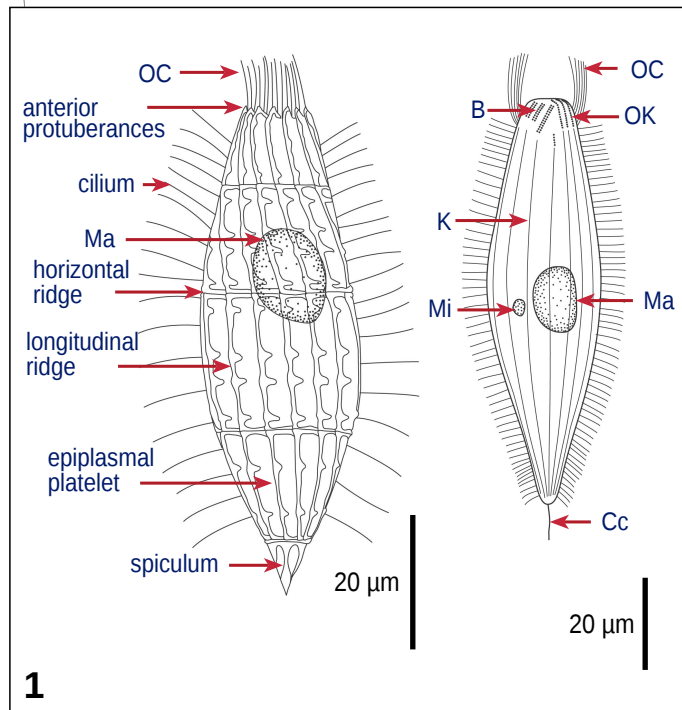


Tiarina fusus (Claparède & Lachmann, 1858) Bergh, 1880



Key features

Body spindle-shaped; rectangular surface platelets with longitudinal or spiral ridges; anterior small protuberances, small posterior spicula; oral cilia ring; 17 somatic kineties; one spheroid macronucleus

Measurements

Length: 80 (60-90) µm
Width: 25 (20-35) µm
No of K: 17
No of OD: 17
Ma diameter: 15 µm
Biovolume: 15,000 µm³

Movement

Swims in spiral tracks

Food

Nanoflagellates, cryptophytes, dinoflagellates (4-20 µm)

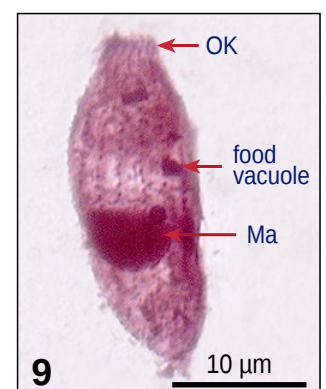
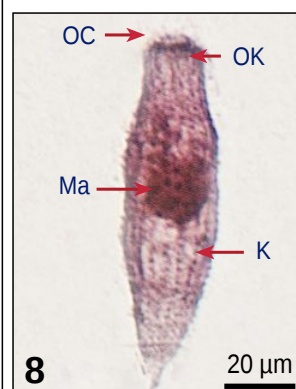
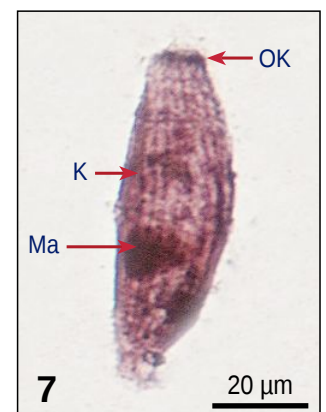
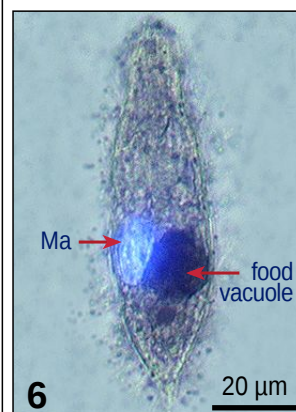
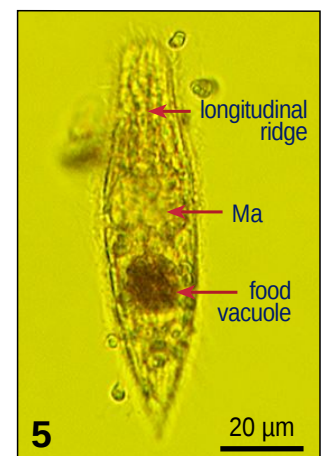
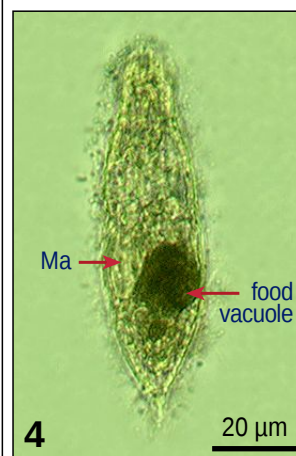
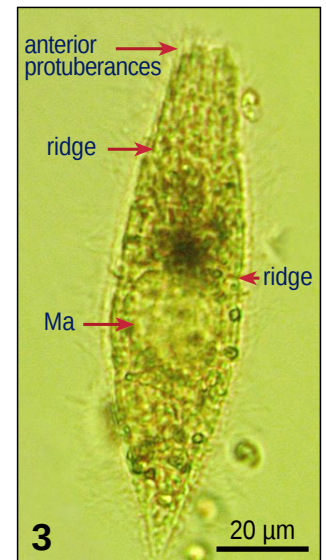
Ecological data

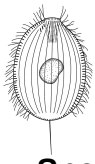
Temperature: 5-10 °C
Salinity: 12-16 ‰
ability to form "red tides"

References

Dale T & Dahl E 1987; Fauré-Fremiet E 1924; Kuylenstierna M & Karlson B 1996-2000 (www.marbot.gu.se/SSS/others/Tiarina_fusus.htm); Lohmann H 1908

Fig 1 Line drawings: a. Structure of the epiplasmal platelets; b. Protargol stained cell, showing infraciliature and nuclei. **Fig 2-5** Lugol's fixed cells, lateral views. **Fig 6** Lugol's fixed and DAPI stained cell (identical to Fig 4), illustrating nuclear shape. **Fig 7-9** Protargol-stained cells, lateral views, showing macronucleus (Ma), somatic kineties (K), and oral cilia and kinetosomes (OC and OK).





Tiarina fusus (Claparède & Lachmann, 1858) Bergh, 1880

Species description

Body **spindle-shaped**, anterior and posterior pointed, 80 (60-90) μm long and 25 (20-35) μm wide; **anterior** with **small protuberances**, **posterior** with one or more **small spicula** (Fig 1,3,8); **rectangular surface platelets**, made of calcium-carbonate, with small lateral teeth, horizontal and **longitudinal or slightly spiral ridges**, regularly or irregularly spaced (Fig 1a-3,5,12); cytoplasm in live specimens with red vacuoles; extrusomes (toxicysts) - not visible in Lugol's fixed cells; one short caudal cilium, typically not visible in Lugol's fixed material (Fig 1b).

Oral cavity apical, surrounded by **oral cilia ring** (OC, Fig 1a,2,8,11) with 17 rows of densely packed kinetosomes (oral kinetids, OK, Fig 1b,7-9,13); brosse oblique to somatic kineties (Fig 1b), located within the area of the oral kinetosomes - not visible in Lugol's fixed material; cytostome flexible, ciliate can ingest prey of its own length.

17 somatic kineties with 40-50 kinetosomes, cilia 7-10 μm long, along the entire cell length (Fig 7-11,13).

One macronucleus, spheroid, 15 μm in diameter, centrally located (Fig 1,3-9).

Similar species

T. meunieri (smaller); *Coleps* spp. (body more barrel-shaped)

List of synonyms

1858 *Coleps fusus* Claparède & Lachmann, Mém Inst Nat Genèv 5: 366, Pl 12, Fig 7,8.

Taxonomical remarks

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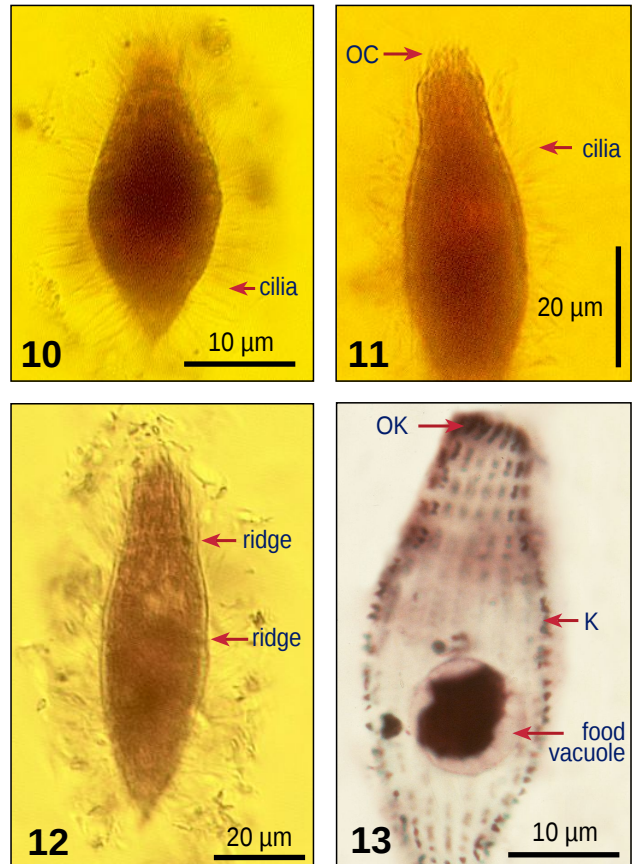


Fig 10-12 Lugol's fixed cells, lateral views: 10. Length of the somatic cilia; 11. Oral cilia (OC) and length of somatic cilia; 12. Horizontal ridges. **Fig 13** Protargol-stained cell, lateral view.

Notes