
Mollisia asteliae
& Flexuomyces asteliae

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Mollisia asteliae Crous, *sp. nov.*

Etymology. Name refers to the host genus *Astelia* from which it was isolated.

Classification — *Mollisiaceae*, *Helotiales*, *Leotiomycetes.*

Apothecia scattered, sessile with central subiculum, cup-shaped, becoming disc-shaped at maturity, outline entire, buff, outer surface buff to honey, 500–800 µm diam. Ectal excipulum at base of *textura globosa*, 200–300 µm diam near base, composed on globose to subglobose brown cells, 7–11 µm diam. *Paraphyses* cylindrical with rounded ends, at times slightly swollen, septate, branched below, thin-walled, 3–4 µm diam, with large refractive vacuole bodies, similar in length to asci. *Asci* cylindrical-clavate, stipitate, 8-spored, 45–52 × 5–7 µm, pore amyloid in Melzer's reagent. *Ascospores* biseriate to obliquely uniseriate, (7–)10–12(–13) × (2–)2.5–3(–3.5) µm, fusoid-ellipsoid to oblong, apices rounded, slightly curved to straight, aseptate, thin-walled, guttulate, some ascospores in water showing remnants of mucoid sheath in central region, disappearing at maturity.

Culture characteristics — Colonies flat, spreading, with moderate aerial mycelium and lobate, smooth margin, covering dish after 2 wk at 25 °C. On MEA and PDA surface hazel, reverse fuscous black; on OA surface rosy buff.

Typus. New Zealand, Auckland, Taunton Terrace, from leaf spots of *Astelia chathamica* (*Asteliaceae*), 14 Mar. 2019, *C. Inglis* (holotype CBS H-24415, culture ex-type CPC 38521 = T19_02324D = CBS 146780, ITS, LSU, *tef1* (second part) and *tub2* sequences GenBank MZ064417.1, MZ064474.1, MZ078248.1 and MZ078261.1, MycoBank MB 839494).

Notes — *Mollisia asteliae* is related to *M. panicicola*, which was described as an asexual morph, *Acidomelania panicicola* (Walsh et al. 2014), later included in *Mollisia* by Tanney & Seifert (2020). It is morphologically and phylogenetically distinct from species presently accepted in the genus (Tanney & Seifert 2020).

(notes *Mollisia asteliae* continues on Supplementary material page FP1183 & 1184)

Flexuomyces Crous, *gen. nov.*

Etymology. Name refers to the flexuous nature of its conidia.

Classification — *Tympanidaceae*, *Leotiales*, *Leotiomycetes*.

Conidiomata convex with a short stipe arising from a basal stroma of brown *textura epidermoidea*; stipe short, of brown, parallel cylindrical cells, fanning outward towards umbrella-like apex, which is pale brown, giving rise to cylindrical, hyaline conidiogenous cells that taper at apex; conidiomata brown, sessile with a crystalline mucoid conidial mass; wall of several layers of brown *textura epidermoidea. Conidiophores* septate, cylindrical, tightly aggregated; on inner plane forming a layer of phialidic *conidiogenous cells*, hyaline, smooth. *Conidia* single, hyaline, smooth, subcylindrical to acicular, multi-septate, guttulate, apex subobtuse, base truncate, conidia spirally twisted in middle with apical and basal part in different planes, widest at basal septum, tapering to truncate hilum.

Type species. Flexuomyces asteliae Crous
MycoBank MB 839495.

Flexuomyces asteliae Crous, *sp. nov.*

Etymology. Name refers to the host genus *Astelia* from which it was isolated.

Conidiomata convex with a short stipe arising from a basal stroma of brown *textura epidermoidea*; stipe short, of brown, parallel cylindrical cells, fanning outward towards umbrella-like apex, which is pale brown, giving rise to cylindrical, hyaline conidiogenous cells that taper at apex; conidiomata brown, 200–400 µm diam, sessile with a crystalline mucoid conidial mass; wall of several layers of brown *textura epidermoidea. Conidiophores* septate, cylindrical, tightly aggregated, up to 40 µm tall, 2–3 µm diam; on inner plane forming a layer of phialidic *conidiogenous cells*, hyaline, smooth, 4–7 × 2 µm. *Conidia* single, hyaline, smooth, subcylindrical to acicular, 3–8-septate, guttulate, apex subobtuse, base truncate, conidia spirally twisted in middle with apical and basal part in different planes, 60–100 × 1.5–2 µm, widest at basal septum, tapering to truncate hilum, 1 µm diam.

Culture characteristics — Colonies erumpent, spreading, with sparse to moderate aerial mycelium and smooth, even margin, reaching 40 mm diam after 2 wk at 25 °C on MEA, but covering dish on PDA and OA. On MEA surface and reverse umber; on PDA surface and reverse chestnut; on OA surface umber with patches of buff.

Typus. New Zealand, Auckland, Taunton Terrace, from leaf spots of *Astelia chathamica* (*Asteliaceae*), 14 Mar. 2019, *C. Inglis* (holotype CBS H-24416, culture ex-type CPC 38522 = T19_02324E = CBS 146786, ITS and LSU sequences GenBank MZ064409.1 and MZ064466.1, MycoBank MB 839496).

Notes — *Flexuomyces* is related to hyphomycetous genera such as *Pallidophorina*, *Variabilispora* (Bien et al. 2020) and *Vandijckella* (Crous et al. 2017). It can easily be distinguished from those genera by its convex conidiomata with a short stipe, and multiseptate, spirally twisted conidia.

(notes *Flexuomyces asteliae* continues on Supplementary material page FP1183 & 1184)

Colour illustrations. Auckland, Taunton Terrace. Left column: *Mollisia asteliae*. Apothecia on OA; ectal excipulum; asci and paraphyses; asci and ascospores; ascospores. Right column: *Flexuomyces asteliae*. Conidiomata *in vitro*; conidiogenous cells giving rise to conidia; conidia. Scale bars = 300 µm (sporocarps), 10 µm (all others).

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