Dendryphiella stromaticola
**Dendryphiella stromaticola** Cantillo, Gusmão & Madrid, *sp. nov.*

**Etymology.** Name refers to the presence of stroma.

**Classification — D**icyosporiaceae, Pleosporales, Dothideomycetes.

On natural substrate: Colonies superficial, effuse, dark brown, releasing a yellow pigment in the substrate, Mycelium immersed, composed of smooth, subhyaline, septate, branched, 3–4.5 µm diam hyphae. *Stromata* pseudoparenchymatous, intraepidermal to erumpent, convex, black, composed of cells with *textura globosa*. Conidiophores macronematous, mononematous, emerging through stroma in loose groups of 3–5(–7) conidiophores, brown, wider at the base, slightly paler at the apex, thick, smooth or verrucose, erect, straight or slightly flexuous, septate, sometimes branched, up to 250(–290) µm high, 3–7 µm wide. Conidiogenous cells polytretic, integrated, terminal and intercalary, verrucose near the geniculate conidiogenous zones, with 1–3 pores, 26–37 × 3–6(–7) µm. *Conidia* rare, cylindrical with rounded ends, yellowish brown, verruculose, 1-septate, 22.5–35 × 4–6.5 µm. *Conidia* cylindrical with rounded apex, truncate or blunt at the base, (1–)3-septate, yellowish brown, verrucose, forming short chains, 20–35 × 4–6.5 µm, constricted at septa when older; loci thickened, darkened and refractive.

**Culture characteristics** — *Conidia* germinated on Water Agar (WA) within 24 h, germ tubes produced from apical and/or basal ends, mycelium hyaline, sparse. Colonies on PDA reaching 60 mm diam after 7 d (25 °C/daylight cycle), cottony, dark grey, 3–4.5 µm diam hyphae. *Stromata* pseudoparenchymatous, intraepidermal to erumpent, convex, black, composed of cells with *textura globosa*. Conidiophores macronematous, mononematous, emerging through stroma in loose groups of 3–5(–7) conidiophores, brown, wider at the base, slightly paler at the apex, thick, smooth or verrucose, erect, straight or slightly flexuous, septate, sometimes branched, up to 250(–290) µm high, 3–7 µm wide. Conidiogenous cells polytretic, integrated, terminal and intercalary, verrucose near the geniculate conidiogenous zones, with 1–3 pores, 26–37 × 3–6(–7) µm. *Conidia* rare, cylindrical with rounded ends, yellowish brown, verruculose, 1-septate, 22.5–35 × 4–6.5 µm. *Conidia* cylindrical with rounded apex, truncate or blunt at the base, (1–)3-septate, yellowish brown, verrucose, forming short chains, 20–35 × 4–6.5 µm, constricted at septa when older; loci thickened, darkened and refractive.

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**Notes** — In *Dendryphiella*, an accurate morphological differentiation of certain species is difficult due to overlapping sizes of reproductive structures and the apparent lack of other taxonomically informative traits. Some species previously identified as *Dendryphiella* has been segregated in two genera using ecological, molecular and morphological characters: *Paradendryphiella*, with marine species (Woudenberg et al. 2013) and *Neodendryphiella* (Iturrieta-González et al. 2018). The blast analysis of the ITS sequence indicates a relatively close affinity of *Dendryphiella stromaticola* with *D. fasciculata* (GenBank MF399213, Identities = 89 %, no gaps), *D. paravinosa* (GenBank NR_154012, Identities = 89 %, no gaps) and of the LSU sequence with *D. variabilis* (GenBank LT963454, Identities = 97 %, no gaps); morphological differences with these species are mainly in the size of conidia and conidiophores, conidiophore agglutination and the presence of stroma. *Dendryphiella stromaticola* is also morphologically similar to *D. eucalyptorum* and *D. vinosa*, which also produces mostly 3-septate conidia. *Dendryphiella eucalyptorum* can be differentiated from *D. fasciculata* based on its smooth and smaller conidia (20–23 × 5–7 µm) and larger conidiogenous cells (20–40 × 6–10 µm). Phylogenetically, *D. stromaticola* appears distinct from the ex-epitype sequence of *D. vinosa* (NBRC 32669), but based on morphological characters, both species share many features such as size, colour and conidial morphology, distinguished only by the longer conidiophores in the latter species and the absence of stroma. It has been suggested by Crous et al. (2014) that the type species, *D. vinosa*, probably represents a species complex, and Iturrieta-González et al. (2018) segregated a new species, *D. variabilis*, previously identified as *D. vinosa* based mostly on molecular characters and the number of septa. However, molecular data in *Dendryphiella* are still scarce and available only for a few species, and so this genus requires further phylogenetic and taxonomic revision.

**Phylogenetic tree inferred from Maximum likelihood and Bayesian analysis based on LSU nrDNA sequence data.** ML Bootstrap support ≥ 75 % and BI values ≥ 0.90 are shown at the nodes. The alignment was performed with MAFFT v. 7 and the General Time Reversible model with Gamma distribution and invariant sites (GTR+G+I) was used as the best nucleotide substitution model. *Dendryphiella stromaticola* is marked in red.

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**Colour illustrations.** Portalegre, Rio Grande do Norte. Colonies on natural substrate, conidiogenous cells and conidia. Scale bars = 0.5 mm (colonies in natural substrate), 30 µm (conidia and conidiogenous cell).

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