Phyllosticta catimbaensis

Etymology. Name refers to the Catimbau National Park, a protected area of the Brazilian tropical dry forest where this fungus was isolated as endophyte from Mandevilla catimbauensis.

Classification — Phyllostictaceae, Botryosphaeriales, Dothideomycetes.

Conidiomata pycnidal, solitary or aggregated, dark brown to black, erumpent, globose to subglobose, 160–280 µm diam, exuding hyaline to crystalline conidia masses; wall of medium brown thick-walled cells of textura angularis. Conidiophores hyaline, smooth, 0–1-septate, densely aggregated, cylindrical, reduced to conidiogenous cells, or with one supporting cell, that can be branched at the base. Conidiogenous cells terminal, sub-cylindrical to ampulliform, hyaline, smooth, 9.5–10.5 × 3–3.5 µm; proliferating several times percurrently at apex. Conidia (8.5–9.5 (–10.5)) × 5.5–6 µm, solitary, hyaline, asceptate, thin- and smooth-walled, granular, ellipsoid, globose, subglobose, broadly ellipsoid or obovoid, tapering towards a narrow truncate base, 2.5–3.5 µm diam, enclosed in a persistent mucoid sheath, 1.5–2.5 µm thick, and bearing a hyaline, apical mucoid appendage, 3–6.5 × 1–1.5 × 1.5, flexible, unbranched, tapering towards an acutely rounded tip. Spermata asceptate, dumbbell-shaped, 5.5–9 × 1.5–2 µm.

Culture characteristics — Colonies covering Petri dishes after 2 mo at 25 ºC. On PDA, colonies with irregular margins, sparse aerial mycelium, surface grey to dark grey and reverse olivaceous-grey to dark grey. On MEA, surface yellowish to dark brown and reverse amber to buff. On OA surface and reverse grey to dark grey.

Additional material examined. Brasil, Pernambuco state, Buique municipality, Catimbau National Park (58°36′35″ W37°14′40″), as endophyte from Mandevilla catimbauensis (Apocynaceae), May 2015, G.R. Araújo (holotype URM 90488, culture ex-type URM 7672; ITS, LSU, actA and tef1 sequences GenBank MF466160, MF466163, MF466157 and MF466155, MycoBank MB822131).

Bayesian inference analysis conducted with MrBayes v. 3.2.1 at CIPRES science gateway using a concatenated matrix of actA, tef1 and ITS sequences. The new species is shown in bold. Bayesian posterior probabilities above 0.60 are indicated at the nodes. Phyllosticta capitataensis IMI 260.576 was used as outgroup.

Colour illustrations. Mandevilla catimbauensis in the Catimbau National Park; conidiomata; conidiogenous cells; spermatia, and conidia. Scale bars = 10 µm.