Cladosporium cycadica
**Fungal Planet 225 — 10 June 2014**

**Cladosporium cycadicola** Crous & R.G. Shivas, *sp. nov.*

*Etymology.* Named after the host genus from which it was collected, *Cycas*.

*Mycelium* consisting of branched, septate, smooth, brown, 2–3 μm diam hyphae. *Conidiophores* erect, flexuous, subcylindrical, unbranched, 30–70 x 3–4 μm, 2–5-septate, giving rise to a co-nidigenous apparatus with chains of branched conidia. *Primary ramoconidia* subcylindrical, pale brown, smooth, 0–1-septate, 17–27 x 2.5–3 μm; hila thickened, darkened and refractive, 0.5–1.5 μm diam. *Secondary ramoconidia* subcylindrical to fusoid-ellipsoidal, 7–14 x 1.5–3 μm. *Intercalary* and *small terminal conidia* in branched chains (<15), brown, smooth, ellipsoid, (4–)5(–6) x 2.5(–3) μm; hila thickened, darkened, refractive, 0.5 μm diam.

*Culture characteristics.* Colonies reaching 30 mm diam darkened, refractive, 0.5 μm diam. *Pale brown, guttulate, (4–)5(–6) x 17–27 μm, hila thickened, darkened and refractive, 0.5–1.5 μm diam. *Secondary ramoconidia* subcylindrical to fusoid-ellipsoidal, 7–14 x 1.5–3 μm. *Intercalary* and *small terminal conidia* in branched chains (<15), brown, smooth, ellipsoid, (4–)5(–6) x 2.5(–3) μm; hila thickened, darkened, refractive, 0.5 μm diam.

*Culture characteristics.* — Colonies reaching 30 mm diam after 2 wk at 22 °C, spreading, folded, with sparse aerial mycelium and smooth, even margins. On PDA olivaceous-grey, reverse iron-grey. On OA surface iron-grey. On MEA surface and reverse olivaceous-grey.


Notes — Two species of *Cladosporium* have been described from *Cycas*, namely *C. apicale* and *C. cycadis* (Bensch et al. 2012). *Cladosporium cycadicola* can be distinguished from both species by being more allied to the *C. sphaerospermum* species complex (Zalari et al. 2007), having ramoconidia that are subcylindrical to fusoid-ellipsoidal, 0–1-septate and intercalary and terminal conidia in long chains that are smaller than those in *C. apicale* and *C. cycadis*.

**ITS.** Based on a megablast search of NCBI’s GenBank nucleotide database, the closest hits using the ITS sequence are *Cladosporium sphaerospermum* (GenBank EU570256; Identities = 635/647 (98 %), Gaps = 5/647 (0 %)). *Cladosporium cu- meringum* (GenBank HM148071; Identities = 632/644 (98 %), Gaps = 5/644 (0 %)) and *Cladosporium lignicola* (GenBank AF393709; Identities = 607/619 (98 %), Gaps = 5/619 (0 %)).

**LSU.** Based on a megablast search of NCBI’s GenBank nucleotide database, the closest hits using the LSU sequence are *Cladosporium sphaerospermum* (GenBank JN938884; Identities = 867/875 (99 %), Gaps = 1/875 (0 %)). *Cladosporium langeronii* (GenBank DQ780380; Identities = 863/876 (99 %), Gaps = 1/876 (0 %)) and *Cladosporium perangustum* (GenBank JF499856; Identities = 894/910 (98 %), Gaps = 1/910 (0 %)).

**ACT.** Based on a megablast search of NCBI’s GenBank nucleotide database, the closest hits using the ACT sequence are *Cladosporium dominicanum* (GenBank EF101368; Identities = 171/190 (90 %), no gaps), *Cladosporium exile* (GenBank HM148580; Identities = 200/235 (85 %), Gaps = 15/235 (6 %)) and *Cladosporium psychrotolerans* (GenBank EF101366; Identities = 162/191 (85 %), Gaps = 9/191 (4 %)).

**TEF.** Based on a megablast search of NCBI’s GenBank nucleotide database, the closest hit using the complete TEF sequence is *Cladosporium dominicanum* (GenBank JN906986; Identities = 361/421 (86 %), Gaps = 19/421 (4 %)) with partial hits of the last exon with *Cladosporium angustisporum* (GenBank HM148236; Identities = 184/190 (97 %), no gaps) and *Cladosporium cladosporioides* (GenBank HM148267; Identities = 186/194 (96 %), no gaps).

Colour illustrations. Brisbane, Australia; conidiophores and conidia in culture. Scale bars = 10 μm.