

Trinosporium guianense



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Trinosporium Crous & Decock, *gen. nov.*

Etymology. Named after its trigonous conidia.

Mycelium consisting of septate, branched, hyaline, smooth, hyphae, encased in a mucoid sheath. *Conidiomata* pycnidial, separate, globose, with a central ostiole, lined with periphyses; wall of 2–3 layers of brown *textura angularis*. *Conidiophores* lining the inner cavity, subcylindrical, hyaline, smooth, reduced to conidiogenous cells or branched, 1–3-septate with conidio-

genous cells terminal and lateral. *Conidiogenous cells* hyaline to pale brown, smooth, thin-walled, ampulliform to subcylindrical; apex with periclinal thickening, but at times also with 1–2 percurrent proliferations. *Conidia* brown, smooth, widest at apex, with three lateral, rounded lobes, tapering towards a truncate base.

Type species. *Trinosporium guianense*.
Mycobank MB800384.

Trinosporium guianense Crous & Decock, *sp. nov.*

Etymology. Named after the locality from where it was collected, French Guiana.

Mycelium consisting of septate, branched, hyaline, smooth, 3–8 µm diam hyphae, encased in a mucoid sheath, up to 6 µm thick. *Conidiomata* 30–150 µm diam, separate, globose, with a central ostiole, up to 25 µm diam, lined with periphyses; wall of 2–3 layers of brown *textura angularis*. *Conidiophores* lining the inner cavity, subcylindrical, hyaline, smooth, reduced to conidiogenous cells or branched, 1–3-septate with conidiogenous cells terminal and lateral, 8–16 × 3–4 µm. *Conidiogenous cells* hyaline to pale brown, smooth, thin-walled, ampulliform to subcylindrical, 4–8 × 3–4 µm; apex with periclinal thickening, but at times also with 1–2 percurrent proliferations. *Conidia* brown, smooth, widest at apex, with three lateral, rounded lobes, tapering towards a truncate base, 1 µm diam; conidia 3–4 µm wide at apex, 3–4 µm tall.

Culture characteristics — (in the dark, 25 °C after 3 wk): Colonies semi-erumpent, flat, spreading, lacking aerial mycelium; surface slimy, with irregular, feathery margins, reaching 35 mm diam; on MEA, OA, and PDA fuscous-black.

Typus. FRENCH GUIANA, Municipality of Regina, Nouragues Nature Reserve, CNRS 'Inselberg' research forest plot, approx. N04°05.5', W52°40.6', elev. approx. 120 m, isolated as a contaminant when trying to isolate a specimen of *Amauroderma* sp. (*Basidiomycota*, *Ganodermataceae*), coll. number ex-FG-11-486, July 2011, C. Decock, holotype CBS H-20965, culture ex-type MUCL 53977 = CBS 132537 = CPC 19878, ITS sequence GenBank JX069869 and LSU sequence GenBank JX069853, MycoBank MB800385.

Notes — The genus *Trinosporium* is characteristic in that it has ostiolate, pycnidial conidiomata, and brown, trigonous conidia. *Trinosporium* is reminiscent of *Readeriella*, which however, clusters in *Teratosphaeriaceae* (Crous et al. 2007a, 2009a, b). It is similar to *Tribolospora*, but the latter has hyaline conidia, with up to six protuberances (Sutton 1980). One possible earlier name for *Trinosporium* is *Trigonosporium*, known from two species, *T. australiense* and *T. cochinchinense*. However, conidia of the type (*T. australiense*) are hyaline, and Sutton (1971) was unable to resolve details related to its conidiogenesis, meaning that the genus remains obscure, pending fresh collections from *Cupaniopsis serrata* (= *Cupania serrata*) in Australia.

Based on a megablast search of NCBI's GenBank nucleotide database, only distant hits were obtained using the ITS sequence, e.g. *Sarea difformis* (GenBank JF440614; Identities = 468/554 (84 %), Gaps = 54/554 (10 %)), followed by *Sarea resinae* (GenBank JF440615; Identities = 483/583 (83 %), Gaps = 61/583 (10 %)), and *Umbilicaria esculenta* (GenBank EU534208; Identities = 479/586 (82 %), Gaps = 52/586 (9 %)). Closest hits using the LSU sequence yielded highest similarity to *Amorphotheca resinae* (GenBank EU040230; Identities = 819/863 (95 %), Gaps = 8/863 (1 %)), *Tricladium angulatum* (GenBank GQ477311; Identities = 810/856 (95 %), Gaps = 2/856 (0 %)), and *Potebniomyces pyri* (GenBank DQ470949; Identities = 821/871 (94 %), Gaps = 14/871 (2 %)).

Colour illustrations. Rain forest at Nouragues Nature Reserve; conidiomata sporulating on malt extract agar; hyphae with mucoid sheath, conidiogenous cells and conidia. Scale bar = 10 µm.

Pedro W. Crous & Johannes Z. Groenewald, CBS-KNAW Fungal Biodiversity Centre, P.O. Box 85167, 3508 AD Utrecht, The Netherlands; e-mail: p.crous@cbs.knaw.nl & e.groenewald@cbs.knaw.nl

Cony A. Decock, Mycothèque de l'Université catholique de Louvain (MUCL, BCCM™), Earth and Life Institute – ELIM – Mycology, Université catholique de Louvain, Croix du Sud 2 bte L7.05.25, B-1348 Louvain-la-Neuve, Belgium; e-mail: cony.decock@uclouvain.be