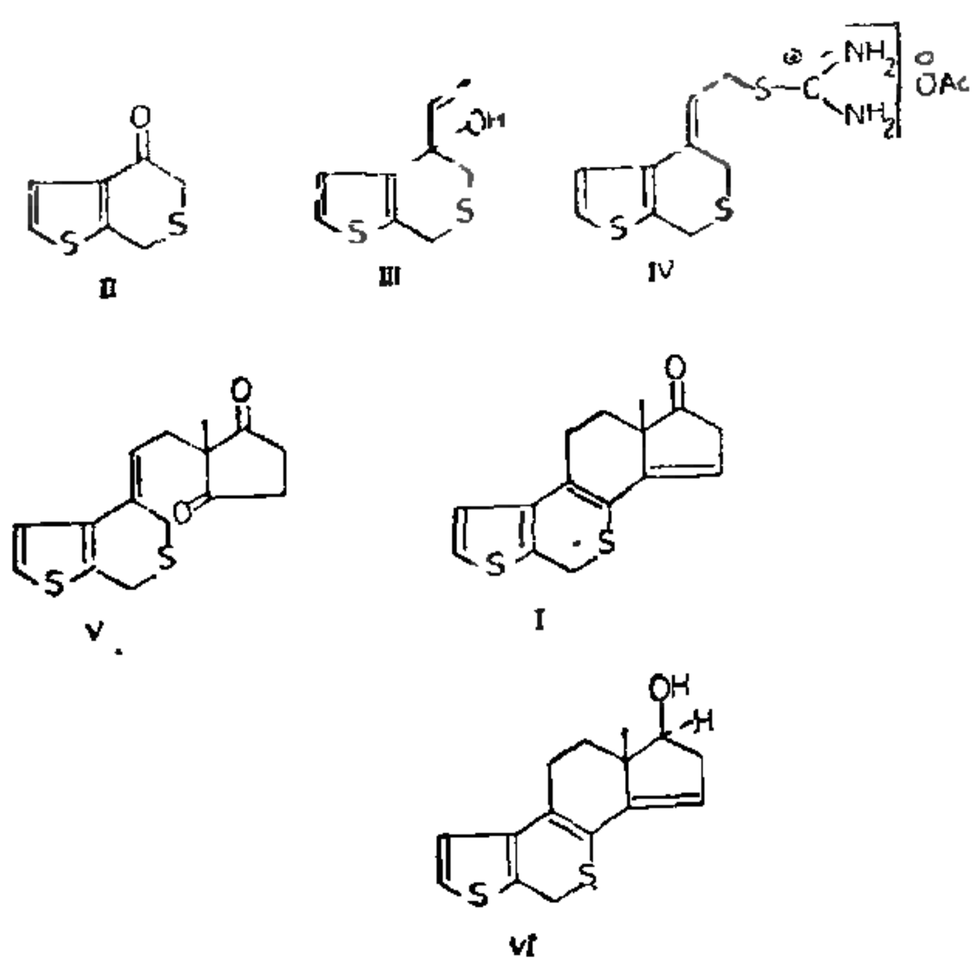
The structure assigned to the A-thieno steroid (I) was evident from its spectral characteristics: M^+ 274 (100%); IR. $\nu_{C=O}$ ($CHCl_3$) 1725 cm^{-1}; NMR ($CDCl_3$) δ1·2 (s, 3H, CH_3), 1·3–3·3 (*m*, 6H, CH_2 at C_{11}, C_{12} and C_{16}), 4·05 (AB–quartet, 2H, CH_2 at C_6). 6·15 (*t*, 1H, olefinic) and 7·15 (*q*, 2H, aromatic). Sodium borohydride reduction of the title compound(II) afforded A-nor-3,7-bisthiaestra-1,5(10),8,14-tetraen-17β-ol (VI) (95%).



SCHEME

All new compounds mentioned above gave satisfactory spectral and analytical data.

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Madras 600 036, *December* 3, 1979.

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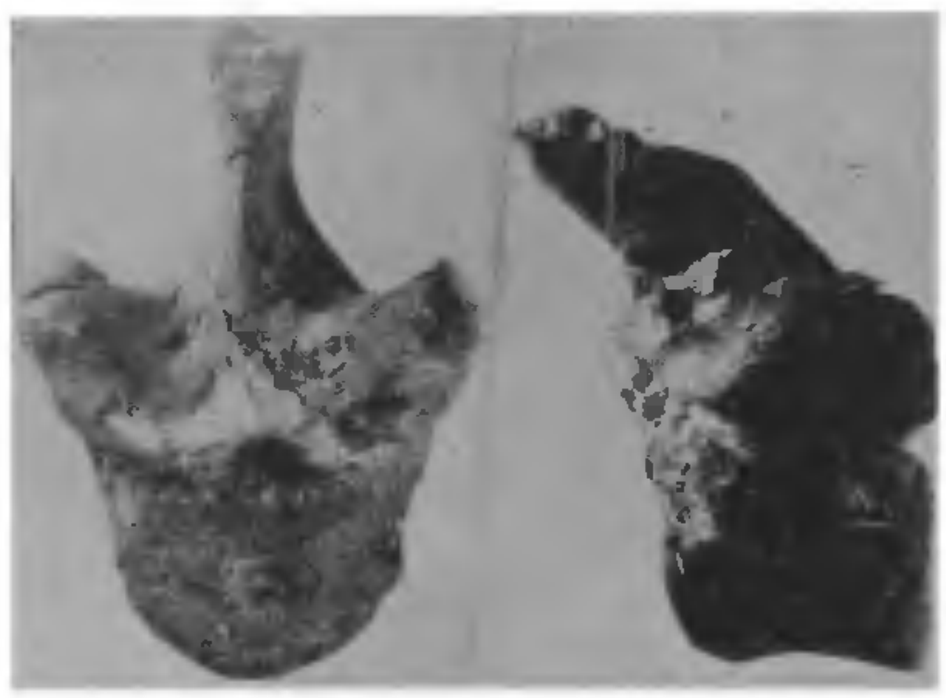
LOWER EOCENE MARINE MAMMAL (SIRENIA) FROM DHARAMPUR, SIMLA HIMALAYAS, H.P.

THE Eocene section exposed at Dharampur, Simla Hills, has recently provided a number of vertebrate localities in the middle marine and uppermost transitional sequence of the Subathu Formation[1]. The vertebrates described here were obtained on the main Kalka-Simla highway, north of the central market of Dharampur.

The most significant find is that of the first dorsal vertebra of a sirenian. This mammal represents the oldest record of Tertiary mammals in the Indian subcontinent as well as one of the oldest records of marine mammals in the world. The vertebra has considerable morphological affinity with the corresponding vertebra of *Moeritherium*. In a few respects such as the short and weakly developed anterior and posterior zygapophyses and in the absence of well-developed facets for rib articulation found in later sirenians, it is similar to that of cetaceans.

The oldest record of sirenians from India represented by isolated vertebra is from the Middle Eocene (Lutetian) Berwali series of Kutch. Middle Eocene sirenians are known from Java,[2–4] Africa, North America, Europe[5], Italy, West Indies[6], India[7], etc., but no definite lower Eocene sirenians had previously been recorded.

The vertebra (Fig. 1 *a* and *b*) possesses short and stout transverse processes and a massive backwardly directed neural spine indicating that it is an anterior dorsal vertebra and most probably the first dorsal.



a *b*

FIG. 1. First dorsal vertebra. *a*—anterior view, *b*—side view. × 0·75.

Centrum outlines are oval anteriorly and transversely elongated posteriorly. The transverse processes terminate in a tubercular facet which is a shallow concave facet facing downwards and forwards. The anterior edge of the transverse processes is produced into a shelf-like projection of bone which seems to be continuous internally with the anterior edge of the neural arch. On the upper surface of this projection are the broad and flat anterior zygapophyses. The neural arch is broad and triangular in outline. The neural spine is very massive and slender, sloping strongly backwards. A natural fracture plane at the apex of the spine shows a triangular outline. There is a cup or demifacet for the capitular head of the rib on the upper angle of the anterior face of the centrum and a comparatively deeper and broad sharply defined demi-

facet (capitular facet) on the upper angle of the posterior face. The length of the centrum measures 3·7 cm.

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A NEW SPECIES OF *CLASTEROSPORIUM*

DURING the course of collecting hyphomycetous fungi in North-East India, the senior author collected a fungus on *Bambusa* sp. from Dergaon, Assam. The fungus was somewhat close to *Clasterosporium flagellatum* Syd. M. B. Ellis[1], but differred significantly in the morphology of the conidia as well as hyphopodia. In the present specimen the conidia are very narrow as compared to those of *C. flagellatum* and the hyphopodia are not deeply lobed. As the present fungus does not match well with any of the known species of the genus *Clasterosporium*[1,2], a new specific epithet as *Clasterosporium bambusae* is justified.

Clasterosporium bambusae Saikia and Sarbhoy spec. nov. (Fig. 1).

Coloniae effusae velutinae atrobrunneae vel atrae cm. plures sub-strati tegentes; mycelium superficiale ex hyphis brunneolis vel brunneis glabrotunicatis ramosis septatis 2·1–3·5 μ diam. constitutum; hyphophodia brunnea lateralia et terminalia, in forma variabilia, 7·0–9·8 × 4·2–5·6 μ; setae carentes; conidiophora singula vel caespitosa, a cellulis terminalibus vel intercalaribus hypharum, etiam e stromate aegre evoluto enata, macronemata, mononemata, recta vel curvata cylindrica eramosa 6–12 septata (intervallis intra septa 18–21 μ longis) glabrotunicata mediobrunnea vel pallide olivaceo-brunnea, 105–210 × 3·5–5·4 μ; cellulae conidiiferae integratae terminales monoblasticae cylindricae; conidia ex extremis inflatis ad apicem conidiophori cuiusque efformata, obclavata, in rostrum longum attenuate, recta vel subcurvata, brunneola vel brunnea, glabrotunicata 6–35–pseudoseptata, (90–) 150–270 (–435) μ longa, ad partem latissimam 6·0–7·5 μ ad apicem 3·0–4–5 μ ad basim truncatam plerumque 3 μ lata.

Hab. in *Bambusa* spp., Dergaon, Assam, coll. U. N. Saikia 20–7–77 (H.C.I.O. 32666).

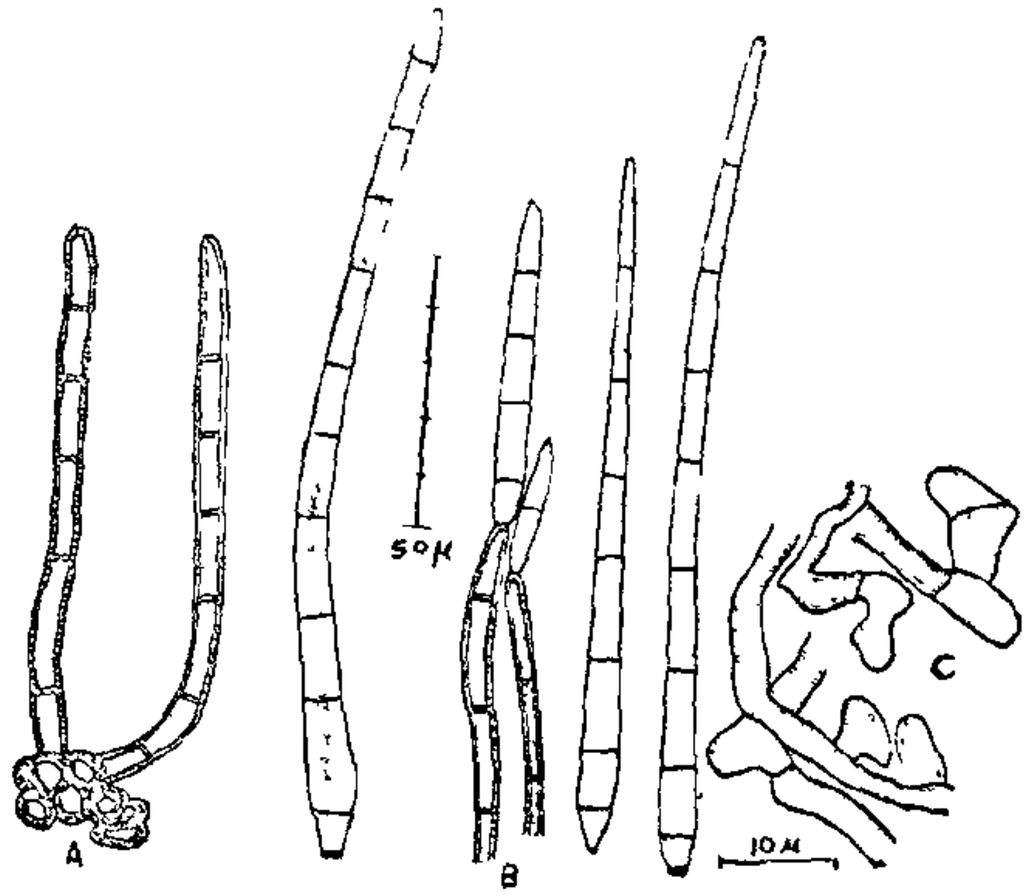

FIG. 1 Clasterosporium bambusae sp. nov.
A. Conidiophores B. Conidia C. Hyphopodia

Clasterosporium bambusae Saikia and Sarbhoy spec. nov. (Fig. 1).

Colonies effuse, velvety, brownish black to black covering several centimeters all along the substratum. Mycelium superficial, composed of pale brown to brown, smooth-walled, branched, septate hyphae 2·1–3·5 μm thick. Hyphopodia brown, lateral and terminal, variable in shape, 7·0–9·8 μm long × 4·2–5·6 μm wide. Setae absent. Conidiophores arising singly or in groups of 2–3 from the terminal or intercalary cells of the hyphae or from the poorly developed stromata, macronematous, mononematous straight or curved, cylindrical, unbranched, 6–12 septate with septa 18·0–21·0 μm apart, smooth-walled, 3·5–4·5 μm thick. Conidiogenous cells integrated, terminal monoblastic, cylindrical. Conidia formed singly as blown-out ends at the tip of each conidiophore, obclavate tapering into a long beak, straight or slightly curved, pale brown to brown, smooth-walled, 6–35 pseudoseptate, (90·0–) 150·0–270·0 (–435·0) μm long, 6·0–7·5 μm thick in the broadest part, 3·0–4·5 μm at the apex and mostly 3·0 μm wide at the truncate base.

On *Bambusa* sp. Dergaon, Assam, Coll. U. N. Saikia, 20–7–77 (H.C.I.O. 32666 type).

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