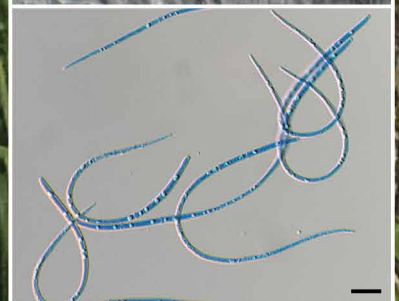
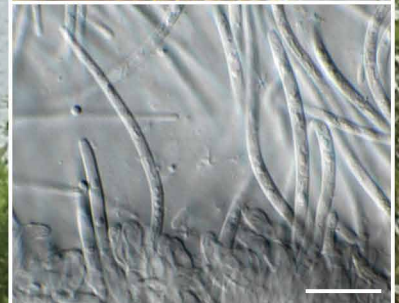
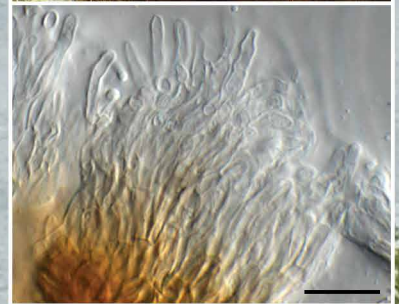
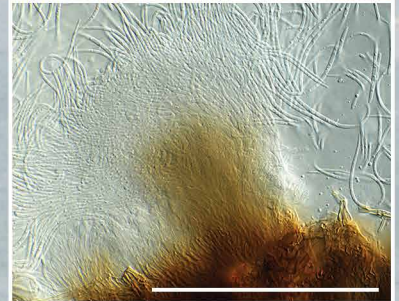
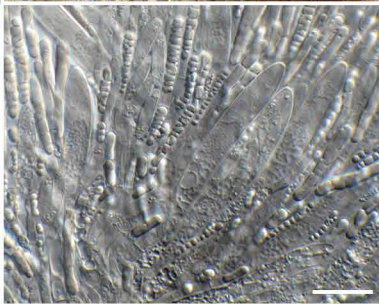
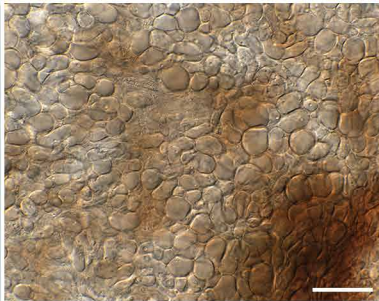
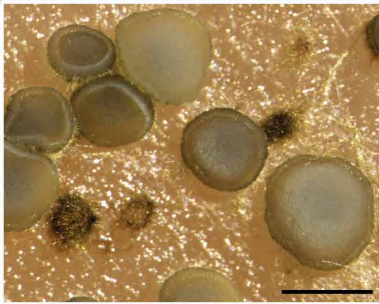


Mollisia astelliae
& *Flexuomyces astelliae*



Fungal Planet 1183 & 1184 – 13 July 2021

***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. panicola*, which was described as an asexual morph, *Acidomelania panicola* (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 — *Typhanidaceae*, *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).

Pedro W. Crous & Johannes Z. Groenewald, Westerdijk Fungal Biodiversity Institute, P.O. Box 85167, 3508 AD Utrecht, The Netherlands; e-mail: p.crous@wi.knaw.nl & e.groenewald@wi.knaw.nl
Raja Thangavel, Plant Health and Environment Laboratory, Ministry for Primary Industries, P.O. Box 2095, Auckland 1140, New Zealand; e-mail: thangavel.raja@mpi.govt.nz