

*Hippopotamyces phragmitis*



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## *Hippopotamycus* Crous, gen. nov.

*Etymology.* *Hippopota-* (from *Hippopotamus*) grazing at the collection site.

*Classification* — *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*.

*Conidiomata* pycnidial, globose, brown, opening via irregular rupture; wall of 6–8 layers of brown *textura angularis*. *Conidiophores* reduced to conidiogenous cells lining the inner cavity,

hyaline, smooth, but green olivaceous in mass, ampulliform to doliform, phialidic. *Conidia* solitary, hyaline, smooth, guttulate, thick-walled, acicular to subcylindrical with taper in upper region to subobtuse apex, base truncate, irregularly curved, septate.

*Type species.* *Hippopotamycus phragmitis* Crous.  
MycoBank MB832879.

## *Hippopotamycus phragmitis* Crous, sp. nov.

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

*Conidiomata* pycnidial, globose, 180–200 µm diam, brown, opening via irregular rupture; wall of 6–8 layers of brown *textura angularis*. *Conidiophores* reduced to conidiogenous cells lining the inner cavity, hyaline, smooth, but green olivaceous in mass, ampulliform to doliform, phialidic, 3–4 × 3–4 µm. *Conidia* solitary, hyaline, smooth, guttulate, thick-walled, acicular to subcylindrical with taper in upper region to subobtuse apex, base truncate, irregularly curved, 3(–5)-septate, (25–)32–37(–45) × 2.5(–3) µm.

*Culture characteristics* — Colonies erumpent, spreading, with sparse aerial mycelium and smooth, lobate margin, reaching 6 mm diam after 2 wk at 25 °C. On MEA, PDA and OA surface and reverse olivaceous grey.

*Typus.* SOUTH AFRICA, KwaZulu-Natal Province, St Lucia, on leaves of *Phragmites australis* (*Poaceae*), 2010, P.W. Crous, HPC 2570 (holotype CBS H-24165, culture ex-type CPC 36385 = CBS 146086, ITS, LSU and *rpb2* sequences GenBank MN562122.1, MN567630.1 and MN556803.1, MycoBank MB832880).

*Notes* — *Hippopotamycus* is septoria-like in morphology (Quaedvlieg et al. 2013, Verkley et al. 2013), but is phylogenetically distinct, and represents a new genus in the *Mycosphaerellaceae* (Videira et al. 2017).

Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the **ITS** sequence had highest similarity to *Xenosonderhenia eucalypti* (strain CBS 138858, GenBank NR\_137937.1; Identities = 494/550 (90 %), 19 gaps (3 %)), *Uwemyces elaeidis* (strain CPUwZC-01, GenBank KX228299.1; Identities = 494/551 (90 %), 19 gaps (3 %)), and *Paramycosphaerella wachendorffiae* (strain CBS 129579, GenBank MH865448.1; Identities = 493/551 (89 %), 17 gaps (3 %)). Closest hits using the **LSU** sequence are *Paramycosphaerella marksii* (strain CBS 110693, GenBank DQ204758.1; Identities = 792/807 (98 %), 1 gap (0 %)), *Paramycosphaerella brachystegiae* (strain CBS 136436, GenBank NG\_058048.1; Identities = 791/807 (98 %), 1 gap (0 %)), and *Pseudozasmidium vietnamense* (as *Mycosphaerella vietnamensis*, strain AGI099A, GenBank EU882134.1; Identities = 783/799 (98 %), 1 gap (0 %)). Closest hits using the **rpb2** sequence had highest similarity to *Zasmidium syzygii* (strain CBS 133580, GenBank MF951730.1; Identities = 690/888 (78 %), 22 gaps (2 %)), *Zasmidium cellare* (strain CBS 892.85, GenBank KT356875.1; Identities = 719/930 (77 %), 28 gaps (3 %)), and *Zasmidium musigenum* (strain CBS 190.63, GenBank MF951718.1; Identities = 699/911 (77 %), 14 gaps (1 %)).

*Colour illustrations.* *Phragmites australis* plants in St Lucia. Section through conidioma on synthetic nutrient poor agar; conidiogenous cells; conidia. Scale bars = 10 µm.