Pseudocercospora leandrae-fragilis
Pseudocercospora leandrae-fragilis O.L. Pereira & Meir. Silva, sp. nov.

Etymology: Name derived from the plant host, Leandra fragilis.

Classification — Mycosphaerellaceae, Capnodiales, Dothideomycetes.

Leaf spots amphigenous, irregular, initially chlorotic, becoming brown with age, 3–8 mm diam. Internal mycelium indistinct. External mycelium absent. Stromata well-developed, subglobose to irregular, brown, cells of brown textura subglobosa. Conidiophores hypophyllous, aggregated in sporodochia, arising from the upper cells of the stroma, subcylindrical, 16.5–34 × 3–4.5 µm, 0–2-septate, straight or geniculate, unbranched, brown, smooth, mostly restricted to conidiogenous cells. Conidiogenous cells terminal, subcylindrical, brown, smooth.

Conidia solitary, guttulate, pale brown, smooth, subcylindrical, straight to curved, 80–164.5 × 4–5 µm, apex obtuse, base truncate, septate, hila unthickened, neither darkened nor refractive.

Culture characteristics — Colonies on PDA 18 mm diam after 2 wk at 25 °C in the dark; slow-growing raised, margins irregular, with aerial mycelium sparse, grey, reverse iron-grey, sterile.


Notes — Nineteen Pseudocercospora species have been described from hosts in the Melastomataceae: P. aciotidis, P. curta, P. dissotidis, P. erythrogena, P. leandrae, P. melastomobia, P. miconiae, P. miconiicola, P. miconigena, P. mirandensis, P. monochaeticola, P. osbeckiae, P. oxysporae, P. sub-synnematosa, P. tamoneae, P. tibouchina-herbaceae, P. tibouchiniae, P. tibouchinicola and P. tibouchinigena (Parreira et al. 2014, Silva et al. 2016, Farr & Rossman 2017). However, only one species of Pseudocercospora is known to occur on a member of Leandra (Crous & Braun 2003, Farr & Rossman 2017), namely P. leandrae on Leandra subseriata from Colombia and Ecuador (Crous & Braun 2003). Pseudocercospora leandrae clearly differs from P. leandrae-fragilis by having longer conidiophores (20–80 µm) and smaller conidia (40–140 µm) (Braun 1999). Among these species in Melastomataceae, Pseudocercospora melastomobia is morphologically similar but distinguishable from P. leandrae-fragilis by having longer and wider conidiophores (10–50 × 3.5–5.5 µm) and smaller conidia (50–150 µm). Additionally, P. leandrae-fragilis does not correspond to any sequences available in GenBank at present. Hence, it is described here as a new species.

ITS. Based on a megablast search of NCBI’s GenBank nucleotide database, the closest hits using the ITS sequence are Pseudocercospora basitruncata (GenBank KF901632; Identities = 441/446 (99 %), Gaps = 3/446 (0 %)), Pseudocercospora sp. (GenBank DQ303084; Identities = 440/445 (99 %), Gaps = 2/445 (0 %)), and Pseudocercospora paraenensis (GenBank KT037523; Identities = 438/445 (98 %), Gaps = 2/445 (0 %)).

LSU. Based on a megablast search of NCBI’s GenBank nucleotide database, the closest hits using the LSU sequence are Pseudocercospora rhabdothamni (GenBank JQ324964; Identities = 849/849 (100 %), no gaps), Pseudocercospora cyathicola (GenBank JF951159; Identities = 849/849 (100 %), no gaps), and Pseudocercospora humuli (GenBank GU214676; Identities = 849/849 (100 %), no gaps).

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