

***Cercospora helminthostachydis* P. Henn in Yorakhpur, India.**

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With 1 Textfig.

A few plants of *Helminthostachys zeylanica* Hook. showing leaf spots were collected from Kushmi forest situated at about eleven kilometers east of Gorakhpur town during October 1959.

The spots first appear as small, circular, light brown discolorations on the lower leaf surface but soon enlarge and become dark brown to black measuring 0.2—1 cm. Old spots are circular to oval or rarely irregular. They usually remain distinct but sometimes coalesce

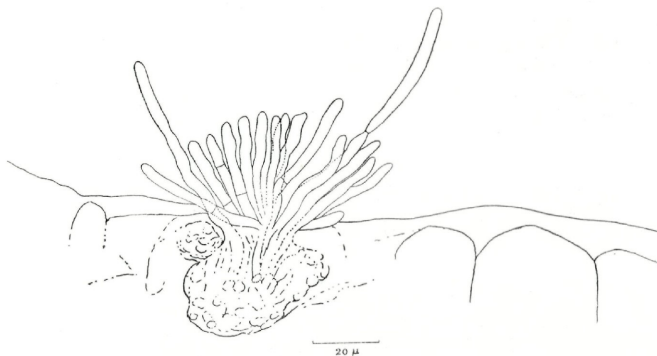


Fig. 1. Section of leaf showing conidiophores and stroma of *Cercospora helminthostachydis*.

forming larger spots. On the upper surface of the leaf these spots are light brown to greyish brown in colour.

Mycelium is endophytic, primarily intercellular but in older spots the whole mesophyll tissue seems to be filled with brown coloured mycelium. There are not haustoria. The hyphae are sparsely septate and branched measuring 2.0—4.6 μ in diameter. Hyphae extend for some distance beyond the spots and are also visible in the midrib parenchyma. The mycelium collects in substomatal cavity and forms rounded pseudoparenchymatous mass from which arise a cluster of

conidiophores. All conidiophores emerge through the stomata: in no instance were they observed to emerge by breaking through the cuticle. (Fig. 1).

The conidiophores are light brown, unbranched, sparsely septate, not geniculate, straight to sinuous $3-4.6 \mu$ in diameter and $31-58.5 \mu$ in length.

Theo conidia are hyaline when young but light pale when old, cylindrical, somewhat tapering at one end, straight to curved, tips blunt, $3-10$ septate indistinct $3-4.4 \mu$ in diameter and $27.3-89.7 \mu$ in length.

The above description agrees pretty well with the description of *Cercospora helminthostachydis* P. Henn. given by Hennings (1908) in its essential characters except that the measurements of spots, conidiophores and conidia given in the original description are $2-4$ mms., $3-5 \times 10-65 \mu$ and $4-6 \times 40-100 \mu$ respectively.

As far as the writers have been able to determine this is the first collection of this species in India and second in the world, the earlier collection being from Davao, Mindanao, Phillipines (Chupp, 1953).

Grateful thanks are due to Mr. F. C. Deighton, Commonwealth Mycological Institute, Kew for kindly examining the material and for helpful suggestions. They are also much indebted to Dr. F. Müller, Zürich for kindly going through the manuscript.

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Zoologisch-Botanische Datenbank/Zoological-Botanical Database

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Zeitschrift/Journal: [Sydowia](#)

Jahr/Year: 1961/1962

Band/Volume: [15](#)

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Artikel/Article: [Cercospora helminthostachydis P. Henn in Yorakhpur, India. 231-232](#)