Vermiculariopsiella lauracearum & Anungitopsis lauri
Vermiculariopsiella lauracearum Crous, sp. nov.

Etymology. Name refers to Laurus, the host genus from which this fungus was isolated.

Classification — Vermiculariopsiellaceae, Vermiculariopsiales, Sordariomycetes.

Sporodochia developing on OA and PDA, erumpent, crystalline, up to 450 µm diam, with brown, erect setae dispersed throughout sporodochium, thick-walled, smooth-walled, straight to flexuous, 100–300 × 4–5 µm, 8–20-septate, tapering to an obtuse apex and with bulbous base, 7–9 µm diam, forming a series of lateral branches (up to 100 µm long) that again branch once with tertiary branch (up to 120 µm long). Conidiogenous cells phialidic, developing in a cluster around the base of setae, pale brown, smooth, subcylindrical with apical taper with periclinal thickening and minute collarette, 1–2 µm long, 20–25 × 3–3.5 µm. Conidia aseptate, solitary, hyaline, guttulate, straight to slightly curved, inequilateral with inner plane straight and outer plane convex, apex subobtusely rounded; base truncate but with excentric hilum, 0.5 µm diam, on inner straight plane, (9–)10–11 × (3–)3.5–(4–)4 µm.

Culture characteristics — Colonies flat, spreading, with sparse aerial mycelium, folded surface, and even, lobate margin, reaching 25 mm diam after 2 wk at 25 °C. On MEA surface pale mouse grey, reverse mouse grey. On PDA surface sepalia, reverse brown vinaceous. On OA surface mouse grey.


Anungitopsis laurii Crous, sp. nov.

Etymology. Name refers to Laurus, the host genus from which this fungus was isolated.

Classification — Venturiaceae, Venturiales, Dothideomycetes.

Mycelium consisting of branched, septate, pale olivaceous, smooth, 2–3 µm diam hyphae. Conidiophores solitary, erect, medium brown, smooth-walled, flexuous, arising from superficial hyphae, subcylindrical, rarely branched, multiseptate, 200–500 × 5–6 µm, with basal cell extending from hyphae or globose, up to 8 µm diam, lacking rhizoids. Conidiogenous cells integrated, subcylindrical, medium brown, smooth-walled, terminal and intercalary, 20–40 × 4–5 µm, polyblastic, with flat-tipped loci, 2–2.5 µm diam, not thickened nor darkened. Conidia in branched chains, subcylindrical to narrowly fusoid with obtusely rounded ends, hila truncate, 1–1.5 µm diam, unthickened, nor darkened, 3(–7)-septate, finely roughened, median cells medium brown, and cells pale brown, (23–)30–35(–47) × (4–)5–15 µm.

Culture characteristics — Colonies erumpent, spreading, with sparse to moderate aerial mycelium and smooth, lobate margin, reaching 8 mm diam after 2 wk at 25 °C. On MEA and PDA surface and reverse olivaceous grey. On OA surface olivaceous grey with diffuse peach pigment.


Notes — Anungitea is a genus of hyphomycetes defined as having dark, solitary conidiophores, with a denticulate head with flattened conidiogenous scars that are unthickened and not darkened, and chains of cylindrical, 1-septate subhyaline conidia (Sutton 1973). Anungitopsis includes taxa with indistinguishable scars arranged in a rachis, and Neoanungitea is intermediate between these two genera, having a rachis, but with flat-tipped loci (Crous et al. 2017b). Crous et al. (2018a) introduced the genus Pseudoanungitea for species phylogenetically distinct from Anungitea s.str., having terminal and intercalary conidiogenous cells, and refractive, thickened scars that give rise to short conidial chains with somewhat darkened and refractive hila. Anungitopsis laurii is phylogenetically distinct from those species presently known from their DNA sequence data. Based on a megablast search of NCBI GenBank nucleotide database, the closest hits using the ITS sequence had highest similarity to Anungitopsis pseudoarscens (GenBank EU035401; Identities = 601/614 (98 %) and Neoanungitea eucalypti (GenBank NR_156383; Identities = 495/607 (82 %), 41 gaps (6 %)).