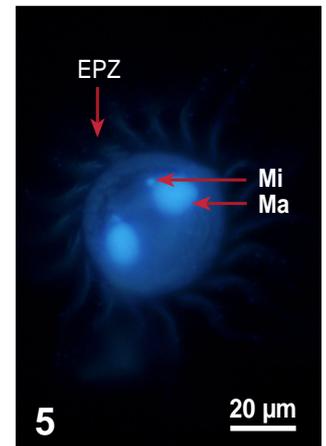
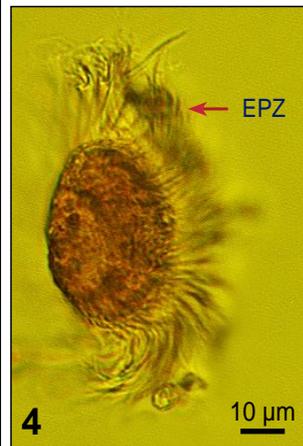
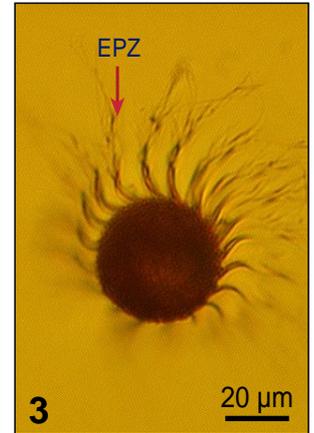
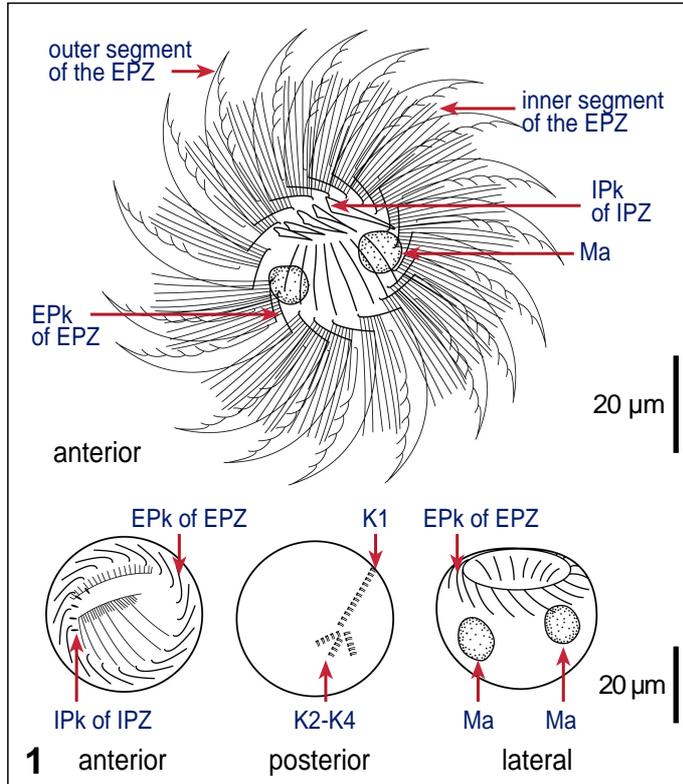


# *Leegaardiella sol* Lynn & Montagnes, 1988



## Key features

Cell bowl-shaped; oral cavity wide, EPks comprised of 2 equal segments, differently ciliated; EPZ very long, some are same length as cell is wide; two macronuclei, almost spherical, lateral; 4 somatic kineties, arranged in a bird-foot pattern; cells almost always fall "face"-up or "face"-down.

## Measurements

Length: 30 (25-45) µm  
 Width: 45 (40-65) µm  
 No of EPk: 19 (18-20)  
 No of IPk: 5 (4-5)  
 Ma diameter: 5-7 µm  
 Biovolume: 40,000 µm<sup>3</sup>

## Movement

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## Food

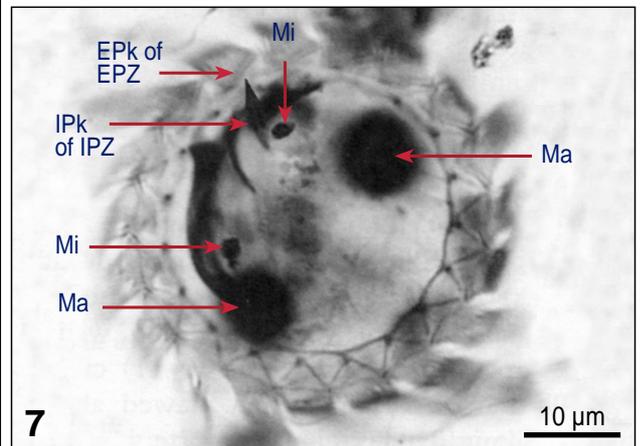
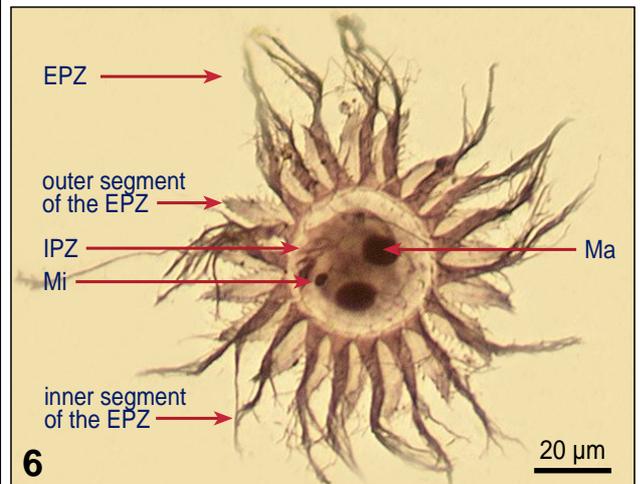
-

## Ecological data

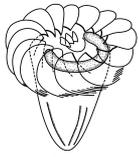
Temperature: 10-18 °C  
 Salinity: 30-32 ‰

## References

Leegaard C 1915; Lynn DH & Montagnes DJS 1988



**Fig 1** Line drawings of protargol stained cells, showing kineties, oral structures and nuclei. **Fig 2-4** Lugol's fixed cells: 2,3. Apical (2) and antapical (3) region - cells normally settle "face"-down in a chamber; 4. Lateral view. **Fig 5** Lugol's fixed and DAPI stained cell, illustrating nuclear shape. **Fig 6,7** Protargol stains, viewed from apical end: oral ciliature with supporting cytoskeletal structures, micro- and macronuclei are stained.



# *Leegaardiella sol* Lynn & Montagnes, 1988

## Species description

Body **bowl-shaped**, with a domed anterior surface (Fig 1,4,8,10); 30 (25-45)  $\mu\text{m}$  long and 45 (40-65)  $\mu\text{m}$  wide.

**Oral cavity wide** (Fig 1,2,6-9); 18-20 EPks and 4-5 IPks; IPZ and EPZ distinctly separate (Fig 1,6,7,9); **EPZ prominent, same length as cell is wide** (Fig 2-4,6); **EPks of 2 equal segments, differently ciliated**, the inner portion is slightly curved whereas the outer portion is relatively straight (Fig 1,9); IPks of unequal size - the smallest IPks are closest to the cytostome, they can be fragmented; cytopharyngeal fibres present (Fig 1,7,8).

**4 somatic kineties in a bird-foot pattern**: 1 long, 3 short, with dikinetids, both kinetosomes ciliated (Fig 1).

**Two macronuclei, almost spherical, in lateral position** (Fig 1,2,5,6,7,9), each with an adjacent micronucleus (Fig 5-7).

## Similar species

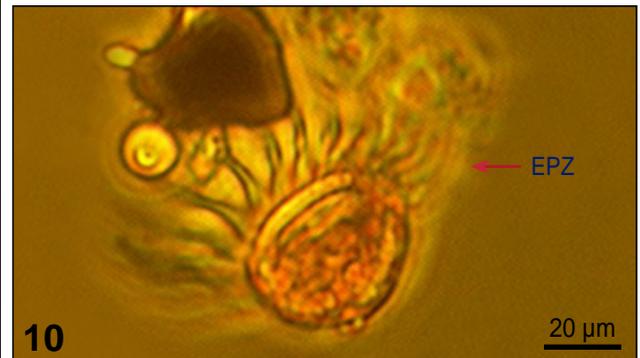
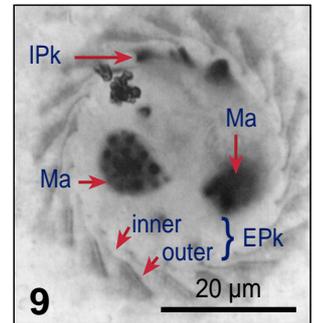
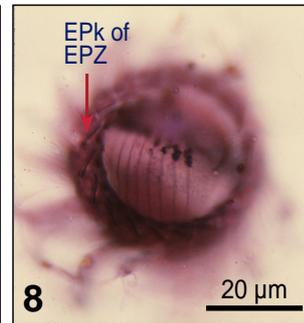
*Leegaardiella ovalis* (smaller, body more spherical, one macronucleus, only one somatic kinety), *Lohmanniella oviformis* (smaller, oral cavity smaller, different cell shape), *Strobilidium neptuni* (posterior part more rounded with one flat side, EPks smaller, somatic kinety 2 is typically arched, macronucleus C-shaped).

## List of synonyms

1915 *Lohmanniella oviformis* Leegaard, Nyt Mag Naturvid 53: 28 Fig 19a - partim

## Taxonomical remarks

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**Fig 8,9** Protargol stains: 8. Apical view, showing the bases of the external polykinetids and the supporting cytoskeletal structures; 9. Apical view of the EPks with the inner (left arrow) and outer (right arrow) segments visible. **Fig 10** Lugol's fixed cell, lateral view.

## Notes