THE SPOTTED JEZEBEL BUTTERFLY AND PARASITIC PLANTS

Fiona Falconer

Walking through the bush on a sunny afternoon in late June, I spotted a butterfly depositing eggs on sandalwood leaves. It was a Spotted Jezebel, *Delias aganippe*, also known as the Wood White or Red-spotted Jezebel. A few weeks later, in August at a different area of bush, there were Spotted Jezebels emerging from pupal cases on quandong trees.

What is the connection between the Spotted Jezebel and parasitic plants? The female Spotted Jezebel searches out specific larval food plants on which to deposit her eggs. In Australia, the larval food plants grow as parasitic trees and shrubs from the genus Santalum (including Sandalwood S. spicatum and Quandong S. acuminatum), the genus Amyema (Mistletoes) and the genus Exocarpus (Ballarts). Delias butterflies obtain toxic properties through their parasitic host plants and the butterflies are poisonous to some degree throughout their life cycle. The poisons from the parasitic host plants that are retained in their bodies provide some protection against vertebrate predation. The bright red



Spotted Jezebel butterfly and eggs on Sandalwood leaves.

Most people know of Sandalwood, the fragrant wood being a valuable export, with the first shipment of four tons to the Far East back in 1845. A few old Sandalwood trees left on our property led us to randomly plant seed amongst remnant vegetation where there are suitable host plants. While the Sandalwood trees may have commercial value one day, the plantings have been done as much for their intrinsic values to wildlife and landcare.

and yellow coloured spotting on the wings is a warning to predators such as birds of the presence of poisons. However, it is thought that the Spotted Jezebel is not very poisonous compared to other *Delias* species. The pupae have been described as mimicking a large bird dropping, a further disincentive to becoming a meal!



Spotted Jezebel butterflies newly emerged from pupal cases (arrowed) on a Quandong.

The larval food plant can be different from the plant the butterfly collects nectar from. These butterflies often feed from flowers of eucalypts and mistletoe. At the site where the butterflies were emerging, York Gums, Eucalytus loxophleba, Graceful Honeymyrtle, Melaleuca radula and M. sclerophylla were flowering at this time.