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A new species of invasive gall wasp (Hymenoptera: Eulophidae: Tetrastichinae) on blue gum (*Eucalyptus globulus*) in California

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Abstract

The blue gum gall wasp, *Selitrichodes globulus* La Salle & Gates, **n. sp.** (Hymenoptera: Eulophidae: Tetrastichinae), is described as an invasive gall inducer on blue gum, *Eucalyptus globulus* Labill. (Myrtaceae), in California.

Key words: Hymenoptera, Eulophidae, invasive species, *Selitrichodes*, *Eucalyptus*, Myrtaceae

Introduction

The blue gum (Tasmanian blue gum, southern blue gum), *Eucalyptus globulus* Labill., (Myrtaceae) is one of the most widely cultivated of Australia's native trees and one of the most extensively planted eucalyptus in the world (Doughy 2000, Eldridge *et al.* 1993). It can be found in parks and gardens in many parts of Australia, and is widely planted in California as an ornamental or for its value as a windbreak. Blue gum is widely planted commercially in many areas of the world (e.g. Bolivia, Chile, China, Colombia, Ethiopia, India, Peru, Spain) for its value in fuelwood, pulpwood and a primary source of medicinal eucalyptus oil (Eldridge *et al.* 1993, Doughy 2000).

In November 2008, a new species of insect, described here as *Selitrichodes globulus* La Salle & Gates, was discovered forming galls on blue gum in Los Angeles County, California. Based on the evidence at hand, this invasive species is almost certainly Australian in origin, although it is yet to be found in its native range. It joins a growing list of invasive species which have the potential to damage eucalyptus around the world.

The presence of *S. globulus* in California poses an interesting question in terms of biological control and conservation biology. Blue gum was introduced into California in the mid 1800's (Doughy 2000), where it is now naturalized and spreading into areas of native vegetation. For this reason, it has been placed on the California Exotic Pest Plant Council List as a potentially harmful invasive species (California Invasive Plant Council 2006). The question must be asked as to whether *S. globulus* is a potential biological control agent against *E. globulus* invasions (at least in California), or whether a search should be made for natural enemies of *S. globulus* in Australia to help protect the blue gum industry in other areas of the world if this invasive species spreads.