

***Thielavia achromatica* A. Subrahm. sp. nov.**

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Morphological characters and temperature relations of *T. achromatica* sp. nov. are presented.

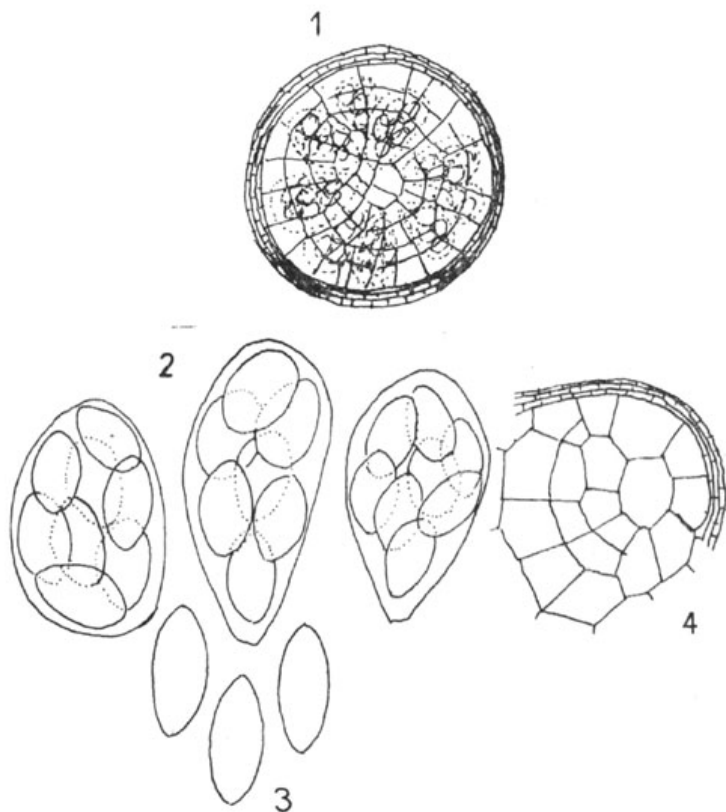
The genus *Thielavia* Zopf. was described as early as 1876 with *T. basicola* Zopf. as the type species. Traditionally the genus is known to possess non-ostilate glabrous ascospores. However in 1973 Malloch and Cain reviewed all the known species and modified the concept of the genus to include the appendaged cleistothecial forms of *Chaetomium* Cain. Since then a few more species have been described by different investigators (Lodha 1974; Seth 1974; Pidoplichko, Kirilenko and Zakharchenko 1973).

During studies on fungi growing in extreme environments a species of *Thielavia* has been isolated at pH 8.0. On comparison it was found to resemble *T. terricola* (Gilman and Abbott) Emmons but appeared distinct by the presence of subglobose to pyriform asci. Therefore it has been accommodated here as a new species. On most of the common laboratory media like PDA, Malt extract agar and YpSs agar it remained predominantly mycelial with a very few or no fruit bodies. Therefore a medium (Sym) containing soluble starch 1.5 g, 80 mg yeast extract, 10 mg magnesium sulphate., 20 mg dihydrogen potassium phosphate, and tap water 100 cc. pH 8.0 was used throughout the study. Monoascosporic cultures were grown at 28 °C for days. Morphological characters along with pH and temperature requirements are presented.

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In 28 °C coloniae in agar SYM hyalinis 90 mm in 10 diebus cleistothecia atribrunnea vel nigra 138–185 μm : asci subglobosus vel pyriformis, 8-spori, hyalinis, evanescentis, 16.5–29.5 \times 16–17 μm ; ascospores atrobrunnea ellipticae, unico poro polari 10.0–14.5 \times 9–10 μm . *Thielavia achromatica* A. Subrahm. sp. nov. (Figs. 1–4).

On SYM agar growth moderate, white, reach 90 mm in 10–12 days at 28 °C. Cleistothecia single or in groups develop by 5th day and mature in another two or three days; reverse colorless without and diffusible pigment. On oat-meal agar thin white submerged mycelial growth



Figs. 1–4. *Thielavia achromatica* sp. nov.

1 — mature cleistothecium ($\times 240$); 2 — asci ($\times 600$); 3 — ascospores ($\times 600$); 4 — portion of peridium ($\times 600$)

develops covering 90 mm in ten days. Slight blackish tinge develops in the centre of the colony indicating the formation of cleistothecia. Reverse colorless without any diffusible pigment.

Mycelium thin, hyaline, septate; conidia not observed; cleistothecia abundant, dark brown to black, globose, nonstiolate, glabrous, single or aggregate, 138-185 μm in diam.; peridium thin, semitransparent, parenchymatous and pale brown; asci subglobose-pyriform hyaline, octosporous, evanescent 16.5-29.5 \times 16-17 μm . Ascospores dark brown, elliptical, one celled, smooth with single germ pore, 10.0-14.5 \times 9-10 μm . Habitat: soil, Pimpri: Poona, India.

HACC No. AS₉ Type culture is deposited at ATCC.

It grows well in the pH range of 6-9 with an optimum pH 8.0. It grows from 24-37 °C with an optimum temperature 28 °C.

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