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## A new species of *Porina* (Porinaceae) from Queensland

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**Abstract:** The corticolous *P. kennedyensis* P.M. McCarthy (Porinaceae) is described as new from coastal forest in north-eastern Queensland.

***Porina kennedyensis*** P.M. McCarthy sp. nov.

Fig. 1

Thallus epiphloeodalis, continuus vel leviter rimosus, minute rugulosus vel verruculosus, mediogriseofuscus, 30–80  $\mu\text{m}$  crassus. Perithecia semiimmersa vel plerumque superficialia, (0.32–)0.39(–0.48) mm diametro. Involucrellum dimidiatum aut ad basim excipuli descendens, partim thallo tectis, 30–40  $\mu\text{m}$  crassum, externe griseoatrum vel viridiatrum, interne pallidius. Centrum 0.18–0.28 mm diametro. Excipulum hyalinum, 30–40  $\mu\text{m}$  crassum. Asci elongatae-fusiforment, 118–132 x 14–19  $\mu\text{m}$ , apicibus rotundatis. Ascospores aciculares, (11–)15(–19)-septatae, (61–)82(–98) x (3.5–)4.5(–6)  $\mu\text{m}$ .

Type: Australia, Queensland, Edmund Kennedy National Park, 10 km N of Cardwell, 18°12'49"S, 146°00'44"E, on tree bark in coastal forest, alt. 2 m, *P.M. McCarthy* 2562, 27.vii.2006 (holotype CANB).

Thallus crustose, epiphloeodal, c. 2–3 cm wide, determinate, continuous to very sparingly rimose, medium greyish brown, matt, minutely rugulose to verruculose, to 30–80  $\mu\text{m}$  thick, ecorticate; prothallus not apparent; basal layer absent. Algae *Trentepohlia*; cells globose to broadly ellipsoid, 7–16 x 7–12  $\mu\text{m}$ . Hyphae long, branching, 2–2.5  $\mu\text{m}$  thick. Ascumata perithecia, semi-immersed to (mostly) almost superficial, becoming hemispherical, usually solitary, (0.32–)0.39(–0.48) diam. [n = 25], greyish or greenish black above, but the lower parts often remaining covered by the thallus at maturity; apex rounded; ostiole inconspicuous or in a shallow c. 50  $\mu\text{m}$  diam. depression. Involucrellum extending to mid-way down the sides of the excipulum or almost to the base, outer layers dark brown to blackish, medium brown internally, 30–40  $\mu\text{m}$  thick, K–. Centrum subglobose to globose, 0.18–0.28 mm wide. Excipulum c. 30–40  $\mu\text{m}$  thick at the base and sides of the centrum, hyaline, the outer layers hyaline to very pale brownish. Subhymenium 30–40  $\mu\text{m}$  thick. Paraphyses unbranched, 0.7–1(–1.5)  $\mu\text{m}$  thick. Periphyses absent. Asci 8-spored, elongate-fusiform, with a rounded apex that lacks an apical chitinous ring, 118–132 x 14–19  $\mu\text{m}$ . Ascospores acicular, usually straight or slightly curved, occasionally almost sigmoidal, massed and overlapping in the ascus, hyaline, (11–)15(–19)-septate, (61–)82(–98) x (3.5–)4.5(–6)  $\mu\text{m}$  [n = 50]; apices acute, but occasionally the distal end more rounded; perispore not apparent; contents usually clear, occasionally guttulate. Conidiomata not seen.

*Etymology:* From the type locality, Edmund Kennedy National Park.

### Remarks

This lichen is characterized by the superficially blackish perithecia, the unusually thick excipulum, elongate-fusiform asci with a rounded apex, and long, multiseptate acicular spores. Two other Australian species are outwardly very similar, and also produce elongate, multiseptate spores. *Porina raphidiophora* (Nyl.) Müll. Arg. is known from south-eastern New South Wales, Tasmania, New Caledonia, southern New Zealand and Madagascar; its spores are 9–11(–15)-septate and 41–73 x 2–4  $\mu\text{m}$  (McCarthy 2001). *Porina meridionalis* P.M. McCarthy occurs on islands in the Bass Strait and on the north coast of Tasmania; it has elongate-fusiform spores that are

often broader towards the distal end, (11–)17(–21)-septate and  $41\text{--}73 \times 6\text{--}9.5 \mu\text{m}$  (McCarthy 2001). A third species, *P. raphidosperma* Müll.Arg., is known from eastern and southern U.S.A.; it has filiform, 13–20-septate spores that are  $100\text{--}140 \times 3\text{--}5 \mu\text{m}$  (Harris 1995).

These three species have perithecia that are not or scarcely overgrown by the thallus even when immature, have a well-defined, black involucrellum, a comparatively thin excipulum, and elongate-cylindrical asci with a subtruncate apex and an apical chitinous ring that becomes more sharply defined in Congo Red.

*Porina kennedyensis* is known only from the type locality, a coastal forest in north-eastern Queensland. Other corticolous species at this site include *Bulbothrix goebellii* (Zenker) Hale, *Cratiria lauricassiae* (Fée) Marbach, *Graphis streimannii* A.W.Archer, *Haematomma africanum* (J.Steiner) C.W.Dodge, *H. stevensiae* R.W.Rogers, *Letrouitia leprolytoides* S.Y.Kondr. & Elix, *Parmotrema gardneri* (C.W.Dodge) Sérus., *Pertusaria velata* (Turner) Nyl., *Phaeographis colligata* (Stirt.) Zahlbr., *Porina eminentior* (Nyl.) P.M.McCarthy, *P. internigrans* (Nyl.) Müll. Arg., *P. tetracerae* (Ach.) Müll.Arg., *Pyxine australiensis* Kalb, *P. schmidtii* Vain. and *Ramalina tropica* G.N.Stevens (J.A.Elix, pers. comm.).

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#### References

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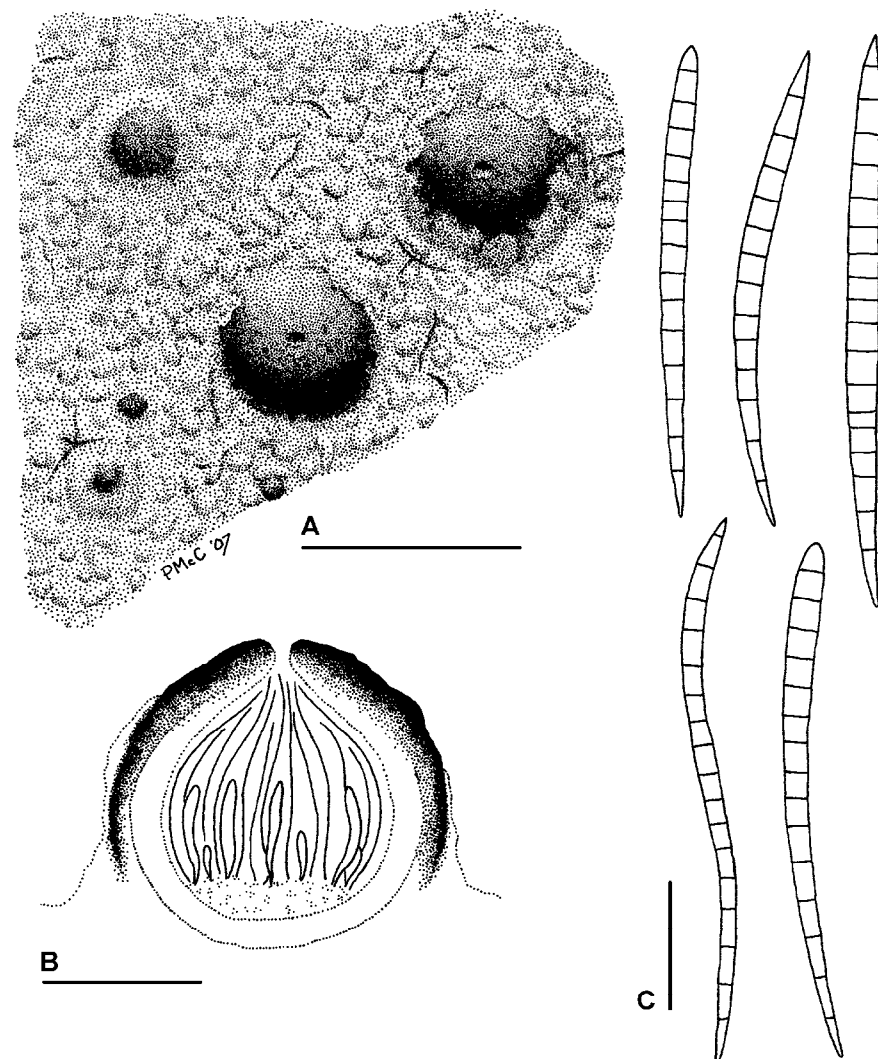


Figure 1. *Porina kennedyensis* (holotype). A, Habit of thallus and ascomata. B, Sectioned ascoma and adjacent thallus (semi-schematic). C, Ascospores. Scales: A = 0.5 mm; B = 0.2 mm; C = 20  $\mu\text{m}$ .