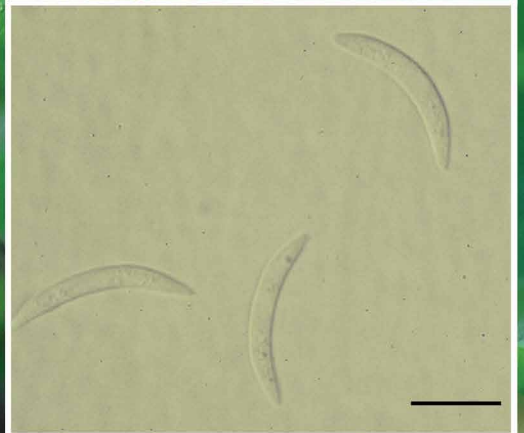


*Zymoseptoria crescenta*



Fungal Planet 755 – 13 July 2018

***Zymoseptoria crescenta*** Abrinbana, Abdollahz. & Crous, *sp. nov.*

*Etymology.* Named after its characteristic crescent-shaped conidia.

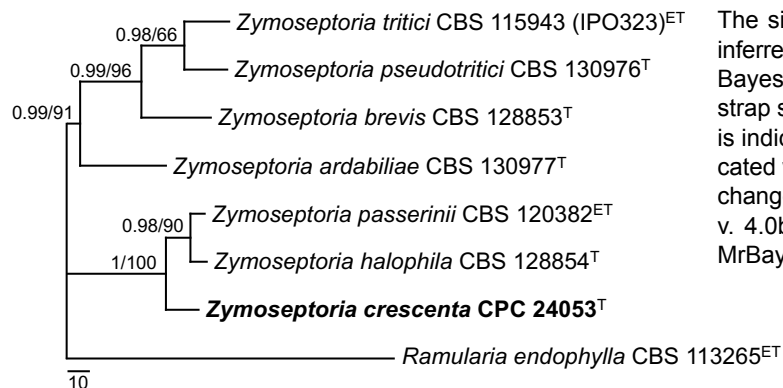
*Classification* — *Mycosphaerellaceae*, *Capnodiales*, *Dothideomycetes*.

Phytopathogenic. *Conidiomata* pycnidial, substomatal, immersed to erumpent, globose, dark brown, up to 120 µm diam, with central ostiole, up to 20 µm diam; wall of 3–4 layers of brown *textura angularis*. *Conidiophores* reduced to conidiogenous cells, or with one supporting cell, lining the inner cavity. *Conidiogenous cells* hyaline, smooth, tightly aggregated, subcylindrical to ampulliform, straight to curved, 6–13 × 2–3 µm, with 1–2 inconspicuous, percurrent proliferations at apex, 1–1.5 µm diam. Type I conidia solitary, hyaline, smooth, guttulate, crescent or sickle-shaped, tapering towards acutely rounded apex, with tapering subtruncate or mostly acute base, 0(–1)-septate, (11–)15–21(–25) × 2(–2.5) µm; hila not thickened nor darkened, 1–2 µm diam. On OA and PDA yeast-like growth and microcyclic conidiation (Type III conidia) are observed, and aerial hyphae disarticulate into phragmospores (Type II conidia).

*Culture characteristics* — Colonies on PDA erumpent, spreading, with sparse aerial mycelium, lobate margins, greenish black, reverse olivaceous grey. On OA erumpent, spreading, with sparse aerial mycelium, olivaceous grey margin; reaching 10 mm diam after 30 d at 25 °C.

*Typus.* IRAN, East Azarbaijan province, Kaleybar, N38°36'43" E47°14'21", on living leaves of *Aegilops triuncialis* (*Poaceae*), May 2012, *M. Abrinbana* (holotype CBS H-23592, cultures ex-types CPC 24053 = CBS 144410, ITS, LSU, *tef1* and *rpb2* sequences GenBank MH259304, MH267287, MH271694 and MH271695, MycoBank 825300).

*Notes* — The genus *Zymoseptoria* (based on *Z. tritici*) was established by Quaedvlieg et al. (2011) for septoria-like species that occur on graminicolous hosts. With the introduction of *Z. crescenta*, the genus presently contains eight species, including *Z. tritici* (causal agent of septoria tritici blotch on wheat) and *Z. passerinii* (causal agent of septoria speckled leaf blotch of barley) (Stukenbrock et al. 2012, Videira et al. 2017). *Zymoseptoria crescenta* is phylogenetically closely related to *Z. halophila* and *Z. passerinii*. However, it is easily distinguished from all known *Zymoseptoria* species by having crescent-shaped conidia *in vivo*.



The single most parsimonious tree of *Zymoseptoria* species inferred from concatenated ITS, LSU, *tef1* and *rpb2* sequences. Bayesian posterior probability and maximum parsimony bootstrap support values are given at the nodes. The new species is indicated in **bold**. All strains are ex-type or ex-epitype (indicated with <sup>T</sup> and <sup>ET</sup>, respectively). The scale bar represents 10 changes. The parsimony analysis was performed using PAUP\* v. 4.0b10 (Swofford 2003) and the Bayesian analysis using MrBayes v. 3.2 (Ronquist & Huelsenbeck 2003).

*Colour illustrations.* Symptomatic leaf of *Aegilops triuncialis*; colony sporulating on potato dextrose agar; conidiogenous cells and conidia. Scale bars = 10 µm.

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