

Strelitziana cliviae



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***Strelitziana cliviae* Crous, sp. nov.**

Etymology. Named after the host genus from which it was collected, *Clivia*.

Description of colonies sporulating on synthetic nutrient-poor agar. *Mycelium* consisting of pale brown, septate, branched, smooth, 3–4 µm diam hyphae, frequently constricted at septa, forming sterile, brown, globose, sclerotium-like bodies, 20–40 µm diam. *Conidiophores* reduced to conidiogenous cells. *Conidiogenous cells* integrated, lateral or terminal on hyphae, phialidic with small collarette (flaring or not), solitary or aggregated (–3), 2–3 µm high, 2 µm wide. *Conidia* pale brown, smooth, obclavate, apex subobtuse, base obconically truncate, 3–7-septate, (35–)42–55(–70) × (3–)3.5(–4) µm, apex and base frequently with mucoid caps, and conidia forming lateral branches in older cultures (onset of microcyclic conidiation).

Culture characteristics — (in the dark, 25 °C after 2 wk): Colonies on potato-dextrose agar, malt extract agar and oatmeal agar erumpent, spreading, with lobate margins and moderate aerial mycelium; surface folded, pale olivaceous-grey; reverse iron-grey, reaching 15 mm diam.

Typus. SOUTH AFRICA, Mpumalanga, Nelspruit, Lowveld Botanical Garden, on leaves of *Clivia miniata* (*Amaryllidaceae*), 16 July 2011, P.W. Crous, holotype CBS H-21078, culture ex-type CPC 19822 = CBS 133577, ITS sequence GenBank KC005772, LSU sequence GenBank KC005794, MycoBank MB801772.

Notes — Four species are presently known from the genus *Strelitziana* (Table 1), which is characterised by having polyphialides, rhexolytic conidiation, pigmented structures, and unthickened conidial scars (Arzanlou & Crous 2006). Although *S. africana* lacks mucoid conidial appendages, these have since been observed in *S. eucalypti*, *S. australiensis*, and now also in *S. cliviae* (Cheewangkoon et al. 2009). Conidia of *S. eucalypti* (40–130 × 3–4 µm; Crous et al. 2010b) are larger than those of *S. cliviae*, while those of *S. australiensis* are again narrower (30–73 × 2.8–3.2 µm; Cheewangkoon et al. 2009). Based on a megablast search of NCBI's GenBank nucleotide database, the closest hits using the LSU sequence are *Strelitziana australiensis* (GenBank GQ303326; Identities = 870/903 (96 %), Gaps = 0/903 (0 %)), *Capronia peltigeriae* (GenBank HQ613813; Identities = 870/904 (96 %), Gaps = 2/904 (0 %)), and *Glyphium elatum* (GenBank AF346420; Identities = 870/905 (96 %), Gaps = 2/905 (0 %)). Closest hits using the ITS sequence had highest similarity to *Strelitziana albisiae* (GenBank HQ599584; Identities = 546/646 (85 %), Gaps = 33/646 (5 %)), *Strelitziana africana* (GenBank DQ885895; Identities = 550/653 (84 %), Gaps = 42/653 (6 %)) and *Strelitziana eucalypti* (GenBank HQ599596; Identities = 548/653 (84 %), Gaps = 45/653 (7 %)).

Table 1 Comparison of hosts, distribution and micromorphology of currently described *Strelitziana* species.

Species	Host	Origin	Morphology		Reference
			Conidial dimensions (µm)	Conidial septation	
<i>S. africana</i>	<i>Strelitzia</i>	South Africa	(18–)50–70(–95) × 3(–3.5)	3–5(–10)	Arzanlou & Crous 2006
<i>S. australiensis</i>	<i>Eucalyptus</i>	Australia	(30–)50–60(–73) × 2.8–3.2	4–8	Cheewangkoon et al. 2009
<i>S. cliviae</i>	<i>Clivia</i>	South Africa	(35–)42–55(–70) × (3–)3.5(–4)	3–7	Present study
<i>S. eucalypti</i>	<i>Rumex</i>	Iran	(40–)60–80(–130) × (3–)3.5(–4)	6–10	Crous et al. (2010b)
<i>S. mali</i>	<i>Malus</i>	China	(12–)35–60(–100) × 7(–35)	(2–)5–10	Zhang et al. (2009)

Colour illustrations. *Clivia miniata* growing in the Lowveld Botanical Garden; colony on synthetic nutrient-poor agar; microsclerotia or sterile fruiting bodies; conidiogenous cells giving rise to conidia that can undergo microcyclic conidiation. Scale bar = 10 µm.