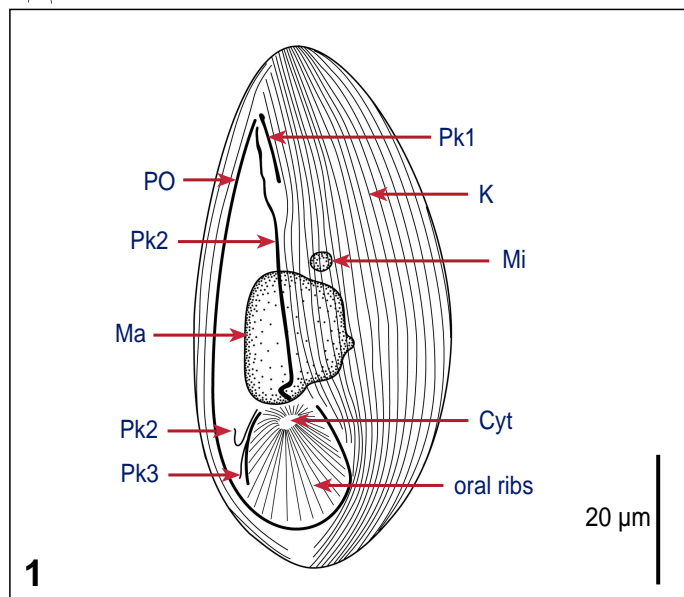




Pleuronematine Scuticociliates



Key features

Cell typically elongate-ovoid; cytostome equatorial or subequatorial, 3 adoral polykinetids, longitudinally arranged; 1 hypertelic paroral kinety, bearing long cilia, runs from the anterior end 50-75% down the cell length, describes a distinct curve almost all around the cytostome; typically, equally spaced somatic kineties, extend to the end of the cell; one to several caudal cilia; one macronucleus, ovoid to spherical

Measurements

Length: 30 (15-150) µm
Width: 20 (10-50) µm
No of K: 5-60
Ma diameter: 5-20 µm
Biovolume: 1,000 - 200,000 µm³

Movement

-

Food

Bacteria and nanoflagellates

Ecological data

Temperature: -

Salinity: -

References

Corliss JO 1979; Protist Information Server 1995-2001 (<http://protist.i.hosei.ac.jp/PDB/Images/Protista/CiliophoraE.html#Oligohymenophorea>); Small EB & Lynn DH 1985

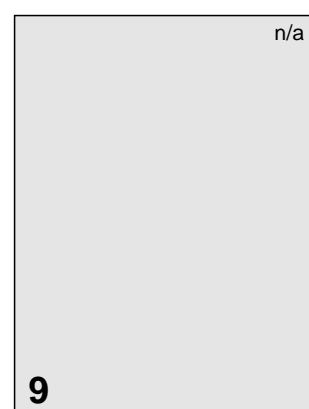
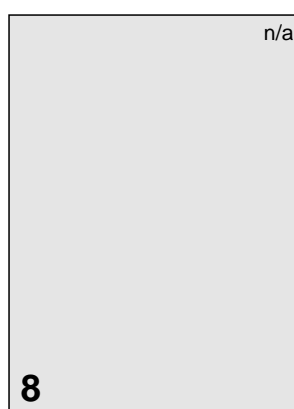
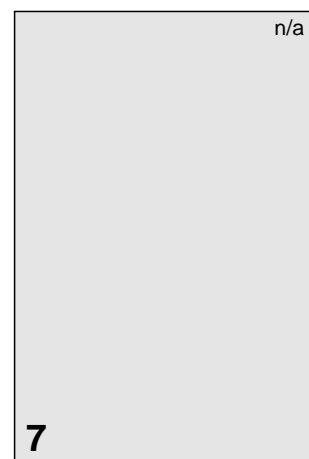
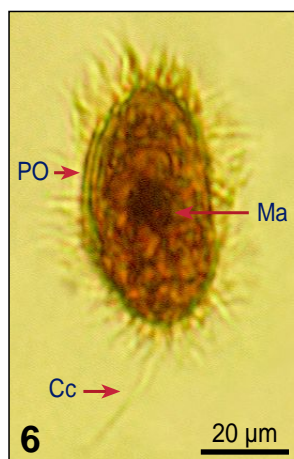
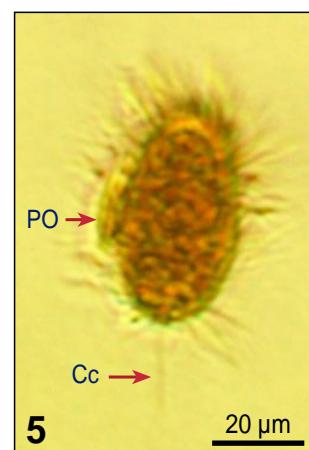
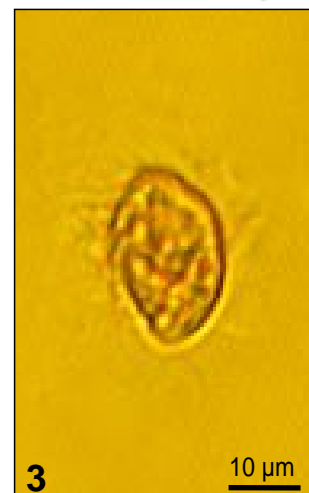


Fig 1 Line drawings: *Pleuronema coronatum*-like, protargol stained cell, showing kineties, oral structures and nucleus. **Fig 2-6** Lugol's fixed cells, lateral views: 2. *Pleuronema coronatum*-like; 3,4,5. *Cyclidium* spp. (**Fig 7** Lugol's fixed and DAPI stained cell, illustrating nuclear shape. **Fig 8,9** Protargol-stained cells, lateral views, showing characteristic features)



Pleuronematine Scuticociliates

Species description

Cell typically elongate-ovoid, may be slightly flattened laterally, 30 (15-120) μm long and 20 (10-50) μm wide; **one to several prominent caudal cilia** (Fig 5,6); mucocysts are the common type of extrusomes however, they are not visible in Lugol's fixed cells; sometimes with trichocysts.

Oral region conspicuous, often occupying much of the ventral surface; oral cavity, however, may be shallow; **cytostome equatorial or subequatorial, 3 adoral polykinetids, longitudinally arranged**, on the left side of the oral region, polykinety 1 is distinctly visible; **1 well developed paroral kinety**, on the right side of the oral region, **bearing long cilia**, sometimes developed like a velum, **runs from the anterior 50-75% down the cell length, describes a distinct curve almost all around the cytostome** (Fig 1,4,5); scutica visible in protargol stains.

Typically, equally spaced somatic kineties, which can be sparse (5-60), **extend to the end of the cell** (bipolar) (Fig 1).

One macronucleus, ovoid to spherical (5-20 μm large), often in the anterior part of the cell (Fig 1,4,6).

Typical genera

Pleuronema, *Cyclidium*

List of synonyms

-

Taxonomical remarks

Pleuronematine scuticociliates comprise a variety of different species, most of which are bacterivorous or histophagous. The cells do not fixed well with Lugol's, and due to their small size and the lack of distinctive features, species identification is not possible based on Lugol's fixed material. Protargol stains are needed to separate species and even genera.

Notes