

Planomyces parisiensis



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Planamyces Crous & Decock, *gen. nov.*

Etymology. Named after its characteristic conidia, which are flattened in side view.

Classification — *Pyronemataceae*, *Pezizales*, *Pezizomycetes*.

Mycelium consisting of hyaline, smooth, branched, septate hyphae. *Conidiophores* solitary, erect, arising from superficial hyphae, hyaline, smooth, subcylindrical, multiseptate, flexuous, developing terminal and intercalary branches that give rise to

clusters of conidiophores; lateral branches hyaline, smooth, subcylindrical, giving rise to conidiogenous cells, frequently two, with bifurcate positioning. *Conidiogenous cells* subcylindrical, hyaline, smooth, clavate at apex; apex with several denticles, with apical and lateral holoblastic loci. *Conidia* solitary, globose but flattened in side view, hyaline, smooth, aseptate, becoming saffron with age, and developing small warts.

Type species. *Planamyces parisiensis* Crous & Decock.
Mycobank MB823383.

Planamyces parisiensis Crous & Decock, *sp. nov.*

Etymology. Named refers to Paris, the city where this species was collected.

Mycelium consisting of hyaline, smooth, branched, septate, 3–5 µm diam hyphae. *Conidiophores* solitary, erect, arising from superficial hyphae, hyaline, smooth, subcylindrical, multiseptate, flexuous, developing terminal and intercalary branches that give rise to clusters of conidiophores; lateral branches hyaline, smooth, subcylindrical, 15–35 × 5–7 µm, giving rise to conidiogenous cells, frequently two, with bifurcate positioning. *Conidiogenous cells* subcylindrical, hyaline, smooth, clavate at apex, 15–35 × 5–10 µm; apex with several denticles, 3–6 × 2–3 µm, with apical and lateral holoblastic loci. *Conidia* solitary, globose but flattened in side view, hyaline, smooth, aseptate, becoming saffron with age, and developing small warts, (6–)7–8(–9) µm in surface view, 5–6 µm diam in side view.

Culture characteristics — Colonies spreading, abundant aerial mycelium, covering dish after 2 wk at 25 °C. On MEA, PDA and OA surface and reverse dirty white with patches of peach.

Typus. FRANCE, Paris, from wood inside a house, 2017, C. Decock (holotype CBS H-23276, culture ex-type CPC 31694 = CBS 143165, ITS, LSU and *rpb2* sequences GenBank MG386040, MG386093 and MG386141, MycoBank MB823384).

Notes — Based on morphology, *Planamyces* appears quite distinct from the genera of hyphomycetes presently known (Seifert et al. 2011). Its hyaline conidiophores give rise to a cluster of conidiogenous cells, that in turn produce several denticles, forming globose conidia (flattened in side view) that turn saffron and finely warty with age. *Planamyces* is related to the sexual genera *Monascella* and *Warcupia*, but these genera lack asexual morphs, complicating a direct morphological comparison.

Based on a megablast search using the ITS sequence, the closest matches in NCBI's GenBank nucleotide database were *Monascella botryosa* (GenBank NR_145208; Identities 534/624 (86 %), 41 gaps (6 %)), *Sporendonema purpurascens* (GenBank GQ272632; Identities 514/601 (86 %), 25 gaps (4 %)) and *Scutellinia cejpai* (GenBank KJ619951; Identities 519/639 (81 %), 46 gaps (7 %)). The highest similarities using the LSU sequence were *Monascella botryosa* (GenBank KC012688; Identities 842/856 (98 %), no gaps), *Warcupia terrestris* (GenBank DQ220467; Identities 842/856 (98 %), no gaps) and *Melastiza flavorubens* (GenBank DQ220369; Identities 822/856 (96 %), no gaps). The highest similarities using the *rpb2* sequence were distant hits with *Otidea mirabilis* (GenBank JN993547; Identities 653/821 (80 %), 6 gaps (0 %)), *Otidea concinna* (GenBank JN993545; Identities 654/822 (80 %), 8 gaps (0 %)) and *Otidea onotica* (GenBank JN993551; Identities 650/819 (79 %), 6 gaps (0 %)).

Colour illustrations. Apartment block in Paris, close to where the fungus was collected; conidiophores sporulating on SNA, conidiophores and conidia. Scale bars = 10 µm.

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