
Zasmidium syzygii

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Zasmidium syzygii Crous, *sp. nov.*

Etymology. Named after the host genus from which it was collected, *Syzygium*.

Occurring as secondary invader on leaf spots of *Pseudocercospora punctata*, sporulating sparsely between prominent, dense fascicles (sporodochia) of *P. punctata*. Description based on colonies on synthetic nutrient-poor agar (SNA). *Mycelium* consisting of septate, branched, verruculose, brown, 2–3 µm diam hyphae. *Conidiophores* solitary on superficial mycelium, erect, unbranched, straight to somewhat flexuous, subcylindrical, brown, finely verruculose, 1–5-septate, 30–70 × 2–3 µm. *Conidiogenous cells* integrated, terminal, subcylindrical, finely verruculose, brown, 10–20 × 2–3 µm, with apical taper towards rounded or flattened apex, with one to several conidiogenous loci; scars thickened, darkened, somewhat refractive, 0.5 µm diam. *Conidia* brown, verruculose, narrowly obclavate or subcylindrical, apex obtusely rounded, base long obconically truncate, hilum thickened, darkened, somewhat refractive, 1 µm diam, 1–2(–5)-septate, (10–)22–25(–50) × (2–)3(–3.5) µm; conidia occurring in branched chains.

Culture characteristics — (in the dark, 25 °C after 2 wk): Colonies spreading, flat with even, lobate margin and moderate aerial mycelium. On malt extract agar olivaceous-grey (surface), iron-grey (reverse). On oatmeal agar iron-grey in centre, surrounded by broad orange outer zone. On potato-dextrose agar olivaceous-grey and iron-grey in reverse. On SNA sienna, reaching 25 mm diam.

Typus. South Africa, Mpumalanga, Nelspruit, Lowveld Botanical Garden, on leaves of *Syzygium cordatum* (*Myrtaceae*), 16 July 2011, *P.W. Crous*, *M.K. Crous, M. Crous & K.L. Crous*, holotype CBS H-21082, cultures ex-type CPC 19792 = CBS 133580, ITS sequence GenBank KC005777, LSU sequence GenBank KC005798, MycoBank MB801776.

Notes — Based on a megablast search of NCBIs GenBank nucleotide database, the closest hits using the LSU sequence are *Zasmidium angulare* (GenBank JQ622096; Identities = 785/798 (98 %), Gaps = 1/798 (0 %)), *Mycosphaerella aleuritidis* (GenBank EU167594; Identities = 825/839 (98 %), Gaps = 0/839 (0 %)) and *Ramichloridium cerophilum* (GenBank GU214485; Identities = 873/888 (98 %), Gaps = 0/888 (0 %)). Closest hits using the ITS sequence had highest similarity to '*Ramichloridium* sp. CATASR1' (GenBank JQ768795; Identities = 531/535 (99 %), Gaps = 1/535 (0 %)), *Zasmidium nocoxi* (GenBank GQ852842; Identities = 518/544 (95 %), Gaps = 9/544 (2 %)) and *Mycosphaerella aleuritidis* (GenBank EU167594; Identities = 515/543 (95 %), Gaps = 8/543 (1 %)). Morphologically *Z. syzygii* is distinguishable from other species of *Zasmidium* occurring on *Syzygium* based on its smaller conidia (Crous 1999).

Colour illustrations. Lowveld Botanical Garden, Nelspruit; verruculose hyphae giving rise to conidiophores and conidia in chains. Scale bars = 10 µm.

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