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NOTE

***EXOSPORIUM MONANTHOTAXIS* PIROZ. (FUNGI: ASCOMYCOTA: PEZIZOMYCOTINA) FROM BILIGIRIRANGAN HILLS, SOUTHERN INDIA**

Rashmi Dubey & Shreya Sengupta

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During the study of fungal diversity under the project “Microfungi of Biligiri Rangaswamy Temple Wildlife Sanctuary, Karnataka”, the authors found a synnematosus fungus on an unidentified twig. On microscopic examination, the fungus was identified as *Exosporium monanthotaxis* Piroz. (Ellis 1976), which was described from Tanzania in 1972 on an annonaceous plant. *Exosporium monanthotaxis* was reported on an unidentified dead twig from Mt. Abu, Rajasthan (Panwar & Chauhan 1976), on an unidentified twig from Adilabad (CBS-H 389), Telangana, in 1983 (Rao & de Hoog 1986), and on the dead twigs of the exotics *Lantana camara* L. and *Delonix regia* L. from Nainital, Uttarakhand (Sharma et al. 1986). Thus, this is the first report of *Exosporium monanthotaxis* Piroz. (cf. Subramanian 1971; Bilgrami et al. 1979, 1981, 1991; Jamaluddin et al. 2004, Maheswari et al. 2012) from the Biligirirangan Hills, Karnataka, India.

Infected unidentified twigs were collected and brought to the laboratory for detailed studies (Image 1). The synnemata were carefully scraped and mounted in hydrous lactophenol cotton blue solution. For photomicrographs, Nikon eclipse 50i Microscope connected with a Nikon DS - Fi 1 camera was used.

Materials examined: 01.iv.2015, on unidentified twig, Biligiri Rangaswamy Wildlife Sanctuary, Karnataka, with collection no. BSI (WC) - 197589 deposited in National Fungal Culture Collection of India (NFCCI), Ajrekar Mycological Herbarium - AMH, with accession no. AMH - 9819.

EXOSPORIUM MONANTHOTAXIS PIROZ. (FUNGI: ASCOMYCOTA: PEZIZOMYCOTINA) FROM BILIGIRIRANGAN HILLS, SOUTHERN INDIA

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There are 13 species of *Exosporium* reported from India. Five of these species form synnemata. They are *E. assamicum* Agnihothr., 1966, *E. monanthotaxis* Piroz. 1972, *E. petersii* (Berk. & M.A. Curtis) U. Braun, 2014, *E. ramosum* M.B. Ellis 1976 and *E. gymnaeae* P.N. Singh & S.K. Singh 2015. A key to these synnemata-forming species of *Exosporium* in India is provided.

In its effuse, dark to blackish-brown, velvety, 3-5 mm colonies formed over the host surface, long and distinct synnemata of 725.9–1491.53 µm height, and prominent scars of conidiophores expanding towards the apices and bearing distoseptate conidia measuring 40.54–65.95 × 14.50–16.88 µm, the fungus closely approaches *Exosporium monanthotaxis* Piroz. Accordingly, it constitutes a new fungal record for the Western Ghats and the state of Karnataka.

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Conflict of Interest: The authors declare no competing interests.

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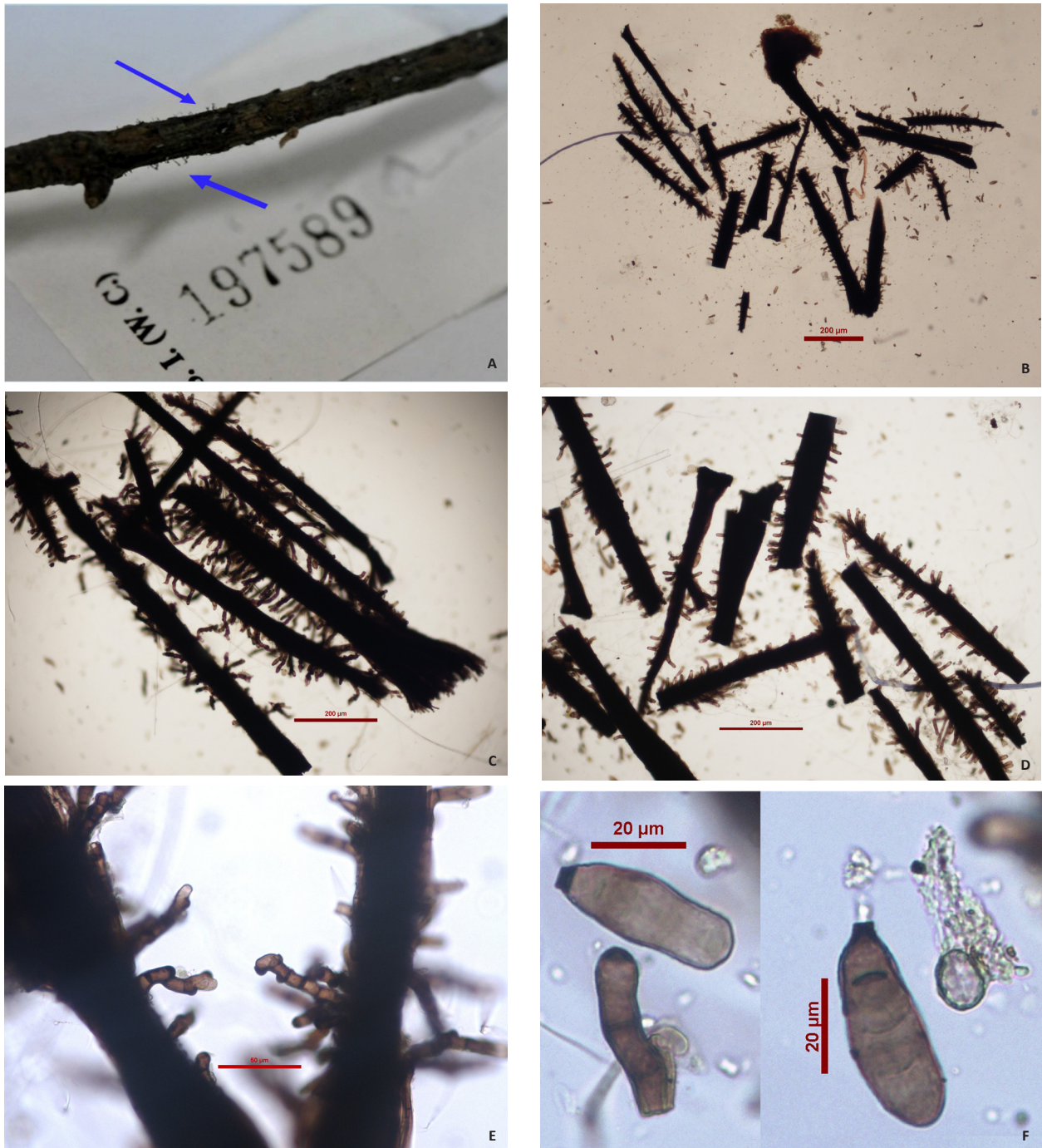


Image 1. *Exosporium monanathotaxis*

A - Unidentified dead twig. Arrows indicating the synnemata; **B–D** - Synnemata variously magnified; **E** - Conidiophores with prominent scars ($\times 400$); **F** - Conidia with dark scar ($\times 400$)

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Key to the synnemata-forming species of *Exosporium*

- | | | |
|-----|---|-------------------------|
| 1. | Conidiophores forming large, distinct synnemata..... | 2 |
| 1a. | Conidiophores fasciculate, not forming large, distinct synnemata..... | 3 |
| 2. | Synnemata up to 1.5mm long, conidiophores 8 – 10 µm wide at apex, scar prominent, conidia 4 (–7)-distoseptate, 40–70 × 15–17 µm..... | <i>E. monanthotaxis</i> |
| 2a. | Synnemata up to 3 mm long, conidiophores 12.5 µm wide at apex, scars forming circular ring, conidia 2 (–15)-euseptate, 21–157 × 16–41.5 µm..... | <i>E. gymnemae</i> |
| 3. | Conidia distoseptate..... | 4 |
| 3a. | Conidia euseptate..... | <i>E. ramosum</i> |
| 4. | Conidia cylindrical to obclavate, large, 140–190 × 24–36 µm..... | <i>E. assamicum</i> |
| 4a. | Conidia obclavate, small, 20–130 × 4–8 µm..... | <i>E. petersii</i> |

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