A New Plant Parasitic Species of Synnematium from India 1)

By R. V. Hiremath, K. Fazalnoor and K. H. Anahosur College of Agriculture, Dharwar — 5 (India)

During their recent visit to the forests of Dandeli the authors noticed severely blighted plants of Sida rhombifolia L. The twigs and the main stem were the most affected of the plant. The symptoms were manifested in the form of a white growth on twigs and stem coupled with characteristic and distinctively visible black erumpent heads of stromatic bodies of the fungus. Microscopic examination of the bodies revealed the presence of synnemata on the surface of which hyaline phialides bearing heads of conidia at their tips were present. On the basis of these characters it was diagnosed as a species of Synnematium Speare. This genus was established by Speare in 1920 with the type S. jonesii, parasitic on insects. All the species of Synnematium hitherto described are entomogenous (Petch, 1937, Mains, 1951 and Nagaraja and George, 1962). As the present collection is a plant parasite being collected on living plants, it is a first record. Therefore, a comparative study was carried out between the type species and the present collection. The results are given in Table I.

Table I: Comparison of species of Synnematium

Species	S. jonesii	S. dandalense
Synnema	2—3 mm long	upto 1 mm
Phialides	40-50 ×	12.5—37.0 μ
	2.5—4.0 μ	long
Conidia	8—10 μ	2—3 μ long,
	oblong,	cylindrical-
	hyaline to	oblong
	pale brown	
Conidial	80—250 μ	9.5—31.0 μ
head	diam.	diam.
Host	Insects	Plants

The present collection differs form the type species in morphological characters as well as in host relationship. The authors' collection is therefore accommodated into a new taxon, the description of which is given below.

¹⁾ Accepted for publication in 1973 by Dr. F. Petrak.

Synnematium dandalense Hiremath, Fazalnoor et Anahosur sp. nov.

Synnemata primum albida postea obscure brunnea, simplicia, erumpentia, numerosa, 1 mm longa ex hyphis longitudinalibus composita; phialidae numerosae, in apice synnematis, hyalinae, superne attenuatae, 12.5—37 μ longae; capitula conidiorum terminalia, globosa, subhyalina, 9.5—31 μ diam.; conidia cylindracea vel oblonga, hyalina vel subhyalina, continua, 2—3 μ longa.

Synnemata first white becoming dark-brown, simple, erumpent, numerous, 1 mm long consisting of longitudinal hyphae. Phialides numerous on the head of synnemata, hyaline, long, tapering towards tip bearing conidial heads terminally, 12.5—37.0 μ long. Conidial heads spherical, subhyaline, 9.5—31 μ diam. Conidia cylindrical to oblong, hyaline to subhyaline, unicellular 2—3 μ long.

Habit: Parasitic on the stems of *Sida rhombifolia* L., collected by K. H. Anahosur, R. V. Hiremath and K. Fazalnoor at Dandeli (Mysore State) on 1.11.1971.

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Autor(en)/Author(s): Hiremath R. V., Fazalnoor K., Anahosur K. H.

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