**Pseudolachchnella guaviyunis** Marinc., T.A. Duong, M.J. Wingf. & C.A. Perez, sp. nov.

**Etymology**

Pseudolachchnella. A common name of the host plant in Uruguay, Guaviyú.

Conidiomata scattered, oval to rounded in outline, up to 688 µm long, up to 416 µm wide, up to 199 µm deep, cupulate with the edge slightly curved-in in sectional view, filled with agglutinated conidial mass, olivaceous-black; basidrial stroma well-developed, subepidermal, up to 85 µm thick, of textura angularis or epi­dermoidea, cells thick-walled, subhyaline when intercellular to pale brown, cells bordering the lateral wall becoming darker and thicker; lateral walls consisting of cells of textura porrecta in a few strata, cells thin-walled, pale brown to brown, marginal cells of each strata becoming darker. Conidiomatal setae absent. Conidiophores arising in the concavity of the conidioma, septate and branched at the base, pale brown, smooth. Conidiogenous cells phialidic, discrete, subhyaline to pale brown, cylindrical, with conspicuous collarette, often showing percurrent proliferation, 15–26 × 2–3 µm. Conidia hyaline when young and becoming pale brown with age, fusiform, straight or slightly curved, gradually tapering towards the apex, with an obtuse, truncate base, smooth or verruculous with age, bearing cellular appendages at both ends, (26.5–)33–36(–43.5) × (2–)2.5–3–(3.5) µm, asperate when young, developing 3 septa with age, germinating from any of 4 cells; apical appendages 5.5–14 µm long, centric; basal appendages 4.5–13 µm long, excentric, both appendages 0.5–1 µm wide at the base and tapering towards the apex.

Culture characteristics — The cultures on 2 % malt extract agar showing optimum growth at 25 °C in the dark, reaching 22 mm after 22 d, sterile, white-grey to yellow-grey, rough, fuscous, flaky, with a slight fox-like odour.


Colour illustrations. Myrcianthes pungens trees growing at the ‘Quebrada de los Cuervos’ in Uruguay; conidiaux in sectional view (bar = 100 µm) and on the host substrate (350 µm), germinating conidium (25 µm), branched conidiophores and phialidic conidiogenous cells with conspicuous collarette (arrows) (20 µm); conidia from young to mature (5 µm).

Notes — Cupulate fruiting structures were found on the bark of Myrcianthes pungens in Uruguay. The morphological features of this isolate best match those of the genus Pseudolachchnella, other than the absence of noticeable conidiomatal setae. Currently there are eight Pseudolachchnella species recognised worldwide from herbaceous stems or leaves of monocotyle­donous host plants, mostly palm trees in Asia (Nag Raj 1993, Zhao et al. 2004, Sato et al. 2008). The Uruguayan collection introduced as the new species P. guaviyunis, is recognised here primarily based on conidial morphology and DNA sequence data.

Both Pseudolachchnella and Pseudolachnea are closely related to Dinemasporium. When Sutton (1980) limited Dinemasporium to the species with asperate conidia, he restricted the species with septate conidia to Pseudolachnea. Nag Raj (1993) further limited Pseudolachnea to the species with 1-septate conidia and Pseudolachnella to those with multisep­tate conidia. No sexual state is known for Pseudolach­nella and Pseudolachnea, whereas one species of Dinemasporium is known based on its sexual state, Phomatospora dinemasporium (Xylariales). However, the identity of the sexual state in this case is considered to be doubtful (Duan et al. 2007).

A recent study applying ribosomal DNA sequence data revealed the phylogenetic placement of Pseudolach­nella and Dinemasporium within the chaetosphaerialean clade. However, the phylo­genetic position of Pseudolachnella could not be determined due to the lack of cultures (Crous et al. 2012b). The present study suggests that Pseudolachnella resides in the Chaeto­sphaeriales but that it is distantly related to Pseudolachnea, thus consistent with the views of Nag Raj (1993).

A case study of Dinemasporium and related genera by Crous et al. (2012b) suggested that the appendage morphology could be a useful characteristic in species delimitation but not in generic separation. Pseudolachnella species are heterogeneous in terms of appendage morphology: short (to 4 µm) or long (to 47 µm) in length, simple or branched, single or multiple in number. Pseudolachnella guaviyunis can be distinguished by its simple appendages at both ends of the conidia, measuring up to 14 µm in length.

A megablast search of the NCBI GenBank nucleotide se­quence database using the ITS sequence of Pseu­dolachnella guaviyunis showed that its closest relatives are Pseudolachnea fraxini (GenBank JQ 889287; Identities = 464/533 (87 %), Gaps = 23/533 (4 %)) and Dinemasporium strigosum (GenBank JQ889283; Identities = 495/579 (85 %); Gaps = 34/579 (5 %)).

A megablast search using the LSU sequence of Pseu­dolachnella guaviyunis showed that it was most similar to Pseudolach­nella fraxini (GenBank JQ889301; Identities = 810/839 (97 %); Gaps = 1/839 (0 %)) and Dinemasporium strigosum (GenBank JQ 889299; Identities = 807/841 (96 %); Gaps = 3/841 (0 %)).

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