

Cylindromonium eugeniicola



Fungal Planet 987 – 18 December 2019

Cylindromonium Crous, *gen. nov.*

Etymology. Name refers to its cylindrical conidia and acremonium-like morphology.

Classification — *Nectriaceae*, *Hypocreales*, *Sordariomycetes*.

Mycelium consisting of hyaline, smooth, septate, branched, hyphae. *Conidiophores* hyaline, smooth, appearing as individual unbranched conidiophores, septate with a terminal phialide,

or as complex structures with a basal cylindrical cell that gives rise to 2–4 phialides; basal cell subcylindrical, hyaline, smooth, septate. *Conidiogenous cells* hyaline, smooth, phialidic, subcylindrical with apical taper; apex with flared collarete. *Conidia* solitary, aggregated in mucoid packets, cylindrical with obtuse ends, medianly 1-septate, hyaline, smooth, granular.

Type species. *Cylindromonium eugeniicola* Crous.
Mycobank MB832900.

Cylindromonium eugeniicola Crous, *sp. nov.*

Etymology. Name refers to the host genus *Eugenia* from which it was isolated.

Mycelium consisting of hyaline, smooth, septate, branched, hyphae. *Conidiophores* hyaline, smooth, appearing as individual unbranched conidiophores, septate with a terminal phialide, or as complex structures with a basal cylindrical cell that gives rise to 2–4 phialides; basal cell subcylindrical, hyaline, smooth, septate. *Conidiogenous cells* hyaline, smooth, phialidic, subcylindrical with apical taper; apex with flared collarete. *Conidia* solitary, aggregated in mucoid packets, cylindrical with obtuse ends, medianly 1-septate, hyaline, smooth, granular.

Culture characteristics — Colonies flat, spreading, with folded surface, sparse aerial mycelium and smooth, lobate margin, reaching 35 mm diam after 2 wk at 25 °C. On MEA surface buff, reverse cinnamon. On PDA surface buff, reverse rosy buff. On OA surface buff.

Typus. SOUTH AFRICA, Eastern Cape Province, Amathole, Haga Haga, on leaf litter of *Eugenia capensis* (*Myrtaceae*), 2010, M.J. Wingfield, HPC 2750 (holotype CBS H-24189, culture ex-type CPC 37170 = CBS 146075, ITS and LSU sequences GenBank MN562142.1 and MN567649.1, MycoBank MB832901).

Notes — *Cylindromonium* is related to *Phialoseptomonium* (Crous et al. 2019a), but distinct in that it has cylindrical conidia, similar to '*A. lichenicola*' CBS 303.70 and '*A. rhabdosporum*' CBS 438.66, which appear to be congeneric, also having cylindrical conidia (Giraldo & Crous 2019).

Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the ITS sequence had highest similarity to *Acremonium lichenicola* (strain CBS 188.70, GenBank MH859549.1; Identities = 544/600 (91 %), 15 gaps (2 %)), *Acremonium rhabdosporum* (strain CBS 438.66, GenBank MH858850.1; Identities = 543/600 (91 %), 17 gaps (2 %)), and *Phialoseptomonium eucalypti* (strain CBS 145542, GenBank MK876402.1; Identities = 541/599 (90 %), 17 gaps (2 %)). Closest hits using the LSU sequence are *Acremonium lichenicola* (strain CBS 415.70A, GenBank MH871536.1; Identities = 805/830 (97 %), no gaps), *Phialoseptomonium eucalypti* (strain CBS 145542, GenBank MK876443.1; Identities = 789/814 (97 %), no gaps), and *Sarcopodium flavolanatum* (strain CBS 128370, GenBank MH876362.1; Identities = 804/830 (97 %), no gaps).

Cylindromonium lichenicola (W. Gams) Crous, *comb. nov.*

Mycobank MB832902.

Basionym. *Acremonium lichenicola* W. Gams, *Cephalosporium-artige Schimmelpilze* (Stuttgart): 134. 1971.

Cylindromonium rhabdosporum (W. Gams) Crous, *comb. nov.*

Mycobank MB832903.

Basionym. *Acremonium rhabdosporum* W. Gams, *Cephalosporium-artige Schimmelpilze* (Stuttgart): 136. 1971.

Colour illustrations. Beach at Haga Haga with *Eugenia capensis*. Leaf spot on *Eugenia capensis* with various fungi; sporulation on synthetic nutrient poor agar; conidiophores with conidiogenous cells; conidia. Scale bars = 10 µm.

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