## Russula erumpens



Russula erumpens © Pat Leonard

**Cap:** centrally depressed, almost as soon as it emerges; to 90 mm diameter; matt, minutely velutinate; chalk white with rusty brown stains developing; margin entire; less than ½ peeling.

Stipe: cylindrical, moderately hard; velutinate, faintly ridged; white.

**Gills:** adnexed, sometimes with a decurrent tooth; thick; white to pale cream;

lamellulae absent or very rare.

**Flesh**: white, browning slightly.

Taste: mild.

**Chemical reactions:** FeSO4 on stipe: pale salmon; guaiac on stipe base: negative.

**Spore print:** white (I b).

**Spores:** subglobose;  $8.2 - 9.7 \times 6.9 - 8.4 \mu m$ , average  $9 (\pm 0.5) \times 7.9 (\pm 0.45) \mu m$ , Q = 1.03 - 1.34, average  $1.14 (\pm 0.08)$ , with a few isolated warts and short amyloid ridges to  $1.5 \mu m$  high and short connectives forming a complete reticulum.

**Basidia:** clavate;  $40 - 60 \times 10 - 15 \mu m$ , four spored.

**Cheilocystidia:** fusiform; 70 - 95  $\times$  10 - 15  $\mu$ m; thick walled, numerous, some mucronate.

**Pleurocystidia:** fusiform; 70 - 90  $\times$  10 - 15  $\mu$ m; numerous; thick walled, some mucronate.

Dermatocystidia: absent.

**Pileipellis:** a complex trichoderm with narrow hyphae 2 - 4 μm some of which appear to be encrusted.

**Habitat:** singly or in groups under *Eucalyptus microcorys* and other *Eucalyptus* sp. in both wet and dry sclerophyll forests.

**Notes:** an all white Russulla with a central depression often filled with debris and a very hard stem. It fits Cleland and Cheel's description well, but spore sizes are distinctly smaller and with a lower Q ratio than reported by Grgurinovic.

**Collections examined:** PL 13609, Maroochy Bushland Botanic Garden, Pat Leonard, 20 Jun 09; PL47313, Mapleton Falls National Park, Pat Leonard 9 Mar 2013.