

*pubescens*¹ in forming synnemata. However, it is distinct from these and other known species in producing conidia which are mostly curved. Hence it is described as a new taxon.

The authors are grateful to the Director, CMI, Kew, England for confirming the identity of the fungus; to the Head, Department of Botany, University of Gorakhpur for facilities and to CSIR, New Delhi for financial support to AKS.

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A NEW SPECIES OF *CERCOSPORIDIUM* FROM INDIA

K. K. SONI, V. S. DADWAL and JAMALUDDIN

Regional Forest Research Centre, P. O. Bilahari, Jabalpur 482020, India.

DURING our studies on parasitic fungi of Madhya Pradesh forests, a parasitic fungus was collected on the leaves of *Helicteres isora* L. from Amarkantak forest. Microscopic examination revealed it to be a species of *Cercosporidium* which differed from the known species of *Cercosporidium*^{1, 2}. Its main distinguishing characters are continuous stromata, epiphyllous conidiophores emerging out as fascicles and the presence of conidia with tubular apex (figure 1). There is no previous record of *Cercosporidium* parasitizing leaves of *H. isora* or any other species in the family *Sterculiaceae*^{3, 4}.

Cercosporidium helicteri sp. nov.

Colonies epiphyllous, effuse, irregular, dark brown; mycelium immersed; stromata continuous, poorly developed; conidiophores developed on the loosely arranged light coloured cells of stroma, fasciculate, simple, sometimes branched, sub-hyaline or with faint greenish tinge, geniculate, conidiogenous cells integrated, conidial scars thickened, 75–450 × 5–7.5 μm in size; conidia solitary, sub-hyaline with faint greenish tinge, dry, broadly fusiform, smooth with a conspicuous thickened hilum, relatively pale brown, 1 to 5-celled; conidial apex tubular, 20–50 × 7.5–12.5 μm in size.

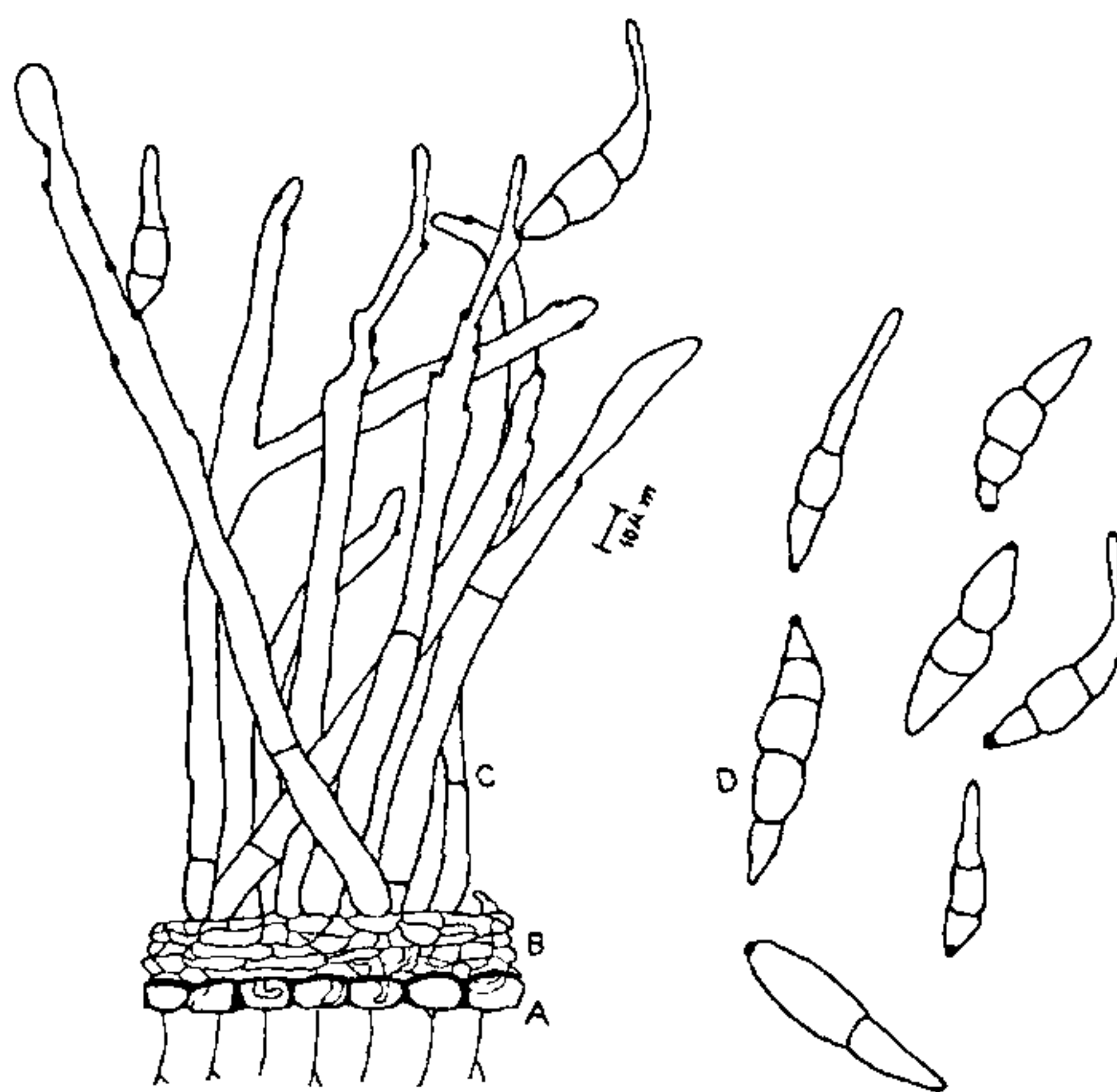


Figure 1A. Host epidermis, B. Stromata C. Conidiophore, D. Conidia.

On living leaves of *H. isora* L. (*Sterculia ceae*) Amarkantak forest (M.P.) dated October 1980. Deposited at CMI Herbarium, Kew, England, IMI No. 259866.

Cercosporidium helicteri sp. nov.

Coloniae epiphyllous, effusae, irregulares, fusce brunneae; mycelium immersum; stromata continua, pauciformata; conidiophori prolati in cellulis pallide coloratis et laxe dispositis stromatis, fasciculati, simplices, interdum ramosa, subhyalini vel exigue subvirides, geniculati; cellulae conidiogenosae integratae, cicatrices conidiales crassatae, 75–450 × 5–7.5 μm; conidia solitaria, subhyalina cum tinctura tenuiter subviridi, arida, late fusiformia, laevia cum hyloconspicuo et crassato, potius pallide brunnea, 1–5 cellulata; apex conidialis tubulatus, 20–50 × 7.5–12.5 μm.

In foliis vivis *H. isora* L. (*Sterculiaceae*) ex Amarkantak Forest (M.P.).

The authors thank Dr Dierckx of St. Xavier's College, Ranchi for latin translation of the description of the fungus and also the Director, C.M.I., Kew, England for confirmation of the identity of the genus.

30 January 1984; Revised 24 April 1984

1. Ellis, M. B., *Dematiaceous Hyphomycetes*, Kew, CMI 1971, p. 608.

2. Ellis, M. B., *More Dematiaceous Hyphomycetes*, Kew, CMI 1976, p. 507.
3. Bilgrami, K. S., Jamaluddin and Rizwi, M. A., *Fungi of India. Part I List and References*. Today and Tomorrow's Printers and Publishers, New Delhi 1979 p. 467.
4. Bilgrami, K. S., Jamaluddin and Rizwi, M. A., *Fungi of India, Part II Host index and Addenda*. Today and Tomorrow's Printers and Publishers, New Delhi, 1981, p. 268.

***SPIRULINA MENEGHINIANA* ZANARD EX GOMONT VAR. *CRASSA* VAR. *NOV.* FROM WEST BENGAL**

DEBAPRIYA MUKHERJEE

Department of Botany, Ramananda College,
Bishnupur 722 122 (Bankura) India.

DURING the survey of the algal flora of Bankura (West Bengal), an interesting variety of *Spirulina meneghiniana* named as *Spirulina meneghiniana* var. *crassa* var. *nov.* was found and is described. The type material was deposited in the herbarium of the Department of Botany, Ranchi University, Ranchi, Bihar, under No. D.M./21.

Spirulina meneghiniana var. *crassa* var. *nov.* (figure 1)

Trichome amidst other algae, free floating, bright blue-green, flexuous, 3–4 μ broad; spirals irregular, away from each other, 6.5–9.5 μ broad and 6.5–15 μ distant from each other. Collected from the paddy fields of Bishnupur and Kotalpur (Bankura district), West Bengal.

Latin diagnosis:

Spirulina meneghiniana Zanard ex Gom. var. *crassa* var. *nov.* (figure 1).

Trichomata inter alias algas, 3–4 μ lata, libera, splendide caeruleo-viridia, flexuosa; spirae irregulares,

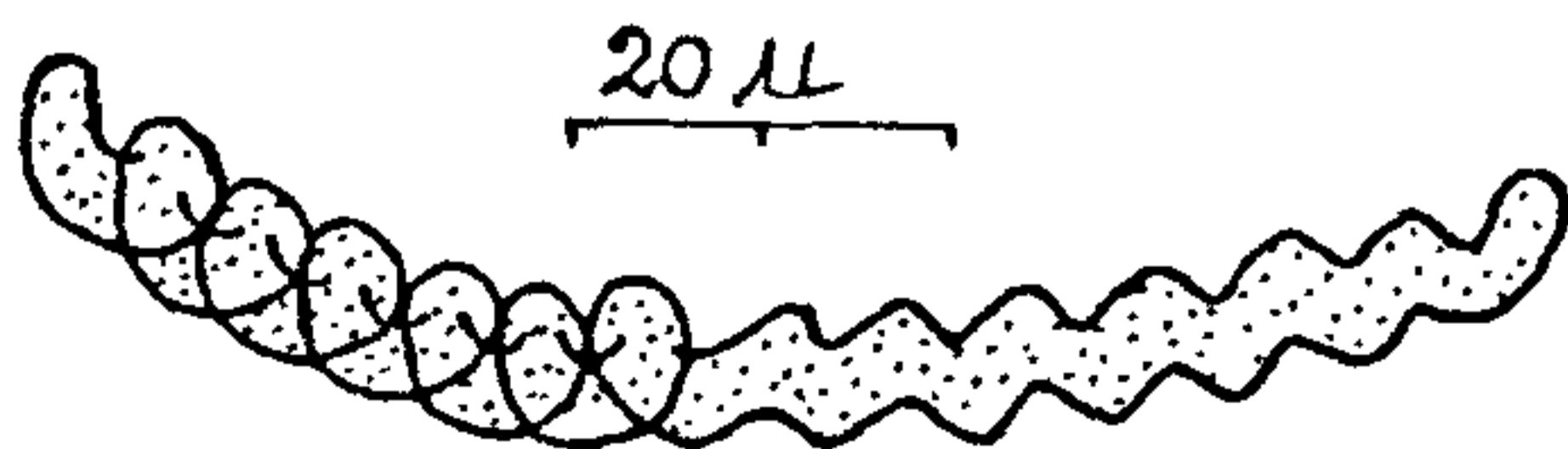


Figure 1. Camera lucida drawing of *S. meneghiniana* var. *crassa* var. *nov.*

invicem aversae, 6.5–9.5 μ latae et 6.5–15 μ inter se distantes.

Typus lectus a D. M. Sub numero 21, ad locum India, Benghala Occidentalis, Bishnupur, Kotalpur, die 2.10.1977, et positus in herbario, Sectione botanica, Universitatis Ranchiensis, Bihar.

The present taxon simulates *S. meneghiniana* Zanard ex Gom.^{1,2}, in irregular spirals that are away from one and another but differs in breadth of trichomes which are 3–4 μ in the present alga, from the type species which ranges from 1.2–1.8 μ broad. Further, the spirals are 6.5–9.5 μ broad as against 3.2–5 μ broad in the type. The distance between the spirals is 6.5–15 μ as compared to 3–5 μ .

This alga also differs from *S. meneghiniana*¹ in having broader trichomes, greater breadth and distance of spirals as compared to the form described by Desikachary¹. The form presently described is therefore regarded as a new variety of *S. meneghiniana* and named as *S. meneghiniana* Zanard ex Gom. Var. *crassa* var. *nov.*

The author is grateful to Prof. J. P. Sinha, Ranchi University, Ranchi, for his help and encouragement. He is indebted to Dr. S. Pandey, St. Xavier's College, Ranchi for his personal help and also to Rev. Father Diereckx of the same college for the latin diagnosis of the taxon.

9 March 1984; Revised 7 May 1984

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2. Geitler, L., *Cyanophyceae in Rabenhorst's Kryptogamenflora*, Leipzig, 1932, Band-14.

NUCLEAR ALIGNMENT AND FUSION IN REGENERATING MUSCLE FIBRES OF MICE INJECTED WITH XYLOTOX

S. S. KATOCH and H. V. VAIDYA

Department of Biosciences, Himachal Pradesh University,
Simla 171 005, India.

INTRAMUSCULAR injections of local anesthetics produce a variety of degenerative changes in the skeletal muscle^{1–5} followed by its regeneration^{1,6}. This degeneration/regeneration process following local anesthetics administration has been well documented as far as histological alterations in skeletal muscle fibres are