
Two follicolous hyphomycetous fungi from West Bengal

D. HALDAR,* A.K. DAS, J.B. ROY AND B.K. CHATTOPADHYAY

Mycology Research Laboratory, Department of Botany, Presidency College, Calcutta 700 073

Two species of leaf inhabiting hyphomycetous fungi viz. *Cercospora solani* de Thuemen and *Cercospora mikaniae* Ellis & Everhart have been collected from the district of Murshidabad, West Bengal and these are worked out in details in the laboratory. They are described and illustrated here.

Key words : *Cercospora*, taxonomy, West Bengal

INTRODUCTION

In this paper an attempt has been made to study the fungal taxonomy of two species of *Cercospora*, namely *C. solani* and *C. mikaniae* reported on *Solanum nigrum* Linn. and *Mikania scandens* (L.) Wild respectively. The fungi were collected from the district of Murshidabad, West Bengal during January 1996 to August 1996. The freshly collected specimens were sent to Indian Agricultural Research Institute (IARI), New Delhi, for proper identification. The specimens were deposited in the herbarium, Mycology laboratory, Department of Botany, Presidency College, Calcutta.

Description

Cercospora solani de Thuemen. Hedwigia 19 : 135. 1880.

- = *Cercospora solani* Feuilleaubois Rev. Mycol. 6 : 231. 1884.
- = *Cercospora nigreseens* Winter, Bol. Soc. Broter. Coimbra 3 : 60. 1885.
- = *Cercospora feuilleaubiosii* Saccardo, Syll. Fungorum 4 : 449. 1886.

(Fig. 1)

Incidence in rainy season, spots formed on lamina, on both the corresponding surfaces, distinct, circular to subcircular, sometimes irregular, greyish centre surrounded by thin brown to dark brown margin, 1-4mm. in extent; caespituli amphigenous, chiefly hypophyllous, dark brown; stromata not well developed, brown; conidiophores fasciculate, 3-25 in a fascicle, olivaceous brown, to light brown,

* C. C. Hindu Vidyapith, Desbandhunagar, Calcutta 700 059

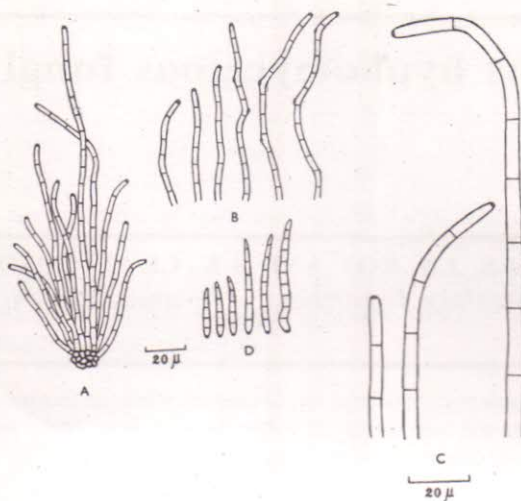


Fig. 1. *Cercospora solani*
 A, Conidiophore fascicle;
 B & C, Conidiophores;
 D, Conidia;

paler and narrower towards the tip, very poorly geniculate, once geniculate in some cases, septate, usually simple, rarely branched, spore scar present lying by the side wall or at tip of the conidiophores, 5-7 x 25-95 μm ; conidia acicular, hyaline, shiny, straight to mildly curved, multiseptate (3-9) base truncate to obconic truncate, tip subobtusate to subacute 4.5 - 7x50-140 μm .

Specimen studied : On the living leaves of *Solanum nigrum* Linn. (fam. Solanaceae), Murshidabad, West Bengal, India, PCC 6102 (= IARI 3298a.97) leg. D. Haldar, June 25, 1996.

Review of literatures (Bilgrami *et al* 1991; Mukherjee, and Bhasin 1986) show that *Cercospora solani* has already been reported from the state of Bihar and Karnataka. Hence, the specimen is first time reported from the state of West Bengal.

Cercospora mikaniae Ellis & Everhart Proc. Acad. Nat. Sci. Phila. Part I. 43 : 90. 1938.

= *Cercospora temnischae* Ciferri, Ann. Mycol. 36 : 235. 1938

(Fig. 2)

Incidence in rainy season, spots formed on lamina, distinct, irregular, circular to angular, vein-limited, greyish brown centre surrounded by light brown margin, 1-3 mm extent, occasionally coalescent; caespituli amphigenous, chiefly hypophyllous; stroma lacking; conidiophores fasciculate, in fascicle 3-10 divergent stalks coming out through the stomata, sometimes more, light brown, gradually paler towards the

apex, straight to curved, simple to branched, smooth and thick walled, entire or geniculate, pluriseptate, distinct conidial scar lying either at the tip or by the side wall of the conidiophores, $4.2 - 5.5 \mu\text{m} \times 63 - 280 \mu\text{m}$; conidia obclavate cylindrical to cylindrical, usually straight, rarely curved, pale olivaceous green, septate (2-5), smooth and thick walled, base obconically truncate, tip subobtuse, $5.5 - 9 \times 30 - 95 \mu\text{m}$.

Specimen studied : On living leaves of *Mikania scandens* (L.) Wild., (fam. Asteraceae), Murshidabad, West Bengal, India, leg. D. haldar, PCC 6115 (= IARI 3298b.97), June 25, 1996.

Review of literatures (Bilgrami *et al.*, 1991; Mukherjee, and Bhasin, 1986) revealed that there is no report of this fungus from India. So, the specimen is first time reported from India.

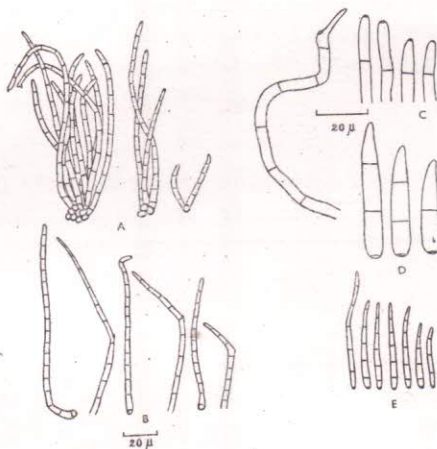


Fig. 2. *Cercospora mikaniae*
A, Conidiophores fascicles;
B & C, Conidiophores;
D & E, Conidia;

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