

Passalora leptophlebiae



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Passalora leptophlebiae Crous, Alfenas, R. Alfenas & O.L. Pereira, *sp. nov.*

Passalorae eucalypti similis, sed conidiis minoribus, (15–)18–22(–27) × 3(–3.5) µm, discernitur.

Etymology. Named after the host from which it was collected, *Eucalyptus leptophlebia*.

Leaf spots amphigenous, subcircular to irregular or angular, 1–6 mm diam, confined by leaf veins, medium brown, with raised border and red-purple margin, becoming confluent; sporulation amphigenous. **Conidiophores** arising from stomata situated on brown stomata up to 100 µm diam, giving rise to densely aggregated, brown, finely verruculose conidiophores that are straight to geniculate-sinuuous, 20–50 × 3–4.5 µm, 1–3-septate. **Conidiogenous cells** 15–30 × 3–3.5 µm, integrated, terminal, apex obtuse, brown to medium brown, finely verruculose, with many, densely aggregated, terminal and lateral loci; scars dark brown, thickened, refractive, 1 µm diam. **Conidia** solitary, rarely in branched chains, pale brown, smooth, guttulate, subcylindrical to narrowly obclavate, base obconically truncate, apex subobtuse, (15–)18–22(–27) × 3(–3.5) µm, 1–3-septate; hila thickened, darkened, refractive, 1 µm diam.

Culture characteristics — (in the dark, 25 °C, after 1 mo): On malt extract agar colonies erumpent, spreading, with moderate aerial mycelium; surface folded, with even, lobed margins, reaching 15 mm diam; surface smoke-grey in centre, with patches of pale olivaceous grey and olivaceous grey; iron-grey in reverse.

Typus. BRAZIL, Minas Gerais, Viçosa, University Forestry Nursery, on leaves of *Eucalyptus leptophlebia*, 23 Aug. 2010, P.W. Crous, A.C. Alfenas, R. Alfenas & O.L. Pereira, holotype CBS H-20585, cultures ex-type CPC 18480 = CBS 129524, ITS sequence GenBank JF951144 and LSU sequence GenBank JF951164, MycoBank MB560168.

Notes — Leaf spots associated with two cercosporoid species. A *Cercospora* sp. (not treated here) is distinguished from *Passalora leptophlebiae* by having less dense fascicles, wider and longer conidiophores, scars up to 2 µm wide, and hyaline conidia. Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the ITS sequence are '*Passalora eucalypti*' (AF309617; Identities = 503/507 (99 %), Gaps = 1/507 (0 %)), *Penidiella tasmaniensis* (AF173307; Identities = 503/507 (99 %), Gaps = 1/507 (0 %)), *Passalora saururi* (AF222836; Identities = 484/497 (97 %), Gaps = 5/497 (1 %)) and *Pseudocercospora humuli* (GU214676; Identities = 587/625 (94 %), Gaps = 21/625 (3 %)). The megablast search using the LSU sequence had as closest hits '*Passalora eucalypti*' (GU214458; Identities = 931/933 (99 %), Gaps = 0/933 (0 %)) and *Pseudocercospora* spp. (typically with Identities = 915/934 (98 %), Gaps = 2/934 (0 %)). Morphologically *Passalora leptophlebiae* is most similar to two other species occurring on *Eucalyptus*, namely *P. eucalypti* (conidia 14–40 × (1.5–)2–2.5 µm; Crous 1998), and *Penidiella tasmaniensis* (conidia 4–20 × 2–2.5 µm; Crous et al. 1998, 2009c), but is distinct based on its conidial dimensions (15–)18–22(–27) × 3(–3.5) µm.

Colour illustrations. *Eucalyptus leptophlebiae* seedling at Viçosa University Forestry Nursery; leaf spots; fascicle of conidiophores and conidia. Scale bars = 10 µm.

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