

7

Parasites, pathogens and other irritations

In the rich growing conditions that prevail in rainforest, few niches are left unoccupied. Every life form tends to have something living on it and much of this fauna is microscopic. Unfortunately parasitologists get very few opportunities to examine tree-kangaroos and our current knowledge of their parasites is meagre. Most, however, appear to be relatively benign. The everpresent *Heterodoxus* lice, which go through their entire life cycle living in the fur of tree-kangaroos (and are therefore ectoparasites) certainly are. Parasites of the internal organs (endoparasites), which often have complex life cycles, and pass through a series of intermediate hosts before ending up in their final tree-kangaroo host are often less so. Some are a serious nuisance whereas others, particularly those that occur in the intestinal tract, live in a symbiotic relationship with their host; that is, they get something from the tree-kangaroo (usually nutrients) and give something back (often the metabolic products they excrete are digested by the tree-kangaroo and form an important source of micronutrients).

So, by and large, this chapter deals with the downside of living in a lush environment. But, parasites and pathogens aside, the rainforest trees themselves can be dangerous. Many harbour irritants and toxins that can cause lesions and harm tree-kangaroos if they are careless about what they feed on. I'll discuss these too, but I'll begin with some of the nastier parasites.