

*Stagonospora victoriana*



Fungal Planet 686 – 20 December 2017

## *Stagonospora victoriana* Crous, *sp. nov.*

*Etymology.* Name refers to the state of Victoria, Australia, where this fungus was collected.

*Classification* — *Massarinaceae*, *Pleosporales*, *Dothideomycetes*.

*Conidiomata* separate, erumpent, globose, pale brown, 150–200 µm diam, with central ostiole. *Conidiophores* reduced to conidiogenous cells lining inner cavity, hyaline, smooth, doliiform to ellipsoid, 8–17 × 7–10 µm, proliferating percurrently near apex. *Conidia* solitary, fusoid-ellipsoid, hyaline, smooth, granular, multiseptate, (1–)3–euseptate, apex obtuse, base bluntly rounded, 4–5 µm diam, (28–)33–38(–45) × (9–)11–12(–13) µm.

*Culture characteristics* — Colonies erumpent, spreading, with moderate aerial mycelium and smooth to feathery, lobate margins, covering dish after 2 wk at 25 °C. On MEA surface pale olivaceous grey, reverse olivaceous grey. On PDA surface smoke grey, reverse olivaceous grey. On OA surface pale olivaceous grey.

*Typus.* AUSTRALIA, Victoria, Mount Best Tin Mine Road, on *Poaceae* at pond, 28 Nov. 2016, *P.W. Crous* (holotype CBS H-23294, culture ex-type CPC 32498 = CBS 143403, ITS, LSU, *tef1* and *tub2* sequences GenBank MG386055, MG386108, MG386153 and MG386166, MycoBank MB823404).

*Notes* — Quaedvlieg et al. (2013) circumscribed *Stagonospora* to include species with conidiogenous cells that proliferate percurrently, or via phialides with periclinal thickening, and conidia that are subcylindrical to fusoid-ellipsoidal. The present collection is related to species of *Stagonospora*, clustering adjacent to *S. pseudovitisensis* (conidia 3-septate, 25–36 × 6–8 µm), from which it is morphologically distinct (Quaedvlieg et al. 2013).

Based on a megablast search using the ITS sequence, the closest matches in NCBI's GenBank nucleotide database were *S. perfecta* (GenBank NR\_138388; Identities 513/531 (97 %), 3 gaps (0 %)), *S. bicolor* (as *Saccharicola bicolor*; GenBank KP276515; Identities 459/476 (96 %), 2 gaps (0 %)) and *S. pseudovitisensis* (GenBank KF251262; Identities 512/532 (96 %), 4 gaps (0 %)). The highest similarities using the LSU sequence were *S. pseudovitisensis* (GenBank KF251765; Identities 834/837 (99 %), no gaps), *S. perfecta* (GenBank AB807579; Identities 844/848 (99 %), no gaps) and *S. trichophoricola* (GenBank KJ869168; Identities 835/840 (99 %), no gaps). The highest similarities using the *tef1* sequence were distant hits with *Helminthosporium tiliae* (GenBank KY984457; Identities 248/308 (81 %), 21 gaps (6 %)), *H. oligosporum* (GenBank KY984451; Identities 218/266 (82 %), 17 gaps (6 %)) and *H. microsorum* (GenBank KY984448; Identities 214/262 (82 %), 14 gaps (5 %)). The highest similarities using the *tub2* sequence were distant hits with *S. pseudovitisensis* (GenBank KF252744; Identities 271/305 (89 %), 2 gaps (0 %)), *S. chrysopyla* (GenBank KM033943; Identities 385/446 (86 %), 11 gaps (2 %)) and *Corynespora cassiicola* (GenBank KU605322; Identities 310/384 (81 %), 16 gaps (4 %)).

*Colour illustrations.* Pond at Mount Best Tin Mine Road; conidiomata sporulating on OA, conidiogenous cells and conidia. Scale bars = 10 µm.

Pedro W. Crous & Johannes Z. Groenewald, Westerdijk Fungal Biodiversity Institute, P.O. Box 85167, 3508 AD Utrecht, The Netherlands; e-mail: p.crous@westerdijkinstituut.nl & e.groenewald@westerdijkinstituut.nl  
 Michael J. Wingfield, Forestry and Agricultural Biotechnology Institute (FABI), University of Pretoria, Pretoria 0002, South Africa; e-mail: mike.wingfield@fabi.up.ac.za  
 Brett A. Summerell, Royal Botanic Gardens and Domain Trust, Mrs. Macquaries Road, Sydney, NSW 2000, Australia; e-mail: brett.summerell@rbgsyd.nsw.gov.au  
 Angus J. Carnegie, Forest Health & Biosecurity, NSW Department of Primary Industries, Level 12, 10 Valentine Ave, Parramatta, NSW 2150, Locked Bag 5123, Parramatta, NSW 2124, Australia; e-mail: angus.carnegie@dpi.nsw.gov.au