Neoseptorioides eucalypti
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**Neoseptorioides** Crous, Jacq. Edwards & Pascoe, *gen. nov.*

*Etymology.* Name reflects a morphological similarity to the genus *Septorioides.*

*Classification.* — *Saccharataceae, Botryosphaeriales, Dothideomycetes.*

*Conidiomata* black, unilocular, globose, flattened, opening by means of irregular rupture; wall consisting of 3–6 layers of pale brown *textura irregularis* to *angularis,* exuding a crystal conidial mass. *Paraphyses* intermingled among conidiophores, hyaline, cylindrical, septate with obtuse ends. *Microconidiophores* hyaline, smooth, subcylindrical, septate, straight to flexuous, with conidiogenous cells terminal and lateral; proliferating percurrently or with periclinal thickening. *Microconidia* hyaline, smooth, subcylindrical, straight or curved, apex obtuse, base truncate, frequently swollen. *Macroconidiophores* reduced to conidiogenous cells or with a supporting cell. *Macroconidiogenous cells* lining the inner cavity in basal layer, hyaline, smooth, subcylindrical to ampulliform. *Macroconidia* hyaline, smooth, guttulate, subcylindrical, straight to irregularly curved, tapering in apical cell to subobtuse apex, base truncate, transversely euseptate.

*Type species.* *Neoseptorioides eucalypti.* MycoBank MB814939.

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**Neoseptorioides eucalypti** Crous, Jacq. Edwards & Pascoe, *sp. nov.*

*Etymology.* Name refers to the host genus *Eucalyptus* from which the fungus was collected.

*Conidiomata* black, unilocular, globose, flattened, up to 300 μm diam, opening by means of irregular rupture; wall consisting of 3–6 layers of pale brown *textura irregularis* to *angularis,* exuding a crystal conidial mass. *Paraphyses* intermingled among conidiophores, hyaline, cylindrical, 1–3-septate with obtuse ends, up to 40 μm tall, 3–4 μm wide. *Macroconidiophores* reduced to conidiogenous cells or with a supporting cell. *Macroconidiogenous cells* lining the inner cavity in basal layer, hyaline, smooth, subcylindrical to ampulliform, 8–15 × 3–6 μm, proliferating several times percurrently at the apex. *Macroconidia* hyaline, smooth, guttulate, subcylindrical, straight to irregularly curved, apical cell obtuse, base truncate, 0(–3)-euseptate, (18–)35–42(–50) × (3.5–)4(–4.5) μm. *Microconidiophores* hyaline, smooth, subcylindrical, 1–3-septate, straight to flexuous, with conidiogenous cells terminal and lateral, up to 50 μm tall, 3–5 μm wide; proliferating percurrently or with periclinal thickening. *Microconidia* hyaline, smooth, guttulate, subcylindrical, straight or curved, apex obtuse, base truncate, frequently swollen, (5–)11–18(–25) × (2–)2.5(–3) μm.

Culture characteristics — Colonies reaching up to 15 mm diam after 2 wk at 25 °C, with spreading, flat, folded surface; margins smooth, lobate, and sparse aerial mycelium. On MEA surface iron-grey, reverse olivaceous grey. On OA surface olivaceous grey. On PDA surface grey olivaceous, reverse olivaceous grey.

*Notes.* — It is not possible to distinguish *Neoseptorioides* from *Septorioides* based on morphology (Quaedvlieg et al. 2013) because both genera have similar conidiomatal anatomy (opening via irregular rupture), the presence of paraphyses, and they have cylindrical macro- and microconidia. The LSU sequence is 97% (786/814 nucleotides, 2 gaps) similar to *Septorioides pini-thunbergii* strain CBS 473.91 (GenBank KF251746), the ITS sequence only has a partial match of 94% (223/236 nucleotides, 3 gaps) to the ITS sequence of the same strain (GenBank DQ019397). There are no *tef1* sequences available for this species / strain for comparison; the *tef1* sequence is 87% (332/383 nucleotides, 17 gaps) similar to *Saccharata capensis* (GenBank EU552094), the ITS sequence 90% (321/357 nucleotides, 13 gaps) to GenBank KF769224 and the LSU 98% (811/831 nucleotides, no gaps) to GenBank KF769390. Based on an inspection of LSU phylogeny, the novel genus described here is more closely related to *Saccharata* (*Saccharataceae, Botryosphaeriales,* Slippers et al. 2013, Phillips et al. 2013) than to *Septorioides.*

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*Colour illustrations.* *Eucalyptus* trees growing in The Gurdies, Victoria; acervuli forming on OA, conidiophores, macro- and microconidia. Scale bars: conidiomata = 300 μm, all others = 10 μm.

Pedro W. Crous & Johannes Z. Groenewald, CBS-KNAW Fungal Biodiversity Centre, P.O. Box 85167, 3508 AD Utrecht, The Netherlands; e-mail: p.crous@cbs.knaw.nl & e.groenewald@cbs.knaw.nl

Ian G. Pascoe & Jacqueline Edwards, AgriBio Centre for AgriBiosciences, Department of Economic Development, Jobs, Transport and Resources, 5 Ring Road, LaTrobe University, Bunyoom, Victoria 3083 Australia; e-mail: pascoeig@bigpond.net.au & jacky.edwards@ecodev.vic.gov.au

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