

Chaetosphaeria poonensis Sp. Nov. from India.

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With 1 Textfig.

In the course of her routine mycological surveys for new ascomycetes fungi the writer collected an interesting fungus on dry twigs of *Allamanda cathartica* L., a common ornamental plant growing in the University campus, Poona during the rainy season of 1962. In gross appearance, the infection resembled sooty mould, which however on closer examination, was found to be an ascomycete belonging to the order *Sphaeriales* and was later identified as species of the genus *Chaetosphaeria* Tul. through the courtesy of Dr. Muller of Institute of Special Botany, Zürich, Switzerland.

The genus *Chaetosphaeria* Tul. was established by Tulsane (1863) with *C. innumera* (Berk and Berl.) Tul. as a type collected as a saprophyte on dead twigs of *Quercus* from Versailles, France. Although the genus is represented by several known species, only two have been reported from India; viz. *C. indica* (Niessl, 1881) on *Alangium decapetalum* collected from Calcutta, and *C. dickasonii* Wehmeyer on *Arenaria kashmirica* Edgew from Kashmir (Wehmeyer, 1963).

The Poona collection of *Chaetosphaeria* obtained on *Allamanda cathartica* L. was found to differ significantly from the type and other Indian species of the genus, in respect of morphological characters and dimensions, besides being collected on a hitherto unreported host as can be seen from the results tabulated in the table.

Species	Perithecum	Ascus	Ascospores
1. <i>C. innumera</i> Tul.	100—200 μ	80 $\times$ 6,5 μ	13 $\times$ 4 μ
2. <i>C. indica</i> Niessl		40—45 $\times$ 9—12 μ	12 $\times$ 3 μ
3. <i>C. dickasonii</i> Wehmeyer	250—350 μ	75—90 $\times$ 16 μ	35—46 $\times$ 11—12,5 μ
4. <i>C. poonensis</i>	180—288 $\times$ 144—273,6 μ	68—97 $\times$ 10—21 μ	63—65 $\times$ 7,5 μ

These figures show that while the Poona species is distinct in many respects from either the type or *C. indica*, it has some resemblance to *C. dickasonii* Wehmeyer. A closer examination, however,

would reveal that it has significantly longer and thinner ascospores and perithecial-setae which are septate and unbranched dark brown unlike in *C. dickasonii*.

The fungus is also distinct from the closely allied genus *Acanthostigma* on account of the presence of distinct paraphyses within the ascocarp.

The Poona collection, therefore, is presented here as a new species of *Chaetosphaeria* with Latin diagnosis.

***Chaetosphaeria poonensis* Sp. nov. Kalani,**

Perithecia more or less globular, dark black, densely gregarious, setose, papillate $180-188 \times 144-273,6 \mu$. Stroma $30-60 \mu$ thick made up of compactly arranged round parenchymatous cells. Perithecial setae numerous, brown, septate, rounded at apex, $3,6-4,8 \mu$ diam.

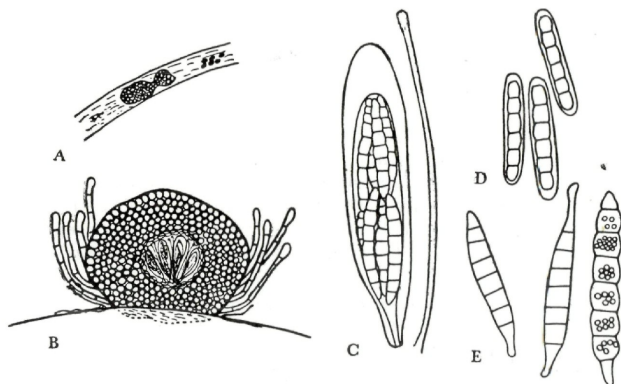


Fig. 1. — A. Habit $\times$ natural. — B. Perithecium with hairs $\times 100$. — C. Ascus and Paraphyses $\times 430$. — D. Mature Ascospores $\times 430$. — E. Germinating Ascospores $\times 430$.

Asci many, distinctly paraphysate, clavate to cylindrical, sessile or shortly stipitate, $68-97 \times 10-12 \mu$. Paraphyses numerous, hyaline, spatulate, non-septate, $36-47 \times 1-2 \mu$. Ascospores hyaline, oblong uni- to biseriate, 4-7 septate, generally 8-celled, $63-65 \times 7,5 \mu$ fat globules present in all cells except the terminal cells.

Collected on dead twigs of *Allamanda cathartica* L. in the month of September 1962 from Poona, India by Miss I. K. Kalani, M. AC. S. Herb No. 177 (Type).

Perithecia gregaria, superficialia, plus minusve globosa, atra, setosa, papillata, $180-288/144-273,6 \mu$; pariete $30-60 \mu$ crasso, contextu pseudoparenchymatico, e cellulis plus minusve angulosis compo-

sito; setae imprimis ad basin perithecorum evolutae, numerosae, brunneae, septatae, antice obtusae, 3,6—4,8 μ crassae; asci subnumerosi, clavati vel clavato-cylindracei, subsessiles vel breviter stipitati, 68—97/10—12 μ ; paraphyses numerosae, fibrosae, apicem versus parum sed plerumque distincte dilatatae, continuae, 36—47/1—2 μ ; sporae mono-vel fere distichae, fusoideae, utrinque plus minusve, interdum vix attenuatae, tunc fere cylindraceae, 4—7-plerumque 6-septatae, ad septa leniter constrictae, hyalinae, 63—65/7,5 μ , in cellulis mediis saepe guttulis oleosis praeditae.

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