

Sphaceloma freyliniae



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Sphaceloma freyliniae Crous, *sp. nov.*

Sphacelomatis protearum simile, sed conidiis $(3.5-)4-6(-7) \times (2.5-)3-4$ μm .

Etymology. Named after the host from which it was collected, *Freylinia lanceolata*.

Lesions foliicolous, amphigenous, irregular, red-brown with indistinct margins, 1–6 mm diam. *Mycelium* internal, consisting of hyaline to pale brown, smooth, 3–4 μm wide hyphae. *Conidiomata* sporodochial or acervular on leaves, cream to pale brown, wall composed of pale brown *textura angularis*, up to 300 μm diam. *Conidiophores* subcylindrical to doliiform or ampulliform, hyaline to pale brown, smooth, 0–2-septate, unbranched or branched below, $10-20 \times 3.5-5$ μm . *Conidiogenous cells* enteroblastic, polyphialidic, hyaline to pale brown, smooth-walled, subcylindrical to doliiform or ampulliform, $6-10 \times 3.5-4.5$ μm ; collarettes and loci indistinct. *Conidia* hyaline, aseptate, ellipsoidal, apex obtuse, base subtruncate to bluntly rounded, $(3.5-)4-6(-7) \times (2.5-)3-4$ μm in vitro.

Culture characteristics — (in the dark, 25 °C): Colonies slow growing, reaching 5 mm diam after 7 d. On oatmeal agar erumpent, with sparse to moderate aerial mycelium, and smooth, lobate margins; surface scarlet with patches of saffron. On malt extract agar and potato-dextrose agar saffron, with patches of scarlet.

Colour illustrations. Leaves of a *Freylinia lanceolata* tree in Kirstenbosch Botanical Garden with scab disease symptoms; honeybell flowers; sporodochia on host; conidiogenous cells giving rise to conidia; conidia. Scale bars = 10 μm .

Typus. SOUTH AFRICA, Western Cape Province, Cape Town, Kirstenbosch Botanical Garden, on leaves of *Freylinia lanceolata*, 8 May 2010, P.W. Crous, CBS-H 20485 holotype, cultures ex-type CPC 18336, 18335 = CBS 128204, ITS sequence of CPC 18335, GenBank HQ599577, MycoBank MB517530.

Notes — The genus *Freylinia* (*Scrophulariaceae*) is endemic to Africa, and has nine species that occur in South Africa. *Freylinia lanceolata* (common names: honeybells, honeybell bush, 'heuningklokkiesbos' in Afrikaans) is a small tree or shrub with golden-yellow, honey-scented, cylindrical flowers that occur in terminal heads on long, arching, drooping branches¹. The ITS sequence of this species identifies its closest sister species to be *Eisinoë australis* (GenBank FJ010289; identity = 593/655 (91 %), gaps = 39/655 (5 %)).

Scab leaf disease, caused by *Sphaceloma freyliniae*, represents the first disease recorded on this host in South Africa².

References. ¹Coates-Palgrave K. 1988. Trees of southern Africa, edn 2. Struik, Cape Town, South Africa. ²Crous PW, Phillips AJL, Baxter AP. 2000. Phytopathogenic fungi from South Africa. University of Stellenbosch Printers, Department of Plant Pathology Press, Stellenbosch, South Africa.