Verrucaria solicola P.M.McCarthy

Mycotaxon 59: 475 (1996)

Illustration: P.M.McCarthy, op. cit. 476, fig. 1.

Thallus terricolous, grey-green, rimose to areolate, matt, smooth to minutely uneven, 30–70 (–120) µm thick, ecoricate; areolae 0.1–0.25 (–0.4) mm wide. Algae globose, (4–) 6–10 (–15) µm diam. Prothallus and basal layer not apparent. Perithecia one-third to three-quarters immersed, 0.11–0.25 mm diam., black; apex usually rounded, occasionally slightly flattened; ostiole inconspicuous or in a shallow 20 µm wide depression. Involucrellum absent. Exciple black and 35–60 µm thick near the apex, grey-brown to dark olive-brown and 15–25 µm thick at the base. Centrum 0.08–0.2 mm wide. Periphyses 20–30 × 1.5–2.5 µm. Asci 48–60 × 14–18 µm. Ascospores elongate-ellipsoidal, often slightly broader towards the distal end, 11–20 × 4.5–7.5 µm.

Known from the type locality at an altitude of 1750 m in alpine N.S.W. where it grows on moist soil in alpine bog/grassland; also on basalt soil in grassland-herbfield in southern Tas. and on boggy soil on a mountain-top in central Tas.

Tas.: Pontville Small Arms Range Complex, 42°41’S, 147°17’E, G.Kantvilas 154/03 (HO); summit of Ironstone Mtn, Central Plateau, 41°43’S, 146°28’E, G.Kantvilas 331/05 (HO).

Comparing this lichen with the handful of terricolous species known from the Northern Hemisphere, the perithecia of V. solicola are discontinuously smaller than those of the boreal V. geophila Zahlbr. and V. sibirica Zahlbr. Furthermore, the ascospores are larger than the subglobose structures of V. bernaiensis Malbr. and V. terrigena Zschacke, but are smaller than those of V. bryoctona (Th.Fr.) Orange. The morphology and dimensions of the perithecia and their contents are very similar to those of the cool-temperate to boreal European species V. xyloxena Norman. However, the latter has a granular-verrucose thallus composed of brown-pigmented goniocysts, i.e. clusters of algae enclosed by ±isodiametric fungal cells.