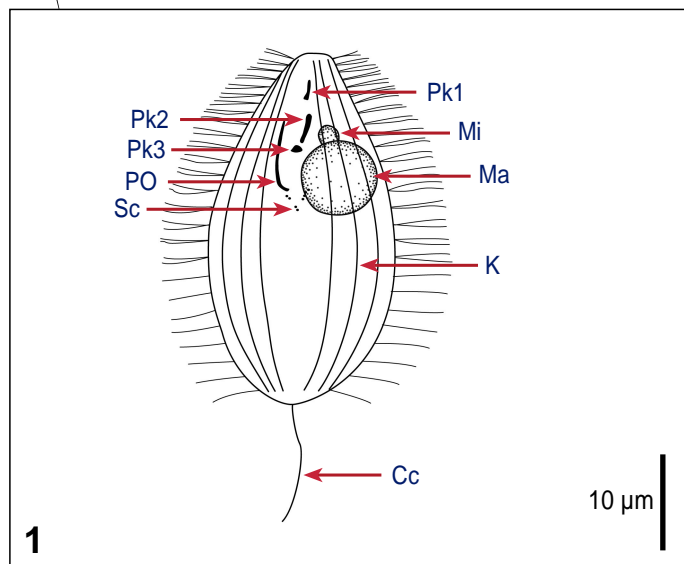


Philasterine Scuticociliates



Key features

Cell typically elongate-ovoid; cytostome in anterior 1/3 of the cell; 3 adoral polykinetids, longitudinally arranged; 1 distinct paroral kinety, bearing long cilia, runs from the anterior end 30-50% down the cell length, describes a slight curve 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: 50 (15-120) µm
Width: 25 (15-50) µm
No of K: 10-60
Ma diameter: 8-20 µm
Biovolume: 2,500 - 160,000 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

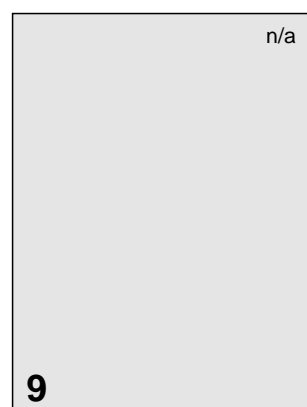
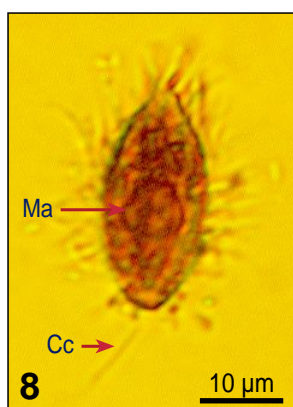
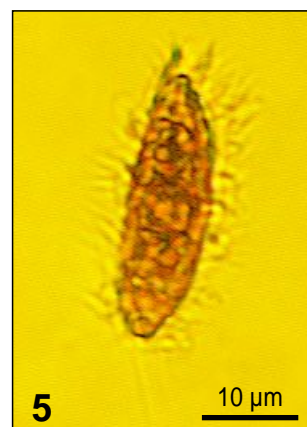
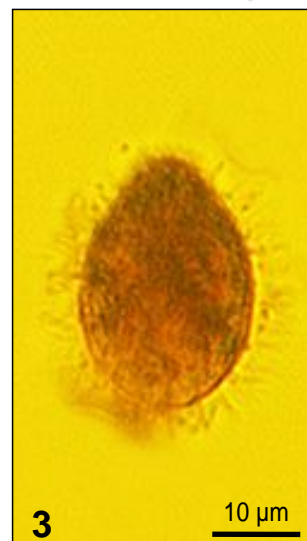
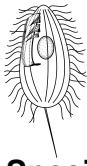


Fig 1 Schematic line drawing of *Uronema* sp. showing kineties, oral structures and nuclei. **Fig 2-8** Lugol's fixed cells of different philasterine scuticociliates, lateral views. (Fig 9. Lugol's fixed and DAPI stained cell, illustrating nuclear shape.)



Philasterine Scuticociliates

Species description

Cell typically elongate-ovoid, 50 (15-120) μm long and 25 (15-50) μm wide; **one to several caudal cilia** (Fig 1,4,5,7,8); with distinct mucocysts, not visible in Lugol's fixed material.

Oral cavity typically shallow; **cytostome in anterior 1/2 of the cell**; **3 adoral polykinetids** on the left side of the oral region, **longitudinally arranged**, appear as fields of kinetosomes and not as rows; **1 distinct paroral kinety**, on the right side of the oral region, **bearing long cilia**, runs from the anterior end **30-50% down the cell length**, describes a slight curve around the cytostome; with a typical zigzag arrangement of kinetosomes; scutica posterior to the paroral kinety, visible only in protargol stains.

Typically, equally spaced somatic kineties (10-60), **extend to the end of the cell** (Fig 1).

One macronucleus, ovoid to spherical (8-20 μm large) (Fig 1,6,8).

Typical genera

Uronema, *Parauronema*, *Philaster*, *Philasterides*, *Cohnilembus*, *Pseudocohnilembus*, *Paranophrys*, *Anophryoides*

List of synonyms

-

Taxonomical remarks

Philasterine scuticociliates comprise a variety of different species, most of which are bacterivorous or histophagous. The cells do not fixed very 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 in order to separate species and even genera.

Notes