

Neothyrostroma encephalarti



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Neothyrostroma Crous, *gen. nov.*

Etymology. Name refers to its morphological similarity with *Thyrostroma*.

Classification — *Amorosiaceae*, *Pleosporales*, *Dothideomycetes*.

Conidiomata sporodochial, black, superficial on leaves, solitary. *Conidiophores* arising from brown stroma, subcylindrical, hyaline, smooth, branched, septate. *Conidiogenous cells* subcylin-

dric, hyaline, smooth, terminal and intercalary, proliferating percurrently at apex. *Conidia* solitary, brown, smooth, fusoid-ellipsoid, apex acutely rounded, base truncate, distoseptate, with 3–5 horizontal septa, and 3–5 oblique or vertical septa.

Type species. *Neothyrostroma encephalarti* Crous.
MycoBank MB832863.

Neothyrostroma encephalarti Crous, *sp. nov.*

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

Conidiomata sporodochial, black, erumpent in agar and superficial on leaves in nature, solitary, 200–500 µm diam (in culture). *Conidiophores* arising from brown stroma, subcylindrical, hyaline, smooth, branched, septate, up to 50 µm tall, 4–5 µm wide. *Conidiogenous cells* subcylindrical, hyaline, smooth, terminal and intercalary, 10–30 × 4–5 µm, proliferating percurrently at apex. *Conidia* solitary, brown, smooth, fusoid-ellipsoid, apex acutely rounded, base truncate, 2–3 µm diam, distoseptate, with 3–5 horizontal septa, and 3–5 oblique or vertical septa, (20–)21–24(–27) × (8–)9–10(–11) µm.

Culture characteristics — Colonies flat, spreading, with moderate aerial mycelium and smooth, lobate margin, reaching 25 mm diam after 2 wk at 25 °C. On MEA surface pale olivaceous grey, reverse olivaceous grey. On PDA surface and reverse olivaceous grey. On OA surface dirty white to smoke grey.

Typus. SOUTH AFRICA, Limpopo Province, Tzaneen, on leaves of *Encephalartos* sp. (*Zamiaceae*), 2010, P.W. Crous, HPC 2486 (holotype CBS H-24162, cultures ex-type CPC 35999, CPC 35998 = CBS 146037, ITS, LSU and *tef1* sequences GenBank MN562104.1–MN562105.1, MN567612.1–MN567613.1 and MN556830.1–MN556831.1, MycoBank MB832864).

Notes — *Neothyrostroma* is reminiscent of the genus *Thyrostroma*, which was recently treated by Marin-Felix et al. (2017). The two genera are distinct phylogenetically, and *Neothyrostroma* can also be distinguished morphologically in having distoseptate conidia.

Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the ITS sequence of CPC 35998 had highest similarity to *Angustimassarina* sp. DP-2019a (voucher MFLU 18-0057, GenBank MN244197.1; Identities = 427/461 (93 %), 8 gaps (1 %)), *Exosporium stylobatum* (strain AN122R, GenBank MH397653.1; Identities = 416/450 (92 %), 8 gaps (1 %)), and *Lophiostoma corticola* (strain Z26, GenBank MK907710.1; Identities = 438/474 (92 %), 11 gaps (2 %)). The ITS sequences of CPC 35998 and 35999 are identical (545/545 bases). Closest hits using the LSU sequence of CPC 35998 are *Alfoldia vorosii* (as *Dothideomycetes* sp. DGK-2019a, strain REF117, GenBank MK589355.1; Identities = 863/883 (98 %), 4 gaps (0 %)), *Amorocoelophoma cassiae* (voucher C259, GenBank MK347956.1; Identities = 857/883 (97 %), 5 gaps (0 %)), and *Angustimassarina coryli* (strain MFLUCC 14-0981, GenBank MF167432.1; Identities = 854/881 (97 %), 6 gaps (0 %)). The LSU sequences of CPC 35998 and 35999 are identical (883/883 bases). Closest hits using the *tef1* sequence had highest similarity to *Alfoldia vorosii* (as *Dothideomycetes* sp. DGK-2019a, strain REF117, GenBank MK599321.1; Identities = 438/466 (94 %), no gaps), *Parathyridaria percutanea* (strain UTHSC D116-292, GenBank LT797111.1; Identities = 433/462 (94 %), no gaps), and *Splanchnonema platani* (strain CBS 221.37, GenBank DQ677908.2; Identities = 435/466 (93 %), no gaps).

Colour illustrations. *Encephalartos* sp. *Neothyrostroma encephalarti* was isolated from. *Conidiophores* with *conidiogenous cells*; *conidia*. Scale bars = 10 µm.

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