

Phlogicylindrium uniforme



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Phlogicylindrium uniforme Crous & Summerell, *sp. nov.*

Phlogicylindrium eucalypti simile, sed conidiis minoribus, (14–)16–20(–21) × (1.5–)2(–2.5) µm, discernitur.

Etymology. Named after its cylindrical, highly uniformly conidia.

Occurring on lesions of living leaves in association with *Mycosphaerella* spp., probably as secondary invader. On pine needle agar: *Conidiomata* visible as slimy, erect tufts of hyaline conidial masses, resembling candle flames, synnematous, indeterminate; conidiomata gradually turn brown with age due to the slime binding the conidial mass. *Conidiophores* consisting of an intricate network of brown, smooth, branched cells, 2.5–4 µm wide. *Conidiogenous cells* subhyaline, smooth, becoming pale brown with age, ampulliform with elongated necks on which percurrent proliferations are clearly visible; 15–35 × 2–3 µm. *Conidia* formed apically on conidiogenous cells, hyaline, cylindrical with obtusely rounded ends, 1-septate, uniform in width, guttulate, (14–)16–20(–21) × (1.5–)2(–2.5) µm; conidia anastomosing while still aggregated in mucus on the conidiophore.

Culture characteristics — (in the dark, 25 °C, after 2 wk): Colonies after 2 wk on all media reaching 25 mm diam. On oatmeal agar lacking aerial mycelium, margin smooth, lobate, surface blood colour, with bay pigment diffusing into agar. On malt extract agar erumpent, lacking aerial mycelium, centre vinaceous-buff, outer margin blood, reverse blood to chestnut. On potato-dextrose agar lacking aerial mycelium with feathery margin, surface and reverse umber.

Typus. AUSTRALIA, New South Wales, Berambing, Bells Line of Road, S 33°32'5.8" E 150°26'39.9", alt. 794 m, on leaves of *Eucalyptus cypellocarpa* (Myrtaceae), 16 Nov. 2010, B.A. Summerell, holotype CBS H-20762, cultures ex-type CPC 19419 = CBS 131312, ITS sequence GenBank JQ044426 and LSU sequence GenBank JQ044445, MycoBank MB560701.

Notes — The genus *Phlogicylindrium* was introduced in 2006 for *P. eucalypti*, a species associated with *Eucalyptus* leaves (Summerell et al. 2006). A second species, *P. eucalyptorum*, was subsequently described (Crous et al. 2007c). *Phlogicylindrium uniforme* can easily be distinguished from these two species based on its smaller conidia (14–21 × 1.5–2.5 µm), that also tend to be uniformly cylindrical in shape. Thus far the genus has only been reported from leaves of *Eucalyptus*. A megablast search of the NCBI's GenBank nucleotide sequence database using the ITS sequence of *P. uniforme* retrieves as closest hits *Phlogicylindrium eucalyptorum* (GenBank EU040223; Identities = 571/578 (99 %), Gaps = 0/578 (0 %)) and *Phlogicylindrium eucalypti* (GenBank DQ923534; Identities = 552/562 (98 %), Gaps = 3/562 (1 %)), amongst others. A megablast search of the NCBI's GenBank nucleotide sequence database using the LSU sequence of *P. uniforme* confirms this placement.

Colour illustrations. *Eucalyptus cypellocarpa*; conidiophores giving rise to conidia on pine needle agar; cylindrical, 1-septate conidia. Scale bars = 10 µm.

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