

**DEFOLIATING INSECTS IN THE SOUTHERN JARRAH FOREST OF
WESTERN AUSTRALIA**

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1. In September 1987 I completed a "Review of past and current research into insect problems in the jarrah forest, with recommendations about the future direction of research". This was submitted to the Policy Directorate of CALM. The recommendations are currently being prioritized by a subcommittee of this Directorate.
2. It is now clear that detailed measurement of insect damage to jarrah leaves need only be done during the first 12 months. After that damage is negligible. However most tagged leaves are still alive then (at 36 months about one third of leaves remain alive).
3. A comparative study of damage to leaves of the eight eucalypt species occurring within a 50km radius of Manjimup showed that E. rudis experienced the most (58% of leaf area) and E. wandoo the least (11%).
4. Studies on inventory plots suggest that Jarrah leafminer causes a loss of about 120 000m³ in wood increment each year. The comparable figure for Gumleaf Skeletonizer is estimated to be 50 000m³.
5. Infestations of GLS could not be correlated with stand basal area, time since logging or time since the most recent fire. Caterpillars were most dense in jarrah stands in the higher rainfall zone.
6. Studies commenced of jarrah leafminer in October 1987 in jarrah forest near Collie, where this species has been in outbreak for 5 years. Leafminer infestation in this District is now severe, with most stands having brown crowns. The occurrence of parasitized mines was mapped north to Dwellingup.

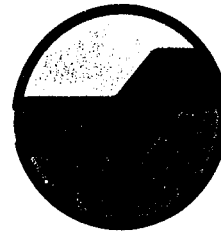
7. There has been an outbreak of lerp Cardiaspina ? brunnea on Eucalyptus occidentalis in the lower Great Southern for the last 5 years. Many inquiries from farmers about brown crowns and dying trees were received in June 1987.

8. Early in 1988 CALM will be doubling its research effort into forest entomology. A second entomologist and two support staff will be based at the Manjimup Research Centre. They will examine whether parasitoids offer any hope in controlling Gumleaf Skeletonizer infestations in the southern jarrah forest. They will also initiate an ecological study of Cardiaspina infestations on Flat-topped Yate. My own efforts will concentrate more on control of jarrah leafminer, co-ordination of research, and writing.

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Dear Jill

Here is my contribution to your newsletter. I hope that your research is going well.

Yours sincerely

IAN ABBOTT

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