

Diaporthe pseudoinconspicua



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Diaporthe pseudoinconspicua T.G.L. Oliveira, J.D.P. Bezerra, A.R. Machado, Souza-Motta & O.M.C. Magalhães, *sp. nov.*

Etymology. The name refers to its morphological similarity to *Diaporthe inconspicua*.

Classification — *Diaporthaceae*, *Diaporthales*, *Sordariomycetes*.

Conidiomata pycnidial on PDA in culture, globose to subglobose, lacking a neck, solitary or aggregated, dark brown to black, 200–320 × 160–190 µm, with yellowish conidial drops exuding from the ostioles. *Alpha conidiophores* hyaline, branched, straight to sinuous, aggregated, 14.5–21.5(–23.5) × 2.5–3 µm. *Beta conidiophores* hyaline, septate, branched, smooth, straight to sinuous, aggregated, 10.5–16(–18) × 2–2.5(–3) µm. *Conidiogenous cells* phialidic, hyaline, bifurcate, straight to sinuous, (9–)10.5–13.5 × 2–2.5(–3) µm. *Alpha conidia* aseptate, hyaline, bi- to multiguttulate, fusoid, rounded at one end, and with acute ends, 5–7.5(–8.5) × 2–2.5(–3.5) µm. *Beta conidia* hyaline, aseptate, filiform, straight to curved, with one end obtuse, the other truncate, 18–21(–25.5) × 1–1.5(–2) µm. *Sexual morph* not observed.

Culture characteristics — On PDA, colonies are initially white, becoming greyish, reverse pale brown with brownish and black dots, fluffy aerial mycelium, covering Petri dishes after 7 d at 25 °C with concentric zonation. Pycnidia forming after 30 d. On MEA, colonies are initially white with slow growth, becoming greyish, reverse pale brown with brownish to black dots, fluffy aerial mycelium, with concentric zonation. Pycnidia forming after 15 days.

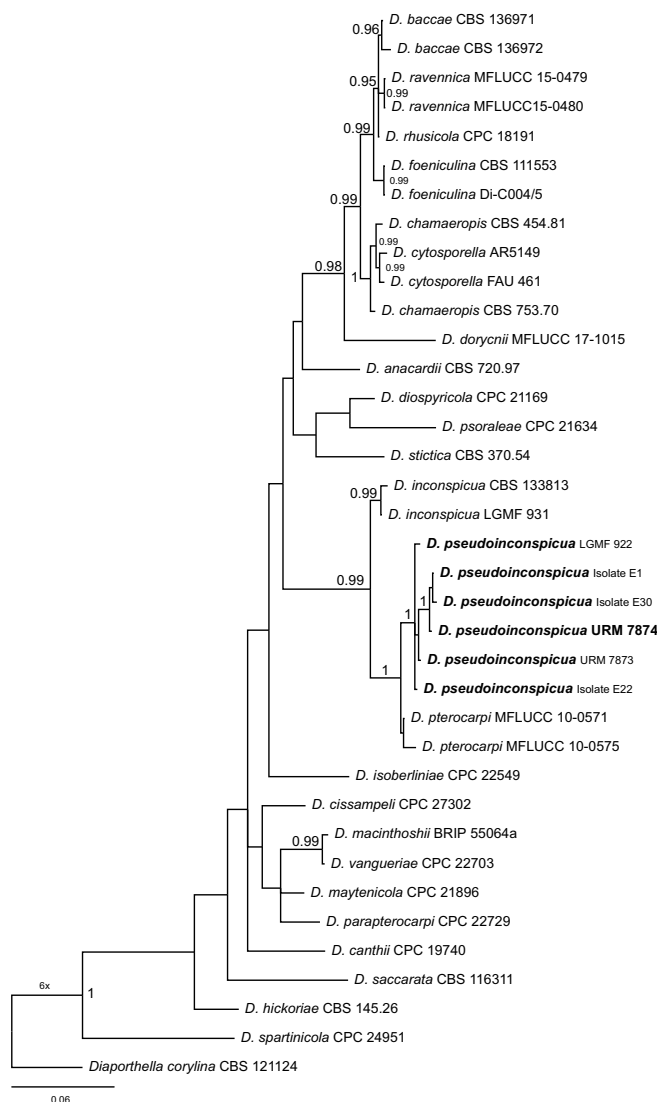
Typus. BRAZIL, Paraíba state, Santa Teresinha, Tamanduá farm (S07°1.524 W037°23.518), as endophyte from branches of *Poincianella pyramidalis* (*Fabaceae*), May 2013, J.D.P. Bezerra (holotype URM 91188, culture ex-type URM 7874, ITS, LSU, *CaM*, *his3*, *tef1-α* and *tub2* sequences GenBank MH122538, MH122541, MH122528, MH122517, MH122533 and MH122524, MycoBank MB824820).

Additional material examined. BRAZIL, Paraíba state, Santa Teresinha, Tamanduá farm (S07°1.524 W037°23.518), as endophyte from branches of *P. pyramidalis*, May 2013, J.D.P. Bezerra, URM 7873, isolates E22, E1 and E30. GenBank sequences URM 7873: ITS MH122535, LSU MH122540, *CaM* MH122525, *his3* MH122518, *tef1-α* MH122530, *tub2* MH122521. GenBank sequences E22: ITS MH122534, LSU MH122539, *tef1-α* MH122529, *tub2* MH122520. GenBank sequences E1: ITS MH122536, *CaM* MH122526, *tef1-α* MH122531, *tub2* MH122522. GenBank sequences E30: ITS MH122537, LSU MH122542, *CaM* MH122527, *his3* MH122519, *tef1-α* MH122532, *tub2* MH122523.

Notes — Based on the current phylogenetic analysis, the new species *Diaporthe pseudoinconspicua* is closely related to *D. inconspicua* and *D. pterocarpi*. Gomes et al. (2013) circumscribed the strain LGMF922 as *D. inconspicua* isolated as endophytic fungus from *Spondias mombin* in Brazil. Our phylogenetic inference placed the strain LGMF922 together with some endophytic fungi isolated from *P. pyramidalis* in Brazil,

Colour illustrations. Brazilian tropical dry forest; colony on PDA; conidiomata pycnidial; alpha and beta conidiophores; alpha and beta conidia. Scale bars = 10 µm.

and here they are proposed as a new species, *D. pseudoinconspicua*. Morphologically, *D. pseudoinconspicua* differs from *D. inconspicua* based on the size of pycnidia (424–954 × 371–742 µm), conidiophores (11–21.5 × 2–2.5 µm), alpha (5.5–6.5 × 1.5–2 µm) and beta ((17.5–)20–26(–28) × 1–1.5 µm) conidia (Bezerra et al. 2018). Furthermore, *D. pseudoinconspicua* also differs from *D. pterocarpi* by the size of its pycnidia (100–120 µm diam), conidiophores (10–15 × 1–2 µm), alpha conidia (6–7 × 2.5 µm), and by the absence of beta conidia (Udayanga et al. 2012).



Bayesian inference tree obtained by phylogenetic analyses of the combined ITS rDNA, *tef1-α* and *tub2* sequences conducted in MrBayes on XSEDE in the CIPRES science gateway. Bayesian posterior probability values are indicated at the nodes. The new species is indicated in **bold face**. *Diaporthe corylina* (CBS 121124) was used as outgroup.