



Two hyphomycetes new to India

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ABSTRACT

Coremiella cubispora (Berk. & Curt.) M. B. Ellis and *Trichocladium canadense* Hughes are reported from Chandigarh, India. The genus *Coremiella* is reported for the first time from India where as *Trichocladium canadense* is a new specific record for India.

Key Words: Hyphomycetes, *Coremiella cubispora*, *Trichocladium canadense*, India

INTRODUCTION

This is in continuation with our previous reports on microfungi from Chandigarh and adjoining areas (Prasher & Singh, 2012 and Prasher & Verma, 2012). Two interesting hyphomycetes *Coremiella cubispora* (Berk. & Curt.) M. B. Ellis and *Trichocladium canadense* Hughes were isolated from dead stalks of *Polystichum squarrosom*.

MATERIALS AND METHODS

The specimens have been collected from Chandigarh in the year 2010. The dried specimens were placed in polyethylene bags of suitable size, along with the required data viz. collection number, details of locality, host/substrate, date of collection and name of lagator. These specimens were studied microscopically under Matrix stereo trinocular microscope and transmission microscope for macro and microscopic characters. The various mountants/stains (Kirk *et al.* 2008) used for the taxonomical investigation of fungi are: Amann's Lactophenol: Phenol-20 g, Lactic acid-20 g, Glycerol-40 g, distilled water 20 ml; 5% (used for mounting of microscopic structures); Potassium hydroxide: Potassium hydroxide 5 g, distilled water 100 ml (used for micro-chemical tests and softening of the study materials); Melzer's Iodine: Chloral hydrate- 22g, Iodine -0.5 g, KI- 1.5 g, distilled water- 20 ml (used to check amyloidity of the sporulating structures); 1% Phloxine: Phloxin 1 g, distilled water

100 ml (used to stain and observe septation in spores and mycelium). The dried specimens have been deposited in the Herbarium of Botany Department Panjab University, Chandigarh, India (PAN).

RESULTS

Coremiella cubispora (Berk. & Curt.) M. B. Ellis. *Dematiaceous hyphomycetes*: 33, 1971. CMI. Kew Surry. **Fig 1 A-D**

Colonies effuse, coremia up to 780 µm high, 190 µm broad, Mycelium immersed, Stroma pseudoparenchymatous. Conidiophores macronematous, synnematos forming a loose coremia with compound stipe and head, flexuous, irregularly or subdichotomously branched, pale to olivaceous brown, smooth, conidiogenous cell integrated, terminal, determinate, cylindrical. Conidia catenate, schizogenous, simple pale to olivaceous brown, 0-septate, smooth, oblong or cubical, 5.2-8.5 × 4-9 µm.

Collection examined: I. B. Prasher, 29088 (PAN), on dead fern fronds, near fern house Botanical gardens, Panjab University, Chandigarh, 365 m. Dec. 23, 2010.

The description of the specimen resembles the type description as given by Ellis (1971). It is a new generic and specific record for India. The record of this specimen in Bilgrami *et al.* (1991) is from pre-partition Punjab, now in Pakistan.

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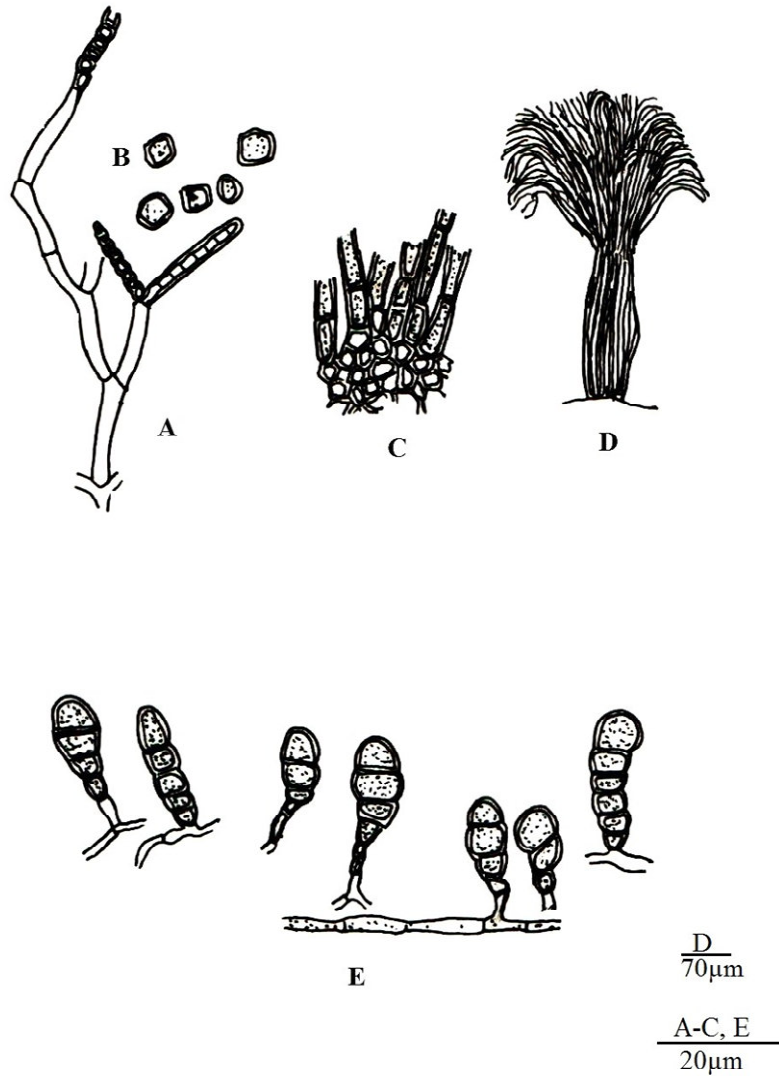


Figure 1. A-E: A-D *Cormiella cubispora* A. conidiophores B. Conidia C. Stroma D. Coremia E. *Trichocladium canadense* conidia and conidiophores

Fig. 1. A-E: A-D *Cormiella cubispora* A. Conidiophores B. Conidia C. Stroma D. Coremia E. *Trichocladium canadense*, conidia and conidiophores

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Trichocladium canadense Hughes, *Can. J.Bot.*, **37**: 857-859. 1959. **Fig. 1 E**

Colonies effuse, black, conidiophores micronematous, mononematous, scattered, loosely branched or unbranched, straight or flexuous, colorless or pale brown, smooth 3-5 μm thick. Conidiogenous cell terminal and intercalary, determinate, cylindrical or doliform. Conidia acropleurogenous, predominantly 1- septate, 2-5 septate, clavate or ellipsoidal, truncate at base, 15-30 μm long, 8-11 μm thick.

Collection examined: I. B. Prasher, 29072 (PAN), on rotten damp wood, near Botany Dept. P.U., Chandigarh, 365 m. July 17, 2010.

The description of the above specimen is within the circumscription of type description (Hughes, 1959). It is a new record for India (Bilgrami, 1991 and Jamaluddin *et al.*, 2004).

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