

# Eucalyptus gall wasp (Blue gum chalcid)

## Recognize the problem

The gall forming wasp is an insect that has only recently been introduced to Ethiopia. The wasps cause damage to young eucalyptus trees and seedlings on farms and in plantations and nurseries. The main symptoms that can be seen on the trees are slightly raised swellings (galls) on either side of the mid-rib of the leaves, the leaf stalks (petioles) and the stem. Severely affected trees show leaf fall, a twisted appearance, loss of vigour, stunted growth and dieback, which eventually leads to the death of the tree.

## Background

The gall wasp insect is believed to be originally from Australia but has spread to Africa, Europe, North America and Asia. The wasp has a relatively narrow host range, affecting only Eucalyptus species. It attacks the leaves and stems of young eucalyptus trees and seedlings. The adult wasp is very small (1-1.5 mm) and cannot fly long distances so the movement of eucalyptus seedlings is one of the ways by which the wasp is spread. The adult wasps lay eggs inside the tender leaves. After hatching, the larvae remain in a cavity formed within the plant tissues and feed on the plant sap. The resulting injury causes the formation of the galls. The larvae and pupae develop inside the galls. Adult wasps then emerge from the galls, leaving round exit holes. The galls are most noticeable in the 'tseday' season (March to May) when heavy infestations can cause leaf fall.

## Management

There are currently no effective management strategies available for this pest, especially where trees are mature and the affected parts are difficult to reach. The following measures are recommended to help manage the pest especially in nurseries and plantations of young trees.

- The adult wasps are very small and cannot fly far. Spread is thought to be caused mainly by movement of planting material so utmost caution is needed to prevent transportation of infected seedlings from nurseries to disease free areas. If no measures of control are available, do not distribute.
- Affected plant parts should be removed and burned along with fallen leaves especially in the 'belg' (September to November)
- Application of systemic insecticides have been used successfully in other countries but such chemicals are not registered for use at this time in Ethiopia
- Research is continuing to try to identify resistant varieties of eucalyptus and potential biocontrol agents

Galls can be seen on the leaf mid-rib and petioles. (Photo by P. Karanja, CABI)



Adult female wasp. (Photo by J. Roux, FABI, University of Pretoria)



Scientific name(s) > *Leptocybe invasa*

The recommendations in this factsheet are relevant to: Ethiopia



Authors: Daniel W. Michael, Solomon Alemseged, Dejene Asfaw, Mhreteab Tsegay  
Tigray Bureau of Agriculture  
tel: +251-914-726241 email: dnyw12@yahoo.com

Edited by Plantwise.