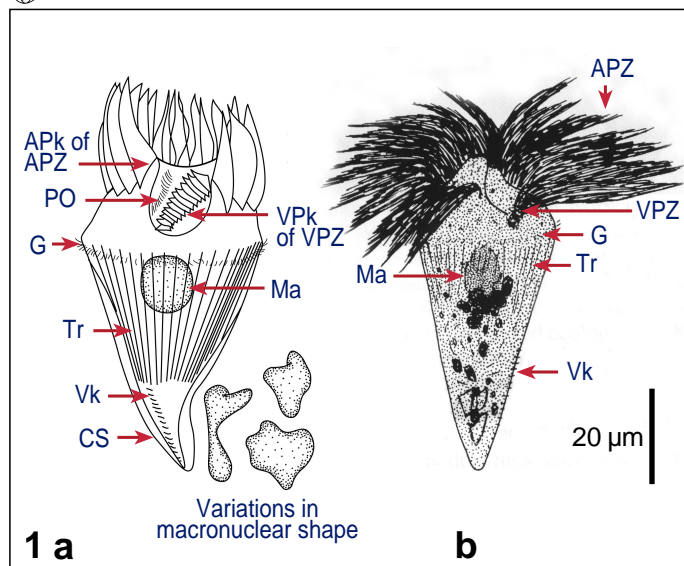


Strombidium conicum (Lohmann, 1908) Wulff, 1919



Key features

Cell conical with rounded top (ice cream cone shape), posterior part with faint longitudinal stripes (trichites); small anterior collar; APZ distinctly separated from VPZ; one macronucleus, variable in shape, centrally or anterior-left located; girdle kinety supraequatorial, ventral kinety clearly separate from girdle

Measurements

Length:	65 (40-110) µm
Width:	35 (25-60) µm
No of APk:	18 (15-26)
No of VPk:	13 (10-17)
Ma diameter:	10-30 x 5-20 µm (variable)
Biovolume:	35,000 µm ³

Movement

Swims slowly in spirals; may swim oral region down towards bottom of dish, moves rapidly forward - backward for 1-2 cell lengths, apparently searching for food

Food

Mixotrophic, chloroplast-retention, pennate and centric diatoms, nanoflagellates

Ecological data

Temperature: 4-20 °C; eurythermal
Salinity: 15-29 ‰; euryhaline

References

Agatha S & Riedel-Lorjé JC 1997; Kahl A 1932; Leegaard C 1915; Lohmann H 1908; Montagnes DJS et al. 1988; Wulff A 1919.

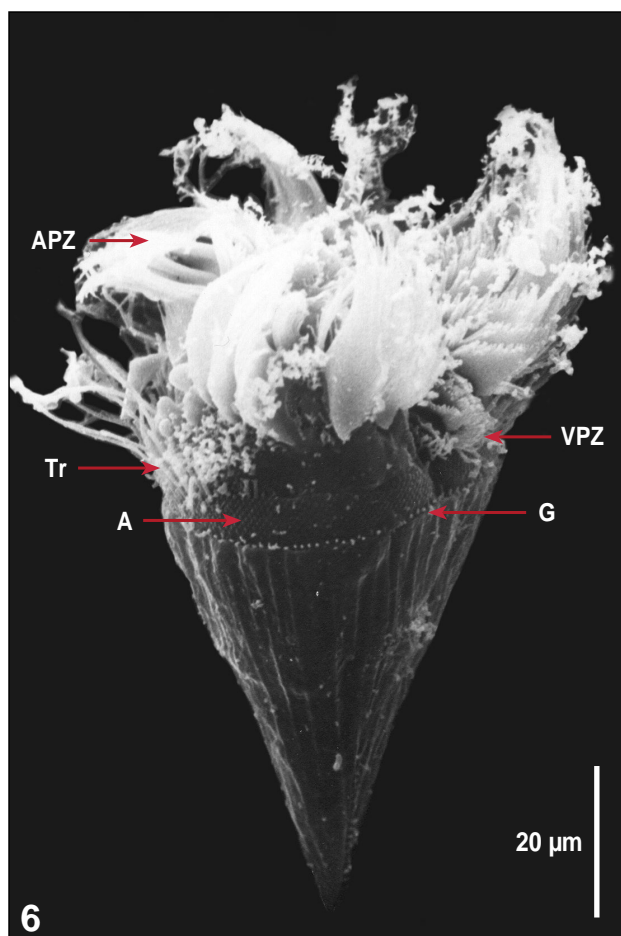
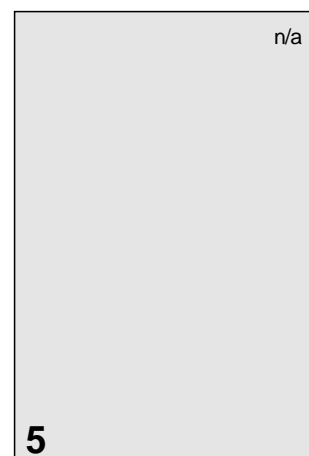
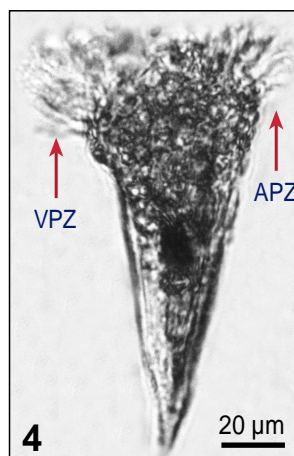
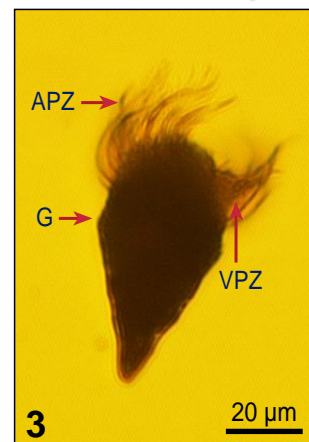
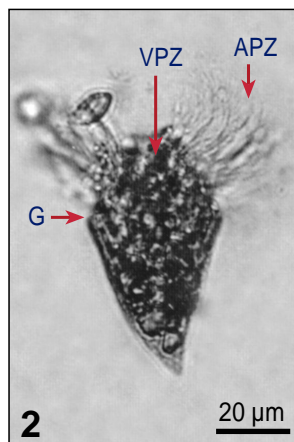
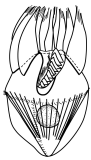


Fig 1 Line drawings: a. Protargol stained cell, showing kineties, oral structures and nucleus as well as macronuclear variability; b. Live specimen. **Fig 2-4** Lugol's fixed cells: 2,3. ventral view of normal specimens; 4. stressed form, lateral view, resembling *S. acuminatum* (see tax. remarks). (**Fig 5** Lugol's fixed and DAPI stained cell, illustrating nuclear shape). **Fig 6** SEM of Lugol's fixed cell, right lateral view, shows the extrusion of trichites (Tr) and the array (A), where many trichites are located below the surface.



Strombidium conicum (Lohmann, 1908) Wulff, 1919

Species description

Body **conical with rounded top: ice cream cone shape**, widest near anterior third, 65 (40-110) μm long and 35 (25-60) μm wide (Fig 1,2,3,6); **posterior part with faint longitudinal stripes (trichites; Fig 1,6,7)**; **anterior collar**; trichites rod-shaped (13-20 μm long), arranged in a funnel-shape and insert in hexagonally packed arrays anterior to the girdle (Fig. 1,6,7); ventral gap without trichites probably, where girdle kinety is interrupted.

Shallow acentric oral cavity (Fig 1,6,7); **APZ distinctly separated from VPZ** (Fig 1a, 7); 30-37 ciliated kinetids as paroral kinety on the right side in the oral cavity; VPZ extends almost to the girdle into the oral cavity (Fig 7).

Girdle kinety supraequatorial (in anterior third), completely surrounding the cell in a shallow furrow, 50-100 stubby cilia (Fig 1,6,7); **ventral kinety clearly separate from girdle kinety**, to the right of the oral cavity, with 10-40 ciliated kinetids (Fig 1a).

One macronucleus, highly variable in shape, mostly spheroid to ellipsoid, central or more anterior-left (Fig 1a,b).

Similar species

S. oculatum (only 11-12 APk, red anterior bump), *S. tintinnodes* and *S. typicum* (girdle not supraequatorial), *S. wulffi* (macronucleus fragmented into two distinct zones), *S. chlorophilum* (multiple macronuclei, shorter ventral kinety).

List of synonyms

1908 *Laboea conica* Lohmann, Wiss Meeresuntersuch, Kiel 10: 299, Pl 17, Fig 18-20.
1915 *Laboea conica* Leegaard, Nyt Mag Naturvid 53: 14, Fig 5a-e.
1915 *Laboea acuminata* Leegaard, Nyt Mag Naturvid 53: 22, Fig 12a-c.
1932 *Strombidium acuminatum* Kahl Tierwelt Dtl 25: 502, Fig 8

Taxonomical remarks

Aged and stressed forms of *S. conicum* (Fig 4) resemble *Strombidium (Laboea) acuminatum* as described by Leegaard (1915). *S. conicum*, *S. chlorophilum* and other undescribed but very similar species may form a species complex.

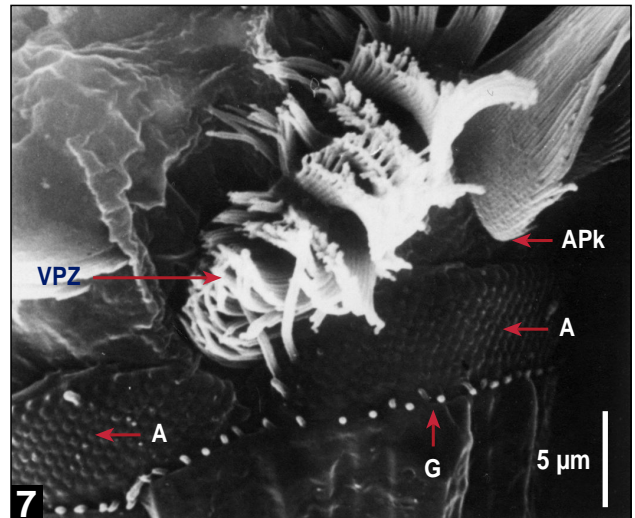


Fig 7 Details of the oral region, showing the cilia of the girdle kinety and the hexagonally patterned array of the trichites (A).

Notes