

**Ramaria zippelii** (Lév.) Corner, *Ann. Bot. Mem.* 1: 632 (1950)

A.M.Young, Aug. 2016

*Clavaria zippelii* Lév., *Ann. Sci. Nat. Ser. III*, 2: 215 (1844)

*Phaeoclavulina zippelii* (Lév.) van . Overeem, *Bull. Jard. Bot. Buitenzorg III*, 5: 276 (1923)

*Neotype*: Java, undated, no location, *Clautrian*, Herbarium FH.

*Fruiting bodies* 8–11 × 3–6 cm; overall shape obconic or stipitate ellipsoid; *apices* olivaceous buff (Edin. 63) but displaying a distinct greyish green tint in subdued light, the apical colour runs down the subtending branch for about 0.2–0.5cm from the apex, cylindrical with rounded end or slowly tapering but again with rounded end, old specimens lose the buff tint at the apices and become uniformly brown to correspond with the remainder of the subtending branches, cuspidate then elongating to become separate and "finger-like", dry; *branches* cinnamon (Edin. 10) to fulvous (Edin. 12) with occasional splashes of umber (Edin 18), cylindrical (0.2–0.4cm diam.) but usually somewhat flattened at the nodes, smooth but often minutely felty on the inner surfaces of the branches, becoming thicker near the stipe; *axils* round and deeply "U-shaped", there is no dependent groove running down the stem from the axil; *stipe* 3–4.5 × 0.9–1.2 cm, cylindrical, robust, umber (Edin. 18), surface smooth to minutely felty, inserted directly into sandy soil substrate,; aborted branches absent. *Flesh* white to off-white (near Edin. 2B), fibrous but not leathery-tough, discolours lavender brownish when cut; *odour* none; *taste* not recorded.

*Rhizomorphs* not present.

*Macrochemical reactions*: unknown.

*Basidiospores* (10.1–)10.8–13.3 × 5.8–7.2(–7.9) μm, mean 12.1 × 6.3 μm, Q: (1.5–)1.71–2.3, mean Q: 1.93, ellipsoid to lacrymiform with a prominent, curved hilar appendix, echinulate with an ornamentation of profuse, randomly scattered conical, acute or roundly tipped spines up to 2 μm high, profile very distinctly echinulate; *basidia* (43–)49–64 × 6–9 μm, mean: 56.6 × 7.6 μm, 2-spored, clamped; *sterigmata* up to 7 μm long, conical, stout and straight to slightly curved; *branch trama* composed of thin-walled, cylindrical to a little inflated, septate hyphae 3–7 μm diam., clamps present; *ampulliform septa* present, 6–9 μm diam., stalactitic ornamentation absent, and hyphae sometimes ending in an ampulliform swelling without any septum formed; *stipe trama* composed of thin-walled (occasionally slightly thickened), cylindrical to a little inflated, septate hyphae 3–8 μm diam., clamps present but scattered; *ampulliform septa* present, 11–17 μm diam., stalactitic ornamentation absent, and hyphae sometimes ending in an ampulliform swelling without any septum formed *gloeoplerous hyphae* not observed in any trama.

*Habit*: on the ground in tufts and also forming fairy rings. *Habitat*: amongst palm trees in gully rainforest and on deep sandy soil.

*Known Australian distribution*: Qld, Fraser Island.

**Notes**: The glaucous-green tint is very marked in subdued light in the rainforest, however it becomes quite difficult to see in either direct sunlight or with a flash photograph. In full sunlight, the colour is seen as cream coloured. Dried material in KOH releases a brownish pigment which is clearly visible on the white tissues used to mop up excess mountant.

The colour chip references in the description are from the chips listed in the Colour Identification Chart published as part of the *Flora of British Fungi* by the Royal Botanic Garden Edinburgh, UK.

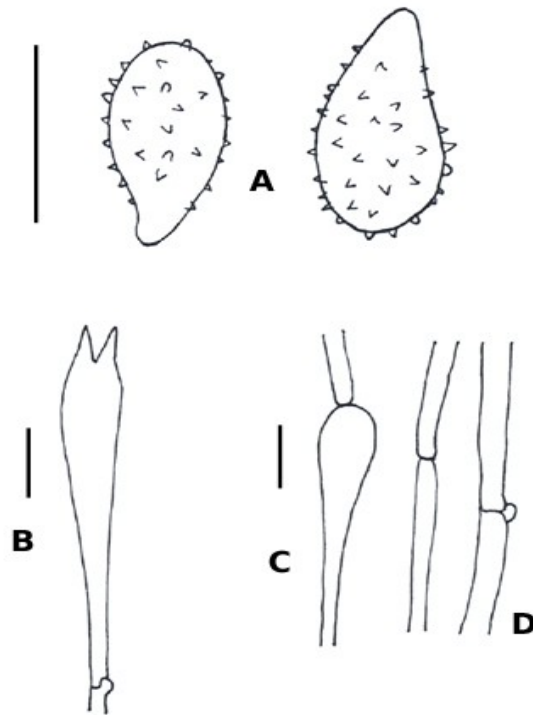
This collection is probably referable to *Ramaria zippelii* f. *aeruginosa* (Pat.) R.H.Petersen (*Biblioth. Mycol.* 79: 189, 1981), (= *Clavaria aeruginosa* Pat., *Bull. Soc. Mycol. Fr.* 14: 96, 1898) which differs from the type only by the glaucous green tints that the form displays.



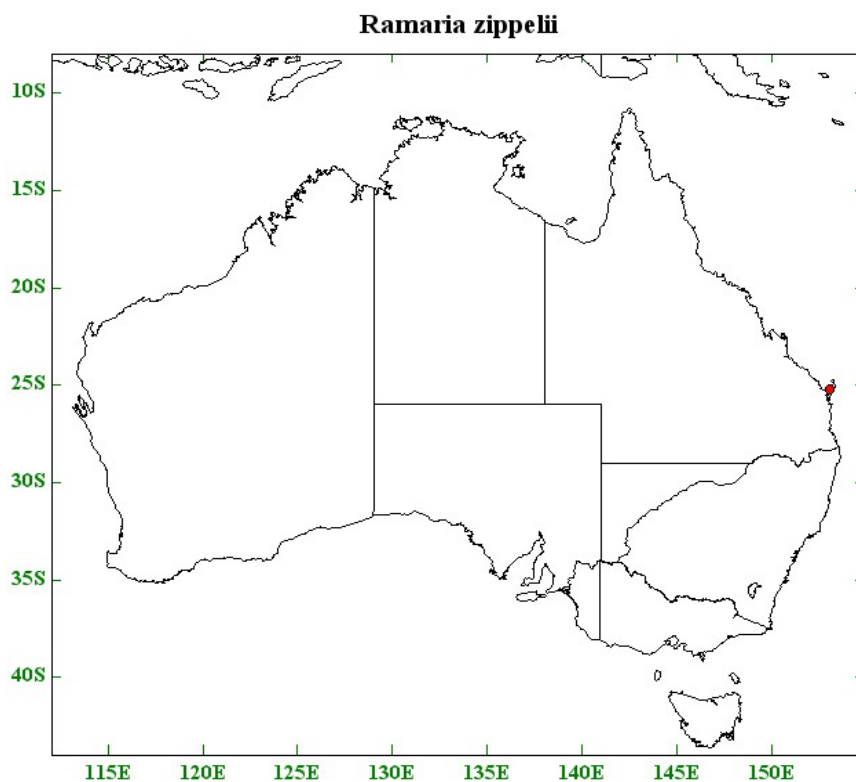
*Ramaria zippelii* in the sand based rainforest on Fraser Island. The faint/pale, creamy greenish tint of the apices is suggested in this image but it was very hard to record satisfactorily. The tint was however, quite clear visually on the day of collection. The robust, rather simple branches are all vertically oriented and the "U"-shaped axils are very clearly displayed. © R. Halling



*Ramaria zippelii* from the same location but using flash photography. The structures are clear but the faint glaucous (greyish green) tints are washed out completely. © R. Halling



*Ramaria zippelii* microdata. A. basidiospores; B. basidium; C. ampulliform septum; D. hyphae with occasional clamp connections. Scale bars = 10  $\mu$ m. © A.M.Young.



*Ramaria zippelii*. Known Australian distribution. So far, only the single location of Fraser Island just off the SE Queensland coast is known. The species may be present in rainforests along the eastern Australian coastline.

## **Acknowledgements**

This document was produced from material contained in the 2007 Interim Submission (The Taxonomy of genus *Ramaria* in Australia: coralloid macrofungi) forwarded to ABRS at the cessation of the *Ramaria* project. ABRS is both acknowledged and thanked for their kindness in permitting me to make this information available to the Australian mycological community.

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