



Two boletes, *Tylopilus formosus* (bottom) and *Porphyrellus novae-zelandiae* (top), other mycorrhiza-forming fungi. Photos: J. Bedford

on the surface of the fruit-body and after being released are dispersed by rain and wind. The often brightly coloured fruit-bodies are eaten by pigeons, possums, and insects. Different *Cyttaria* species are also found in beech forests of other parts of the southern hemisphere. In South America, some species are popular with the native Indians as food.

Fungi on Fallen Wood and Leaves

A quite different group of fungi live on fallen wood and leaves. These fungi are the decomposers. By decomposing dead plant parts, not only do the fungi grow and reproduce, but living plants can use the nutrients which are returned to the soil. Decomposer fungi are called saprophytes, as opposed to the parasites (or pathogens) that attack a living tree. Many species of polypore fungi, with fruit-bodies similar to those of *Piptoporus*, are saprophytes on fallen wood. They produce enzymes that break down parts of the plant cell wall, and in so doing cause the wood to rot. Depending on which parts of the cell wall



The fruit of the 'beech strawberry', *Cyttaria nigra*, appear in spring, growing from the woody galls their parasitic hyphae have induced on the host branches. Photo: P. Johnston.



are destroyed, the polypore fungi are divided into two groups, brown rot and white rot fungi. Brown rot species cause a rot in which the decayed wood becomes brown, cracked, and eventually collapses into a fine powder. White rot fungi are more common than brown rot fungi and cause the wood to become white to pale brown, often wet, and stringy.

Ganoderma is one of the most common white rot fungi in beech forests, and in other forest types. Its fruit-bodies are like shelves or brackets sticking out from the wood. Their