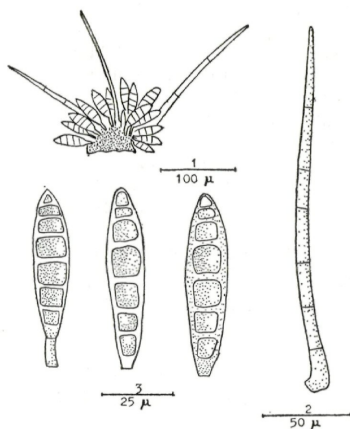


## Studies on Tuberculariaceae of Hyderabad-I.

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The authors have been working on the morphology and structural development of members belonging to Melanconiaceae, Dematiaceae and Stilbaceae collected on various substrata of ecological significance and periodical divergence, but Tuberculariaceous forms with their characteristic sporodochial fructifications could not be considered. However,



*Excipularia nigroseptata*. — 1. Sporodochium, 2. Seta, 3. Conidia.

the authors (1964) described some species of *Berkleasium* Zobel., which was a first Indian record and in this series they propose to record, or describe members of Tuberculariaceae collected from Hyderabad-A.P. India.

*Excipularia fusispora* Sacc., (= *Excipula fusispora* B. & Br. 1859 in Ann. nat. Hist. III 359) the type was redescribed by Saccardo in

1884 (Sylloge Fungorum III p. 689) growing on *Clematis vitalba* from Britain. Later, Hennings (1905) described a second species viz., *E. epidendri* while *E. narsapurensis* was collected and described from Narsapur forest by Subramanian (1956). During our routine collection of Hyphomycetous fungi, we have come across a *Excipularia* which on observation revealed to be new and is described here. It is of interest to note that of the four species of *Excipularia*, the two Indian forms, viz., *E. narsapurensis* and *E. nigroseptata* described in this communication are known from Hyderabad (S. India).

***Excipularia nigroseptata* sp. nov.**

This fungus forms black superficial pin head sized colonies on the substratum. The sporodochia are sessile, setulose with a basal parenchymatous stromatic tissue, which is subhyaline to hyaline. Sporodochia measure 162—2252  $\mu$  across 36—72  $\mu$  in length. Setae are 135—270  $\mu$  long, dark brown to black brown, simple 7.2—12.6  $\mu$  broad, pointed at apex and septate. The distance between the septa measures upto 25.2  $\mu$ . Each sporodochium is observed to possess 3—6 setae. The conidiophores which arise from the basal stromatic tissue are simple, cylindrical, hyaline to subhyaline, continuous 3.6—7.2  $\mu$  long and 3.6—5.4  $\mu$  broad. Conidia are produced acrogenously and singly from the tips of the conidiophores. They are golden brown at first, becoming blackish brown with age. Conidia are 46.8—61.2  $\mu$  long, 10.8—14  $\mu$  broad in the middle and upto 7.2  $\mu$  at their ends, fusiform 6—7 septate commonly (rarely 5 septate) attenuated at septa. The basal and apical cells of the conidia are subhyaline while the remaining are uniformly coloured with thick, black septa, which is a diagnostic feature of this species.

This fungus is *Excipularia* Sacc., and differs from its species known in conidial measurements, their septation, and other characters. Hence a new species *E. nigroseptata* is being proposed, indicating the thick black septa of the conidia.

A comparative statement of the known species of *Excipularia* and the present fungus is given below for ease of reference.

	<i>Sporodochia</i>	<i>Setae</i>	<i>Conidia</i>
<i>E. fusispora</i>	70—120 $\times$ 70—120 $\mu$	60—90 $\times$ 3—4 $\mu$	6—9 septate 36—48 $\times$ 4—6.5 $\mu$
<i>E. epidendri</i>	60—90 $\mu$ in diam.	70—80 $\times$ 3—4 $\mu$	3—4 septate 12—30 $\times$ 4—5 $\mu$
<i>E. narsapurensis</i>	210—420 $\mu$ across 98—140 $\mu$ long	upto 280 $\mu$ long 10.2—8.5 $\mu$ broad	6—8 septate 61—73 $\times$ 20.4—22.1 $\mu$
<i>E. nigroseptata</i>	162—252 $\mu$ across 36—72 $\mu$ tall	135—270 $\mu$ long 7.2—12.6 $\mu$ broad	6—7 septate (rarely 5) 46.8—61.2 $\times$ 10.8—14.4 $\mu$

Collected on unidentified woods from Hyderabad on 15-8-66 Coll. D. R. Herb. Hyd. V. V. C. B. L. No. 401.

*Sporodochia gregaria*, superficialia, hypostromate pseudoparenchymatico, hyalino vel subhyalino, supra convexo, basi late applanato sessilia, 162—252  $\mu$  diam., 36—72  $\mu$  alta; setae 3—6 in quoque sporodochio, rectiusculae vel leniter arcuatae, obscure brunneae vel atro-brunneae, paulatim attenuatae et acutiusculae, 135—270  $\mu$  longae, prope basim 7.2—12.6  $\mu$  crassae, septatae, septis usque ad 25.2  $\mu$  distantibus; conidiophora hypostromatis superficiem obtegentia, cylindracea, hyalina vel subhyalina, continua, 3.6—7.2  $\times$  3.6—5.4  $\mu$ ; conidia acrogena, primum aureo-brunnea, postea atro-brunnea, fusiformia, 6—7  $\mu$ , raro 5-septata, 46.8—61.2  $\times$  10.6—14  $\mu$ , septis crassiusculis, atris, cellulis apicalibus et basalibus subhyalinis, ceteris coloratis.

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