

Table 1. Comparative account of *M. cajani* and *M. myrtacearum*

Species	Conidiophores size (in μm)	Structure	Conidia size (in μm)	Structure
<i>M. cajani</i> (Type species)	Very variable in length 1–3 near the base, broadening above to 4–7.	Much branched, climbing leaf hairs, pale or mid pale olivaceous brown.	20–30 × 4–6	Mostly cylindrical, hyaline to mid pale olivaceous brown, 1–3 septate, scars conspicuous.
<i>M. myrtacearum</i> sp nov (proposed species)	13.8–39 × 4–4.6	branched, pale brown.	27.6–92 × 1.7–2.8	Obclavate, pale olivaceous brown, 3–7 transversely septate, scars less distinct.

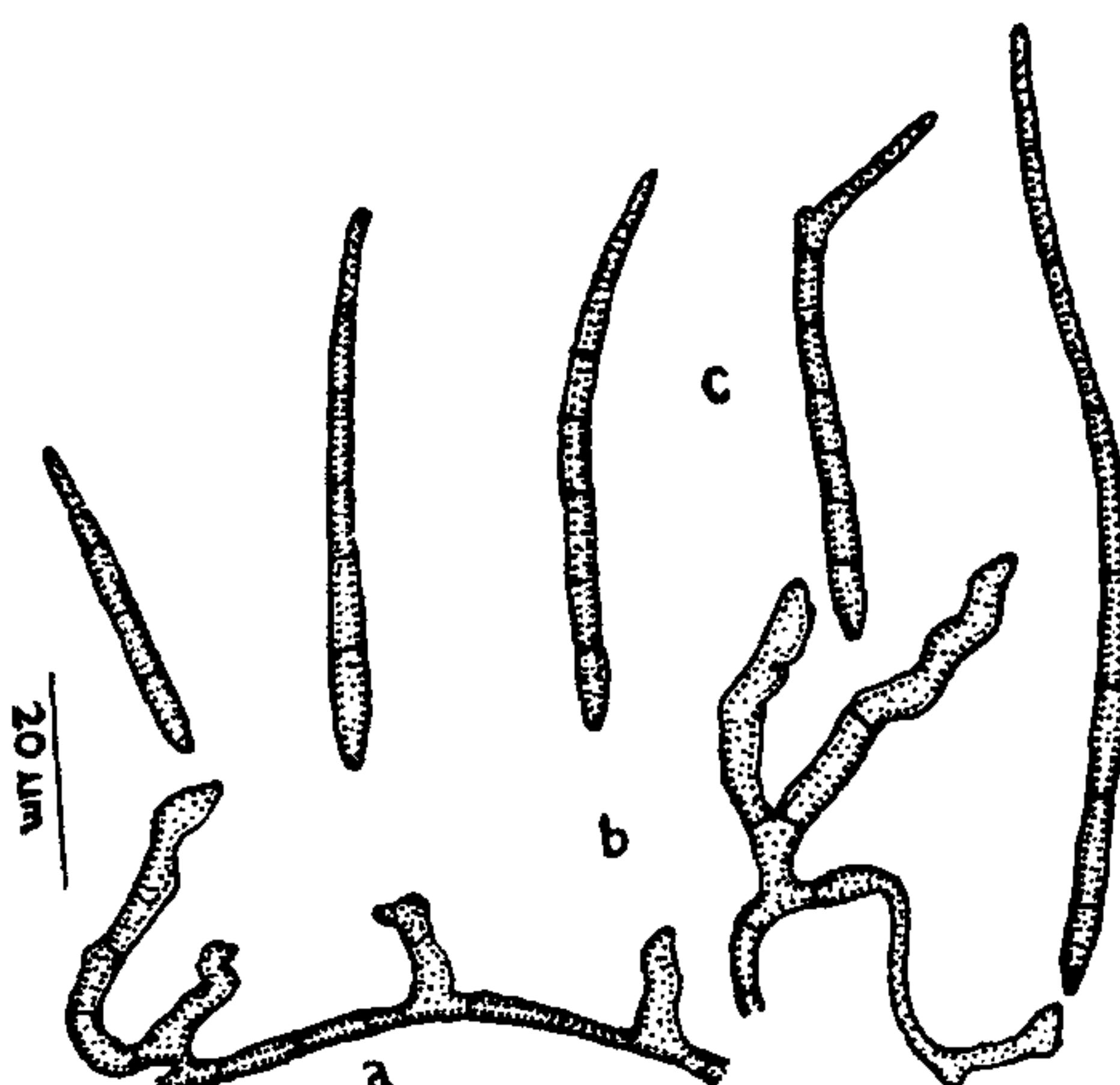


Figure 1. *Mycovellosiella myrtacerum* A. N. Rai, B. Rai and Kamal sp. nov. a. Mycelium, b. conidiophores, c. conidia.

subacute to rarely obtuse apices, obconicotruncate bases, smooth, 3–7 transversely septate, hila less distinct, 27.6–92 × 1.7–2.8 μm (figure 1).

On living leaves of *Psidium guava* Linn. (Myrtaceae); March, 1979; Tilkonia (South Gorakhpur Forest Division); leg. B. Rai, KR 173, type, IMI 235984.

A reference to literature revealed that the present collection does not resemble any of the species of *Mycovellosiella* described so far^{1–11}. Hence the type species is compared in table 1.

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TWO NEW TAXA OF THE DESMID XANTHIDIUM EHR (CHLOROPHYCEAE) FROM KARNATAKA STATE (INDIA).

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DURING 1978 a total of 51 collections were made in freshwater ponds and lakes situated in Shimoga district ($13^{\circ}17'$ and $14^{\circ}39'$ N latitude and $74^{\circ}38'$ and $76^{\circ}04'$ E longitude) and Uttara Kannada district ($13^{\circ}53'$ and $15^{\circ}32'$ N latitude and $74^{\circ}04'$ and $75^{\circ}05'$ E longitude) of Karnataka State. The collections are deposited in this Department (accession No.s KRNU-1-

42–92 and 103). These samples contained two new taxa of the genus *Xanthidium* Ehr (Chlorophyceae) and are described below.

Xanthidium croasdalianum Hegde sp. nov. (figures 1A–C).

Semicellulae obverse semicirculares, sinus parvus, linearis inapertusque; margines semicellularum inferiores plerumque recti atque per plus quam di-midum altitudinis semicellularum divergentes, aut convex; apex plane convexus. Anguli superiores rotundati; margines semicellularum 3–6 ordinibus spinarum curvatarum sursum directarum praediti. Superficies utrius semicellulae poros ventrales circulares inflatos flavo-brunneosque praebens. Omnis porus aut depressione polygonali circularive, aut fortasse foveis simplicibus circundatus. Area membrana interior marginis lateralis in media parte magis tumida, depressionibus qui poros simulant praedita. Cellula sine spinibus 113–125 μm longae, cum spinibus 116–132 μm longae; sine spinibus 76–80 μm latae, cum

spinibus 82–85 μm latae; Isthmis 33–35 μm latae; 60–68 μm crass.

Iconotypus: figure 1.

Locus typi: Kallabbe (Uttara Kannada-KRNU. 103)

Semicells obversely semicircular, sinus small linear and closed; lower margins of semicells generally straight and diverging for more than half the height of semicells or convex; apex flatly convex. Upper angles rounded; margins of semicells with 3–6 rows of curved upwardly pointed spines. Surface of each semicells with central yellowish brown swollen circular pores. Each pore either surrounded by polygonal or circular depression or may be with simple pits. Rest of the surface area coarsely punctate. In side view semicells elliptical, the inner wall of lateral margin more swollen in the middle with depressions representing pores. Cells without spines 113–125 μm long, with spines 116–132 μm long; without spines 76–80 μm broad, with spines 82–85 μm broad; Isthmus 33–35 μm broad; 60–68 μm thick.

Iconotype: figure 1.

Distribution: Kallabbe (Uttara Kannada-KRNU. 103).

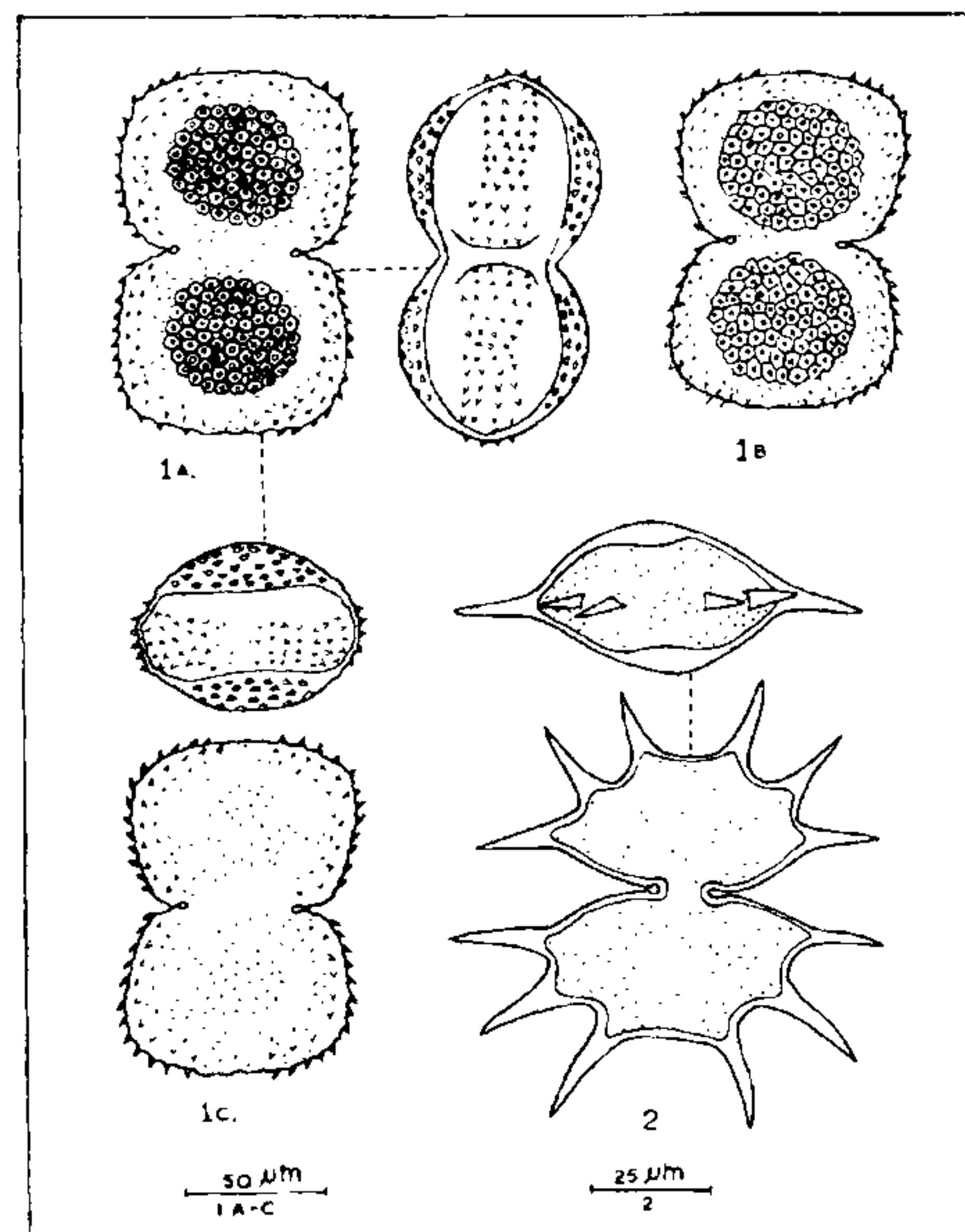


Figure 1. A–C. *Xanthidium croasdalianum* Hegde sp. nov. 2. *X. sexmammillatum* W. et G. S. West var. *pulneyensis* Iyengar et Vimla Bai fa. *simplex* Hegde fa. nov.

Xanthidium sexmammillatum W. et G. S. West var. *pulneyensis* Iyengar et Vimla Bai fa. *simplex* Hegde fa. nov. (figure 2).

Forma varietati magnitudine formaque similis, differens, autem, ut granula spiniformis in angulo basali convexo nulla. Membrana poros habens. Cellula sine spinibus 57–58 μm longae, cum spinibus 80–93 μm longae; sine spinibus 55–56 μm latae, cum spinibus 85–93 μm latae; Isthmis 10 μm latae; 31–33 μm crass.

Iconotypus: figure 2.

Locus typi: Tyarendur (Shimoga-KRNU. 55).

Similar to the variety *pulneyensis* Iyengar et Vimla Bai (1941) in size and shape but differs in not having a spiny granule on the convex basal angle. Wall with pores. Cells without spines 57–58 μm long, with spines 80–93 μm long; without spines 55–56 μm broad; with spines 85–93 μm broad; Isthmus 10 μm broad; 31–33 μm thick.

Iconotype: figure 2.

Distribution: Tyarendur (Shimoga-KRNU. 55).

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