**Verrucaria pluviosilvestris** P.M. McCarthy


T: banks of Tully R. below Kareeyah Power Station, Tully Gorge, 55 km NW of Tully, Tully Gorge Natl Park, 17°46'03"S, 145°34'48"E, on shaded siliceous rocks in rainforest gorge, alt. 220 m, *P. M. McCarthy* 2577; holo: CANB.

Illustration: P.M. McCarthy, *op. cit.* 25, fig. 1.

Thallus epilithic, usually off-white to pale grey when dry, occasionally darker, richly rimose to areolate (less rimose in deep shade), with a smooth to rugulose or irregularly and minutely uneven surface, matt, 30–60 µm thick in the absence of ascomata, to 100 (–120) µm thick between ascomata in richly fertile thalli; moist thallal pale greenish (when ascomata are sparse) to medium greyish green (when ascomata are numerous and densely aggregated); areolae angular to irregular, separated by thin cracks. True cortex lacking, but the uppermost 10–20 µm of the thallus without algae; cells rounded to angular and vertically elongate, 3–8 × 3–5 µm, hyaline, thin-walled. Algae 5–10 (–12) × 4–8 (–10) µm. Prothallus not apparent. Basal layer absent; however, overlapping involucrellum bases in abundantly fertile thalli can give the impression of a thick continuous layer of blackish basal hyphae. Perithecia almost entirely immersed in the thallus, with only the upper part of the involucrellum exposed, less commonly semi-immersed in the thallus. Involucrellum black, (0.2–) 0.38 (–0.55) mm diam., usually exposed only towards the apex, c. 40–60 µm thick, contiguous with the excipulum but also spreading laterally into the thallus and towards the substratum. Perithecial apex usually plane to convex, (0.08–) 0.15–0.22 (–0.35) mm diam., with a central, hyaline to grey-brown plane shallowly depressed or, occasionally, crateriform ostiole (40–) 80 (–100) µm diam. Excipulum hyaline to greyish brown in thin section, 20–25 (–30) µm thick. Centrum subglobose to obpyriform, 0.15–0.28 mm diam. Periphyses 15–30 (–40) × (1.5–) 2–2.5 µm, simple to sparingly branched. Asci 65–115 × 24–40 µm. Ascospores narrowly to broadly ellipsoidal, occasionally subcylindrical or broadly clavate, biseriate or irregularly massed in the asci, (22–) 31 (–39) × (9–) 12 (–15) µm.

Occurs on shaded, fine- and coarse-grained siliceous rock outcrops, boulders and cliff faces in lowland to montane rainforest between Wallaman Falls and Mossman Gorge, north-eastern Qld.

Qld: Jinda Track, Wallaman Falls, Girringun Natl Park, 50 km W of Ingham, *P. M. McCarthy* 2549 (CANB); Murray Falls State Forest Park, 19 km WSW of Bilyana, *P. M. McCarthy* 2592 (CANB); Elinjaa Ck. below Elinjaa Falls, c. 5 km ENE of Millaa Millaa, Atherton Tableland, *P. M. McCarthy* 2514, 2517 (CANB); Mossman Gorge, 6 km W of Mossman, *P. M. McCarthy* 2621 (CANB).

This species is characterised by the very pale areolate thallus, numerous and largely immersed perithecia, each with a spreading involucrellum, and comparatively large asci and ascospores. The thallus of the aquatic and semi-aquatic *V. praetermissa* is subtended by a thick brownish black basal layer, and its ascospores are smaller.