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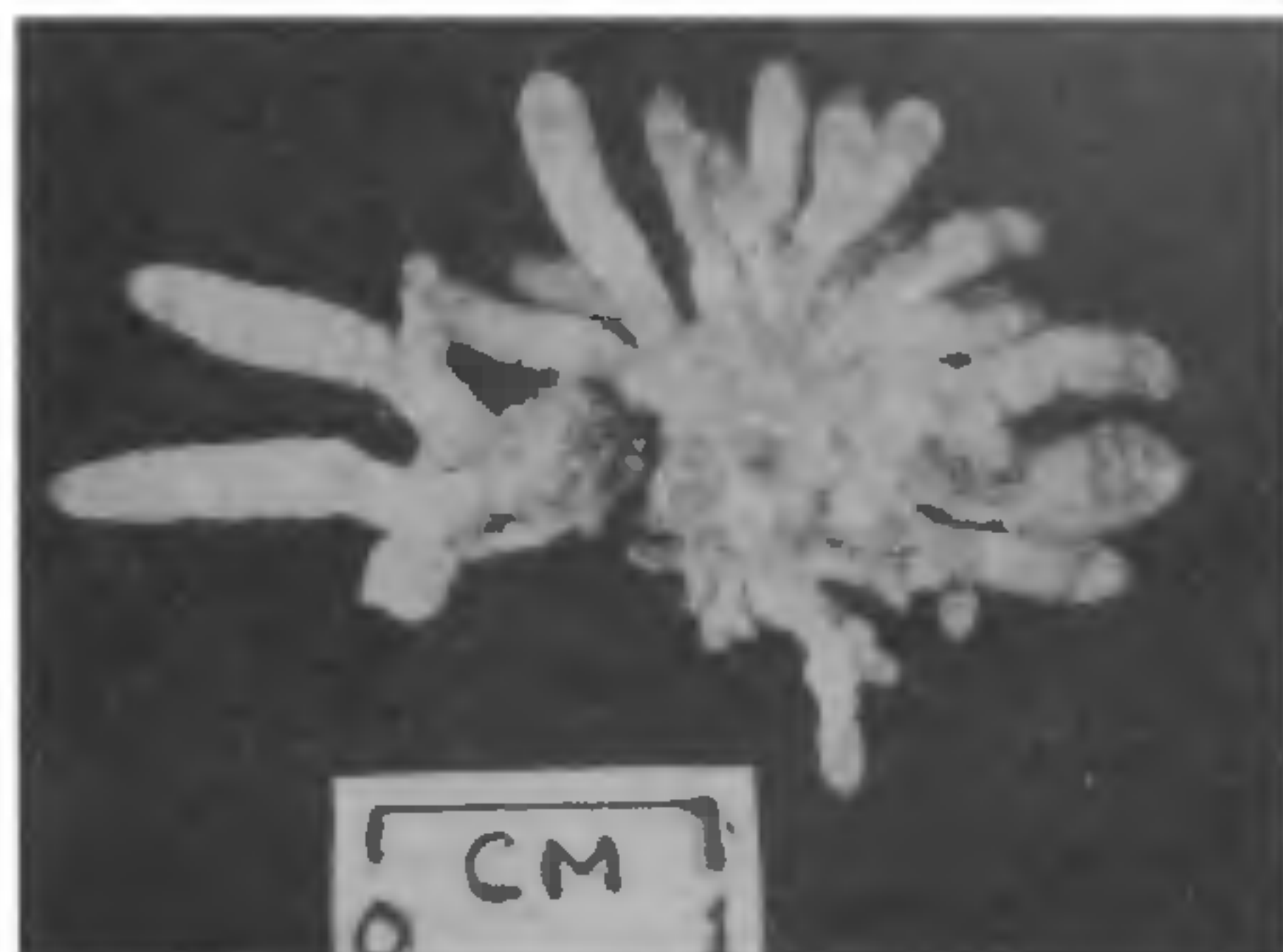


Figure 1. *Neomeris van-Bosseae*—Habit.

NEOMERIS VAN-BOSSEAE HOWE—A NEW RECORD ALONG THE INDIAN COAST

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TWO species of *Neomeris* have so far been reported from the Indian coast, viz. *N. annulata* Dickie and *N. dumetosa* Lamoun. *N. annulata* has been reported from various localities of India by various authors, while *N. dumetosa* has been listed by Chacko¹ from the Krusadai Island. During a survey in the Lakshadweep islands *N. van-Bosseae* was found growing in the lower mid-littoral zone in December. Details of habit and habitat, morphology and reproduction are given below.

Habit and habitat

Thalli were found growing on calcareous rocks and on dead corals. Thalli are light-green and strongly calcified in the lower region and weakly in apical region.

Morphology

Plants are in clusters and attain a height of 1.5–2.5 cm (figure 1). The main axis gives rise to 28–40 whorls of laterals along the entire length. These primary branches are 460–580 μm long. Secondary branches arise in pairs 340–400 μm long (figure 2a). The inflated apex of secondary branches is broad and conical, 180–220 μm (figure 2b). Secondary

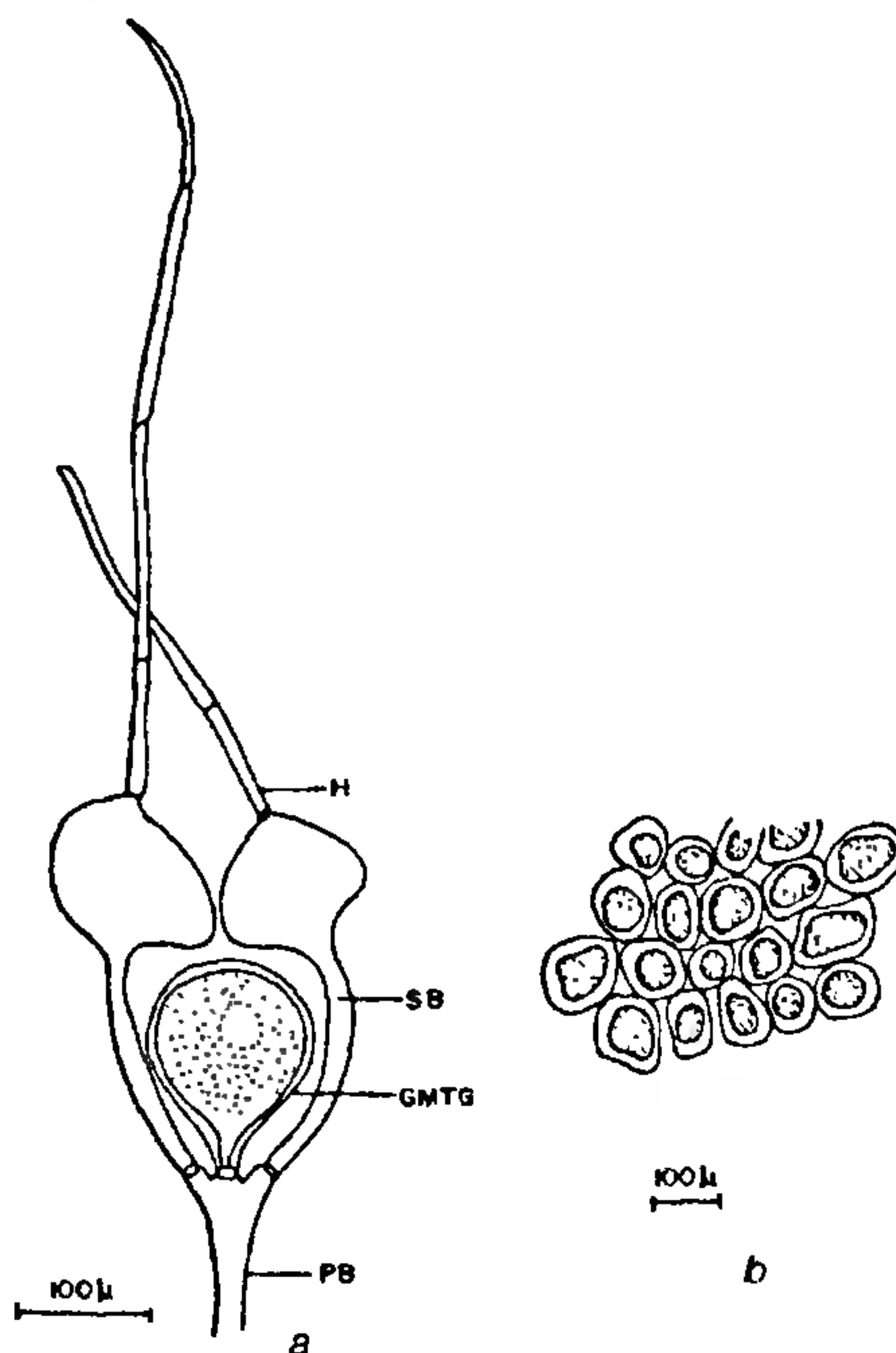


Figure 2. *N. van-Bosseae*: a, branching of primary (PB) and secondary (SB) order enclosing globular gametangium (GMTG), secondary branches bearing hairs (H); b, surface view of secondary branches.

branches terminate in a segmented, deciduous hair only at the apex, measuring about 1.0–1.5 mm in length (figure 2a).

Reproduction

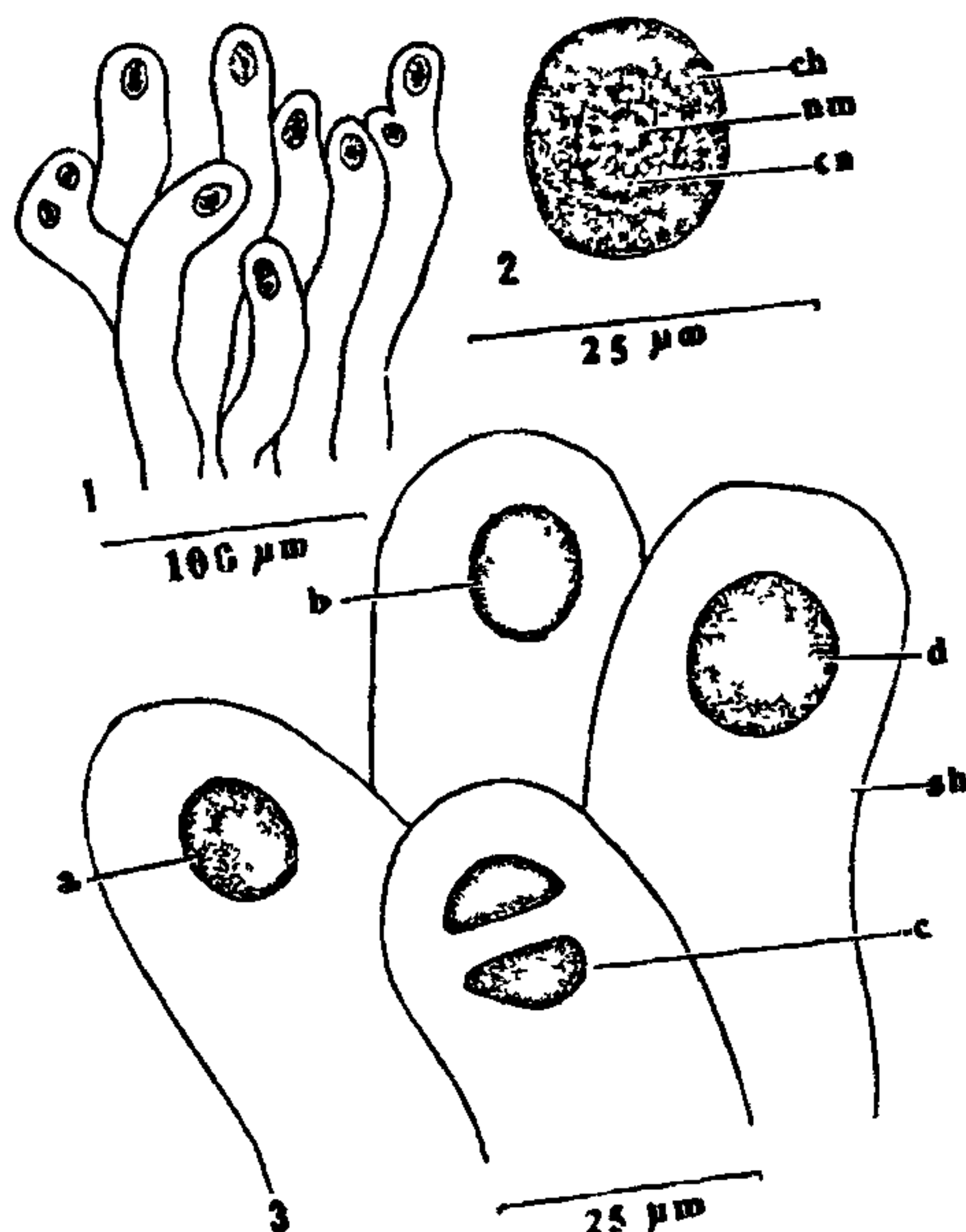
Cametangia are pedicellate and produced on the primary branches, globose in shape. These are free even though strongly calcified and 88–110 μm in diameter. Each one bears a single spherical cyst.

This alga differs from *N. annulata* in having globose and free gametangia; in *N. annulata*, the gametangia are ovoid and cemented together in annular rows by a calcareous sheath.

The above account is in agreement with Egerod².

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Figures 1–3. *Cyanostylon cylindrocellulare* Geitl. & Ruttn. 1, A few cells with cylindrical stalk. 2, A single cell. 3, Cells with division stages. (ch, Chromoplasm; cn, central nodule; nm, nuclear material; sh, sheath; a–d, stages in division.)

bases of several such strands form a mass of mucilage.

Cells are oval or spherical with a diameter of 12.4–18.6 μm . The protoplast is clearly differentiated into an outer granular chromoplasm and an inner transparent centropiasm with distinct nuclear material (figure 2). Reproduction is by binary fission and different stages of division are found in the same colony (figure 3). The nuclear material elongates and divides into two, followed by division of chromoplasm, resulting in the formation of two hemispherical daughter cells (figure 3c). In certain cells the division of the chromoplasm is delayed and 2–5 daughter centropiasmic structures are found in the same cell.

The cell is prokaryotic; still, it is more advanced due to the presence of a spherical transparent centropiasm with prominent nuclear material. Due to its peculiar habitat and structure Fritsch³ suggested that it should be placed in a separate family. More cytological studies are required to confirm its position.

CYANOSTYLON CYLINDROCELLULARE GEITL. & RUTTN., A BLUE-GREEN ALGA NEW TO INDIA

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THE terrestrial blue green alga *Cyanostylon* has been collected from the cuttings of red rocks near Quilon, Kerala State. It was found growing along with *Zygonium*, *Scytonema* and *Stigonema*. This monotypic genus has been described from Europe^{1, 2}. So far there is no record from Asia.

Cells are uninucleate and colonial; colony gelatinous, macroscopic, irregular with spreading patches, 2–8 mm in diameter, slightly yellowish-brown. Each cell is capable of secreting mucilage only on one side and due to this unilateral secretion the cell is pushed towards the opposite direction resulting in the formation of a cylindrical stalk-like structure (figure 1). The finger-shaped mucilage strands may be branched or unbranched and contain one or more cells. The mucilage sheath is homogeneous and 23.3–26.6 μm in diameter. The