

**CHAETOPATELLA INDICA SP. NOV., A NEW  
GENERIC RECORD FOR INDIA**

DURING January 1977 a rare but interesting pycnidial fungus belonging to the form genus *Chaetopatella* Hino & Katumoto (Form-order Sphaeropsidales) was collected, growing saprophytically on dead culms of *Bambusa* sp. from Pachmarhi in Madhya Pradesh. The genus *Chaetopatella* was erected by Hino and Katumoto in 1961 with the type species *C. ryukyensis* Hino & Katumoto. They described another species, *C. setulosa* Hino & Katumoto, which is characterised by conidia having up to 12 septa and measure  $26-68 \times 3-4 \mu$ . On microscopic examination and comparison, the present fungus was found to be distinct from the two known species of *Chaetopatella* in having mostly 3 septate conidia measuring  $25-35 \times 2 \mu$ . The specimen was examined by Dr. Punithalingam of C.M.I., Kew, England, who reported that the "present fungus does not match with any of the two known species". Therefore, the present fungus is described here as a new species of *Chaetopatella*, which is also a new record of the genus from India.

*Chaetopatella indica* Rajak & Soni, sp. nov.

Pycnostromata almost reduced to subcuticular acervuli, sessile, dark brownish black, flattened, shield shaped, thick-walled upper wall  $20-55 \mu$  in thickness, pseudoparenchymatous,  $296-415 \mu$  in breadth,  $30-118 \mu$  in height, setose; setae numerous, covering stroma, dark brownish black, pointed, septate, smooth,  $15-52 \mu$  long.

Loculi flattened, non-ostiolate, pale yellowish,  $148-177 \mu$  broad,  $18.5 \mu$  in height; conidiophores hyaline, elongated, branched, septate,  $13-18.5 \mu$  long,  $2.5-3 \mu$  broad; conidia hyaline, 3-septate, filiform to fusoid, pointed at ends,  $18.5-35 \times 2-2.5 \mu$  with terminal and basal setulae. Setulae hyaline, simple or branched, curved, unseptate, up to  $10 \mu$  long (Fig. 1).

*Chaetopatella indica* Rajak & Soni, sp. nov.

Pycnostromata in acervulos subcuticulares paene reducta, sessilia, obscure brunneo-atra, applanata, peltata, crasse tunicata, tunicis supericribus,  $20-55 \mu$  crassis, pseudoparenchymatica,  $296-415 \mu$  lata,  $30-118 \mu$  alta, setosa; setae multae, stroma contegentes, obscure, brunneo-atrae, acutae septatae leves,  $15-52 \mu$  longae.

Loculi, applanati, haud ostiolati, pallide lutei,  $148-177 \mu$  lati,  $18.5-40.5 \mu$  alti; conidiophori hyalini elongati, ramosi, septati,  $13-18.5 \mu$  longi,  $2.5-3 \mu$  lati; conidia hyalina, 3-septata, filiformia vel fusoida, utrinque acuta,  $18.5-35 \times 2-2.5 \mu$  setulis et terminalibus et basalibus. Setulis hyalinis, simplicibus vel ramosis, curvulis, haud septatis, ad  $10 \mu$  longis (Fig. 1).

The type specimen has been deposited in the herbarium of Commonwealth Mycological Institute, Kew, Surrey, England, under the accession No. IMI 212440 and in the herbarium, Botany Department, Govt. Science College, Jabalpur.

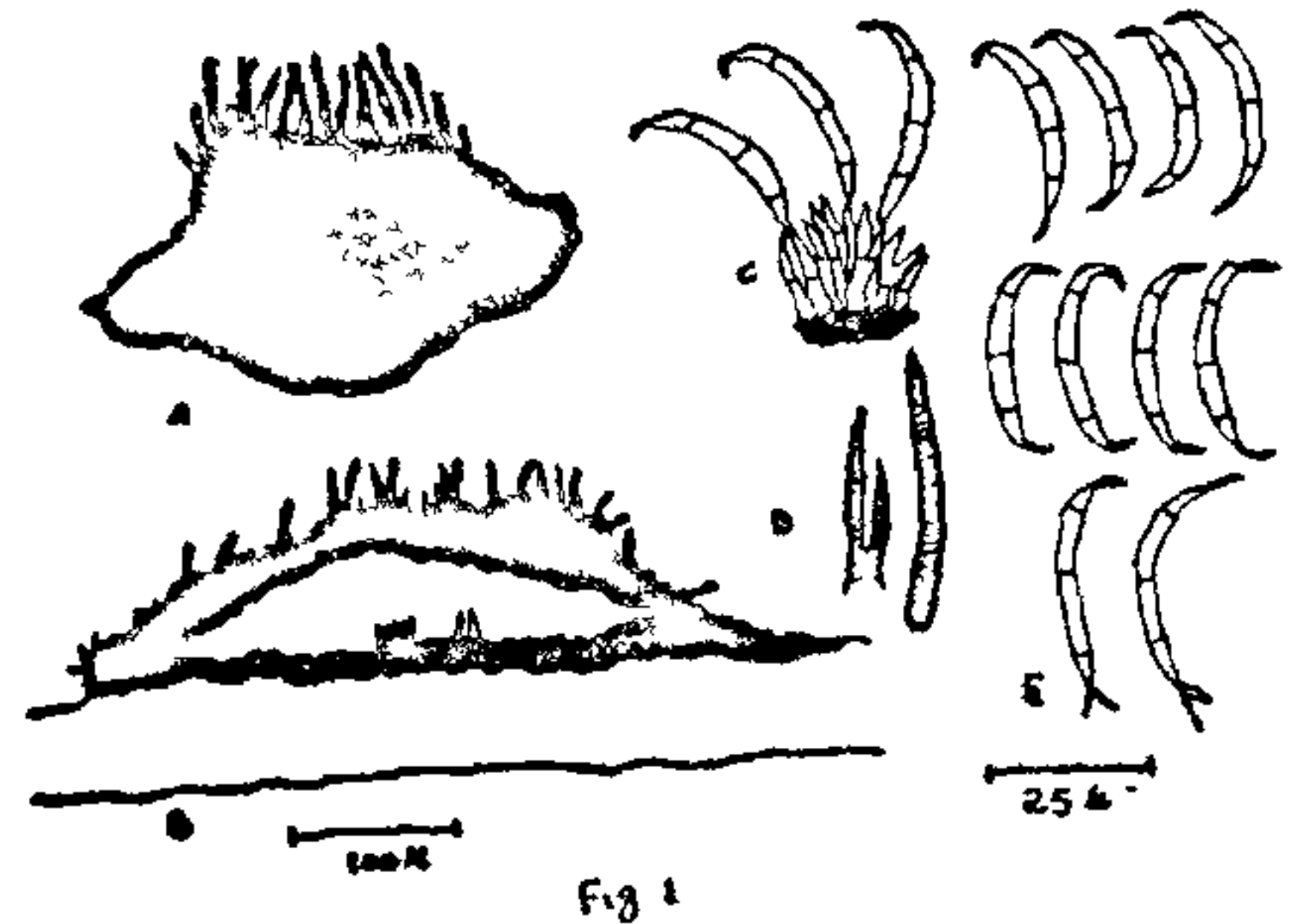


FIG. 1 A-E. A, Pycnostromata; B, T.S. through pycnostromata; C, Conidiophores and conidia; D, Setae; E, Conidia.

Grateful thanks are offered to the Director, C.M.I., Kew, England and Dr. E. Punithalingam, Mycologist, C.M.I., Kew, England, for their help in confirming the identity of the fungus, to Dr. D. P. Rogers, University of Illinois, Urbana, Illinois, U.S.A., for rendering the diagnosis in to Latin. Thanks are also due to the Principal and Head., Botany Department, Govt. Science College, Jabalpur, for providing laboratory facilities.

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1. Hino, I. and Katumoto, K., *Icones Bambusi Colorum Japonicarum*. The Fugi Bamboo Garden, 1961.

**CABOMBA AQUATICA AUBL.\*—A NEW RECORD  
FOR INDIA FROM KERALA**

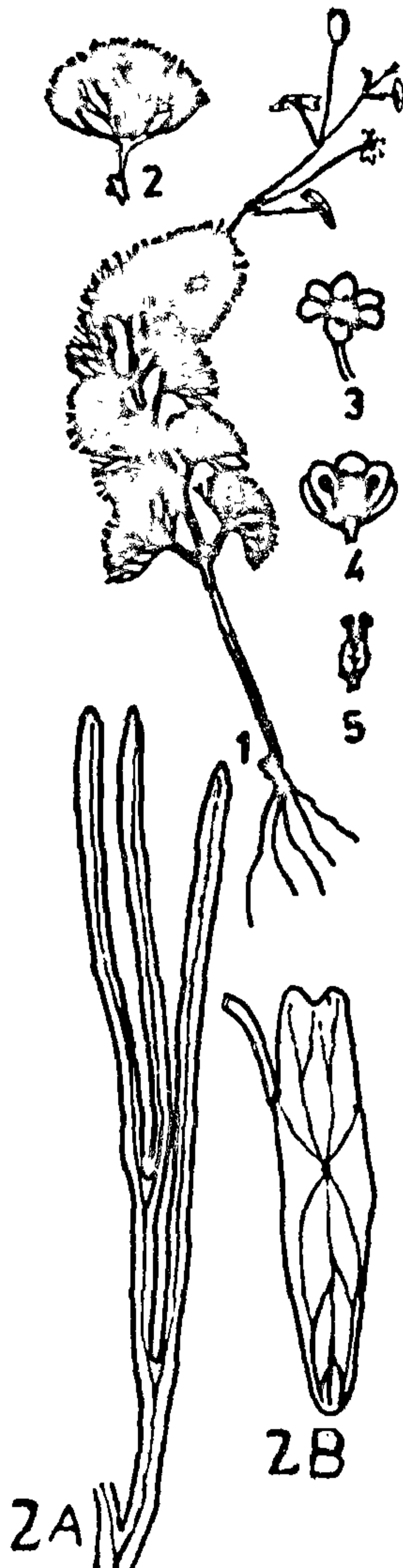
*Cabomba aquatica* Aubl.—a member of the Cabombaceae—is recorded for the first time from India. It is an aquatic perennial herb with dimorphic petiolate leaves and creamy white solitary axillary flowers (May to July). This species is native to central and south America. In Cochin, Kerala State, it grows wild and is quite common in fresh water ponds and ditches. This plant might not have been noticed by the earlier taxonomists. We feel that if Kerala State is explored intensively and extensively one

may find several plants new to India and some new to science world. The present plant has been deposited in the herbarium, St. Teresa's College, Ernakulam. This species is reported and illustrated with a view that

the material will be useful at the time of the revision of the flora of India—a scheme undertaken by Botanical Survey of India.

Our thanks are due to Dr. P. S. Green, Deputy Director and Keeper of the Herbarium, Royal Botanic Gardens, Kew, England, for confirming the identification.

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FIGS. 1-5. 1, Habit sketch; 2, Submerged leaf; 2A, Portion of submerged leaf (enlarged); 2B, Aerial leaf (enlarged); 3, Flower; 4, Longitudinal section of flower; 5, Carpels.

**SOMATIC CHROMOSOMES OF AN ESTUARINE FISH, *TRYPAUCHEN VAGINA* (FAM.: GOBIIDAE) FROM SAGAR ISLAND, WEST BENGAL, INDIA**

THE present communication deals with the diploid number, morphology and merical analysis of chromosomes in the males of *Trypauchen vagina* (Bloch & Schneider), on which cytological investigations do not seem to have been carried out earlier.

6 adult living specimens, all of which later turned out to be males, of *Trypauchen vagina*, collected from the creeks of Sagar Island bathed with saline water, constituted the materials for the present study. Slides for cytological observations were prepared both from kidneys and testes of colchicized specimens according to the flame-drying-Giemsa-stain schedule described elsewhere<sup>1</sup>. Unfortunately no divisional stages were obtained from the testis, presumably because it regressed after breeding activity and in spite of some effort, no male specimens were available for the study of germinal chromosomes, nor could any female specimen be collected which could be utilized for the comparison of somatic karyotypes in the two sexes. The arm ratio ("r" value) of individual chromosomes in the karyotype was taken as parameter for morphological nomenclature following Levan *et al*<sup>2</sup>.

The kidney metaphase complements (Fig. 1, PM. 1) consisted of 46 chromosomes in the majority of spreads though a few contained 45 or 47 chromosomes. The diploid number in the male of *T. vagina* was, therefore, decided to be 46.

The karyotype (Fig. 2) revealed 23 homomorphic pairs of gradually seriated chromosomes that measured between 2.4 and 1.2 micra in length. The maximum difference in size between any two successive pairs in the karyotype was 0.21 micron (Nos. 1-2) and there was little difference between some adjacent pairs, e.g. Nos. 7-9, 10-11, 15-16. The differences between