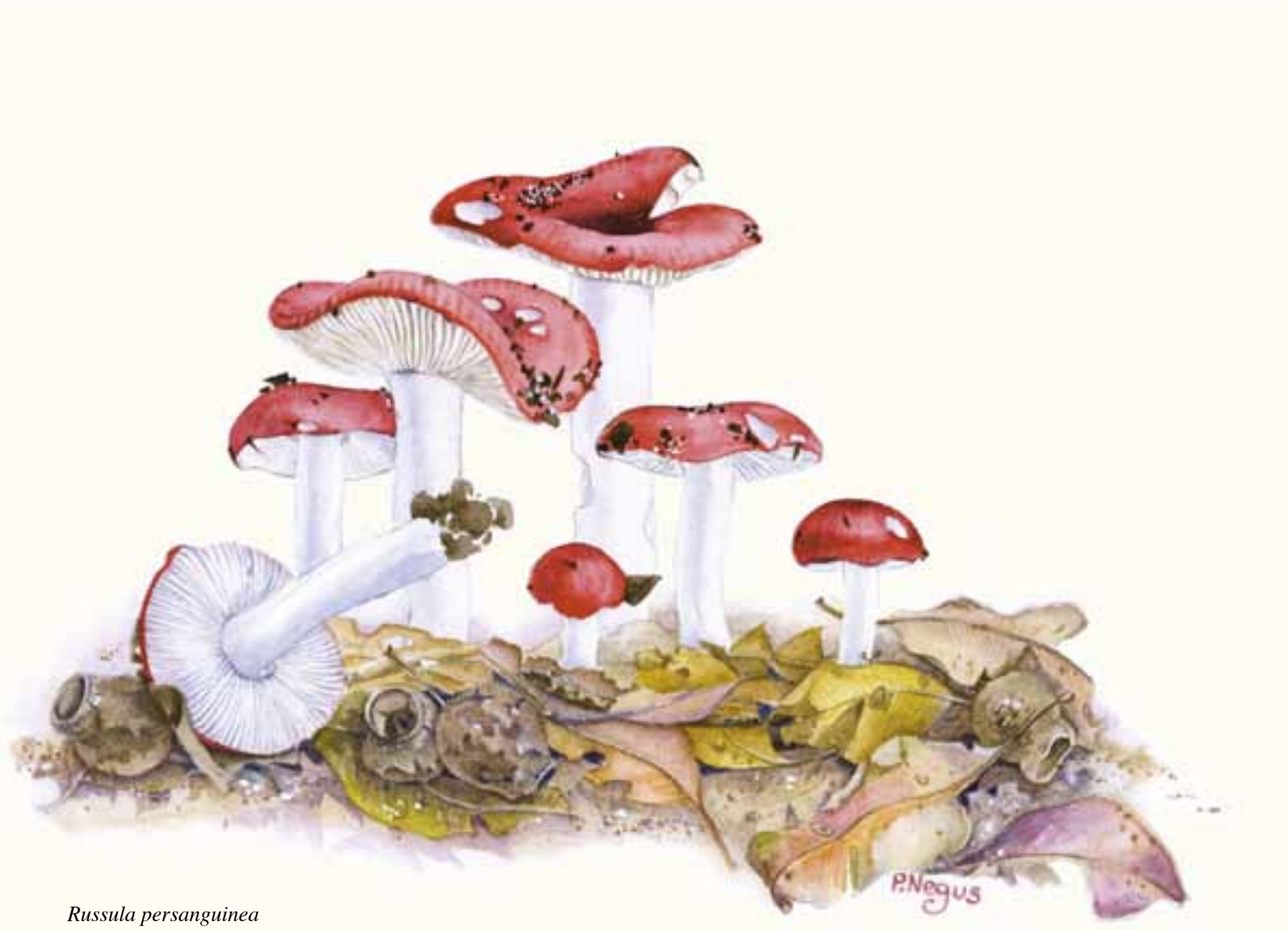


Russula persanguinea

Russula species - Russulas

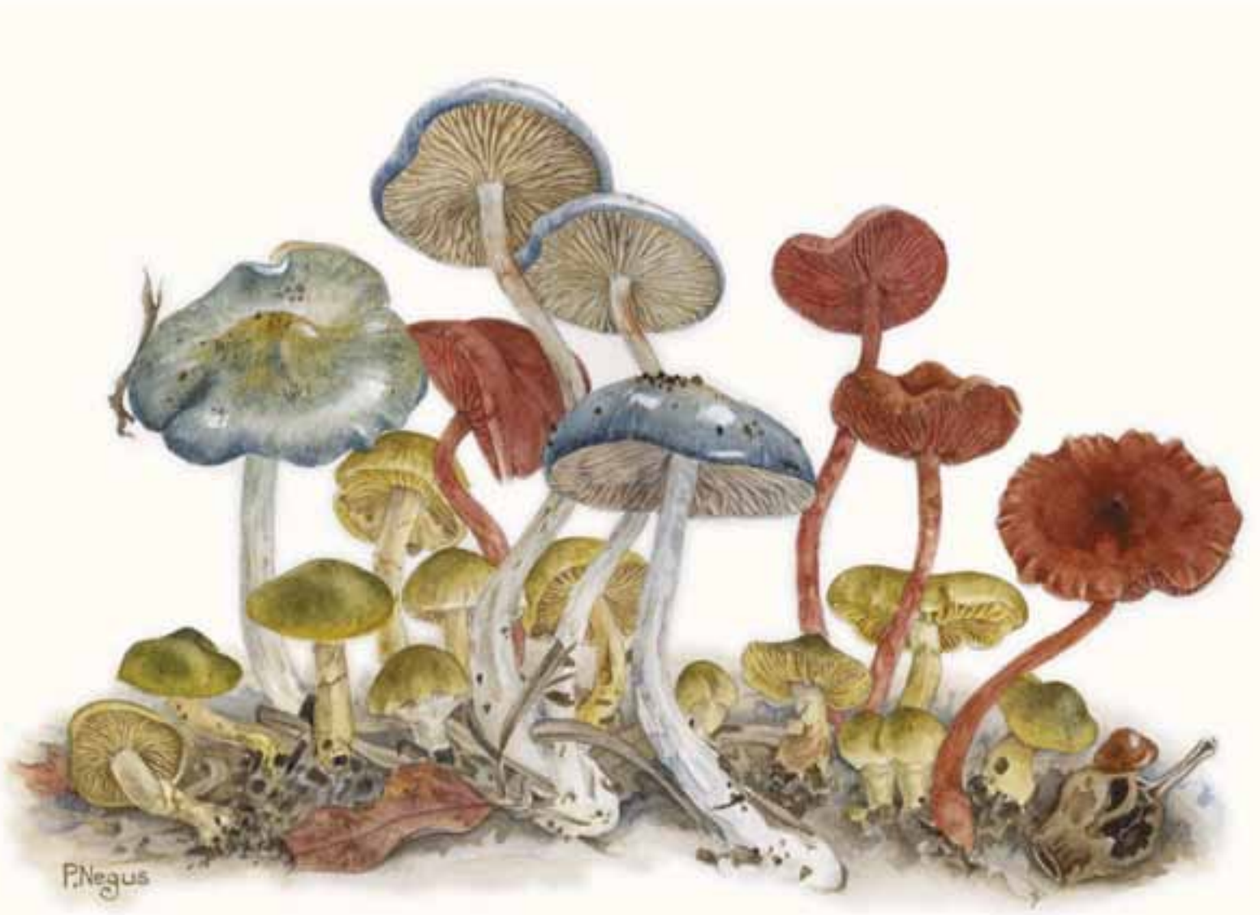
Many Russulas look like other species of mushrooms, but the structure of their tissues differs. Most gilled mushrooms have fibrous tissue that tears or simply bends when you break it. Russulas on the other hand have a brittle or granular texture and their stems snap like chalk when you try to bend them. This is because they have groups of round or globular cells within the usual fibrous structure of their cap and stem tissue; and their 'snapability' makes them readily identifiable. Species of *Lactarius* and *Lactifluus* (see *Lactifluus clarkeae*, plate E6 & p.30) have the same tissue structure and look very similar to Russulas, but when their tissue is broken they exude a white or coloured latex-like fluid. Most species of *Russula* are coloured, generally in shades of brown, grey and red. *Russula kalimna* (plate L9) is easily recognised because its cap has blotches of all these colours as well as greenish tinges. *Russula clelendii* (plates C9 & C10) is the most common red capped species found in eucalypt forest and woodlands and is distinguished by a white stem with a variable but pink blush. *Russula persanguinea* (above & plate Q14) is a similar red species but has a pure white, almost translucent, stem. *Russula adusta* (plate Q1) is usually well-hidden being greyish-brown and growing under leaf litter, whereas Russula flocktonae (plate E7) is bright yellow-orange and usually grows in open habitats on bare soil. Like Cortinars and Amanitas, Russulas are important mycorrhizal partners of many native trees and shrubs. Although Russulas are not as numerous as Cortinars in species numbers, mushrooms of *Russula clelandii* and *Russula neerimea* (plate L8) are very common and often found in large numbers throughout southern Australia in mid-autumn to early winter.

Richie

Cortinarius species – Cortinars

Cortinarius is the largest genus of macrofungi, with literally hundreds of species in Australia. They vary from small nondescript brown species (often referred to as LBMs – little brown mushrooms) to spectacular large and colourful ones. Perhaps the most distinct species within this large genus belong to a group collectively known as Dermocybes, meaning 'dry skin'. *Dermocybe* was, until recently, recognised as a separate genus, but DNA studies showed that they belong to the genus *Cortinarius*. Dermocybes are recognised by their dry colourful mushrooms that often arise from similarly coloured mycelium in the soil or litter. They are also well known for an extraordinary range of coloured pigments that can be extracted from their mushrooms. The pigments from a number of species can be used to dye textiles including cotton, silk and wool. Of the species illustrated, the Green Skinhead, *Cortinarius austrovenetus* does not produce pigments that are permanent dyes but *Cortinarius kula* does, in shades of orange to reddish orange. Ecologically, *Cortinarius* is a very important mycorrhizal partner for many native trees and shrubs, especially in the Myrtaceae family, which includes eucalypts. *Cortinarius rotundisporus*, with its colourful, blue glutinous cap and white glutinous stem is perhaps the most recognisable Cortinar in southern Australia and is common throughout most eucalypt forests and woodlands as well as cool temperate rainforest. In the image below the small LBM growing on the gum nut is also a Cortinar; not nearly as noticeable as its companions, but just as important.

Richie



Green Skinhead *Cortinarius austrovenetus* *Cortinarius rotundisporus* *Cortinarius kula*