Fungal Planet 410 – 4 July 2016

**Ramularia citricola** Crous & Guarnaccia, sp. nov.

**Etymology.** Name refers to *Citrus*, the plant genus from which this fungus was collected.

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

*Mycelium* consisting of septate, branched, hyaline, smooth, 2–2.5 µm diam hyphae. *Conidiophores* solitary, arising from hyphae as lateral branches, or terminal in loose fascicles, straight to geniculate-sinuous, erect, hyaline, smooth, subcylindrical, reduced to conidiogenous loci on hyphae, or 0–1-septate, erect, 2–20 x 2–2.5 µm. *Conidiogenous cells* hyaline, smooth, subcylindrical, 2–16 x 2–2.5 µm; loci terminal, thickened, darkened and refractive, 1 µm diam. *Primary ramoconidia* hyaline, smooth to finely roughened, subcylindrical, 0–1-septate, 22–33 x 2.5–3 µm. *Secondary ramoconidia* subcylindrical, 0–1-septate, finely roughened, guttulate, 8–22 x 2–2.5 µm. *Intermediary conidia* subcylindrical-fusiform, 0(–1)-septate, 7–9 x 2 µm. *Conidia* in branched chains, ellipsoid-fusoid, smooth to finely roughened, (3–)6–8(–9) x 2 µm; loci thickened, darkened and refractive, 0.5 µm diam.

**Culture characteristics.** Colonies reaching up to 15 mm diam after 2 wk at 25 °C, with spreading, erumpent, folded surface; margins smooth, lobate, and sparse aerial mycelium. On MEA surface luteous, reverse ochreous. On OA surface mouse-grey. On PDA surface pale mouse-grey to mouse-grey, reverse mouse-grey.

**Typus.** **ITALY,** Sicily, Messina, on twigs of *Citrus floridana* (*Rutaceae*), Mar. 2015, V. Guarnaccia (holotype CBS H-22598, culture ex-type CPC 26192 = CBS 141449; ITS sequence GenBank KX228262.1, LSU sequence GenBank KX228313.1, actA sequence GenBank KX228358.1, rpb2 sequence GenBank KX228369.1, tef1 sequence GenBank KX228373.1, MycoBank MB817020).

Notes — On ITS *Ramularia citricola* is 99 % (524/531) similar to *R. grevilleana* (CPC 4903; GenBank GU214691.1) and 98 % (523/531) *R. grevilleana* (isolate s208; GenBank GU939181.1). None of the sequences from the protein coding genes resulted in similarities higher than 92 %. *Ramularia grevilleana* can be distinguished from *R. citricola* by having larger conidia that are ellipsoid-ovoid, subcylindrical-fusoid, (8–)15–45(–55) x (1.5–)2.5–4.5(–5) µm, 0–2(–3)-septate (Braun 1998). Two species of *Ramularia* have been described from *Citrus*, namely *R. citri* and *R. citrifolia*. *Ramularia citri* (on *Citrus aurantium*, Italy) was described from fallen, dry leaves (asymptomatic), with catenate conidia, oblong, 8–14 x 3.5–4 µm, 0–2-septate. Type material of the latter species could not be traced, and its generic affinity remains unclear (Braun 1998). *Ramularia citrifolia* (hyperparasitic on *Meliola butleri* on *Citrus tankan*, Taiwan) was allocated to *Eriomycopsis* by Braun (1993).

**Colour illustrations.** Glasshouse with *Citrus floridana* trees; conidiophores sporulating on PNA, conidiophores and conidia. Scale bars = 10 µm.