



PLACIDIOPSIS ¹

Gintaras Kantvilas ²

Placidiopsis Beltr., *Symm. Lich. Bassan.*: 212 (1858).

Type: *P. grappae* Beltr. [= *P. cinerascens* (Nyl.) Breuss]

Thallus subsquamulose-crustose to squamulose; squamules dispersed, contiguous or imbricate, sometimes pruinose, lacking rhizines, attached to the substratum by hyaline or brown rhizoidal hyphae; upper cortex a thin pseudocortex, composed of small cells 4–8 µm wide, poorly differentiated from the algal layer; lower cortex sometimes developed; prothallus sometimes present. Photobiont a green coccoid alga (*Diplosphaera*) with globose cells 7–16 µm wide. Ascomata perithecia, immersed or, more rarely, emergent or superficial, ± subglobose, with or without an involucrellum. Exciple hyaline or dark coloured, usually composed of tangentially arranged hyphae, more rarely parenchymatous. Periphyses 10–20 µm long. Hymenium I+ reddish brown, KI+ reddish brown, lacking algal cells. Paraphyses absent. Asci 8-spored, cylindrical to clavate or obclavate, with a well-developed, non amyloid tholus and a long, narrow ocular chamber when young, both becoming compressed as the ascoplasm develops. Ascospores 1-septate, hyaline, ellipsoid, ovoid to fusiform, biseriolate in the ascus. Pycnidia unknown. Chemistry: nil.

Placidiopsis is a small, ± squamulose genus of c. 14–20 species, related to but distinguished from *Catapyrenium* by its septate ascospores and lack of pycnidia. In the Tasmanian lichen flora, it is most likely to be confused with *Endocarpon* or *Placidium*, both of which have a well-developed, clearly differentiated upper cortex, and muriform or simple ascospores respectively. The genus is found mainly in the temperate Northern Hemisphere, with most species occurring on consolidated soil or rock.

Key references: Breuss (1996); Prieto *et al.* (2010); McCarthy (2019); Nimis (2022).

1 *Placidiopsis parva* P.M.McCarthy

Australas. Lichenol. 85: 12 (2019).

Squamules grey-black to dark greenish black, epruinose, minute, 0.08–0.2 mm wide, 50–80 µm thick, scattered or contiguous, plane to slightly convex, entire and rounded to somewhat angular, or with a minutely lobate margin, corticate above and below; prothallus present, consisting of a sparse reticulum of dark brown to blackish hyphae 4–6(–7) µm wide. Perithecia semi-immersed to superficial, 0.07–0.15 mm wide; involucrellum absent; exciple parenchymatous, greenish black to dark brown, 15–25(–32) µm thick. Asci (42–)60–70(–85) × 16–24 µm. Ascospores ellipsoid, asymmetrically septate, 13–22 × 5.5–8.5 µm.

Very rare (or most probably overlooked due to its small size) in Tasmania and known from a single, minute specimen where the tiny squamules and perithecia are scattered and overgrown by the foliose *Xanthoparmelia mougeotina* (Nyl.) D.J.Galloway. Consequently the description above is based largely on the original one compiled by McCarthy (2019) in first describing the species from the Australian Capital Territory where it is common on pebbles in disturbed habitats. The Tasmanian specimen is from a large outcrop of Triassic sandstone in dry sclerophyll forest. The sparse network of prothalline hyphae radiating from beneath the perithecia is very distinctive.

1 This work can be cited as: Kantvilas G (2024). *Placidiopsis*, version 2024:1. In MF de Salas (Ed.) *Flora of Tasmania Online*. 2 pp. (Tasmanian Herbarium, Tasmanian Museum and Art Gallery: Hobart). <https://flora.tmag.tas.gov.au/lichen-genera/placidiopsis/>

2 Tasmanian Herbarium, Tasmanian Museum & Art Gallery, PO Box 5058, UTAS LPO, Sandy Bay, TAS 7005, Australia.

Bluff Road, c. 2 km S of Elderslie, 42°37'S 147°04'E, 200 m, 1999, G. Kantvilas 174/99 (HO).

REFERENCES

- Breuss O (1996) Revision der Flechtengattung *Placidiopsis* (Verrucariaceae). *Österreichische Zeitschrift für Pilzkunde* (new series) **5** 65–94.
- McCarthy PM (2019) *Placidiopsis parva* (lichenized Ascomycota, Verrucariaceae), a new species from siliceous rocks in the Australian Capital Territory. *Australasian Lichenology* **85** 12–15.
- Nimis PL (2022) Keys to the lichens of Italy 13. *Placidiopsis*. https://italic.units.it/flora/index.php?procedure=ext_key_home&key_id=1748. Accessed 23 May 2024.
- Prieto M, Martínez I, Aragón G, Otálora MAG, Lutzoni F (2010) Phylogenetic study of *Catapyrenium* s. str. (Verrucariaceae, lichen-forming Ascomycota) and related genus *Placidiopsis*. *Mycologia* **102** 291–304.

INDEX

C	P
<i>Catapyrenium</i>1	<i>Placidiopsis</i>1
D	<i>Placidiopsis cinerascens</i>1
<i>Diplosphaera</i>1	<i>Placidiopsis grappae</i>1
E	<i>Placidiopsis parva</i>1
<i>Endocarpon</i>1	<i>Placidium</i>1
	X
	<i>Xanthoparmelia mougeotina</i>1