

*Verrucocladosporium visseri*



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## *Verrucocladosporium visseri* Crous, sp. nov.

**Etymology.** In honour of Johan Visser, former Springbok and Captain of the Stellenbosch University Waveski Surfing Team, who regularly practiced with his team members at Skaapeiland, IJzerfontein, during the 1980s.

**Classification** — *Cladosporiaceae*, *Capnodiales*, *Dothideomycetes*.

**Mycelium** consisting of branched, septate, brown, smooth, 3–4 µm diam hyphae. **Conidiophores** solitary, dimorphic, macro- and micronematous, reduced to conidiogenous cells. **Microconidiophores** 0–1-septate, brown, verruculose, straight to geniculate-sinuous, 20–40 × 4–5 µm. **Macroconidiophores** erect, flexuous to geniculate-flexuous, subcylindrical, up to 150 µm tall, 4–5 µm diam, brown, verruculose, 2–7-septate. **Conidiogenous cells** terminal and intercalary, subcylindrical, brown, verruculose, 10–30 × 4–5 µm; scars thickened, darkened and refractive, 1.5–2 µm diam. **Conidia** occurring in branched chains, brown, verruculose to warty. Primary ramoconidia subcylindrical, 15–35 × 3.5–4(–5) µm, 0–2-septate. Secondary ramoconidia subcylindrical, 0–1-septate, 13–20 × 3.5–4(–5) µm. Intercalary conidia subcylindrical to ellipsoid, aseptate, verruculose to warty, (8–)9–10(–11) × (3.5–)4(–4.5) µm. Small terminal conidia aseptate, verruculose to warty, 6–7 × 3–4 µm; hila thickened, darkened, refractive, 1–1.5 µm diam.

**Culture characteristics** — Colonies erumpent, spreading, with moderate aerial mycelium and smooth, lobate margin, reaching 10 mm diam after 2 wk at 25 °C. On MEA, PDA and OA surface and reverse olivaceous grey.

**Typus.** SOUTH AFRICA, Western Cape Province, IJzerfontein, on *Carpobrotus edulis* (*Aizoaceae*), 2016, P.W. Crous, HPC 2556 (holotype CBS H-24243, culture ex-type CPC 36317 = CBS 146046, ITS and LSU sequences GenBank MN562118.1 and MN567626.1, MycoBank MB832873).

**Notes** — *Verrucocladosporium visseri* is phylogenetically closely related to *V. dirinae* (isolated from the lichen *Dirina massiliensis*, UK, conidiophores macronematous, ramoconidia 16–21 × (2–)2.5–3 µm, conidia 4–18(–23) × (2–)2.5–3.5 µm, 0–1-septate; Crous et al. 2007b), but distinct in having dimorphic conidiophores, larger ramoconidia and smaller conidia.

Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the **ITS** sequence had highest similarity to *Verrucocladosporium dirinae* (strain HF16, GenBank KR081411.1; Identities = 612/637 (96 %), 9 gaps (1 %)), *Graphiopsis chlorocephala* (strain SDAU Forestry402-4, GenBank KJ682320.1; Identities = 439/465 (94 %), 7 gaps (1 %)), and *Trimmatostroma salinum* (strain MZKI B-962, GenBank AJ238676.1; Identities = 421/450 (94 %), 8 gaps (1 %)). Closest hits using the **LSU** sequence are *Verrucocladosporium dirinae* (strain MUT 4857, GenBank KP671739.1; Identities = 864/870 (99 %), no gaps), *Graphiopsis chlorocephala* (strain CBS 121523, GenBank MH874669.1; Identities = 862/870 (99 %), no gaps), and *Trimmatostroma salinum* (strain CBS 100461, GenBank MH874308.1; Identities = 860/870 (99 %), no gaps).

**Colour illustrations.** Surf spot at 'Skaapeiland', IJzerfontein. Colony on synthetic nutrient poor agar; conidiophores with conidiogenous cells; conidia. Scale bars = 10 µm.