

Marquesius aquaticus

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Marquesius* L.B. Conç., R.F. Castañeda & Gusmão, *gen. nov.

Etymology. Named for Dr Marcos F.O. Marques (in memoriam), recognising his contribution to popularisation of mycology in the northeast of Brazil.

Classification — *Incertae sedis*, *Dothideomycetes*.

Colonies on the natural substrate effuse. *Mycelium* partly superficial, partly immersed. *Conidiophores* macro- and mononematous, erect, simple or branched, straight or slightly curved, cylindrical, sometimes with percurrent extension, septate, smooth or rarely verrucose, brown to pale brown, basal cells lobed or sometimes inflated. *Conidiogenous cells* mono- or

polyblastic, denticulate, integrated. *Denticles* conspicuous, cylindrical, truncate at apex. Conidial secession schizolytic. *Conidia* acropleurogenous, holoblastic, simple, in acropetal chains, dry, septate, constricted or not at septa, thick-walled, verrucose, brown to pale brown, sometimes with a conspicuous hilum at base.

Type species. *Marquesius aquaticus* L.B. Conç., R.F. Castañeda & Gusmão.

Mycobank MB823622.

Marquesius aquaticus* L.B. Conç., R.F. Castañeda & Gusmão, *sp. nov.

Etymology. Name refers to the aquatic habitat, from which this fungus was collected.

Colonies on the natural substrate effuse, sparse, hairy, pale brown. *Mycelium* partly superficial, partly immersed, composed of septate, branched, smooth, pale brown hyphae, 2–3 µm wide. *Conidiophores* macro- and mononematous, erect, simple or rarely with apical branched, straight or slightly curved, cylindrical, sometimes with percurrent extension by regenerative growth unrelated to conidiation, 3–7-septate, thick-walled, smooth, brown to pale brown toward the apex, basal cells lobed or sometimes inflated, 45–202.5 × 3–4.5 µm. *Conidiogenous cells* mono- or polyblastic, denticulate, determinate or with several, short sympodial extension, integrated, terminal or rarely subterminal, smooth, verruculose to verrucose, where terminal, usually inflated at apex, 11–20 × 3–6 µm, 1.5–3 µm wide at base, where subterminal, cylindrical, 16–18 × 2–3 µm. *Denticles* predominately at apex of conidiogenous cells, cylindrical, truncate, slightly melanised margin, 0.5–1.5 × 0.5–1 µm. Conidial secession schizolytic. *Conidia* acropleurogenous, holoblastic, simple, in short acropetal chains (1–2 on natural substrate; 4–5 on culture), dry, 0–1-septate, constrict or not at septa, ellipsoidal to narrowly clavate, thick-walled, verrucose, pale brown, 9–15 × 4–8 µm (on Corn Meal Agar (CMA) ellipsoidal to clavate, 9–14 × 4–6 µm), sometimes with a conspicuous hilum at base.

Culture characteristics — Colonies on CMA with slow development (attaining 25 mm diam in 7 wk at 25 °C), circular, sparse aerial mycelium, raised to umbonate, entire edges, surface with central brown and black margins, reverse black.

Typus. BRAZIL, Bahia, Pindobaçu, Serra da Fumaça, on submerged decaying twig and leaves of unidentified plant, 26 July 2016, L.B. Conceição (holotype HUEFS-216710, culture ex-type CCLAMIC 153/16, ITS and LSU sequences GenBank MG572717 and MG572718, MycoBank MB823623).

Notes — Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the LSU sequence are *Dothideomycetes* sp. KO-groupB 2014 (GenBank AB986428.1; Identities = 616/616 (100 %), no gaps), *Dothideomycetes* sp. genotype 377 isolate FL0753 (GenBank JQ760416.1; Identities = 523/559 (94 %), 7 gaps (1 %)) and *Sympodiella acicola* strain CBS 487.82 (GenBank KY853530.1; Identities = 563/631 (89 %), 18 gaps (2 %)). Closest hits using the ITS sequence had highest similarity to *Dothideomycetes* sp. KO-groupB 2014 (GenBank AB986428.1; Identities = 555/559 (99 %), no gaps), *Dothideomycetes* sp. genotype 377 isolate FL0753 (GenBank JQ760416.1; Identities = 458/547 (84 %), 29 gaps (5 %)) and *Cylindrosympodium lauri* strain CBS 240.95 (GenBank EU035414.1; Identities = 319/366 (87 %), 13 gaps (3 %)). *Castanedaia minor* (Partridge et al. 2001) represents a monotypic genus and it resembles *Marquesius* morphologically, although the presence of conspicuous denticles distinguishes it. The conidiogenous cells of *Marquesius* are more similar to *Cylindrosympodium* than *Sympodiella*. Apparently, the OTUs (GenBank AB986428 and JQ760416.1) isolated from *Cenococcum* 'black sclerotia' (Obase et al. 2014), are specimens of the same genus.

Colour illustrations. Serra da Fumaça, Pindobaçu, Brazil; general aspect; conidiogenous cells and conidia. Scale bars = 5 µm.

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