

*Zeloasperisporium cliviae*



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## *Zeloasperisporiaceae* Crous, *fam. nov.*

Classification — *Zeloasperisporiaceae*, *Incertae sedis*, *Dothi-  
deomycetes*.

*Ascomata* thyriothecial, circular, solitary and scattered, superficial, brown to dark brown; outer wall composed of ellipsoid to angular cells, arranged in parallel radiating lines from the centre to the outer rim. *Pseudoparaphyses* not observed. Asci 8-spored, bitunicate, fissitunicate, globose to ovoid or clavate, apedicellate, with apical ocular chamber. *Ascospores* 2–3-seriate, obovoid to clavate, 2-celled, widest in upper cell, hyaline, smooth-walled. *Mycelium* internal to superficial, septate, pale brown, smooth or finely verruculose, thin-walled. *Macroconidiophores* arising as lateral hyphal branches, erect, straight, subcylindrical or conical, tapering towards the apex, medium-brown, minutely verruculose; conidial proliferation sympodial, with one to several subdenticulate to flat conidiogenous

loci, mostly crowded at the apex, protuberant; conidial scars thickened-refractive. *Macroconidia* solitary, straight to curved, fusiform, tapered towards the apex, septate, pale to medium brown, verruculose; at times forming a globose, apical mucoid appendage; base truncate with a protruding scar, which is somewhat thickened and darkened-refractive. *Micronematous synanamorph*. *Conidiogenous cells* short-cylindrical, brown, finely verruculose, as lateral pegs on hyphae, with minute apical scars. *Microconidia* obovoid, aseptate, brown, finely verruculose.

*Type genus*. *Zeloasperisporium* R.F. Castañeda.  
MycoBank MB812487.

Genera included in family — *Neomicrothyrium*, *Zeloasperisporium*.

## *Zeloasperisporium cliviae* Crous, *sp. nov.*

*Etymology*. Name reflects the host *Clivia*, from which this species was isolated.

*Mycelium* internal to superficial, consisting of sparingly branched, septate, pale brown, smooth or finely verruculose, thin-walled, 2.5–4 µm wide hyphae. *Macroconidiophores* reduced to conidiogenous cells, arising as lateral hyphal branches, erect, straight, subcylindrical or conical, not geniculate, unbranched, 20–35 × 4–5 µm, tapering towards the apex, medium-brown, minutely verruculose, slightly thick-walled, somewhat constricted at the apex below the conidiogenous loci; conidial proliferation sympodial, with one to several subdenticulate to flat conidiogenous loci, mostly crowded at the apex, protuberant; conidial scars thickened-refractive, appearing as thickened circles when viewed from directly above, 0.5–1 µm wide. *Macroconidia* solitary, straight to curved, fusiform, tapered towards the apex, 1(–3)-septate, distinctly constricted at the median septum, pale to medium brown, verruculose, somewhat thick-walled, (14–)20–24(–26) × (3.5–)4.5–5 µm; apex subhyaline, thinner and smoother than the rest of the conidial body, at times forming a globose, apical mucoid appendage; base truncate or slightly rounded, tapering toward a protruding scar, which is somewhat thickened and darkened-refractive, 1 µm diam; microcyclic conidiation observed in culture. *Micronematous synanamorph*. *Conidiogenous cells* short-cylindrical, brown, finely verruculose, as lateral pegs on hyphae, 2–8 × 1.5–2 µm, with minute apical scars. *Microconidia* obovoid, aseptate, brown, finely verruculose, 5–7 × 3 µm, with truncate hilum, 0.5 µm diam.

*Culture characteristics* — Colonies spreading, erumpent, with sparse aerial mycelium and smooth, lobed margins, reaching 25 mm diam after 1 mo at 25 °C. On PDA, OA and MEA surface olivaceous grey, reverse iron grey.

*Typus*. SOUTH AFRICA, Gauteng, Kwalata Game Ranch, on leaves of *Clivia* sp. (*Amaryllidaceae*), 25 Sept. 2014, P.W. Crous (holotype CBS H-22245, culture ex-type CPC 25145 = CBS 139915; ITS sequence GenBank KR476748, LSU sequence GenBank KR476781, MycoBank MB812458).

*Notes* — The *Zeloasperisporiaceae* represent a distinct clade in the *Mycrothyriales* for which the *Zeloasperisporiaceae* is herewith introduced. *Zeloasperisporium cliviae* is phylogenetically related to *Z. hyphopodioides* and *Z. eucalyptorum* (Castañeda Ruiz et al. 1996, Crous et al. 2007b, Cheewangkoon et al. 2008), although these species differ based on their DNA sequence data as well as their conidium morphology.

*Colour illustrations*. *Clivia* flowering at Kwalata Game Ranch; colony on PDA; hypha with lateral branches; conidiophores and conidia. Scale bars = 10 µm.