A new species of *Corynespora* causing foliar disease on *Ficus religiosa* from forest of Sonebhadra, Uttar Pradesh, India

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A new species of *Corynespora* is described, illustrated and compared to similar species. *C. ficigena* sp. nov. was collected on *Ficus religiosa* (Moraceae) from forest flora of Sonebhadra, Uttar Pradesh, India.

**Key words** – *Corynespora* – Foliicolous hyphomycete – Fungi – Morphotaxonomy – New species

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**Introduction**
During our recent survey (2007–2009) of the forest region of Sonebhadra of District Mirzapur, Uttar Pradesh, a large number of collections showing foliar disease have been encountered. Within these, a new species, *Corynespora ficigena* on *Ficus religiosa* (Moraceae) was found. A description and illustration of the taxon is presented in this paper.

**Methods**
Surface scrapping and free hand cut sections of infected leaf samples, collected from Sonebhadra forests of Uttar Pradesh, were taken through infection spots and mounted in lactophenol cotton-blue mixture for microscopic examination, camera lucida drawing and micrometry. Type specimens have been deposited in Herbarium Cryptogamiae Indiae Orientalis (HCIO), Indian Agriculture Research Institute (IARI), New Delhi and their isotopes have been retained in the departmental herbarium for further reference. Morphotaxonomic comparisons were made with allied taxa and by consulting the current literature pertaining to taxonomy of *Corynespora*. Descriptions and nomenclatural details were deposited in MycoBank (www.Mycobank.org).

**Results**

**Taxonomy**

*Corynespora ficigena* Archana Singh, Sham. Kumar, R. Singh & Dubey sp. nov. Fig. 1

MycoBank MB 801329

Leaf spot amphigenous, subcircular to irregular, spreading on entire leaf surface, necrotic, brown to dark brown, up to 10 mm in diam. Colonies hypophyllous, effuse. Mycelium internal, composed of branched, septate, thin-walled, smooth, subhyaline to olivaceous hyphae. Stromata absent. Conidiophores macronematous, mononemato-
Fig. 1 – Corynespora ficigena. 1 Infection spots 2 Conidiophores. 3 Conidia. Bars a= 20 mm, b= 20 µm.
tous, arising singly from hyphae, erect, straight to flexuous, smooth, thick-walled, cylindrical, branched, pale brown to brown, up to 10-septate, 2–4 successive, cylindrical, terminal proliferations, dark brown 135–400 × 6–8 µm. Conidiogenous cells integrated, terminal or intercalary, monotretic, smooth, cylindrical, scars unthickened, swollen towards apex. Conidia acrogenous, solitary, simple, dry, thin-walled, smooth, straight to slightly curved, obclavato-cylindrical, 7–13-distoseptate, apex obtuse, base obclavate, light olivaceous brown, hilum unthickened, germinating conidia with germ tube are observed, 90–165 × 9–20 µm.

Type – On living leaves of Ficus religiosa L. (Moraceae), Sonebhadra, (U.P.), India, Nov. 2009, coll. Archana Singh BHU Herb No. 9098 (isotype), HCIO 50142 (holotype).

Etymology – ficigena in reference to the host genus.

Perusal of literature revealed that two species of Corynespora viz. C. fici-altissimae X.G. Zhang & J.J. Xu (Zhang & Xu 2005) and C. fici-benjaminae H.B. Fu & X.G. Zhang & Zhang (Zhang et al. 2009) have been described on the host genus. Hence, the morphology of the new species was compared with these two taxa. From comparison, it is clear that the conidiophores are unbranched in C. fici-altissimae and C. fici-benjaminae while branched in C. ficigena. The conidiophores of C. ficigena are smaller (135–400 × 6–8 µm) with fewer proliferations (2–3) than in C. fici-altissimae (30–65 × 5–6 µm) and C. fici-benjaminae (152–467 × 5.5–11 µm). The conidia are longer (90–165 × 9–20 µm) in C. ficigena than C. fici-altissimae (55–85 × 9–12 µm) and C. fici-benjaminae (51.5–71 × 8–11 µm). The conidia of C. ficigena have 7–13 distosepta while C. fici-altissimae has 11–18 and C. fici-benjaminae has 5–10.

Therefore, the present species merits recognition as a new taxon.

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