalyptus* plantations for the first time in 2013, when it was detected in the Barbeton - Kaapmuiden plantations near Swaziland. Shortly after this detection, *G. brimblecombei* was also detected in further plantations in Mpumalanga, as well as Limpopo and KwaZulu-Natal. The current distribution of *G. brimblecombei* must still be assessed, but it is expected to spread to all susceptible plantations in the near future.

Glycaspis brimblecombei is a sap-sucking insect that feeds on *Eucalyptus*. Native to Australia, the red gum lerp psyllid has been accidentally introduced into various countries, including the USA, Mexico, Argentina, Chile, Brazil, Uruguay, Italy, Madagascar and Mauritius. Females of the red gum lerp psyllid lay between 45 and 700 eggs. The eggs hatch in 10 to 20 days and the nymphs will pierce the plant tissue with their stylet (mouthparts), feeding on the xylem. As the nymphs feed they secrete honeydew with which they construct a waxy cover (called a lerp) around themselves. This cover is whitish and conical in shape and shelters the insects until the adult stage. In Australia there are two to four generations per year.

The red gum lerp psyllid is known as an aggressive insect that spreads rapidly. Symptoms of its feeding include dropping of leaves and drying of leading shoots. Infested leaves are covered with waxy secretions and honeydew, on which sooty mould grows. Heavy infestations can totally defoliate and kill trees. *Eucalyptus* species differ in their susceptibility to attack by the red gum lerp psyllid, with *E. camaldulensis* and *E. tereticornis* being highly susceptible and *E. grandis* being more tolerant.

Both chemical and biological control measures have been used in an attempt to control infestations of the red gum lerp psyllid. Contact insecticides are known to be ineffective as the nymphs are protected by their covers. Systemic insecticides have been used with some success, but their use is of limited value in plantation forestry due to the high cost. In the USA, natural enemies of the red gum lerp psyllid were imported from Australia. One of these, the parasitic wasp *Psyllaephagus bliteus* (Hymenoptera, Encyrtidae) has become established in the USA as a biological control agent for the red gum lerp psyllid.

The susceptibility of the main *Eucalyptus* species planted in South Africa to *G. brimblecombei* is not fully understood and research is required to investigate levels of susceptibility across the *Eucalyptus* species. This information will assist to better predict and manage the impact of *G. brimblecombei*. Efforts are also being made to introduce *P. bliteus* into the quarantine facility at the FABI Biocontrol Centre and test its suitability as a biological control agent in South Africa. It is important to obtain accurate information on the distribution and host associations in South Africa, as this information will assist management decisions. Thus, if you notice symptoms of *G. brimblecombei* on *Eucalyptus*, please report it to:

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The red gum lerp psyllid on a *Eucalyptus* leaf, showing white conical lerp of the nymphs (photos by Carlos Rodas, Smurfit Kappa Cartón, Colombia)