Leptotrema

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[From Flora of Australia volume 57 (2009)]

Leptotrema Mont. & Bosch, in F.A.W. Miquel, Pl. Junghuhn. 4: 483 (1855); from the Greek leptos (small, thin or delicate) and trema (a hole), in reference to the pore-like opening of the ascomata.

Type: L. zollingeri Mont. & Bosch

Thallus thick, epiphloeodal, pale greenish grey, with a protocortex. Photobiont trentepohlioid. Prothallus thin to indistinct, pale to rather dark brown. Ascomata ±rounded, perithecioid or apothecioid, solitary, immersed. Proper exciple non-amyloid, hyaline internally to yellowish or orange-brown marginally. Hymenium non-amyloid, not inspersed, conglutinated; paraphyses with thickened apices, straight to slightly bent, parallel to somewhat interwoven; lateral paraphyses and true columella absent. Epiphymenium hyaline, egranulose or granulose. Asci 8-spored, clavate, non-amyloid; ascus apex and walls uniformly thin. Ascospores 1–2-seriate, submuriform to muriform, non-halonate, hyaline to brown, non-amyloid to faintly amyloid. Conidiomata pycnidial, with bacilliform conidia.

Chemistry: β-Orcinol depsidones or anthraquinones present.

Frisch et al. (2006) resurrected this genus for the pantropical, corticolous species L. wightii. They distinguished it from Myriotrema, where it had been placed previously (Hale, 1980), by differences in the structure of the asci and ascospores. While Frisch et al. (2006) accepted only L. wightii, we also recognise L. zollingeri Mont. & Bosch due to its distinctive chemistry (see below).

Leptotrema is accepted here somewhat tentatively, and it requires further evaluation following molecular studies. Reimnitzia has similar ascospores, but it also has Geaster-like ascomata and asci with a ±distinct tholus. We cannot confirm differences in exciple morphology between the two genera, since we were unable to find lateral paraphyses in Reimnitzia. Myriotrema is readily distinguished by its excipular structure with ±radiating apical hyphae, asci with a ±distinct tholus and immature ascospores with comparatively thin walls. Unthickened asci and thick-walled, immature ascospores can also be found in species belonging to genera that are otherwise well separated from Leptotrema. Thus, for example, Chapsa lamellifera has ‘Leptotrema-type’ asci, and Ocellularia bahiana has similar ascospores.