



Periconia Species New To North- Western Himalayas

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ABSTRACT

Two species of the anamorphic fungus *Periconia* Tode ex Fries were collected from the Himachal Pradesh (North-Western Himalayas). *Periconia lateralis* Ellis & Everh. and *Periconia digitata* (Cooke) Sacc. are being described and illustrated. *Periconia lateralis* is a new record for Himalayas where as *P. digitata* is a new record for North Western Himalayas.

Key Words: *Periconia* spp., anamorphic fungi, Himachal Pradesh, North- Western Himalayas.

INTRODUCTION

During a survey of the micromycete diversity of Himachal Pradesh, two interesting fungi were collected. A detailed study and survey of the literature revealed these to be species of *Periconia* viz. *P.lateralis* and *P.digitata* which have not been recorded earlier from Himalayas (Bilgrami *et al.* 1991 and Jamaluddin *et al.* 2004).

MATERIALS AND METHODS

The specimens have been collected from Jolplakhin (Bilaspur). 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 triocular 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). All the specimens have been deposited in the Herbarium of Botany Department Panjab University, Chandigarh, India (PAN).

Taxonomy

Periconia lateralis Ellis & Everh., 1886, *J. Mycol.*, 2: 104. (Fig.1)

Conidia formed below the sterile, setiform apex and on one side of the conidiophore. Conidiogenous cells borne directly on the stipe and on unilateral branches which sometimes have sterile, setiform apices. Conidiophores often curved, subulate, brown, up to 380 μm long, 10- 17 μm thick at the base, 7-10 μm just above the basal swelling, tapering to 2-5 μm at the apex. Conidia spherical, rather pale brown verruculose or shortly echinulate, 8-12 μm in diameter.

Collection examined: I.B. Prasher, 30112 (PAN), on *Cyanodon dactylon*, Jolplakhin (Bilaspur), 670m, Oct. 10, 2011.

The above collection resembles the type species in morphological details (Ellis 1971). This species has been earlier recorded from Rajasthan, Andaman Island and Madras (Bilgrami *et al.* 1991 and Jamaluddin *et al.* 2004). It is being recorded for the first time for Himalayas.

Periconia digitata (Cooke) Sacc., 1886, *Syll. Fung.*, 4: 274. *P. paludosa* Mason & M. B. Ellis, 1953, *Mycol. Pap.*, 56: 94-98. (Fig. 2)

Conidiophore up to 500 μm long, 8-12 μm thick at the base, 6-9.5 μm immediately below the head, branches seen clearly in mature heads where the conidia are relatively loosely compacted. Conidia spherical brown verruculose to shortly echinulate, 5-10.5 μm in diameter.

Collection examined: I.B. Prasher, 30113 (PAN), on fallen twigs, Jolplakhin (Bilaspur), 670m, Oct. 10, 2011.

The above collection resembles the type species in morphological details except for slightly smaller conidiophore and conidia (Ellis 1971). It has been earlier recorded from Bihar, Rajasthan

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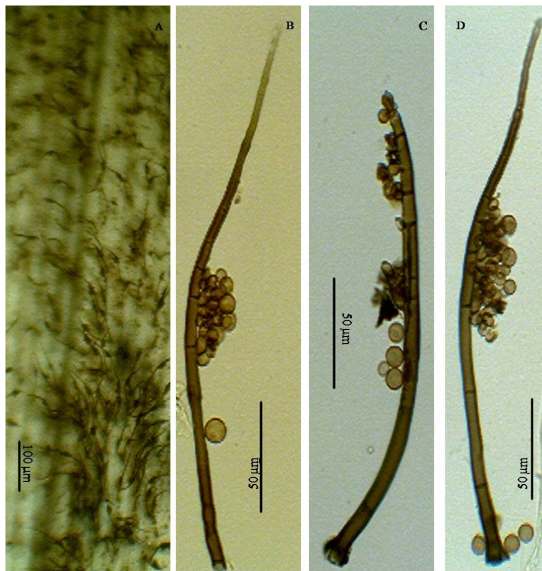


Fig1. *Periconia lateralis* A: Colonies on natural substratum, B- D: Conidiophores bearing conidia laterally.

and from Sikkim – Eastern Himalayas (Bilgrami *et al.* 1991 and Jamaluddin *et al.* 2004). It is new record for N. W. Himalayas.

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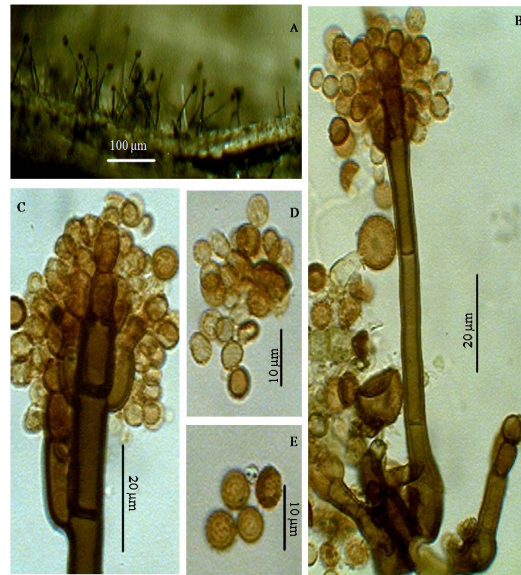


Fig 2. *Periconia digitata* A: Colonies on natural substratum, B: Conidiophore with attached conidia, C: Conidiophore mature head showing branches, D-E: Verruculose to shortly echinulate conidia.

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