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***Pseudocercospora mangifericola*** R.G. Shivas, A.J. Young & Grice, *sp. nov.*

Mycelium internum ad externum, pallidum-brunneum ad brunneum; hyphae superficiales septatae, leves, ramosae, 2.5–4.5 µm latae. Stromata absunt. Conidiophora sola vel in fasciculis laxis usque ad sex, orientia ex hyphis superficialibus, lateralia, erecta, ampulliformia ad subcylindracea, recta vel interdum geniculata, 8–45 × 3.0–4.5 µm, raro ramosa. Cellulae conidiogenae terminales, pallidae-brunneae et pallidiores in apice. Conidia sola, pallida-brunnea, subcylindracea, 10–47 × 2.5–3.5 µm, recta vel partim curvata, apex rotundatus, basis obconice truncata ad subtruncata, 0–5-septata, interdum constricta in uno vel pluribus septis, levis.

*Etymology.* Derived from the name of the host plant *Mangifera* in the *Anacardiaceae*.

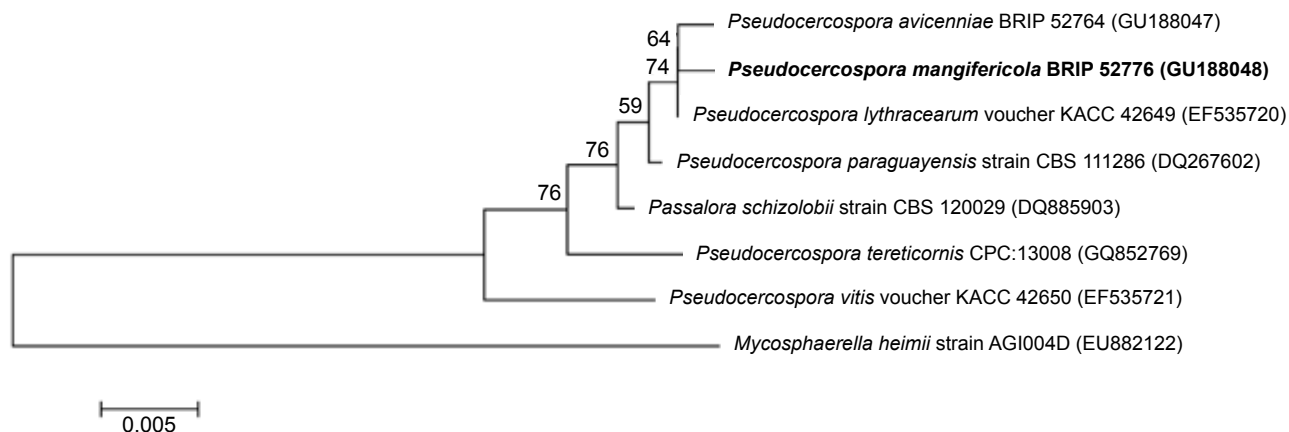
*Leaf spots* amphigenous; conspicuous on abaxial surface, polyangular to irregular, often vein-limited, 2–8 mm wide, margins diffuse or narrowly water-soaked, dark brown in centre becoming paler towards margin, often widespread over the entire leaf surface, lesions sometimes covered with abundant sporulation; inconspicuous on adaxial leaf surface, irregular, margins diffuse, pale to yellowish brown, always smaller than the corresponding lesion on the abaxial surface. *Mycelium* internal and external, pale to medium brown; superficial hyphae septate, smooth, branched, 2.5–4.5 µm wide. *Stromata* absent. *Conidiophores* solitary or in loose fascicles of up to 6, arising from superficial hyphae, lateral, erect, ampulliform to subcylindrical, straight or occasionally geniculate, 8–45 × 3.0–4.5 µm, rarely branched. *Conidiogenous cells* terminal, pale brown becoming paler towards the apex, proliferating percurrently or

occasionally sympodially, smooth or minutely roughened from torn annulations, rounded at apex. *Conidia* solitary, pale brown, subcylindrical, 10–47 × 2.5–3.5 µm, straight or partially curved, apex rounded, base obconically truncate to subtruncate, 0–5-septate, sometimes constricted at one or more septa, smooth; hila inconspicuous.

*Culture characteristics* — Colonies on malt extract agar (Difco) circular, up to 30 mm diam after 28 d at 25 °C, grey to pale olivaceous-grey, reverse olivaceous-black, radially furrowed, flat and raised in the centre, margin entire, smooth.

*Typus.* AUSTRALIA, Queensland, Tolga, 17° 13' S, 145° 28' E, *Mangifera indica* cv. Kensington Pride, 28 Aug. 2009, K.R.E. Grice & P. Holt, BRIP 52776b, holotype; cultures ex-type BRIP 52776b, GenBank GU188048, MycoBank MB515467.

*Notes* — *Pseudocercospora mangifericola* parasitised mango (*Mangifera indica*) leaves that were also infected at low levels with *Scolecostigmina mangiferae* (syn. *Cercospora mangiferae*, *Stigmina mangiferae*), which differs symptomatically by producing angular, black lesions with chlorotic haloes visible on both leaf surfaces (see middle photograph in adjacent illustrations) and is clearly distinguishable based on ITS sequence. The only other cercosporoid fungus reported on mango is *C. mangiferae-indicae*, which differs by having broader conidia measuring 3–6 µm in width<sup>1</sup>.



An ITS neighbour-joining tree constructed using MEGA4<sup>2</sup>. The scale bar shows 0.005 changes per site, and bootstrap support values from 1 000 replicates are shown at the nodes. The species described here is printed in **bold face**. The tree was rooted to *Mycosphaerella heimii* (GenBank EU882122).

*Colour illustrations.* *Mangifera indica* with leaf spots caused by *Pseudocercospora mangifericola* at Tolga, Queensland; leaf (upper side left, lower side right) infected with *P. mangifericola*; leaf spots caused by *P. mangifericola* (left and middle) and *Scolecostigmina mangiferae* (top right); hyphae and conidiophores; conidia in vivo. Scale bars (from left to right) = 1 cm, 1 mm, 10 µm, 10 µm.

*References.* <sup>1</sup>Crous PW, Braun U. 2003. *Mycosphaerella* and its anamorphs. 1. Names published in *Cercospora* and *Passalora*. CBS Biodiversity Series 1: 1–157. <sup>2</sup>Tamura K, Dudley J, Nei M, Kumar S. 2007. MEGA4: Molecular Evolutionary Genetics Analysis (MEGA) v4.0. *Molecular Biology and Evolution* 24: 1596–1599.

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