

STUDY ON HYPHOMYCETES GENUS *Corynespora crotonicola* CAUSING LEAF SPOT DISEASE FROM FOREST FLORA OF NORTH UTTAR PRADESH

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ABSTRACT

This paper is devoted to the description and illustration of *Corynespora crotonicola* occurring on living leaves of *Crotonis banplandianum* (Euphorbiaceae). These species has been collected from forest flora of North Uttar Pradesh.

KEYWORDS : *Corynespora crotonicola*, Forest flora , North Uttar Pradesh.

The genus *Corynespora* was established by Gussow, 1906) without assigning the type species, which was re-established by Wei, 1950 as *Corynespora cassiicola* (Berk, & Curt.) The fungus was found to be associated with *Cassia* sp. L.. Some contributions have been made by our resident mycologists such as, Saikia and Sarbhoy, 1980; Meenu and Kamal , 1997 and Meenu et al., 1997 .

The genus now contains 71 species described from all over the world .of these only 14 species were earlier reported from Indian subcontinent. Most recently, Sivanesan (1996) isolated an ascomycete from *Caryota urens* bearing *Corynespora* like conidial apparatus, which he named as telcomorphic genus *Corynespora caryotae* Gen et. sp. nov. collected in Sri Lanka. For this he described a new family *Corynesporascaceae* Fam.nov. No species of *Corynespora* was reported to have its teleomorph before him.

MATERIALS AND METHODS

Infected leaf samples were collected from forest areas of North Uttar Pradesh. The host plants were tentatively identified in the field and their identities were confirmed later in the laboratory. From the fresh collection scraping and hand cut section in lactofuchsin mounts were prepared for the examination of taxonomic characters .Taxonomic determination were made with the help of standard literature keeping in view the current concepts about the organism described and by the expertise available in the Department. Detailed taxonomic study was done with the help of compound microscope and cameralucida drawings.

RESULTS AND DISCUSSION

C. Crotonicola sp. nov.

Maculae amphigenae, subcirculares, brunneae vel fusco brunneae ad superne. Colnoiae hyphophyllae, atro brunneae. Mycelium ex hyphis internum, septatis, laevibus, ramosis, pallide olivacea. Stromata nulla. Conidiophora macronematosa, mononematosa, erecta vel raro flexuosa, simplicia vel ramosis, cylindrica laeves, crassitunicata, 1-4 septata, pallide brunneae vel olivaceae, brunneae 40-158 µm. Cellulae conidiogenae integratae, terminales, cicatrix incrassata. Conidia solitaria, primo in apice, recta vel curvata, obclavata, subhyalina vel pallide, olivacea, ad apicem, subobtusa vel obtusa, ad basim, 2-17 pseudoseptata, hila incrassata, 17.5-106.5X3.8-9.0 µm.

Leaf spots amphigenous, subcircular, light brown to tar like on upper surface. Colonies hypophyllous, dark brown. Mycelium of hyphae internal, septate, thin smooth walled, branched, light olivaceous. Stromata absent. Conidiophores macronematous, mononematous, simple to branched, cylindrical, smooth, thick walled, 1-4 septate, light brown to olivaceous brown, 40-158X3-5 µm. Conidiogenous cells integrated, terminal, unthickened scars. Conidia arising singly through a pore that the apex of conidiophores, acrogenous, simple, thin walled, smooth , straight to curved, obclavate, subhyaline to very light olivaceous, apex subobtuse to obtuse, base slightly obclavate, 2-17, pseudoseptate, hilum unthickened, some conidia producing germ tubes from the base and apex both, 17.5-106.5X3.8-9.0µm. (Figure,1).

On the living leaves of *Croton banplandianum* Linn. (Euphorbiaceae); Dec.2001, SNC Herb No.2000/68 IMI-284670 Azamgarh.

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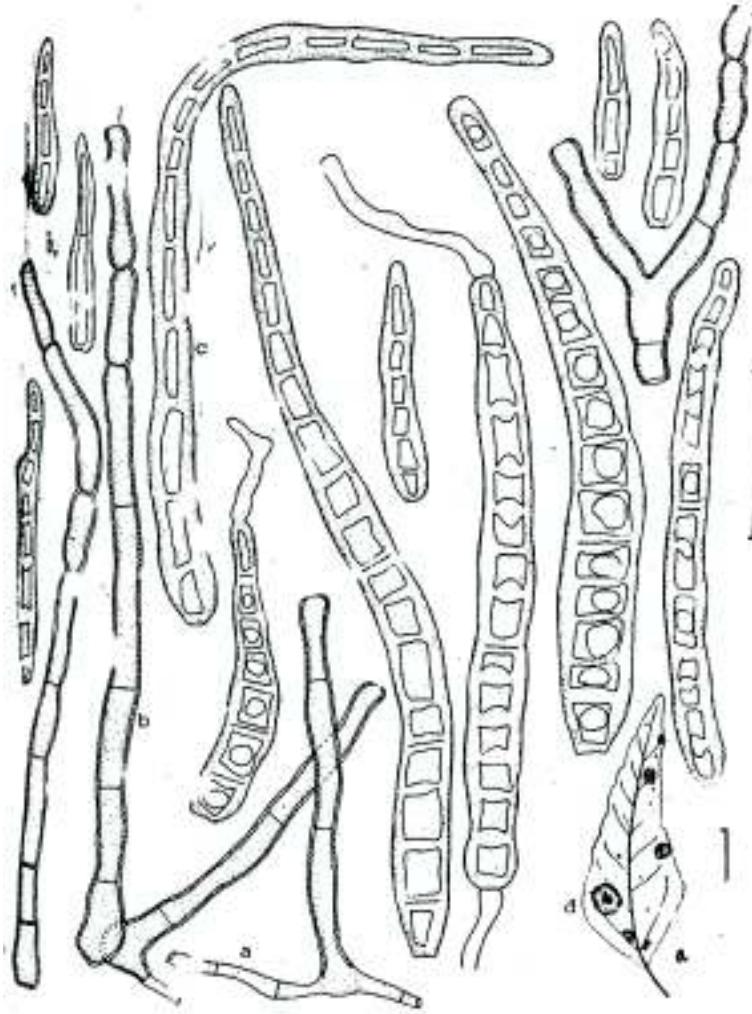


Figure 1 : *Corynespora crotonicola*

a. Hyphae , b. Conidiophores, c. Conidia, Bars : a-c=20µm

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