Mulderomyces natalis
Fungal Planet 419 – 4 July 2016


*Etymology.* Named after Prof. dr. Theo W. Mulder, the scientific director of the institutes of the Royal Dutch Academy of Arts and Sciences (KNAW), on the occasion of his farewell symposium, 20 June 2016.

*Classification.* — *Incertae sedis*, Ostropales, Lecanoromycetes.

Conidiomata pycnidial, solitary, pale brown, erumpent, globose, with central ostiole; wall of 6–8 layers of subhyaline to pale brown *textura angularis*. *Conidiophores* lining the inner cavity, hyaline, smooth, subcylindrical, septate, branched. *Conidia* hyaline, smooth, subcylindrical, terminal and lateral; proliferating sympodially, scars inconspicuous. *Conidia* cylindrical, hyaline, smooth, guttulate, straight with subobtuse ends, 2–6-septate, prominently constricted at septa (cells linked by a narrow isthmus), with mature conidia breaking into phragmospores.


**Mulderomyces natalis** Crous, Jacq. Edwards & P.W.J. Taylor, *sp. nov.*

*Etymology.* Natalis (Latin genitive noun), refers to the birth date of the first author, on which day this fungus was collected.

*Conidiomata* (on pine needle agar; PNA) pycnidial, solitary, pale brown, erumpent, globose, to 200 µm diam, with central ostiole; wall of 6–8 layers of subhyaline to pale brown *textura angularis*. *Conidiophores* lining the inner cavity, hyaline, smooth, subcylindrical, 1–4-septate, branched, 10–30 × 3–5 µm. *Conidigenous cells* hyaline, smooth, subcylindrical, terminal and lateral, 8–15 × 3–5 µm; proliferating sympodially, scars inconspicuous. *Conidia* cylindrical, hyaline, smooth, guttulate, straight with subobtuse ends, 2–6-septate, prominently constricted at septa (cells linked by a narrow isthmus), with mature conidia breaking into phragmospores, (22–)50–75(–90) × (2–)3 µm.

*Culture characteristics.* — Colonies reaching up to 20 mm diam after 2 wk at 25 °C, with spreading, flat surface; margins smooth, lobate, and sparse aerial mycelium. On MEA surface cinnamon, reverse brick. On OA surface rosy buff. On PDA surface rosy buff, reverse cinnamon.

*Typus.* AUSTRALIA, Victoria, Melbourne, Moonee Ponds Creek, on leaves of *Eucalyptus* sp. (Myrtaceae), 2 Nov. 2014, P.W. Crous, J. Edwards & P.W.J. Taylor (holotype CBS H-22609, culture ex-type CPC 25519 = CBS 141296; ITS sequence GenBank KX228271.1, LSU sequence GenBank KX228322.1, MycoBank MB817035).

*Notes.* — The LSU sequence of *Mulderomyces natalis* is 91 % similar to species of *Xylographa* (lichenised ascomycetes; e.g. 738/810 to *X. opegraphella* GenBank KJ462366.1) and 92 % (746/812) similar to *Furcaspora eucalypti* (GenBank EF110613; Crous et al. 2007c). Phylogenetically, it appears quite distinct from all taxa presently available in GenBank, both on LSU and ITS. Morphologically, *Mulderomyces* resembles species of *Phacidella*, except that the nature of its conidia is different with cells not linked by a narrow isthmus, and its conidiomata become cupulate with age (Sutton 1980).

*Colour illustrations.* *Eucalyptus* tree growing along river at Moonee Ponds Creek; conidiomata sporulating on OA; conidiophores and conidia. Scale bars = 10 µm.