

A NEW SPECIES OF *QUESTIERIELLA* FROM TAMIL NADUV.B. Hosagoudar<sup>1</sup>, S. Madhavan<sup>2</sup>, V. Dhivaharan<sup>2</sup> and G. Sangeetha<sup>2</sup><sup>1</sup> Tropical Botanic Garden and Research Institute, Palode, Thiruvananthapuram 695562, Kerala, India<sup>2</sup> Department of Microbiology, Sengamala Thayaar Educational Trust Women's College, Mannargudi, Tamil Nadu 614001, IndiaEmail: <sup>1</sup> vbhosagoudar@rediffmail.com

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## ABSTRACT

*Questieriella toddaliae* sp. nov. collected on *Toddalia* sp. from Kodaikanal has been described and illustrated as a new species.

## KEYWORDS

Fungus, India, new species, *Questieriella toddaliae*, Tamil Nadu

## ABBREVIATIONS

HCIO - Herbarium Cryptogamae Indiae Orientalis, New Delhi;

TBGT - Tropical Botanic Garden, Thiruvananthapuram

During a survey of foliicolous fungi in the montane forests of Kodaikanal, the authors came across a plant infected with a black mildew fungus. Microscopic observation of the fungus revealed falcate conidia borne on an appressoriolate brown mycelium, which are the characters of the form genus *Questieriella*, a synanamorph of the genus *Schiffnerula*. The teleomorphic genus *Schiffnerula* includes four synanamorphs, namely, *Questieriella*, *Mitteriella*, *Digitosarcinella* and *Sarcinella*. The genus *Questieriella* differs from other form genera in having falcate 3-septate falcate conidia.

*QUESTIERIELLA TODDALIAE* sp. nov.(Fig. 1, Image 1<sup>w</sup>)

## Material examined

**Holotype:** 18.vi.2006, on leaves of *Toddalia asiatica* (L.) Lam. (Rutaceae), Mathikettan shola, Kodaikanal, Tamil Nadu, coll. G. Sangeetha, HCIO 47675.

**Isotype:** TBGT 2697.

## Diagnosis

*Coloniae amphigenae, tenues, ad 2mm diam. Confluentes. Hyphae rectae vel subrectae, oppositae, alternatae vel irregulariter acuteque vel laxae ramosae, laxae reticulatae, cellulae 14–24 x 4–8µm. Appressoria alternata, dispersa, unicellularis, ovata vel globosa, integra vel leniter angularis, 9–13 x 6–13µm. Conidiophora non visa. Conidia pallid brunnea, fusiformes, curvula, 3-septata, leniter constrictae ad septata, 24–37 x 11–18µm, attenuatae ad ambi apicem.*

Colonies amphigenous, thin, up to 2mm in diameter, confluent. Hyphae straight to substraight, branching opposite, alternate to irregular at acute to wide angles, loosely reticulate, cells 14–24 x 4–8µm. Appressoria alternate, scattered, unicellular, oval to globose, entire to slightly angular, 9–13 x 6–13µm. Conidia pale

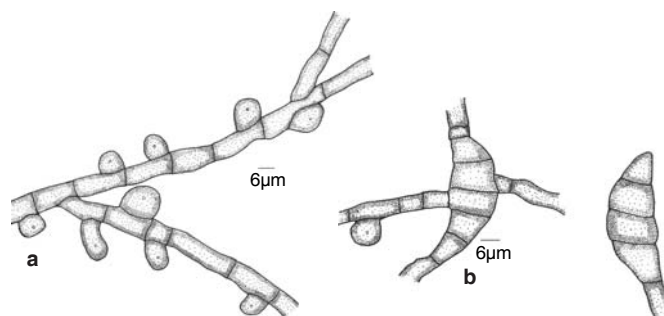


Figure 1. Germinating 3-septate conidia produced appressoriolate mycelium

brown, fusiform, curved, 3-septate, slightly constricted at the septa, distal cells attenuated, 24–37 x 11–18µm.

## Remarks

*Schiffnerula toddaliae* Hansf. is known on this host from Uganda with *Questieriella* anamorph (Hansford, 1941). *Clypeolella toddaliae* Hansf. known on *T. aculeata* from Uganda has only teleomorphic state and has been made synonymous to *Schiffnerula toddaliae* Hansf. (Hughes, 1983, 1987; Hosagoudar, 2003).

The present collection appears to be the synanamorph of the genus *Schiffnerula toddaliae* Hansf. but in absence of the teleomorphs, it is preferred to accommodate it in a distinct entity. Hence, it is placed under a new species.

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## Comparative account with the allied species

Name of the species	Conidiophores	Conidia
<i>Schiffnerula toddaliae</i> Hansf. <i>Questieriella</i> -form	Unicellular, unilateral, similar to appressoria	Falcate, olivaceous brown, acute towards both ends, 3-septate, 35-40 x 10-12µm
<i>Questieriella toddaliae</i> sp. nov.	Conidiophores not distinct	Conidia pale brown, fusiform, curved, 3-septate, slightly constricted at the septa, distal cells attenuated, 24-37 x 11-18 µm

<sup>w</sup> See Image 1<sup>w</sup> in the web supplement at [www.zoosprint.org](http://www.zoosprint.org)

