

BEWARE OF EUCALYPTUS (GUAVA) RUST

Rusts are very damaging plant pathogens that have caused periodic devastation of wheat crops since earliest times - indeed Joseph, sold into slavery in Egypt around 1800 BC, got himself out of jail by interpreting Pharaoh's dreams and getting him to store grain against the forthcoming years of famine, which would have been caused by wheat rust. Somewhat later, Aristotle's pupil Theophrastus, writing in Greece two centuries before Christ, described the disease quite accurately.

But rusts attack all sorts of plants, not just grasses, and in the 1880s a rust wiped out the coffee plantations in Ceylon (now Sri Lanka) forcing the desperate planters to convert to tea instead. Within the space of 15 years, Britain went from controlling the world's largest coffee supplier to having almost none growing in its economic sphere of influence - thus the scions of Empire turned to tea for 'the cup that cheers' rather than coffee, which contains far more of the stimulant, caffeine.

So, rusts can affect world events - why should we care? Because the possibility for an Australian disaster is looming. Rust spores are light and easily spread on the wind, but Australia's isolation has probably helped to protect the indigenous flora, at any rate, eucalypts, melaleucas, teatrees and many other plants from the Myrtaceae family don't harbour any native rusts. That means, of course, that if an introduced one should arrive here, our plants would have little resistance to it.

In Western Wildlife 6/4 (Oct. 2002) we alerted readers to a very worrying development - in Brazil the virulent pathogen, guava rust *Puccinia psidii*, had jumped host onto eucalyptus trees. It has become a serious disease of young trees and can kill up to 90% of seedlings. CSIRO scientists have been working on how to contain the potential problem, should the disease spread. It has the potential to do severe damage to commercial and natural ecosystems right across the country.

Just think of an Australia without eucalypt forests.

The threat has just got much closer - the disease has been confirmed in Hawaii.

As with any potential problem from an exotic organism, early detection is a key factor in mobilizing defences to destroy the invader. Be aware of this potential problem. Read the fact sheet "Look out for Eucalyptus (guava) rust". It is obtainable from the Dept. of Agriculture Fisheries and Forestry, GPO Box 858, Canberra, ACT 2601. Or download in pdf format from the DAFF's website.