

Pseudophaeomoniella oleae



Fungal Planet 351 – 10 June 2015

Pseudophaeomoniella Nigro, Antelmi & Crous, *gen. nov.*

Etymology. Name reflects its morphological similarity to the coelomycetous synanamorph of *Phaeomoniella*.

Classification — *Incertae sedis*, *Phaeomoniellales*, *Eurotiomycetes*.

Conidiomata pycnidial, dark brown to black, semi-immersed, separate; wall of 2–3 layers of brown *textura angularis*. *Conidiophores* reduced to conidiogenous cells lining the inner cavity, or

1-septate, subcylindrical, hyaline, smooth. *Conidiogenous cells* subcylindrical to ampulliform, terminal or intercalary, hyaline to green brown, smooth; apex with minute periclinal thickening. *Conidia* solitary, hyaline, smooth, subcylindrical with obtuse ends. A yeast-like synasexual morph develops in culture.

Type species. *Pseudophaeomoniella oleae*.
MycoBank MB812470.

Pseudophaeomoniella oleae Nigro, Antelmi & Crous, *sp. nov.*

Etymology. Name reflects the host *Olea*, from which this species was isolated.

On OA. *Conidiomata* pycnidial, dark brown to black, semi-immersed, separate, 90–400 µm diam; wall of 2–3 layers of brown *textura angularis*. *Conidiophores* reduced to conidiogenous cells lining the inner cavity. *Conidiogenous cells* hyaline to green brown, smooth, ampulliform, 4–6 × 3–4 µm; apex 1 µm diam with minute periclinal thickening. *Conidia* solitary, hyaline, smooth, subcylindrical with obtuse ends, (2–)2.5(–3) × 1–1.5 µm.

Culture characteristics — Colonies spreading with sparse aerial mycelium, and feathery margins, reaching 50 mm diam

after 1 mo at 25 °C. On MEA surface and reverse olivaceous grey. On PDA surface grey olivaceous, reverse grey olivaceous with buff to smoke grey zones. On OA centre olivaceous grey, outer zones buff and grey olivaceous.

Typus. ITALY, Province of Lecce, Alezio, isolated from black-discoloured xylem of wilting *Olea europaea* (*Oleaceae*) branch of plant infected by *Xylella fastidiosa* 'CoDiRO strain', Oct. 2013, *F. Nigro* (holotype CBS H-22250, culture ex-type FV84 = CBS 139191; ITS sequence GenBank KP635972, LSU sequence GenBank KP635971, ACT sequence GenBank KP635974, TEF sequence GenBank KP635968, MycoBank MB812471).

Notes — Several phaeomoniella-like species described from *Prunus* wood (Damm et al. 2010), represent distinct genera in this complex, and are described below:

Minutiella Crous, *gen. nov.*

Etymology. Name reflects the minute conidiomata in this genus.

Mycelium consisting of hyaline, septate hyphae, lacking chlamydospores. *Sporulation* abundant, conidia formed on hyphae and in pycnidia. *Conidiophores* on hyphae reduced to conidiogenous cells. *Conidiogenous cells* enteroblastic, reduced to mere openings formed directly on hyphal cells, rarely to short necks, discrete phialides very rare; collarettes mostly inconspicuous. *Conidia* aseptate, hyaline, cylindrical to obovate, smooth. *Microcyclic conidiation* rarely observed. *Conidiomata* pycnidial, solitary, subglobose, superficial, pale to dark brown, globose to subglobose, unilocular, opening by irregular rupture, wall 1–2 cell layers thick, composed of pale brown *textura angu-*

laris. *Conidiophores* reduced to conidiogenous cells. *Conidiogenous cells* enteroblastic, hyaline or brown, ampulliform to angular. *Conidia* hyaline, aseptate, cylindrical, sometimes slightly curved, smooth.

Type species. *Minutiella tardicola*.
MycoBank MB812473.

Minutiella tardicola (Damm & Crous) Crous, *comb. nov.* —
MycoBank MB812474

Basionym. *Phaeomoniella tardicola* Damm & Crous, *Persoonia* 24: 77. 2010.

Description & Illustration — See Damm et al. (2010).

Aequabiliella Crous, *gen. nov.*

Etymology. Name refers to the uniformly distributed pigment produced in culture.

Mycelium consisting of hyaline, smooth-walled hyphae, lacking chlamydospores. *Sporulation* abundant; conidia formed on hyphae and in pycnidia. *Conidiophores* on hyphae mainly reduced to conidiogenous cells, subcylindrical to navicular. *Conidiogenous cells* enteroblastic, discrete phialides rare, mostly reduced to very short adelopialides or more often with collarettes formed directly on hyphal cells, distinct phialides navicular or elongate-ampulliform and attenuated at the base; collarettes and periclinal thickening conspicuous. *Conidia* aggregated in masses around the hyphae, hyaline, 1-celled, cylindrical to obovate, sometimes slightly curved, both ends obtuse, smooth-walled, containing small droplets. *Conidiomata*

pycnidial, solitary, subglobose, superficial, unilocular, opening by irregular rupture, wall composed of brown *textura angularis*. *Conidiophores* reduced to conidiogenous cells. *Conidiogenous cells* enteroblastic, hyaline, broadly ellipsoidal, somewhat angular, collarette very short or inconspicuous. *Conidia* hyaline, aseptate, cylindrical, sometimes slightly curved, both ends obtuse, smooth-walled, containing small droplets.

Type species. *Aequabiliella effusa*.
MycoBank MB812475.

Aequabiliella effusa (Damm & Crous) Crous, *comb. nov.* —
MycoBank MB812476

Basionym. *Phaeomoniella effusa* Damm & Crous, *Persoonia* 24: 75. 2010.

Description & Illustration — See Damm et al. (2010).

Colour illustrations. Symptomatic olive tree in Italy; wood discolouration, conidiomata on OA, conidiogenous cells and conidia. Scale bars = 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
Franco Nigro & Ilaria Antelmi, Dip. Scienze del Suolo, della Pianta e degli Alimenti, Università degli Studi di Bari - Aldo Moro, Via Amendola 165/A, 70126 Bari, Italy; e-mail: franco.nigro@uniba.it