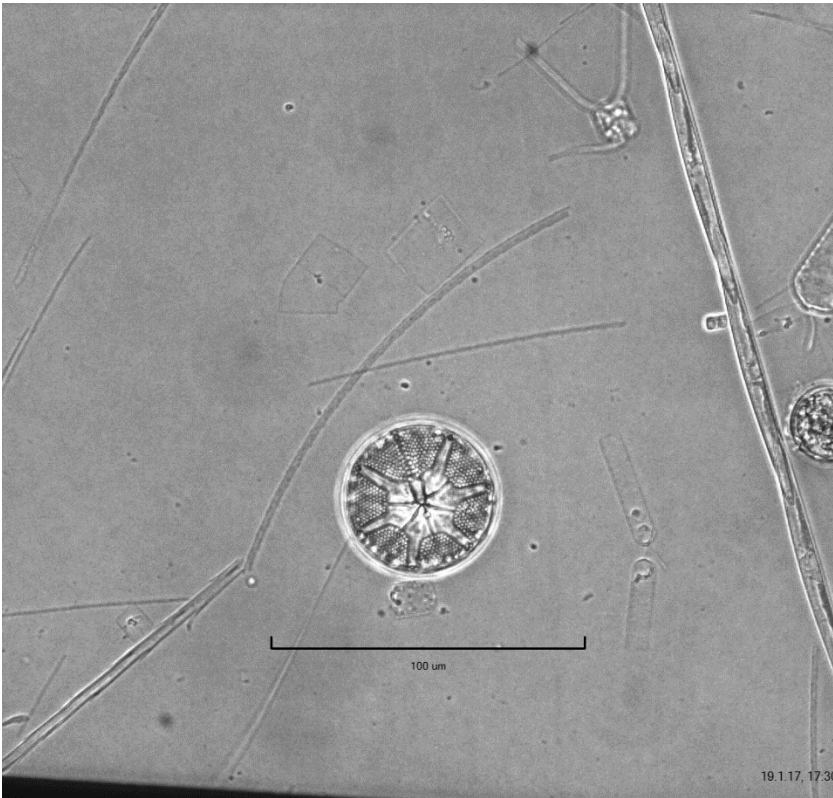


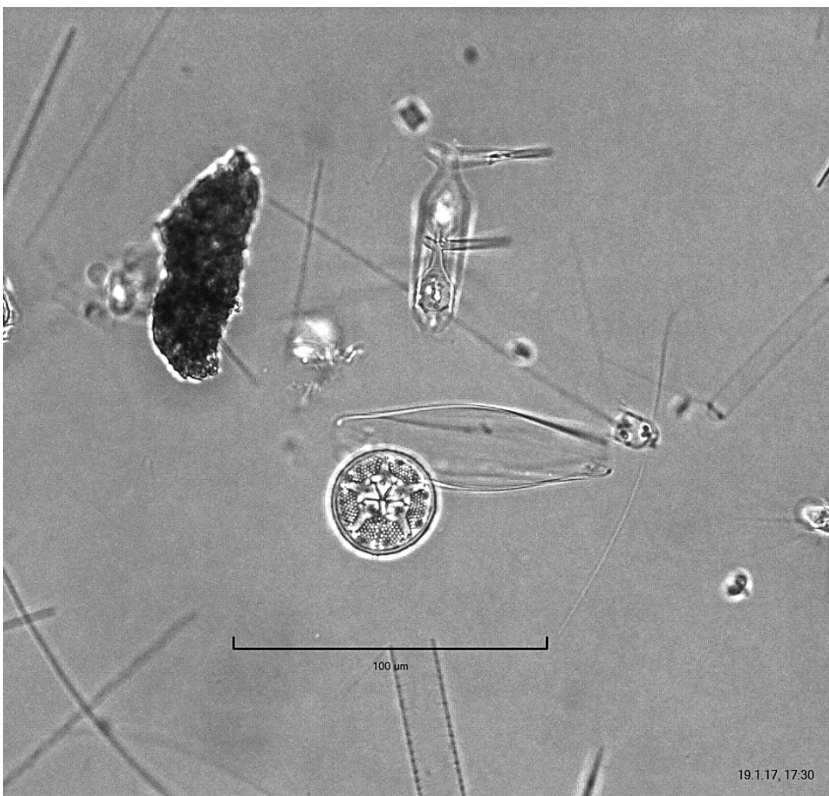
# Frequently observed diatoms- underway 20µm sieved samples

## *Asteromphalus hookeri*



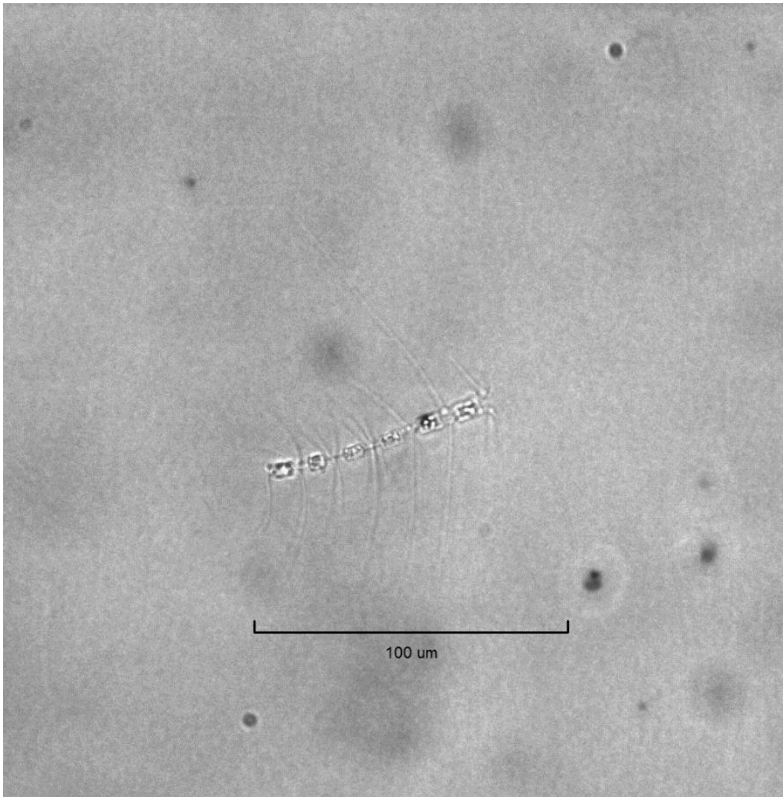
- Diameter 25-60µm
- Central hyaline area 33-50%
- 6-9 hyaline rays, 1 markedly narrower
- Separating lines straight

## *Asteromphalus parvulus*



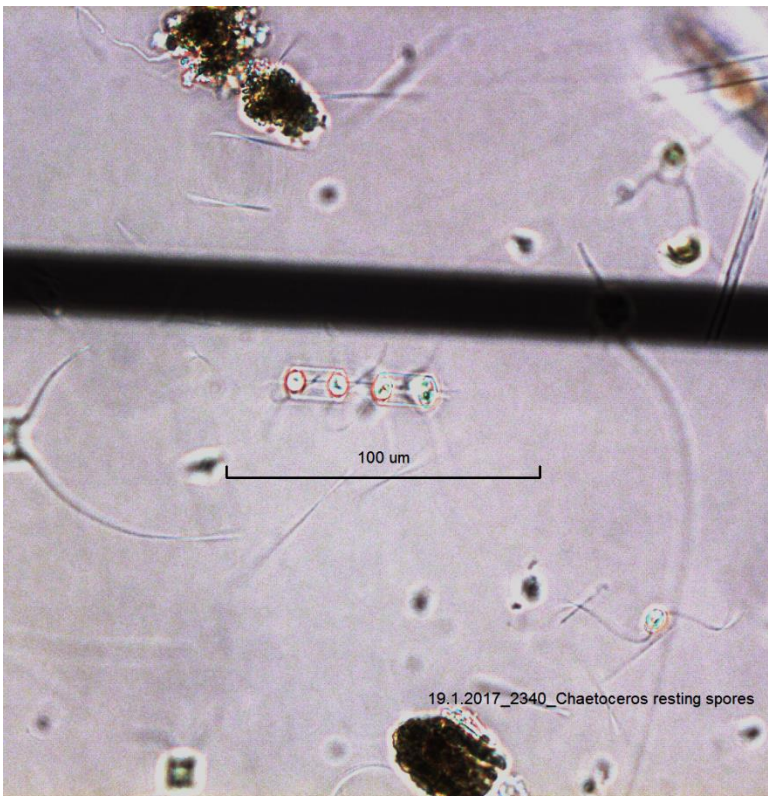
- Diameter 22-48µm
- Central hyaline area 50-75%
- 6-7 hyaline rays, 1 markedly narrower
- Separating lines broken

## *Chaetoceros Hyalochaete*



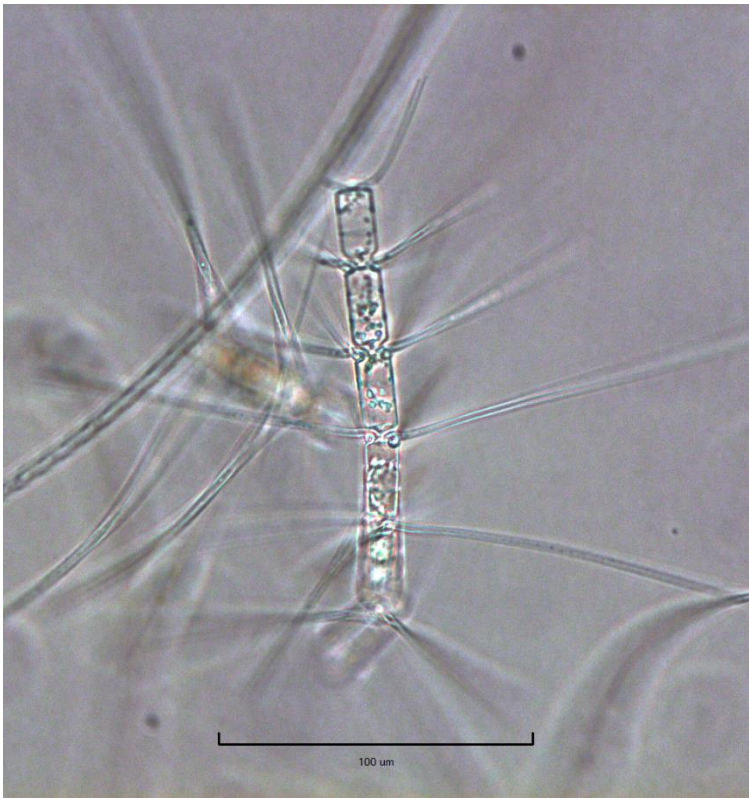
- Small, delicate forms with thin setae
- No chloroplasts in setae

## *Chaetoceros Resting Spore*



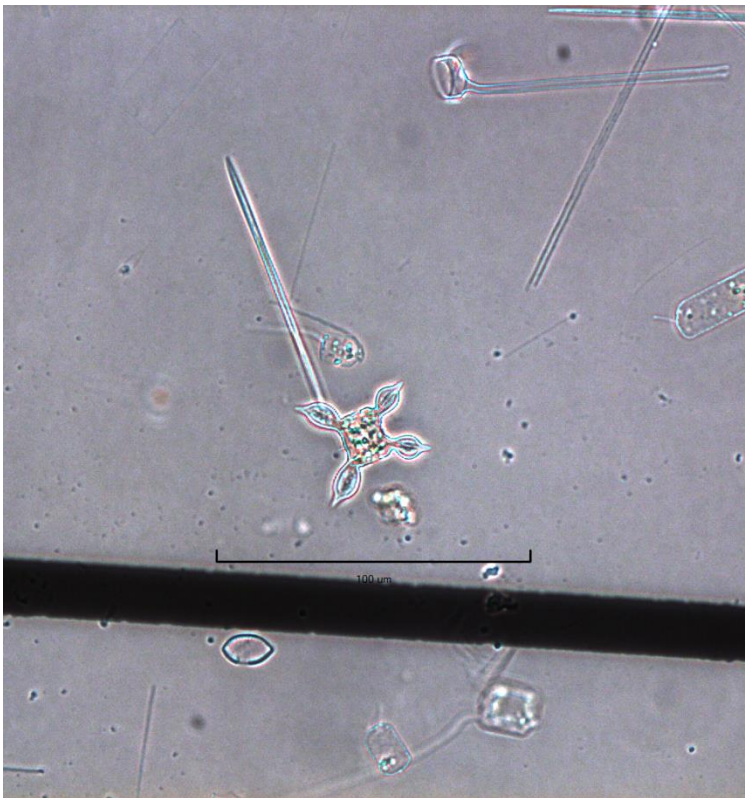


## *Chaetoceros adelianus*



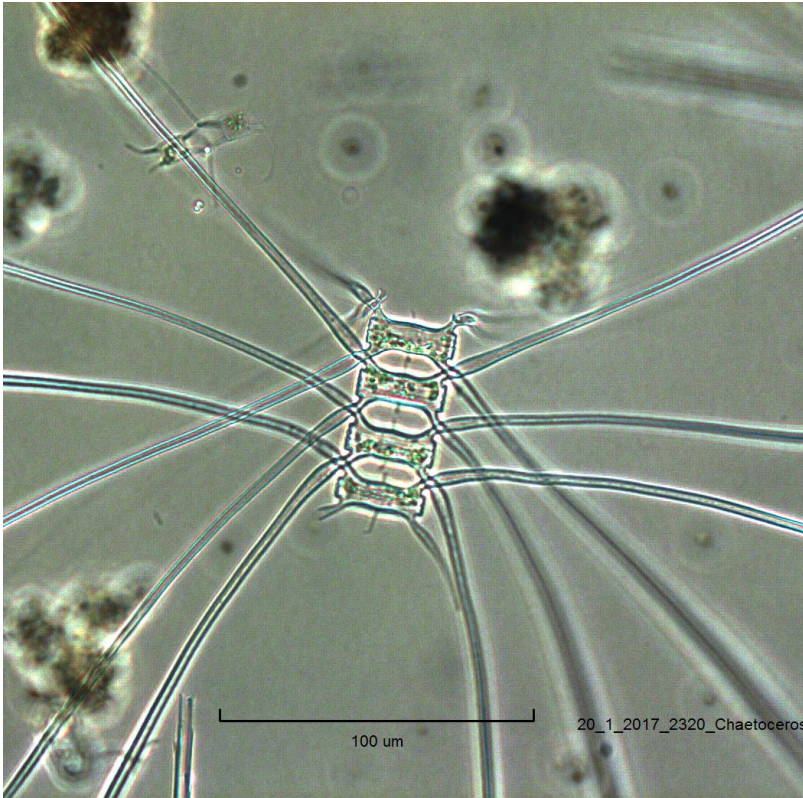
- Chain forming
- Pervalvar axis 42-48μm
- Small apertures
- Heavily silicified
- Rectangular in girdle view
- Small central spine
- Setae= long, coarse, spinose, almost perpendicular to valve

## *Chaetoceros atlanticus- bulbosum* form



- Solitary or short chains
- Elliptical valves
- Pervalvar axis 10-25μm
- Central spines
- Large apertures
- Setae= bulbous at base, tapering distally, often striated
- Chloroplasts small, distributed into setae

## Chaetoceros atlanticus



- Form straight chains
- Rectangular in girdle view
- Pervalvar axis 12-40μm
- Large, rectangular aperture
- Small central spine
- Setae arise from valve surface slightly within margin
- Small chloroplasts often spread into setae

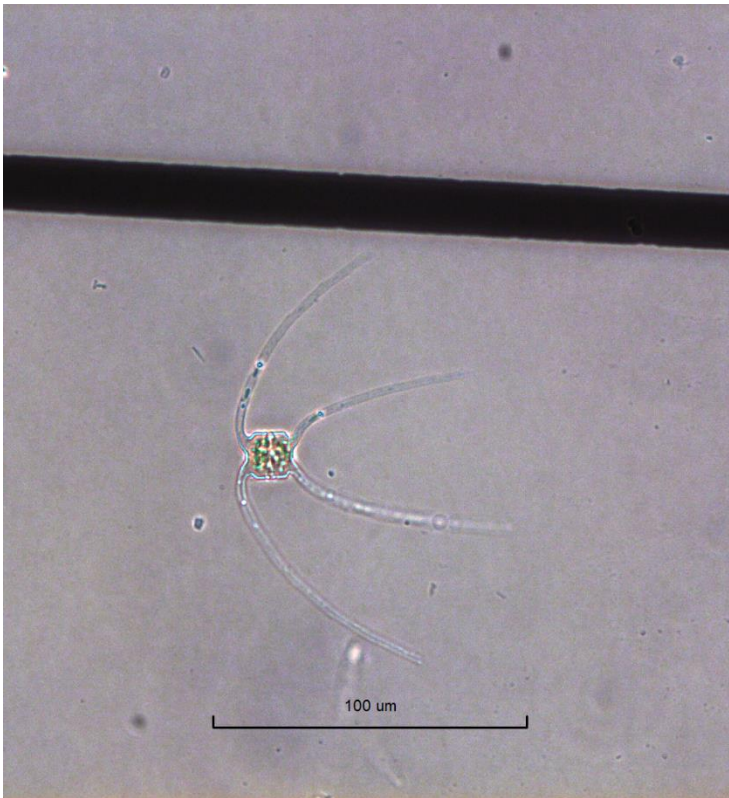
## Chaetoceros dichchaeta



- Chain forming, often united by parent girdle
- Pervalvar axis 10-40μm
- Central spine
- Apertures large
- Setae extend from well inside valve margin, parallel to cell for ~1 cell length, then bend out ~perpendicular
- Small chloroplasts often spread into setae

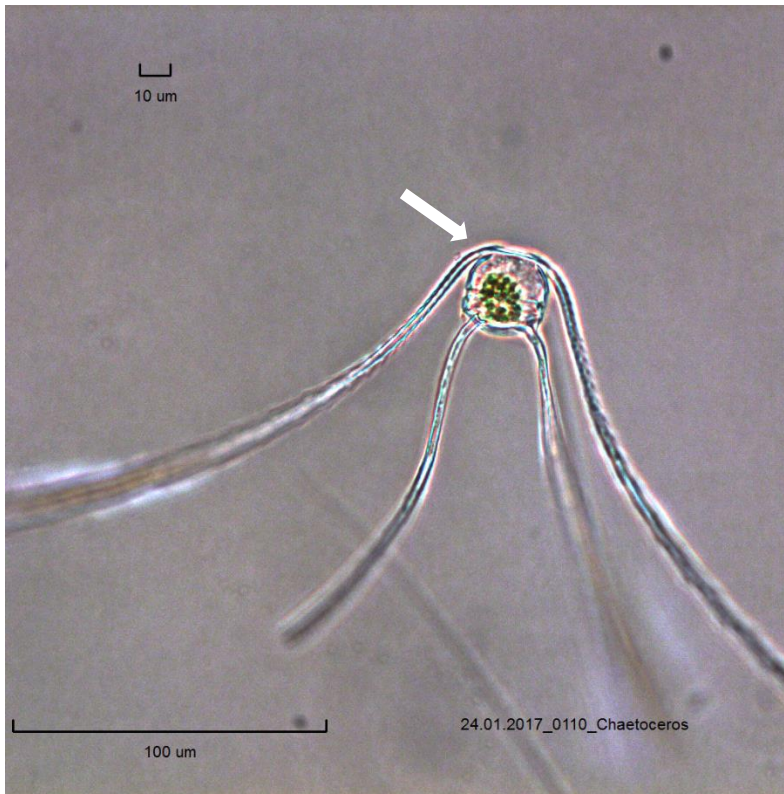


## Chaetoceros aequatorialis



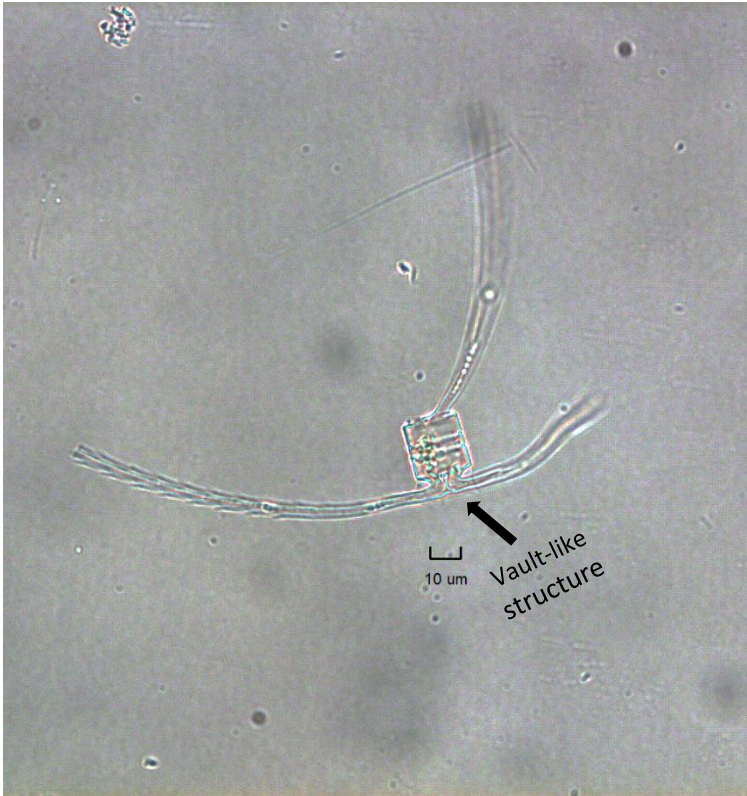
- Cells solitary
- Rectangular in girdle view, upper valve with central depression
- Pervalvar axis 6.5-9 μm
- Setae= long, coarse, spinose, slightly enlarged at emergence from upper valve
- Setae emerge almost perpendicular then curve down
- Upper and lower setae almost parallel

## Chaetoceros criophilus



- Cells solitary or chain forming
- ±rectangle in girdle view
- Pervalvar axis 15-55 μm
- Upper valve convex
- Setae= long, curved backwards, spinose, arise from near valve margin
- Characteristic notch between setae and lower valve

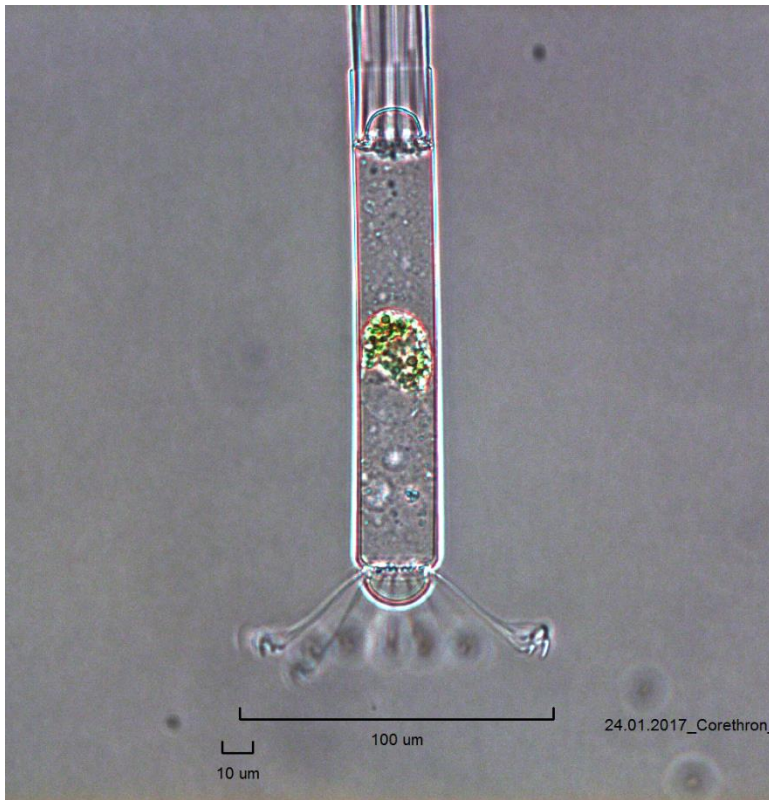
## Chaetoceros peruvianus



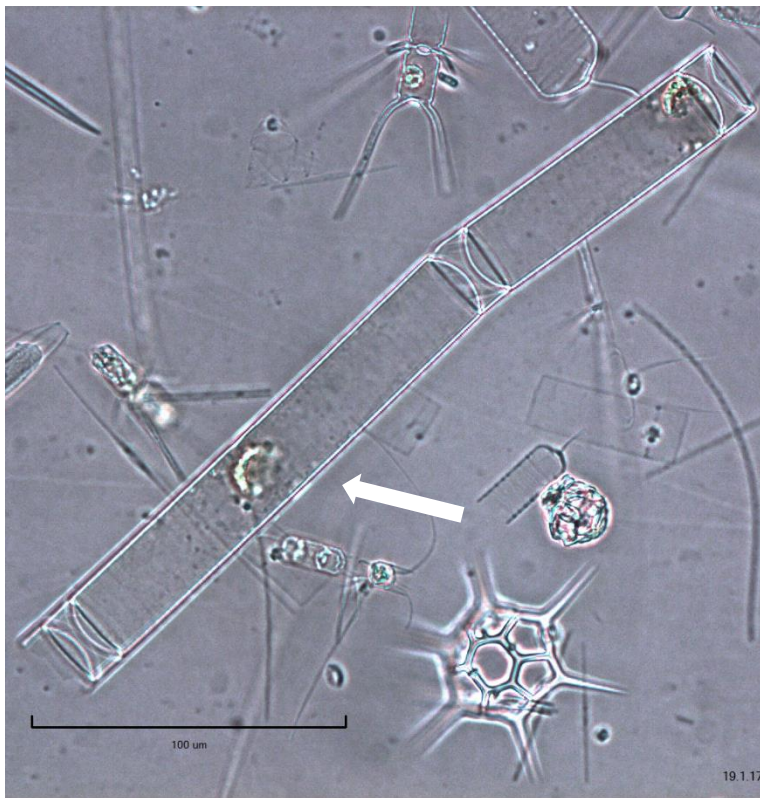
- Usually solitary, sometimes short chains
- Rectangular in girdle view
- Small central spine
- Pronounced constriction between valves and girdle
- Pervalvar axis 13-20μm
- Upper valve rounded
- Setae of upper valve emerge from center forming vault-like structure, of lower valve emerge from near margin
- Setae= long, thin, spinose



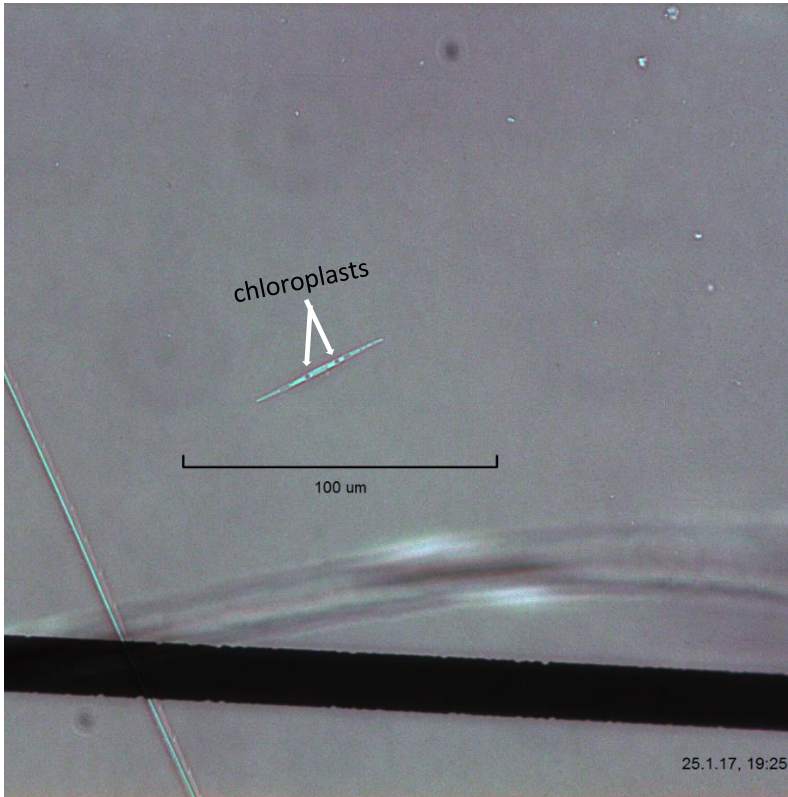
*Corethron pennatum*



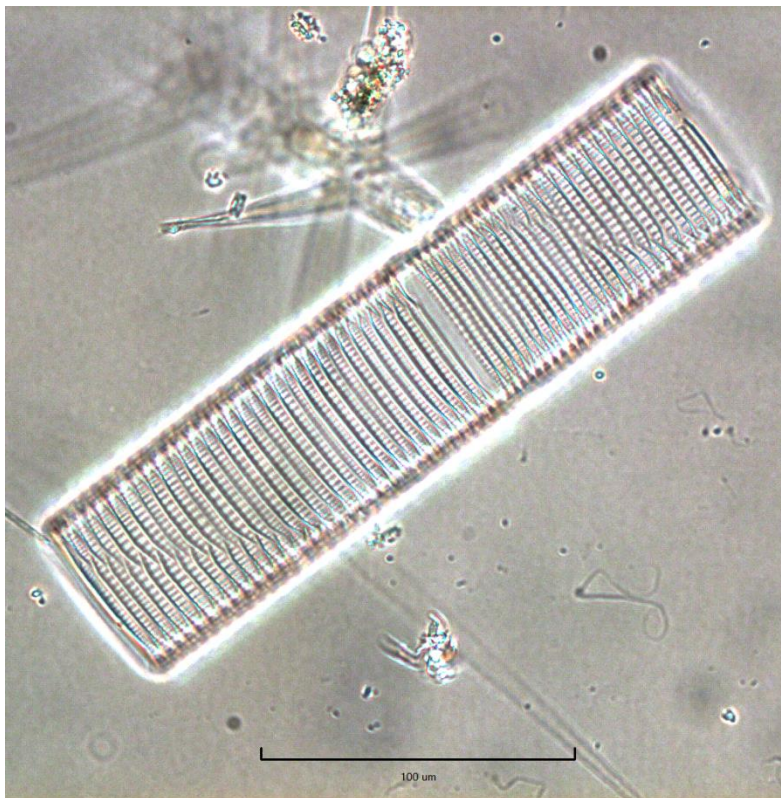
*Corethron inerme*



*Cylindrotheca* spp.

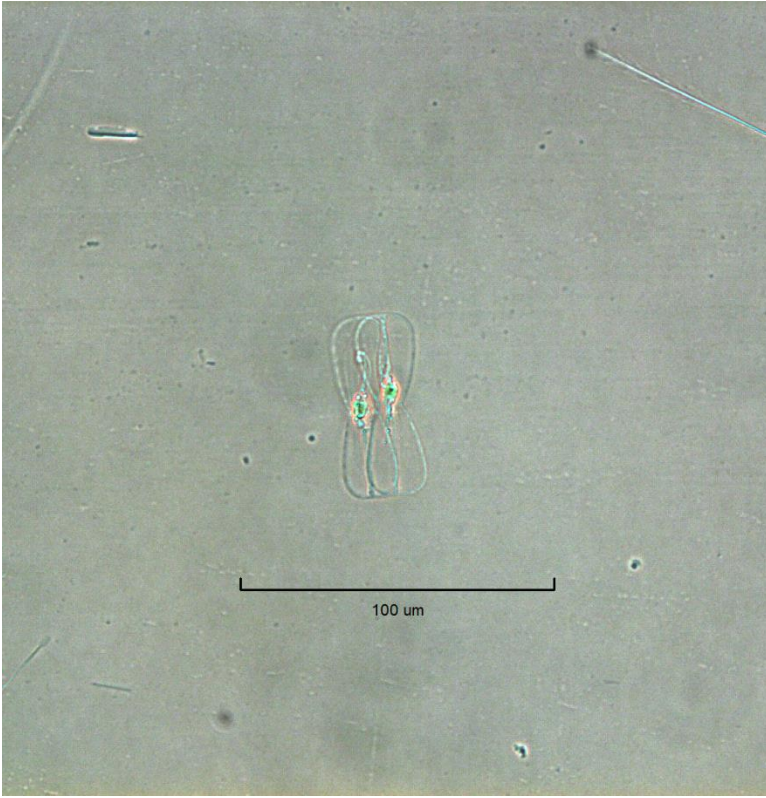


*Dactyliosolen antarctica*

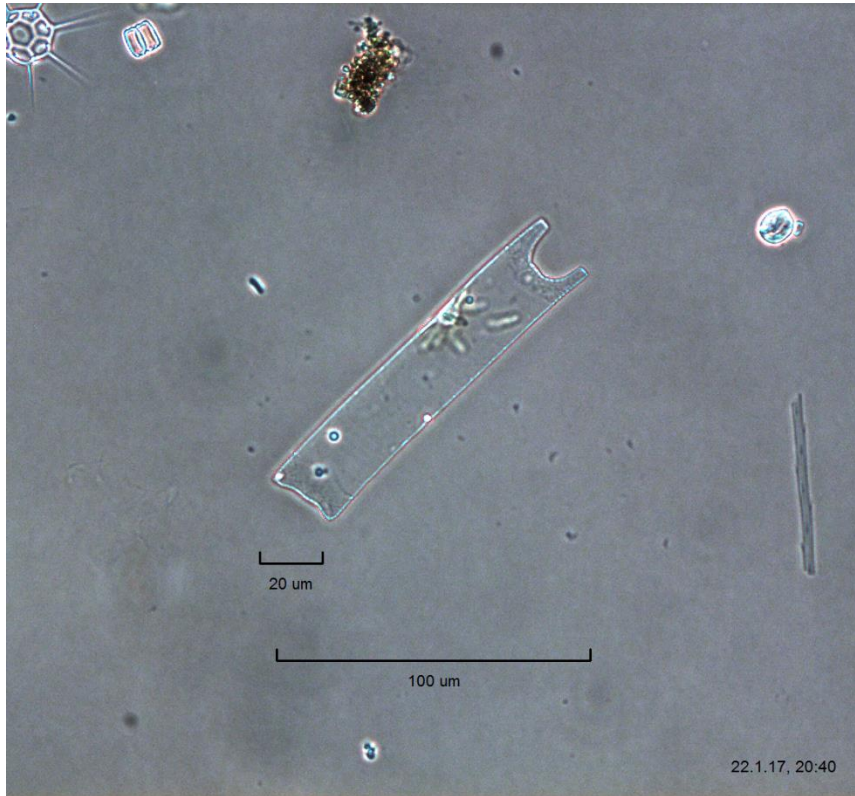




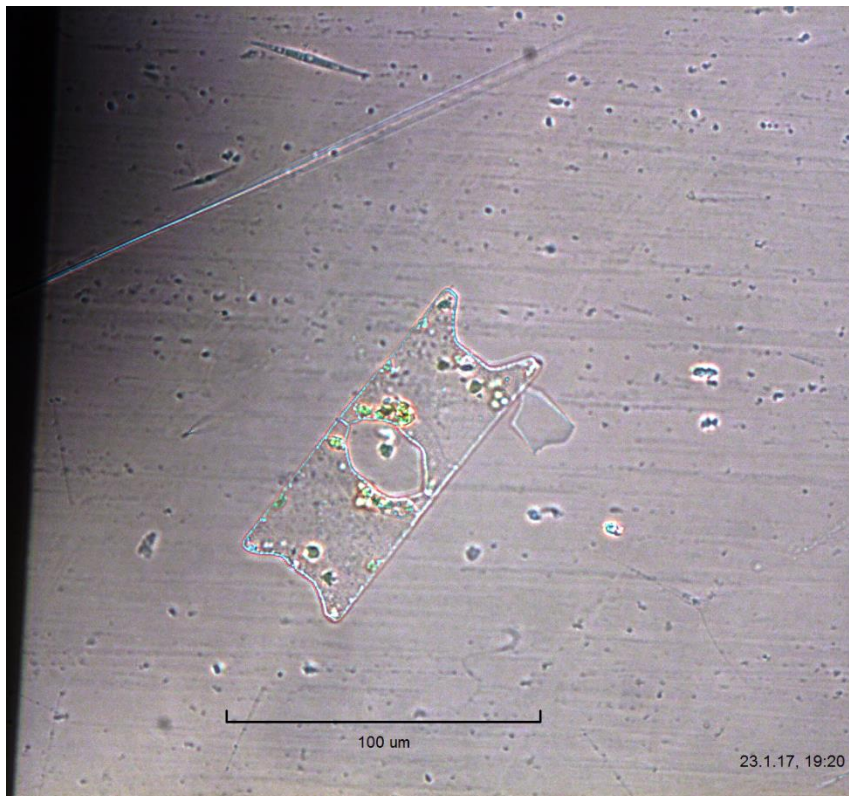
*Entomoneis* sp.



*Eucampia antarctica* var. *antarctica*

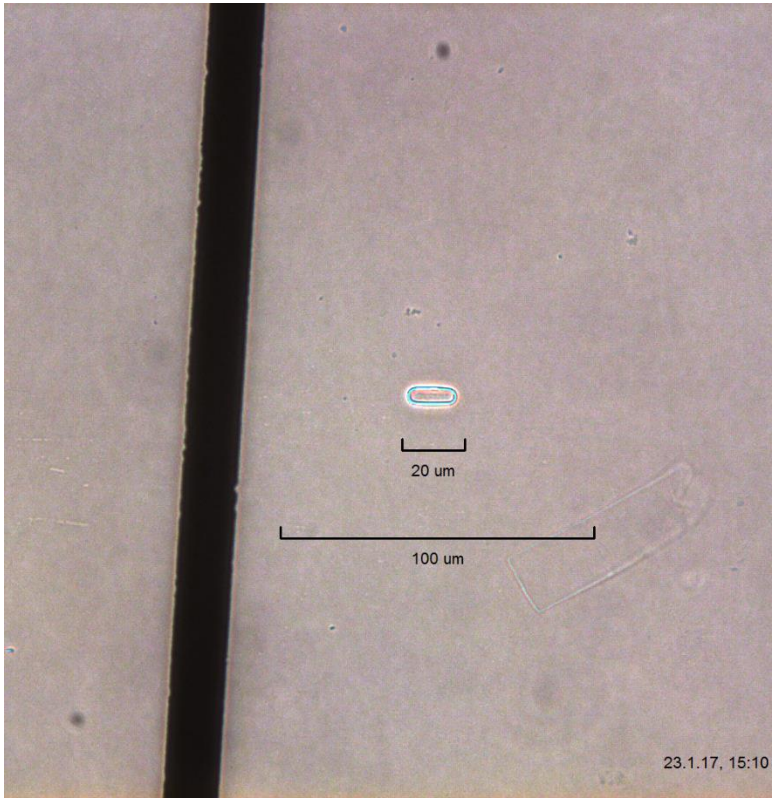


*Eucampia antarctica* var. *recta*

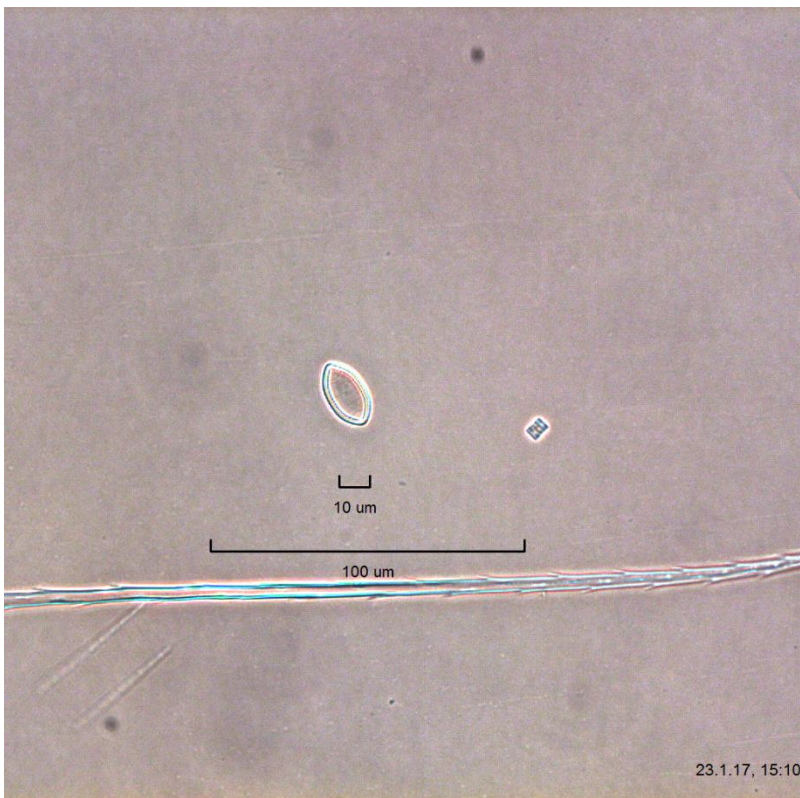




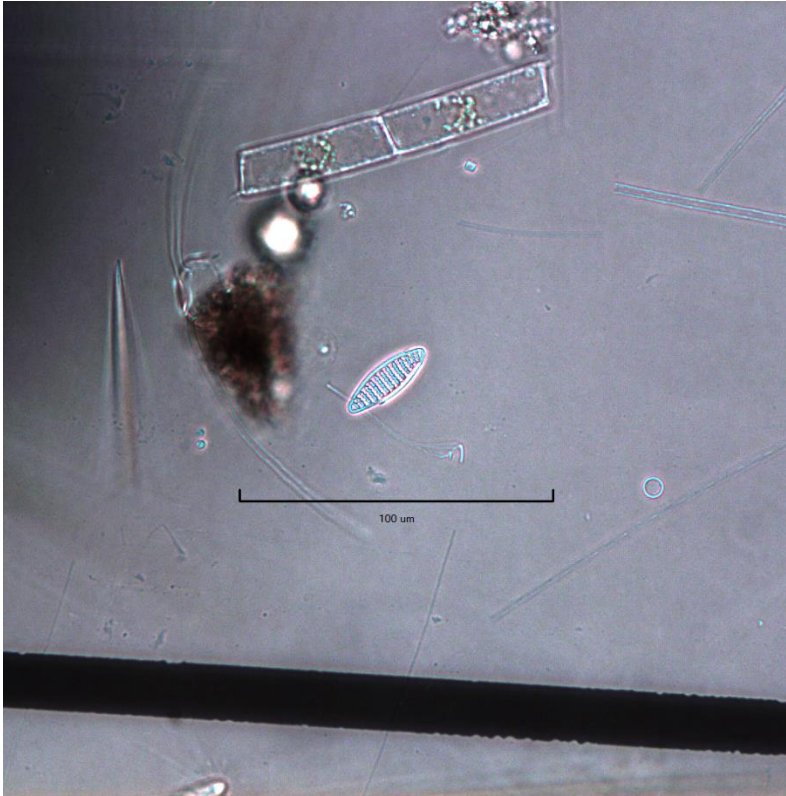
*Fragilariopsis curta*



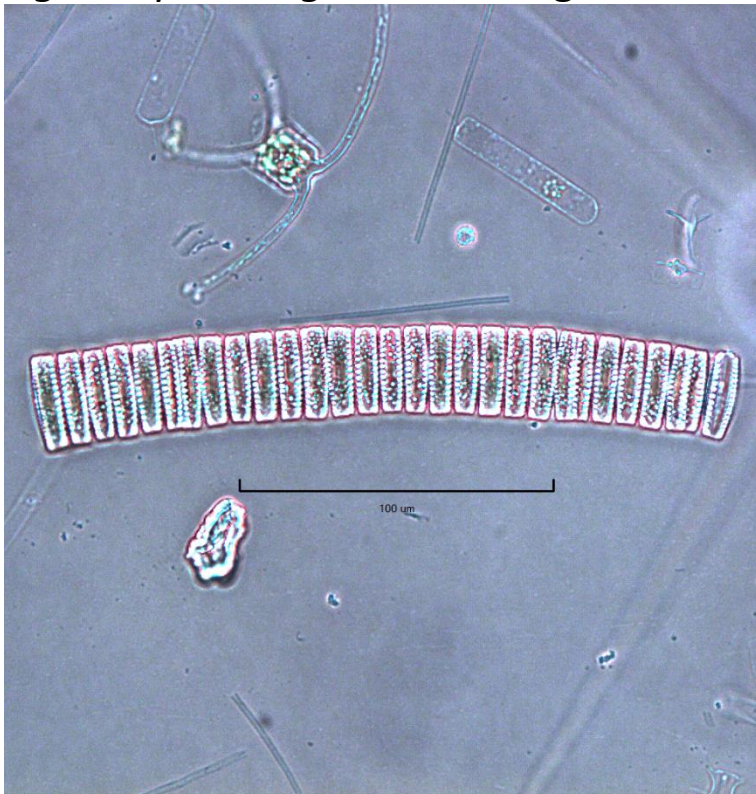
*Fragilariopsis rhombica/separanda*



*Fragilariopsis kerguelensis*

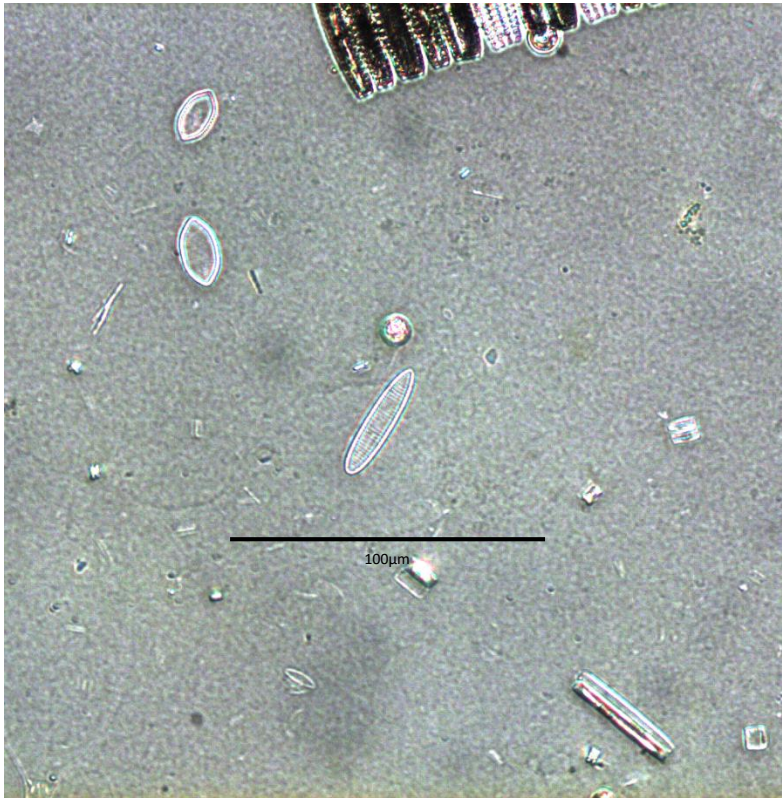


*Fragilariopsis kerguelensis* long chain

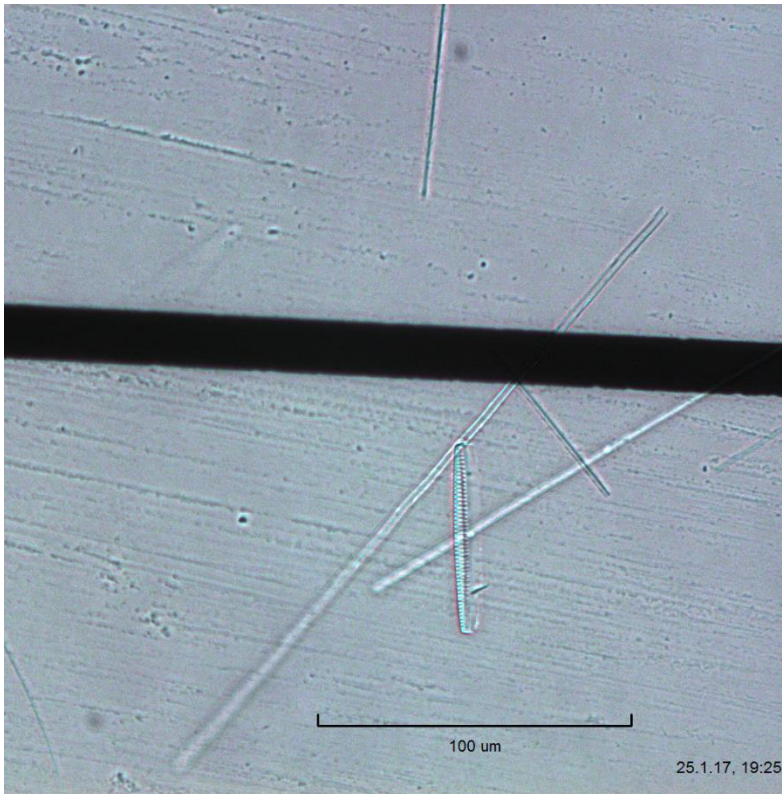




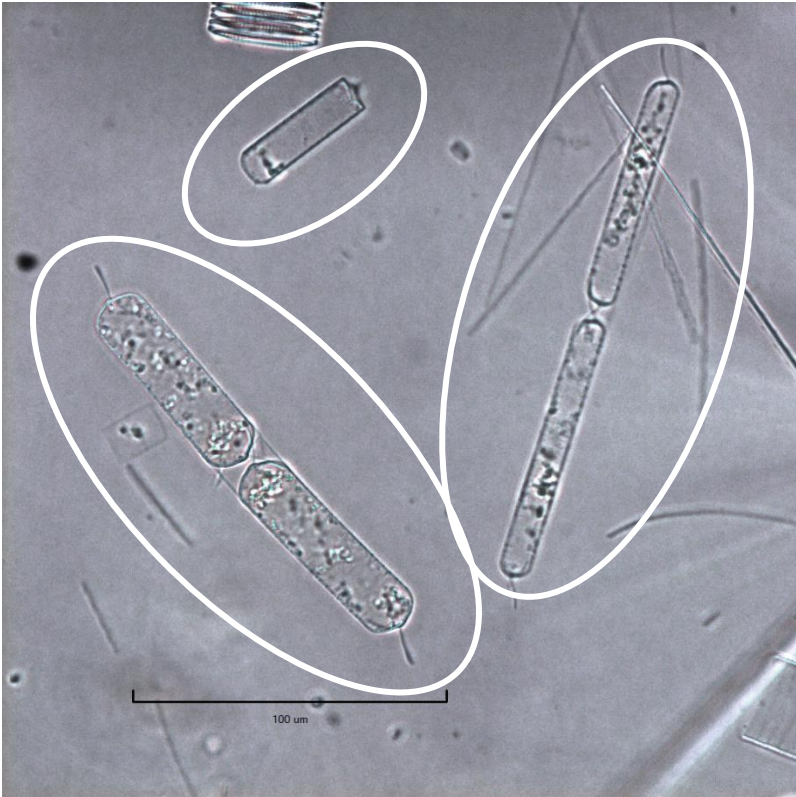
*Fragilariopsis ritscheri*



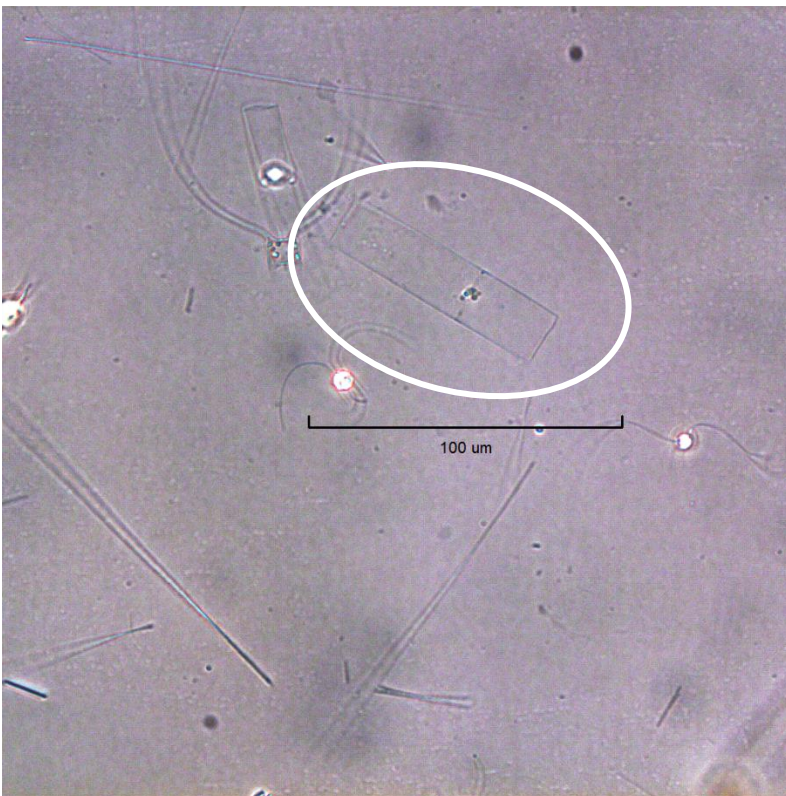
*Fragilariopsis sublinearis* cf



*Guinardia cylindrus*

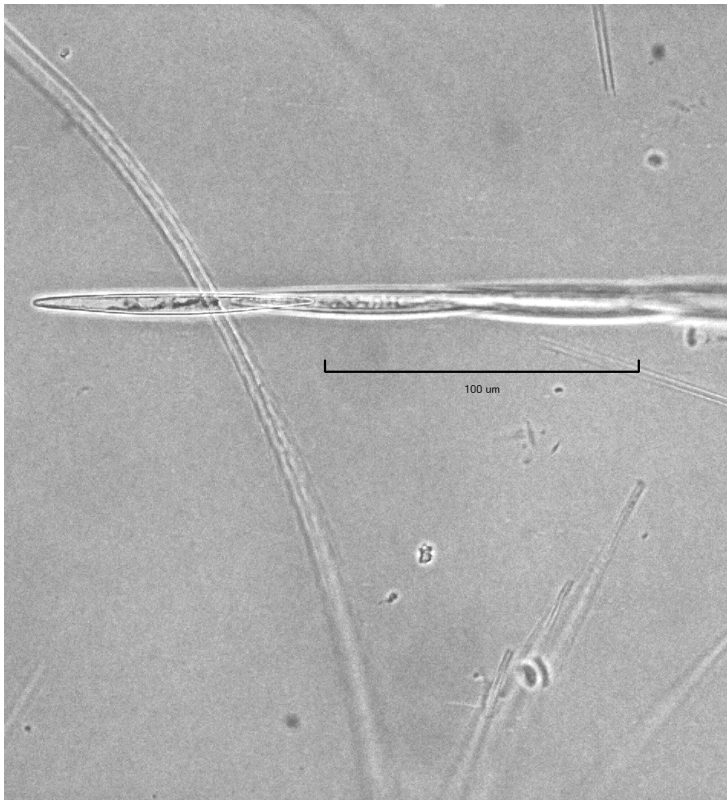


*Guinardia tubiformis*





## *Pseudo-nitzschia*

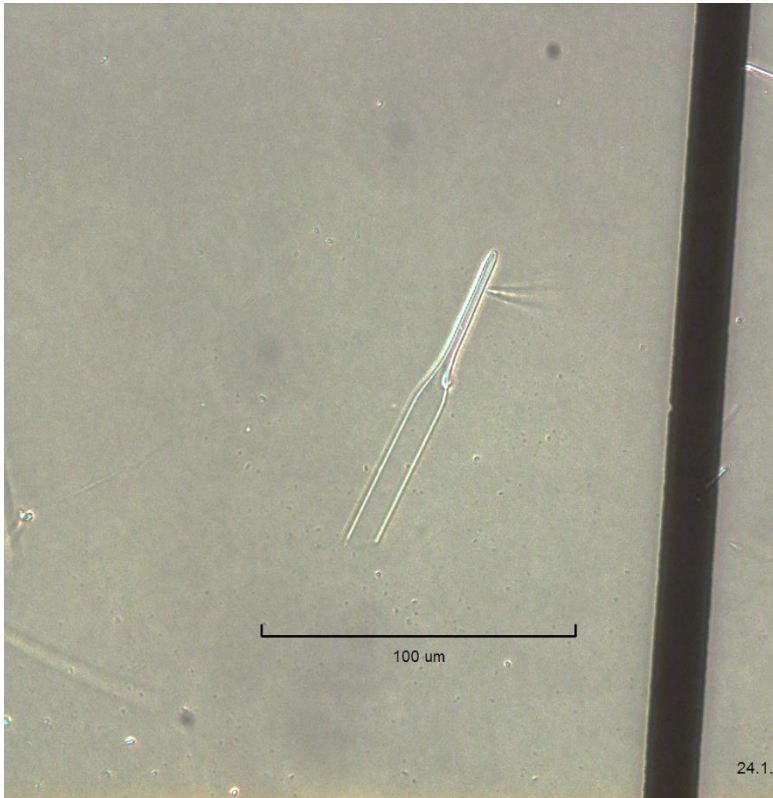


- ~100μm length
- Slightly sigmoidal shape at ends
- Form long chains

## *Proboscia alata*



*Proboscia truncata*



*Proboscia truncata auxospore*

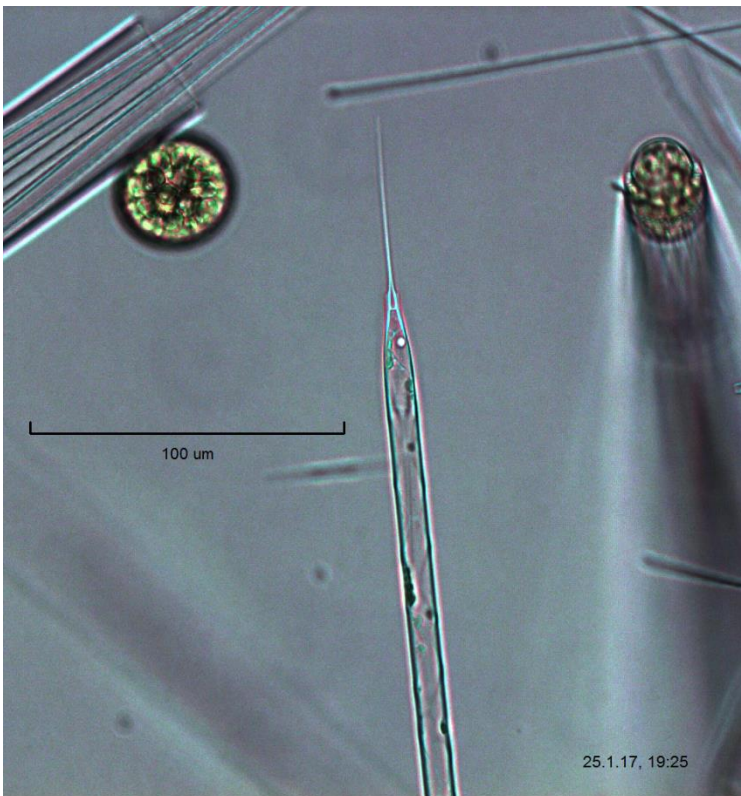




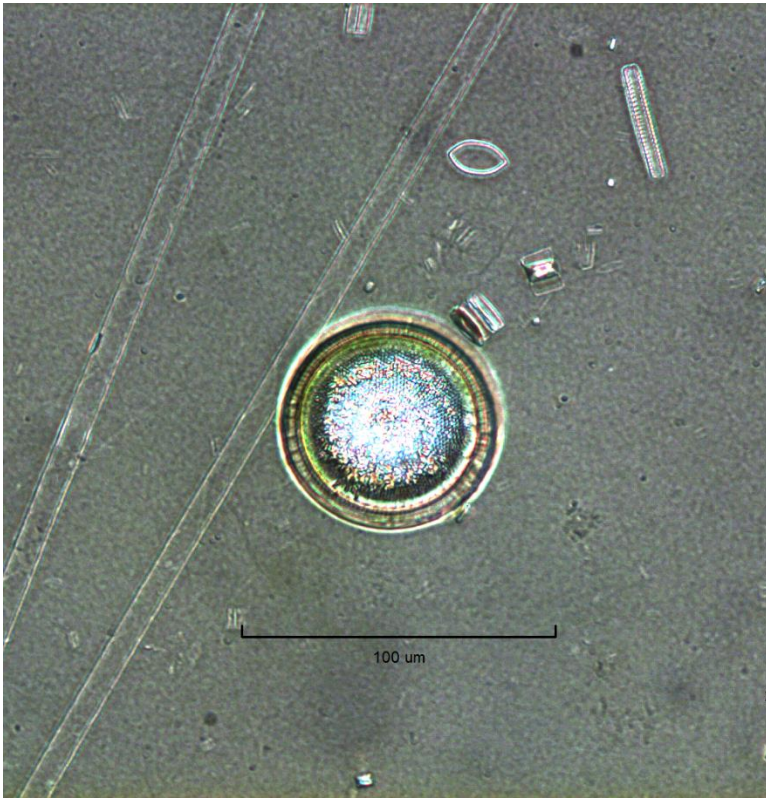
*Proboscia inermis*



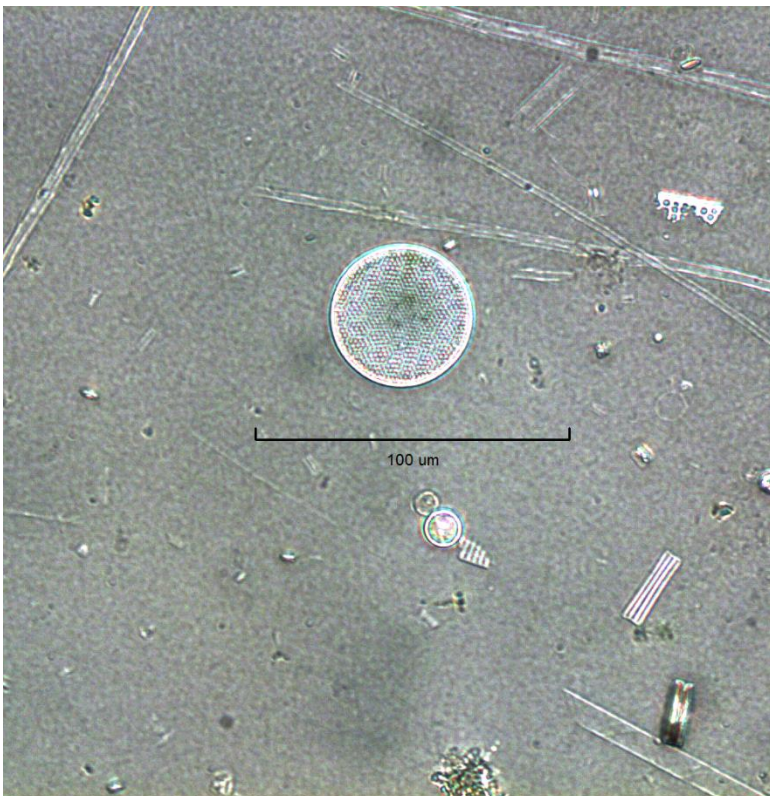
*Rhizosolenia antennata semispina*



*Thalassiosira oliverana*

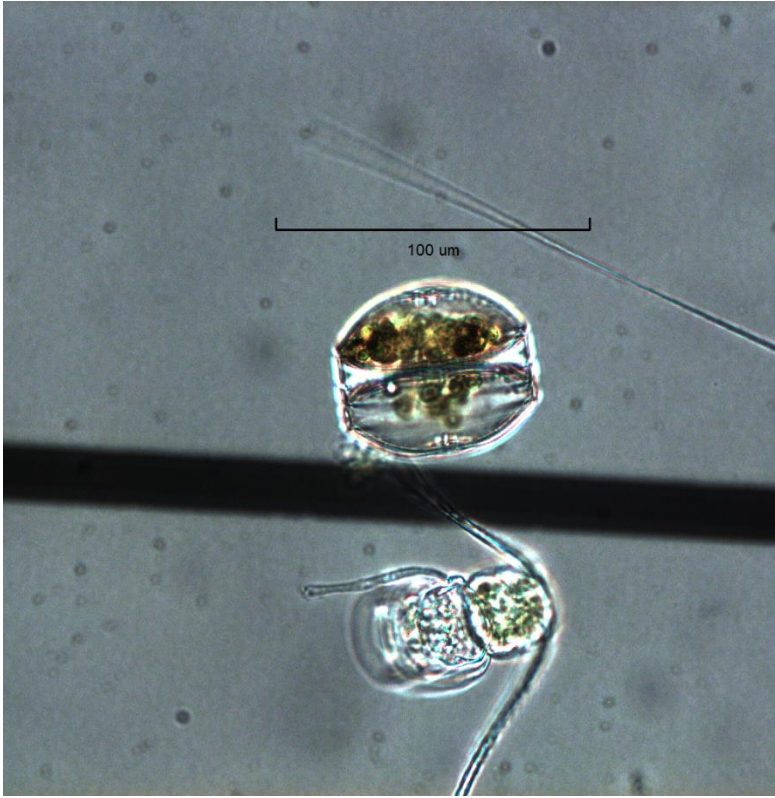


*Thalassiosira tumida* cf





*Thalassiosira* spp.



- Resting spores forming?