Strombidinopsis acuminatum Fauré-Fremiet, 1924



Key features

Cell elongate, conical, posterior gradually tapering; oral cavity acentric; 2 macronuclei, spheroid to ovoid; 15 longitudinal somatic kineties extend from anterior to posterior, ciliated, cilia $3-5 \ \mu m \log q$

Measurements

Length: Width: No of EPk: No of IPk: No of K: Ma diameter: Biovolume: 90 (35-125) μm 35 (25-90) μm 15 (14-16) 3 (1-5) 12-20 10 x 14 (6-14 x 8-25) μm 63,000 μm³

Movement

Swims slowly and straight

Food

Nanoflagellates and small diatoms

Ecological data

Temperature: 15-20 °C Salinity: 20-33 ‰

References

Dale T & Lynn DH 1998; Fauré-Fremiet E 1924; Kahl A 1932; Lynn DH et al. 1991; Montagnes DJS & Taylor FJR 1994; Snyder RA & Ohman MD 1991

Fig 1 Line drawings: a. Protargol stained cells, showing kineties, oral structures and nuclei; b. Live specimen (from Fauré-Fremiet 1924). Fig 2 Lugol's fixed cell. (Fig 3 Lugol's fixed and DAPI stained cell, illustrating nuclear shape.) Fig 4 SEM of Lugol's fixed cell. Fig 5,6 Protargol stains, lateral view: 5. Nuclei and internal polykinetids; 6. Cell surface, showing the kineties.



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Strombidinopsis acuminatum Fauré-Fremiet, 1924

Species description

Body elongate, **conical, posterior gradually tapering,** 90 (35-125) µm long, 35 (25-90) µm wide (Fig 1,2).

Oral cavity acentric; 15 (14-16) EPks and 3 (1-5) IPks; EPZ and IPZ not completely separate: 4-5 IPks are separate, the others are extensions of EPks (Fig 1a,5,7b); EPZ is a closed circle with cilia of unequal length (Fig 7a,b,8); paroral kinety situated beneath and close to the EPks.

12-16 longitudinal somatic kineties, extend along entire cell length (Fig 1,4,6) with 20-50 dikinetids, both kinetosomes ciliated, cilia 3-5 µm long; incomplete somatic kineties can occur – lacking either posterior or anterior ends.

Two macronuclei, spheroid to ovoid (Fig 1,5,6).

Similar species

S. lohmanni (more somatic kineties), *S. multiauris* (interpolykinetidal ridges and granules, EPZ divided in 2 distinct zones, more kinetosomes per kinety, larger), *S. spiniferum, Strobilidium marinum* (more EPks, less somatic kineties); *Strobilidium pelagicum* (somatic kineties not composed of dikinetids).

List of synonyms

1991 *Strombidinopsis cheshiri* Snyder & Ohman, Trans Am Microsc Soc 110: 239-240, Fig 1,2. 1994 *Strombidinopsis cheshiri* Montagnes & Taylor, J Euk Microbiol 41: 576-578, Fig 7-9.

Taxonomical remarks

Based on an improved redescription of *S. acuminatum*, Dale & Lynn (1998) synonymised *S. cheshiri* with *S. acuminatum*.

Notes





Fig 7a-c Apical view of protargol-stained cells, showing details of the oral structures: a. Above the cell (showing the cilia of the EPk); b. At the base of the cilia, showing the EPk; c. Within the cell (showing the IPk), OS - outer segment, IS - inner segment. **Fig 8** SEM image, apical view of the oral region.