

# Zelene vlaknite rasy a ruduchy

Lenka Caisova

**Ruzne pristupy,  
ruzna dulezitost,  
odlisne vysledky**

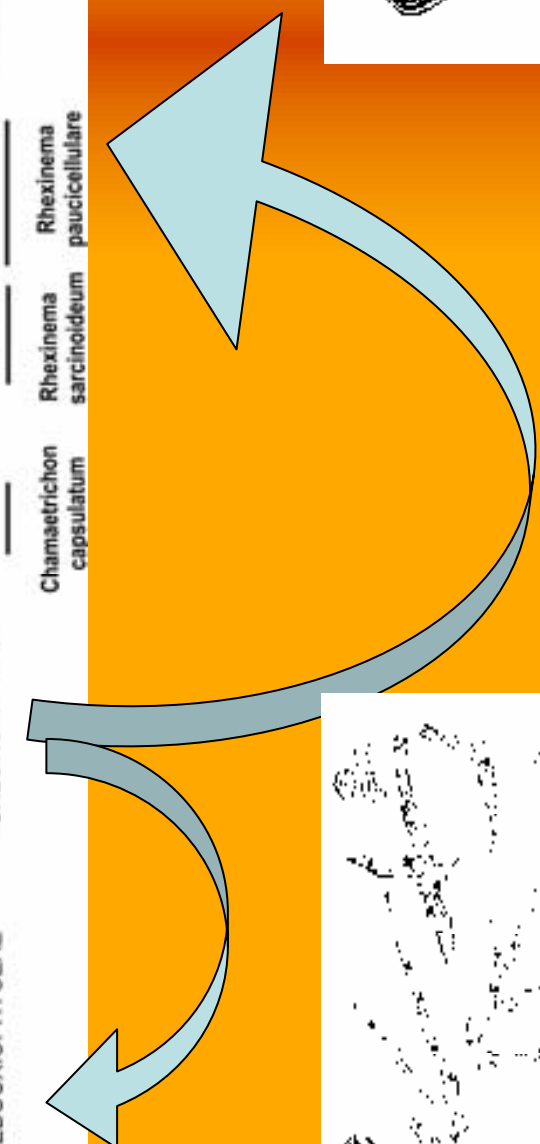
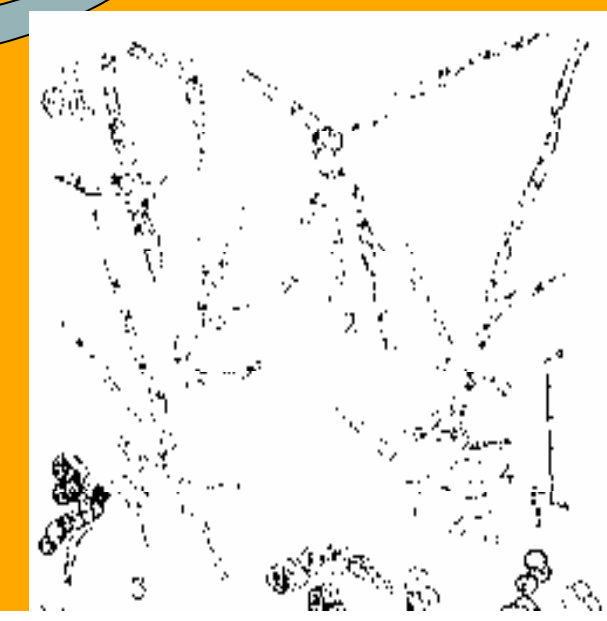
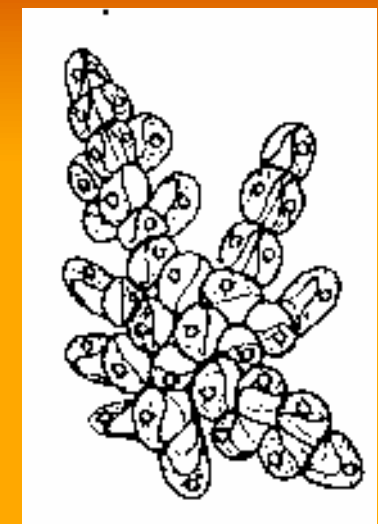
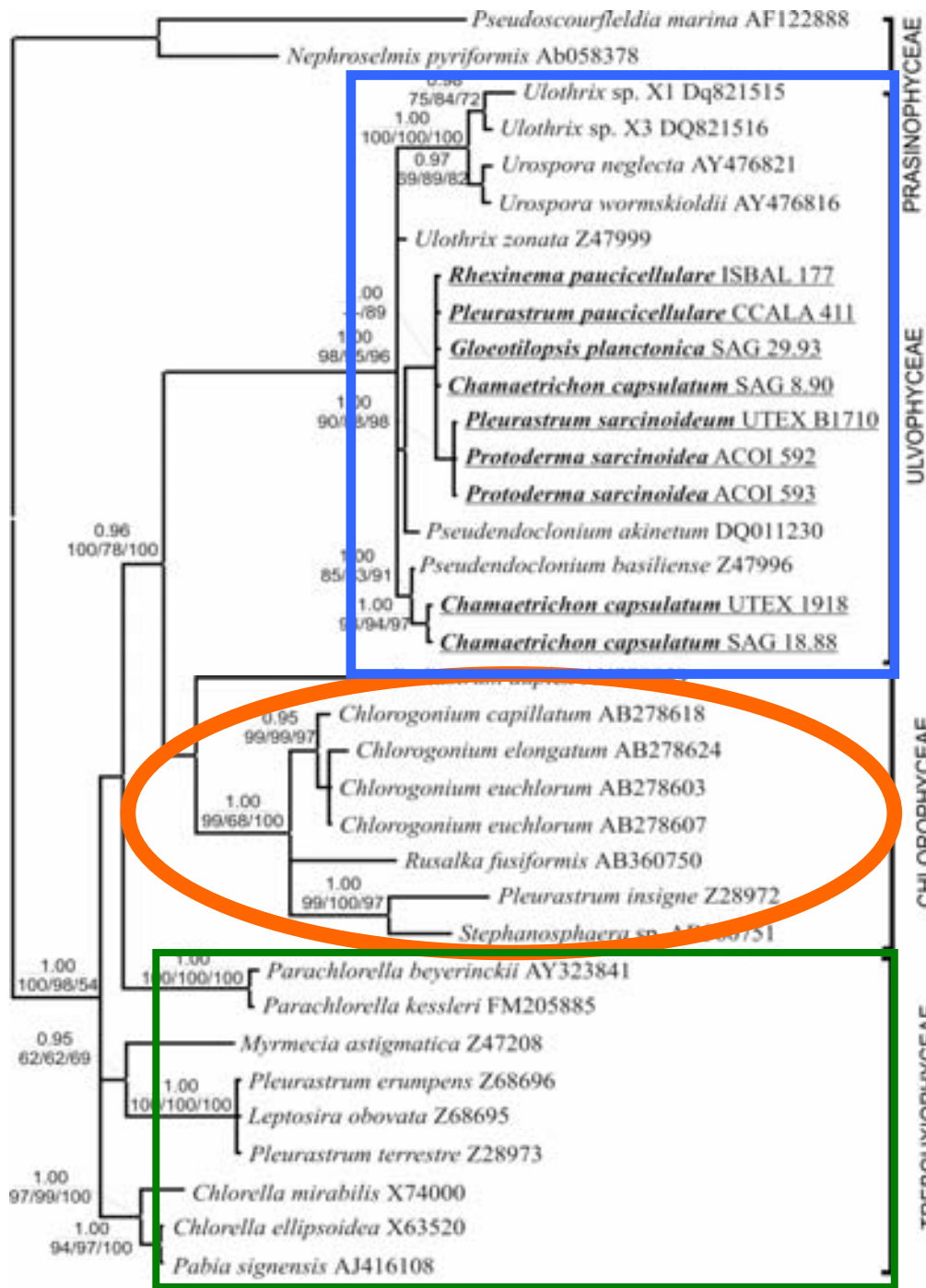
**Ultrastruktura**

**Morfologie**



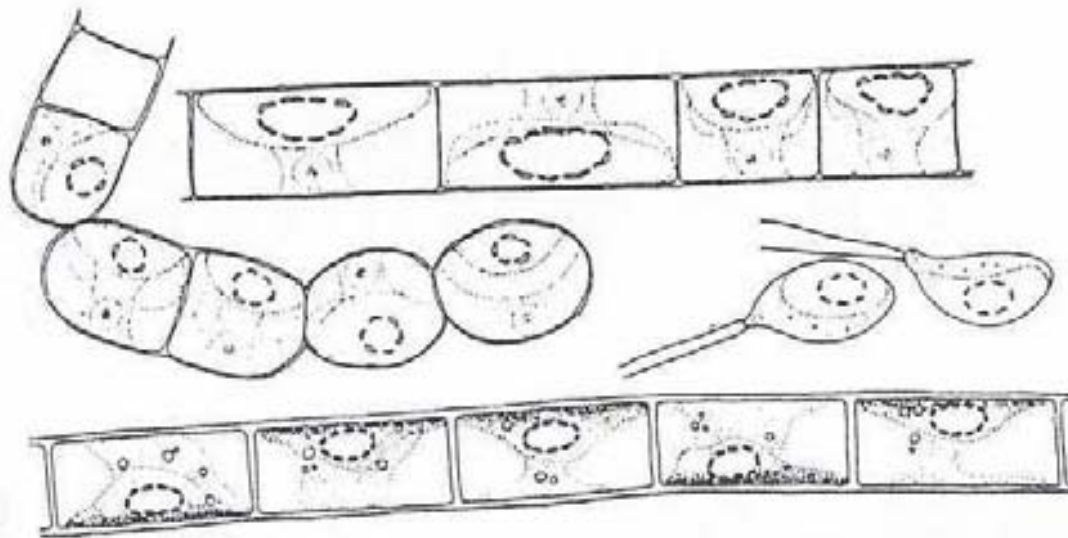
**Molekularni  
analzy**

**Ekologie**



# *Klebsormidium*

- trichalni, rozpadavost vlaken
- izopolarni
- chloroplast s pyrenoidem
- puda, litoral vod



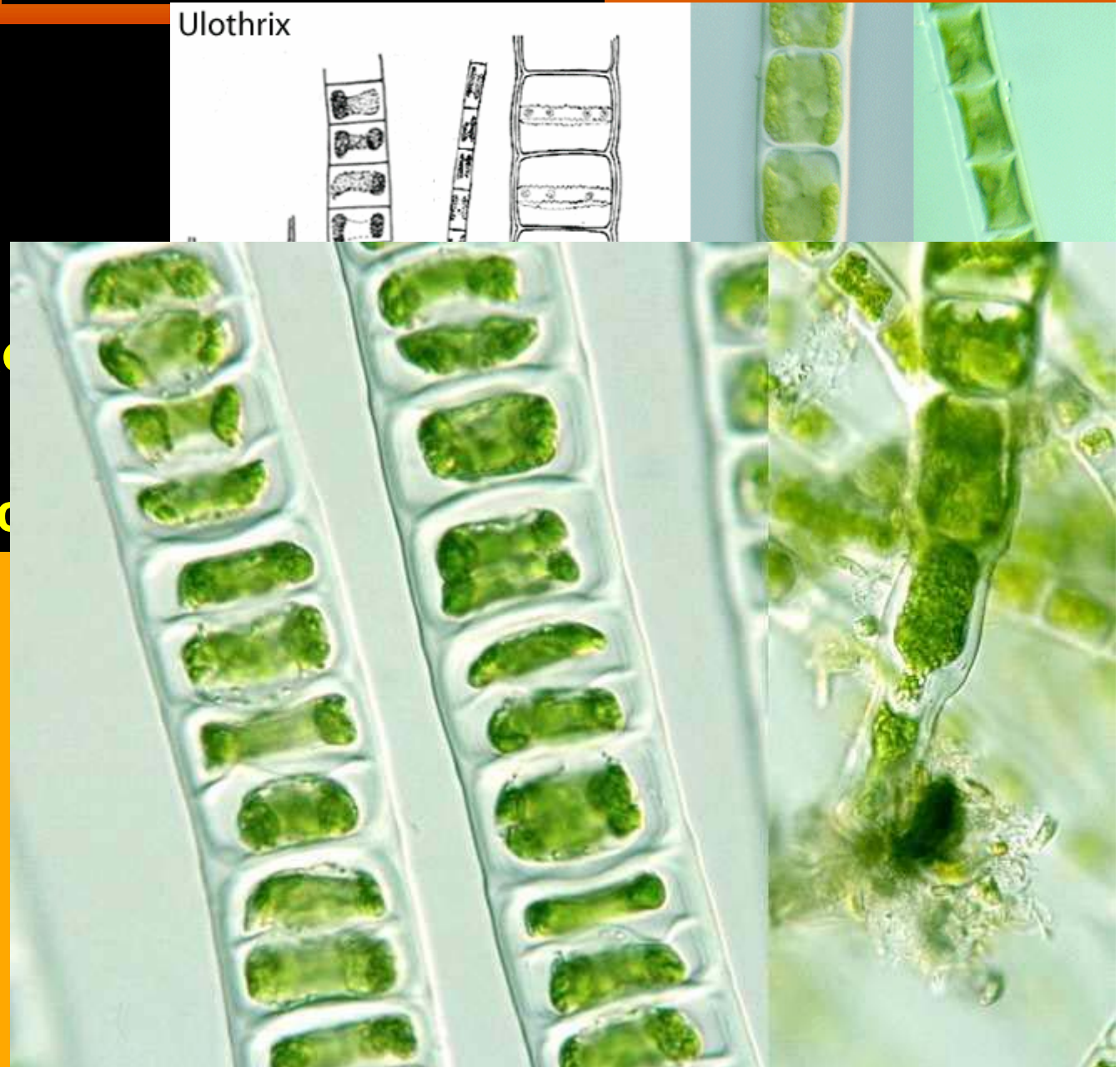
***K. flaccidum***

# *Ulothrix*

- trichalni
- izopolarni
- rhizoidy
- apikalni bunky začiatku
- chloroplast s pyrenoidem (1 – vid)

*U. zonata*

Ulothrix



# *Uronema*

- trichalni
- heteropolarni
- dermoid
- chloroplast s pyrenoidem (1, 5)



# *Rhizoclonium*

- vatovite vlasy
- trichalni az heterotrichalni
- izopolarni
- charakteristicke spojeni bunek
- chloroplast s pyrenoidy

*R. hieroglyphicum*



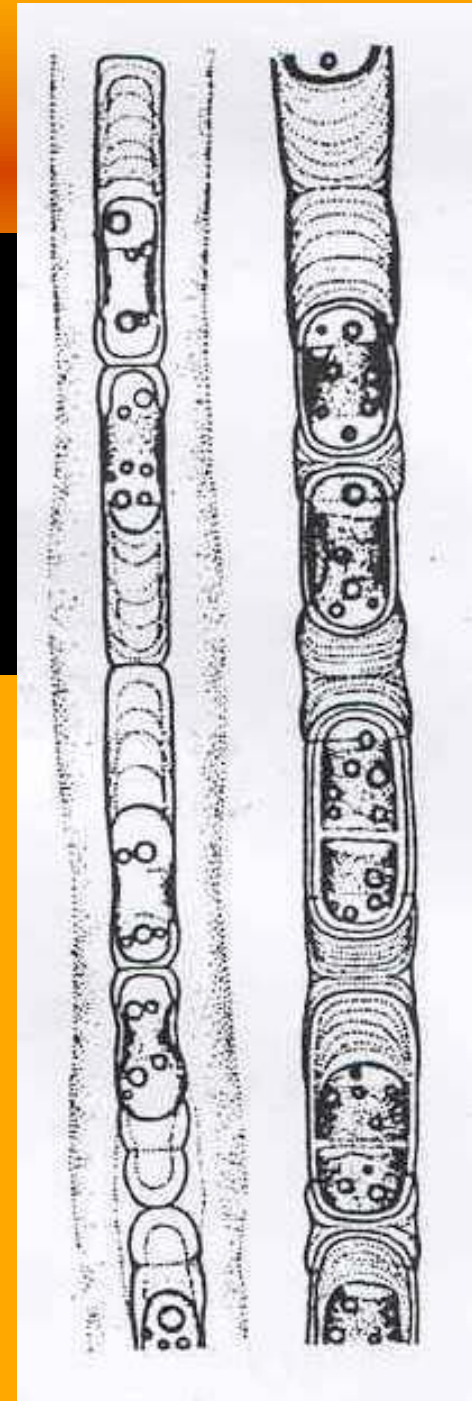
All after Entwisle et al. (1997)

# *Binuclearia*

- trichalni
- polarni
- bunecne steny ve tvaru H, vrstevnate
- chloroplast s pyrenoidem

## *B. tectorum*

- raselinne biotopy, oligotrofni vody

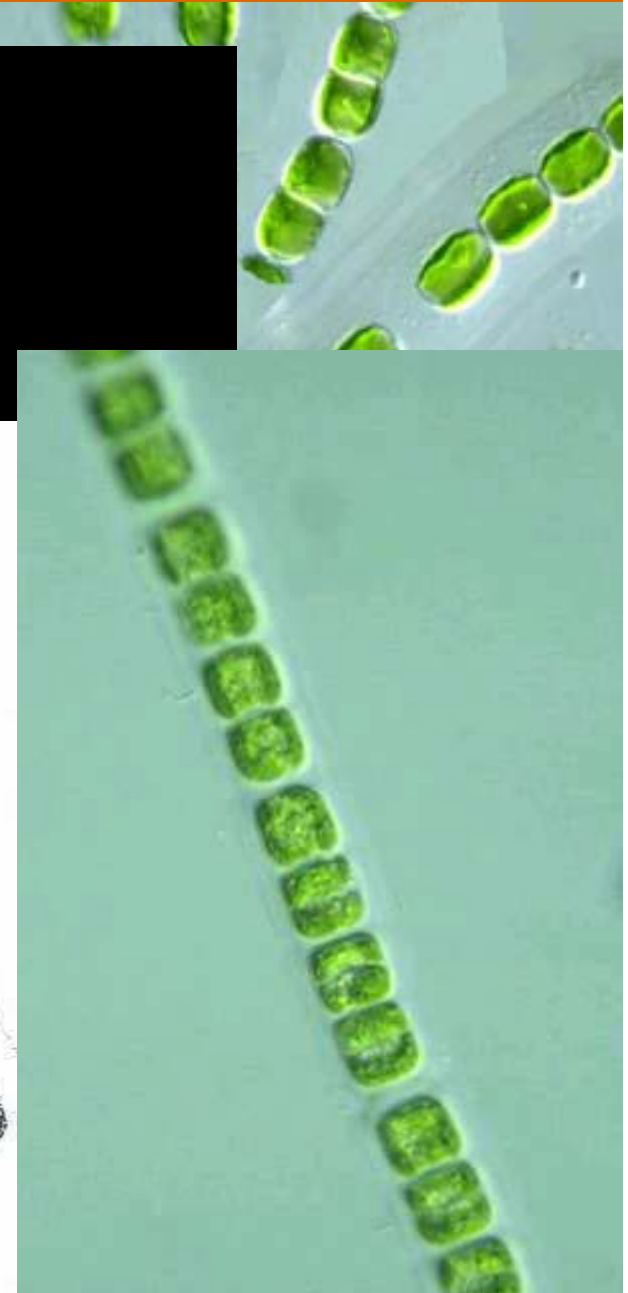
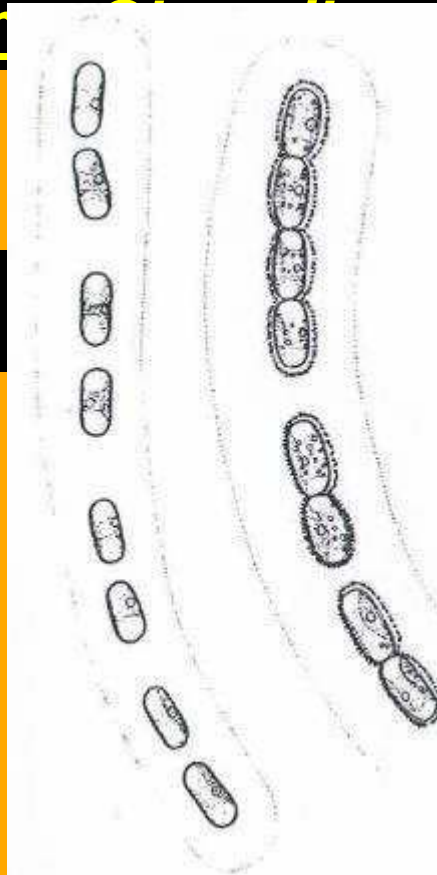




# Geminella

- trichalni
- slizový obal, pochva
- jednoducha b. s.
- chloroplast s pyrenoidem

***G. interrupta***



# Chaetophorales

*Chaetophora*

*Aphanochaete*

*Draparnaldia*

*Chaetosphaeridium*

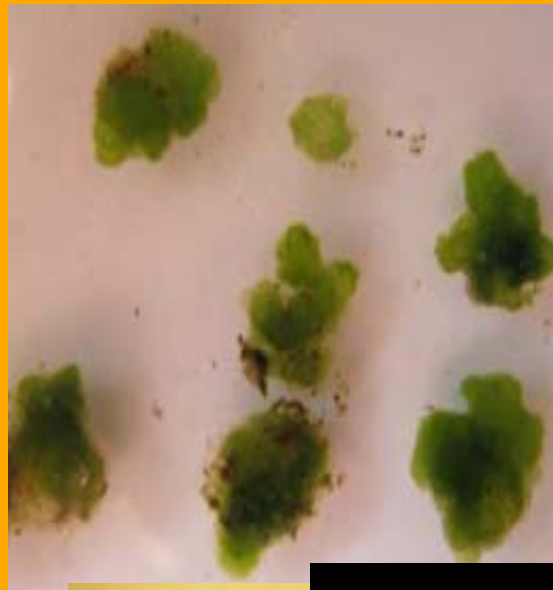
*Stigeoclonium*

- heterotrichalni stelka obalena slizem
- typicky vzhled?
- hyalinni vlasovite zakonceni ?

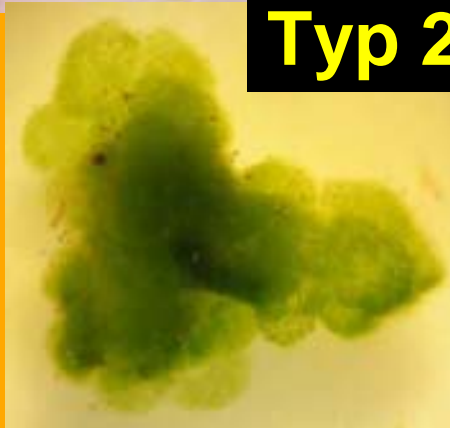
# *Chaetophora*



**Typ 1**



**Typ 2:**

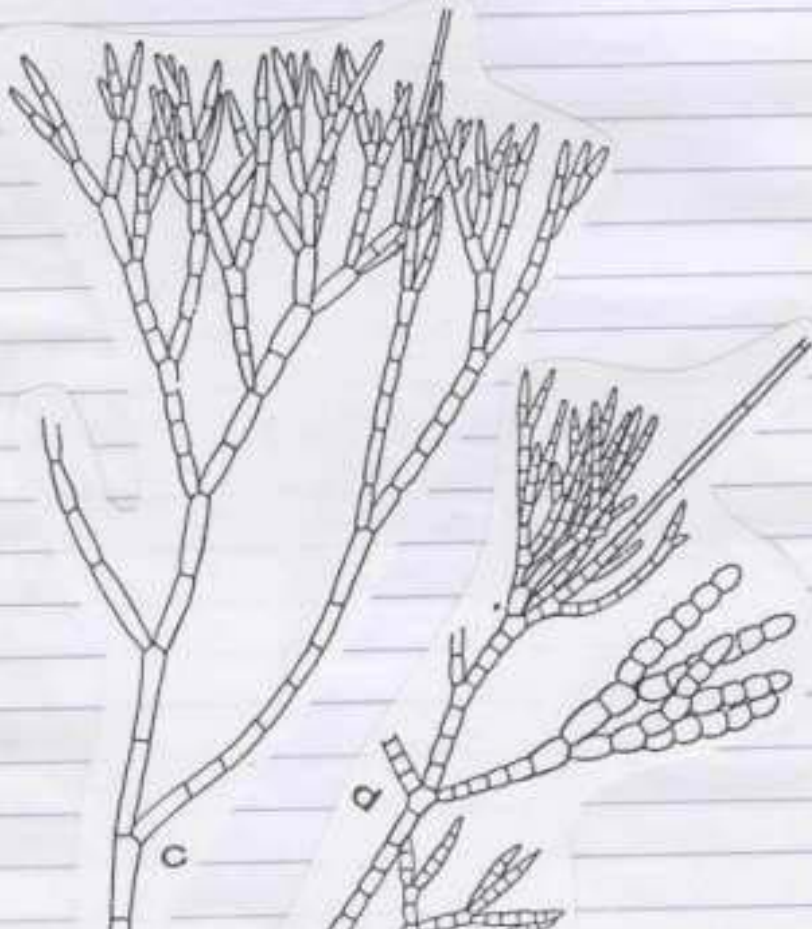


**Typ 3:**

# Ch. elegans

Chaetophora elegans

Eloli stölgur: c, d, e



Veiðil (tvar) ketanir: a



Vannslótt: f  
= CH. elegans var þögluma

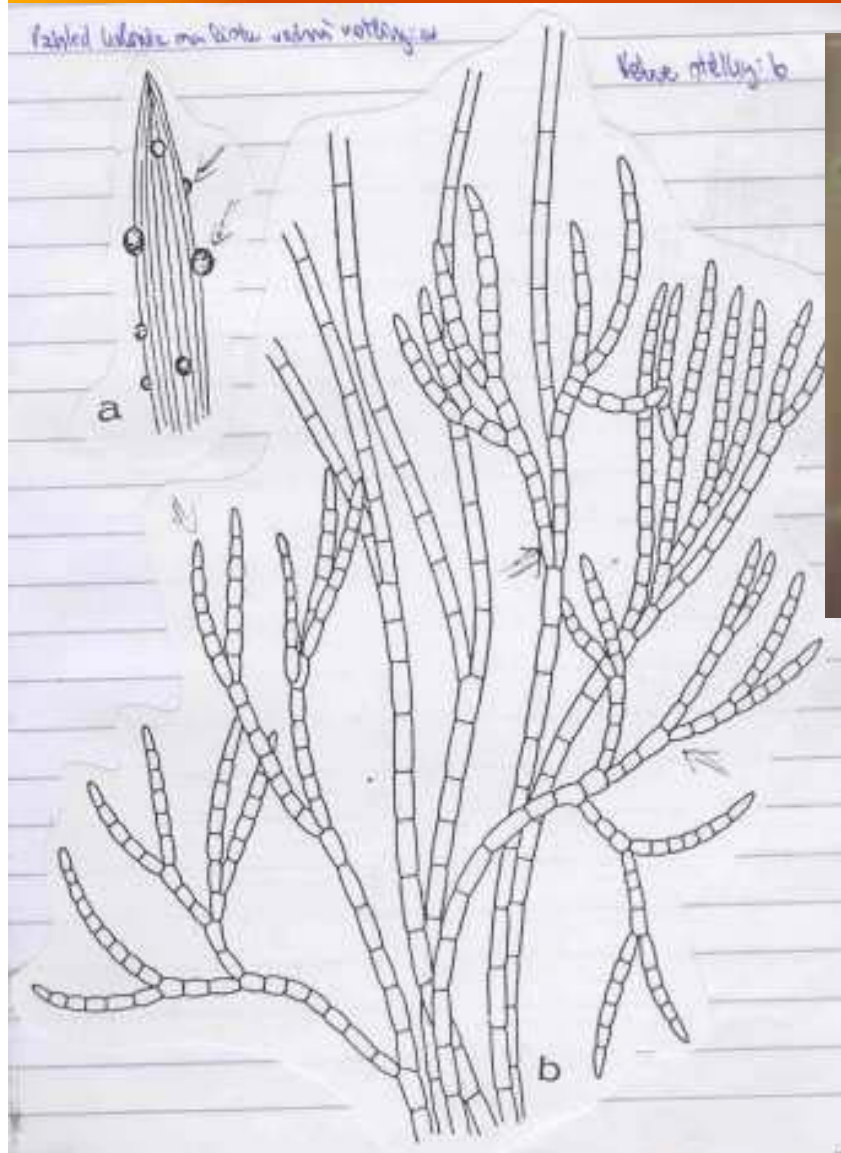
CH. elegans 3n: g



ketanir e. ketanir h

# *Ch. pisiformis*

# *Ch. incrassata*



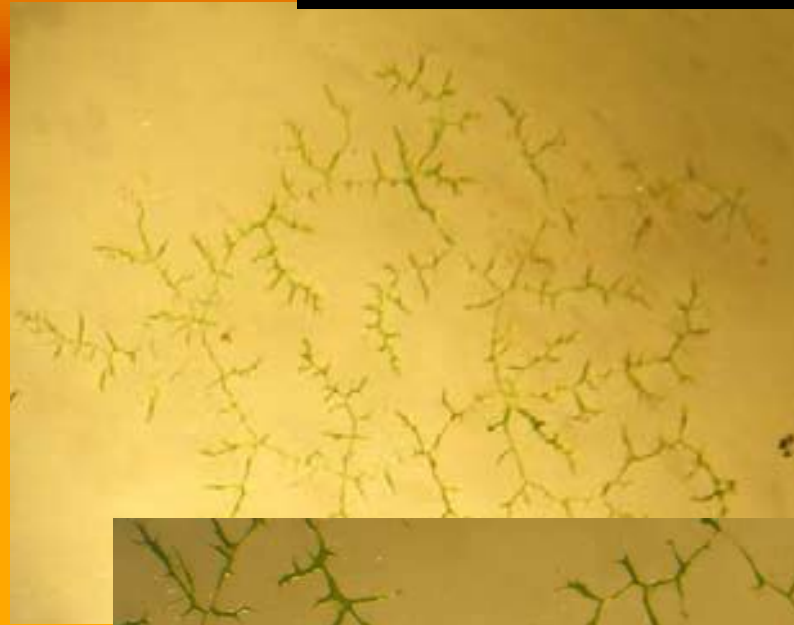
# ***Draparnaldia***



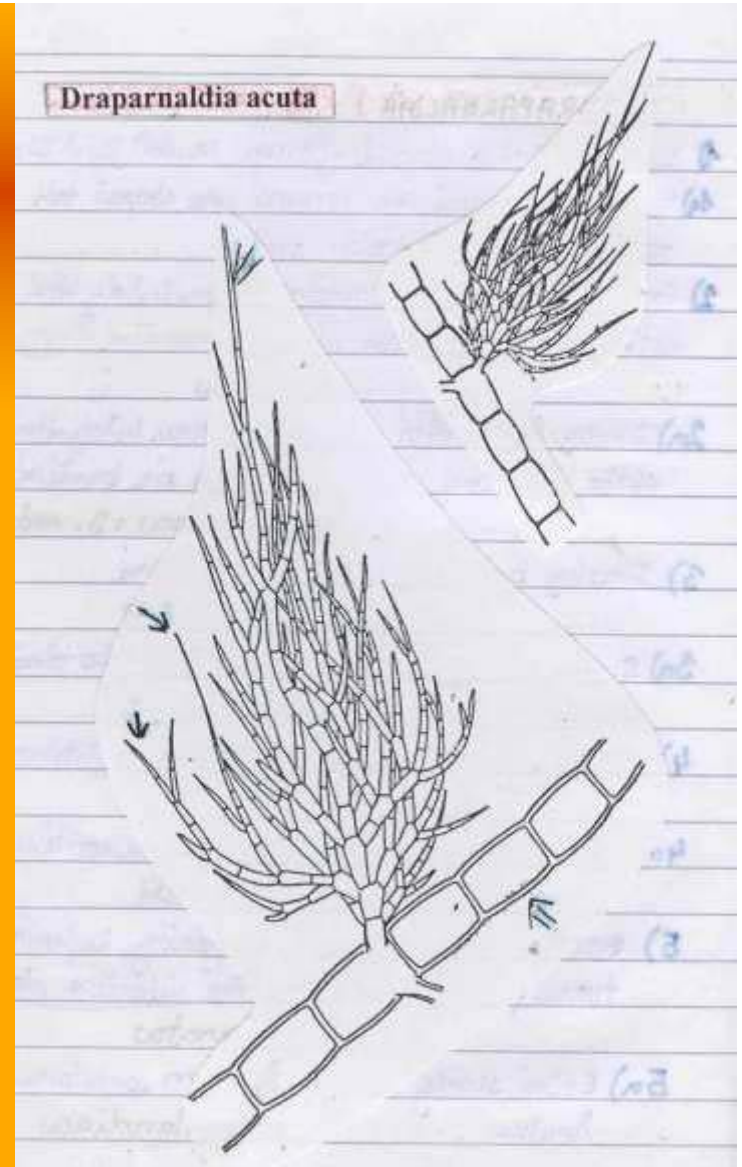
***D. acuta***



***D. plumosa***

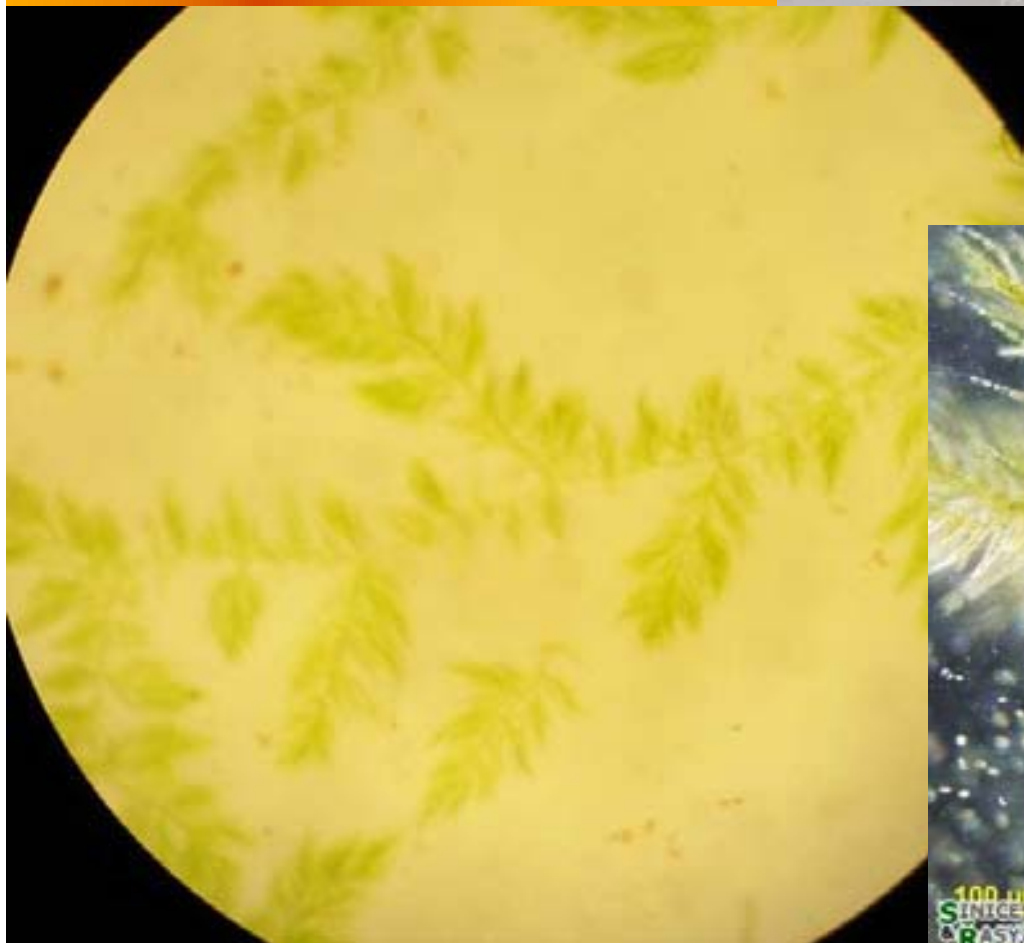


# *D. acuta*

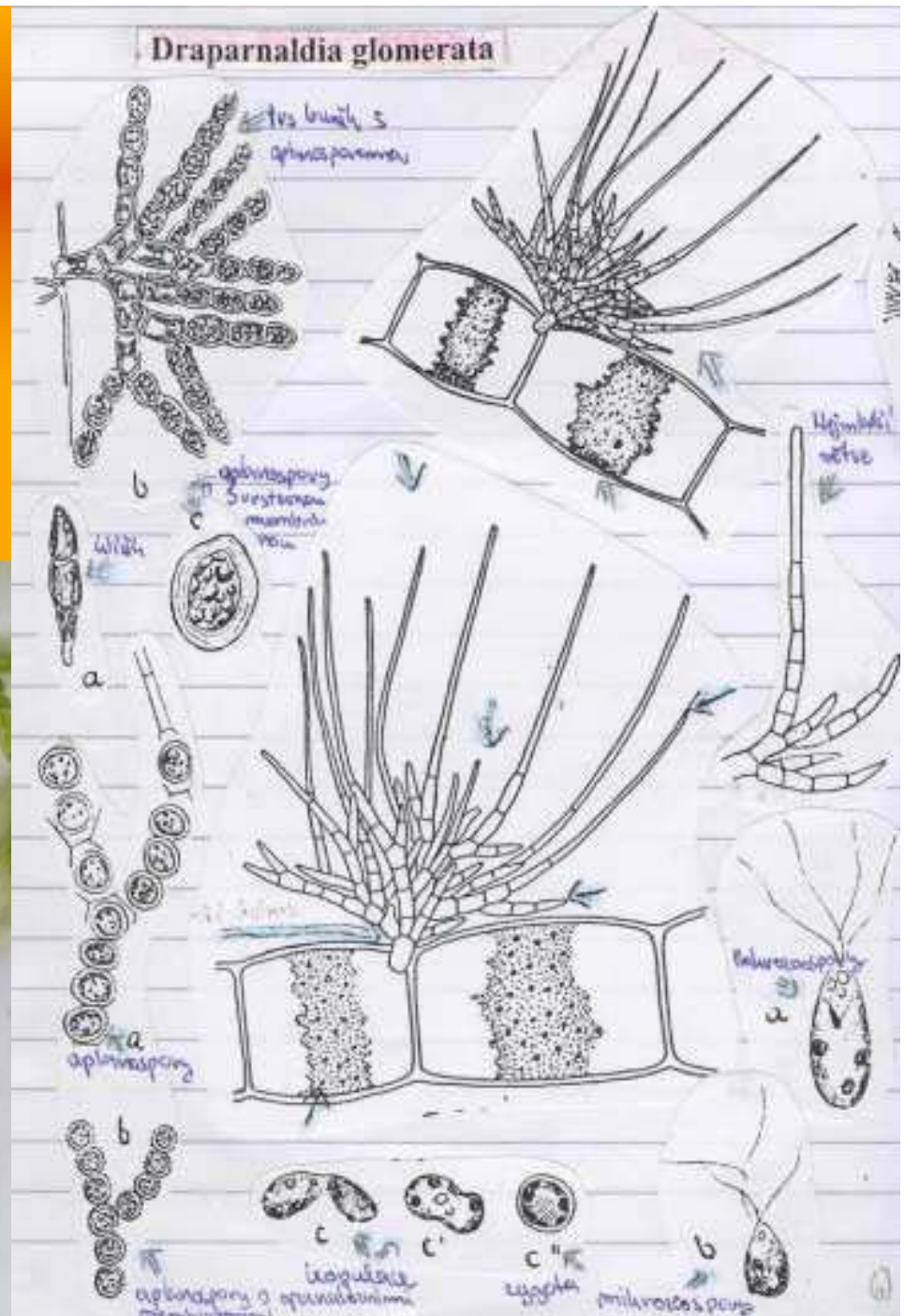




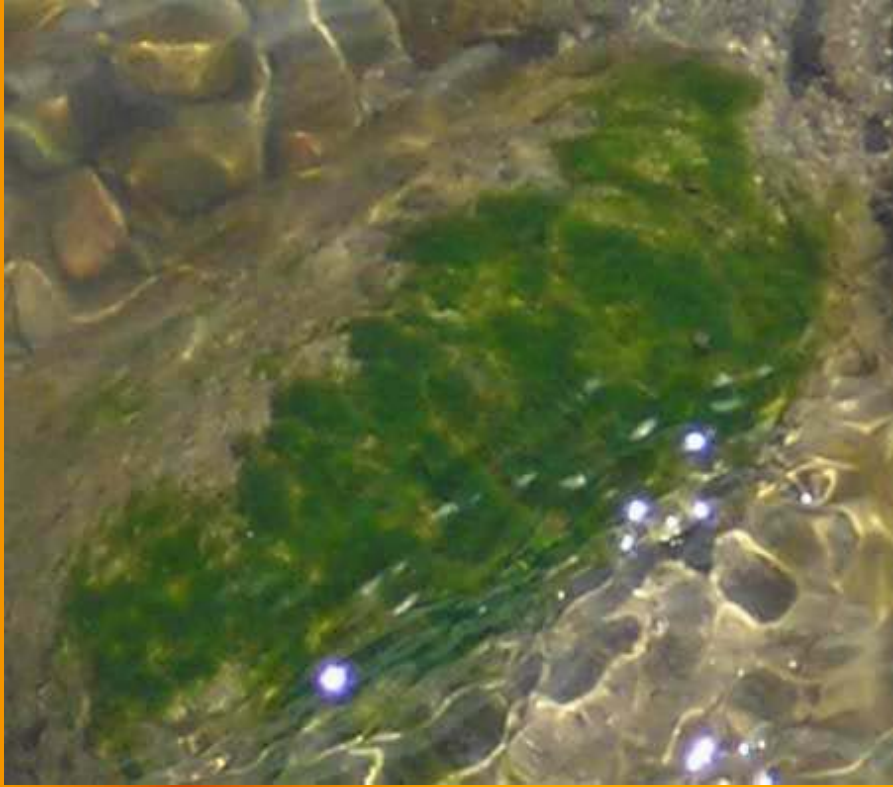
***D. plumosa***



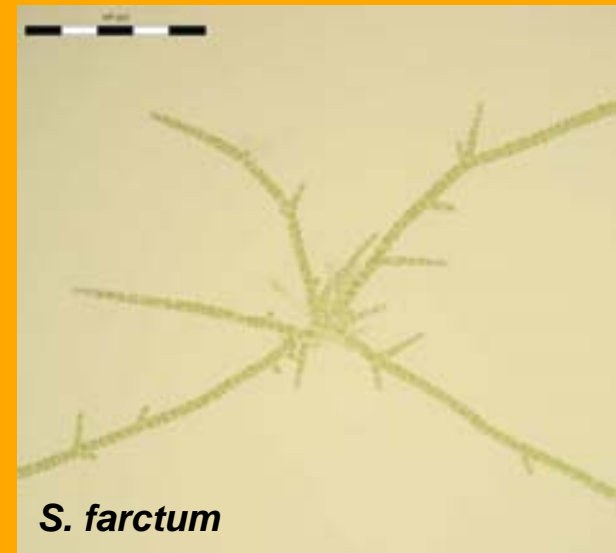
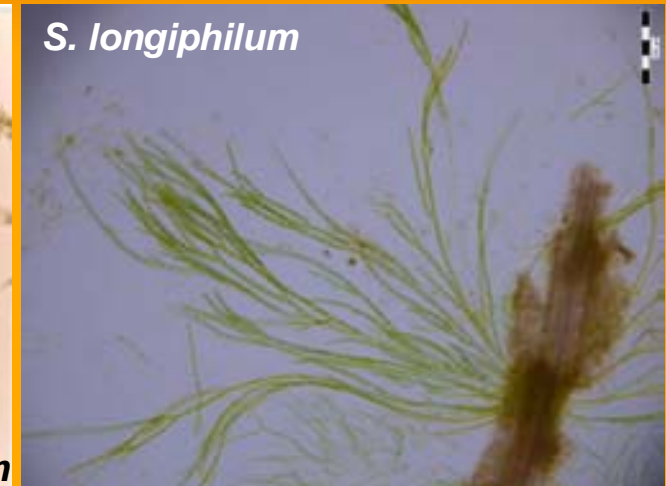
# D. glomerata



# *Stigeoclonium*



# Typ 2



*S. tenue*

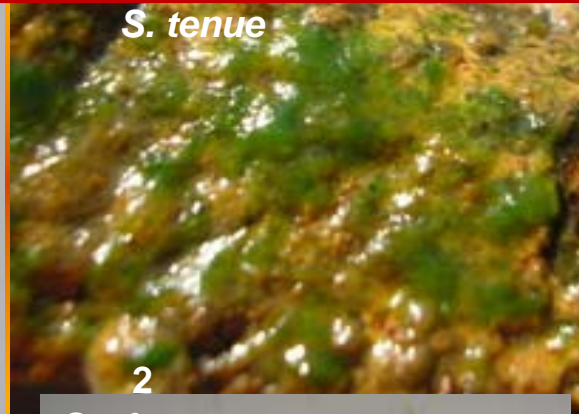
1



0,5 cm

*S. tenue*

2

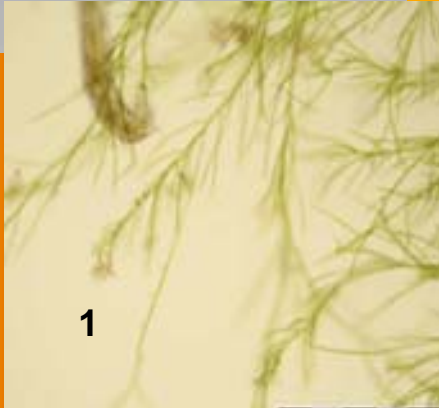


*S. cf. tenue*

1,5 cm



1



*S. tenue* var. 1



4

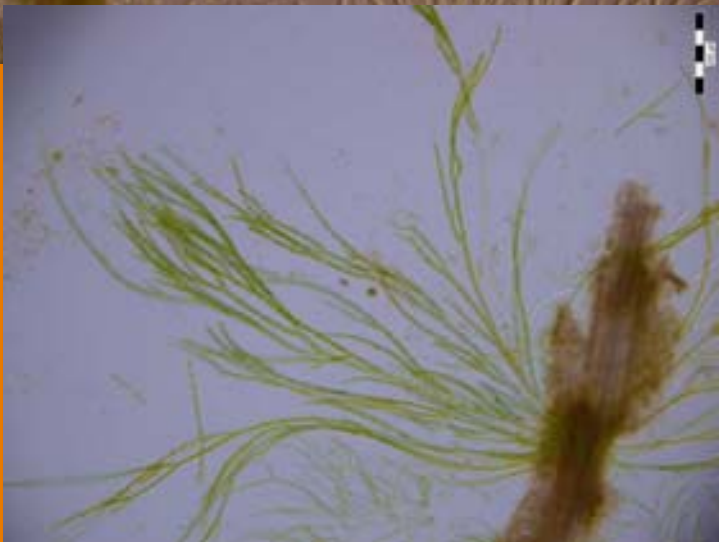
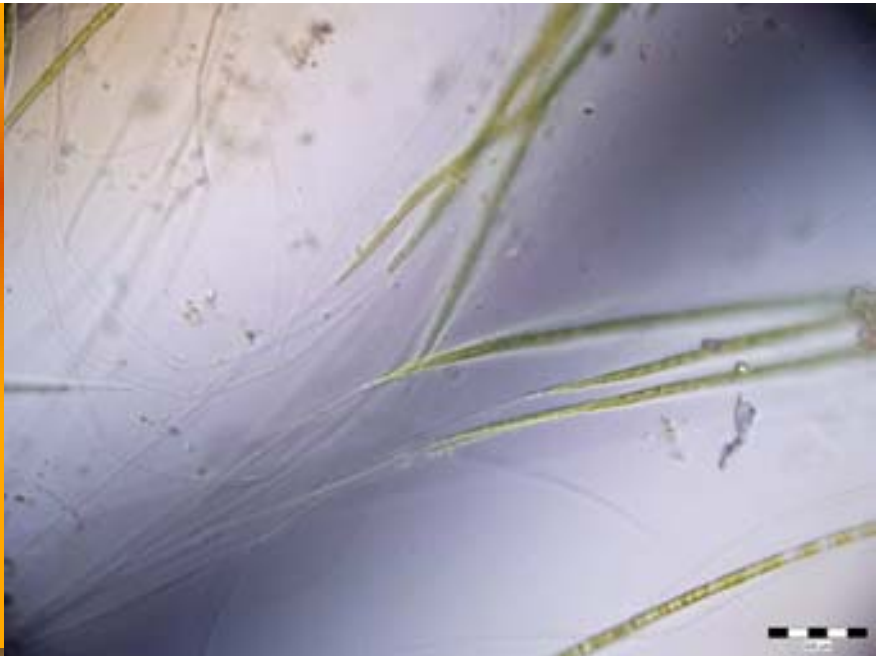
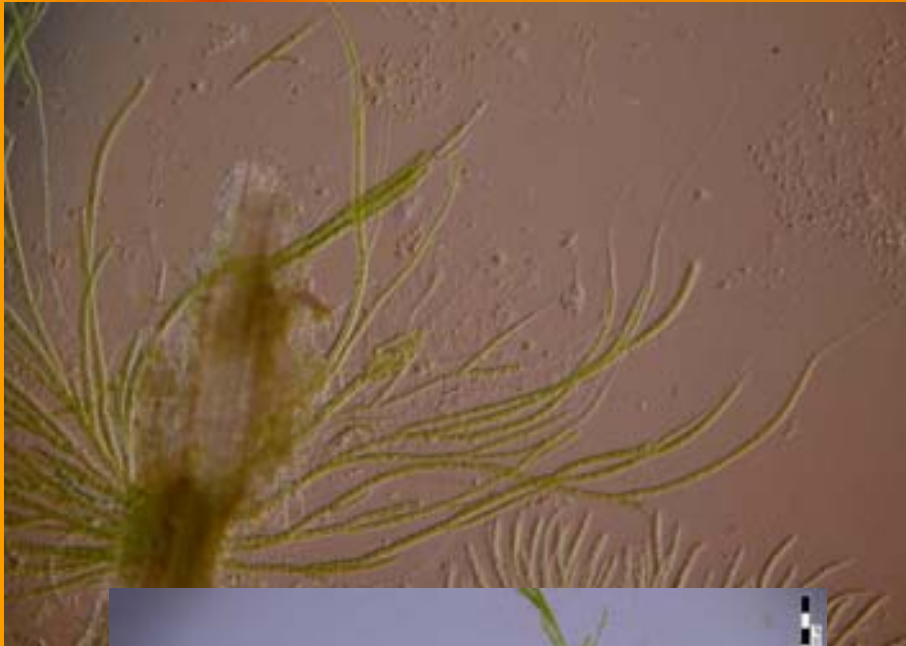
0,5 cm

**Typ 1 S.tenue**

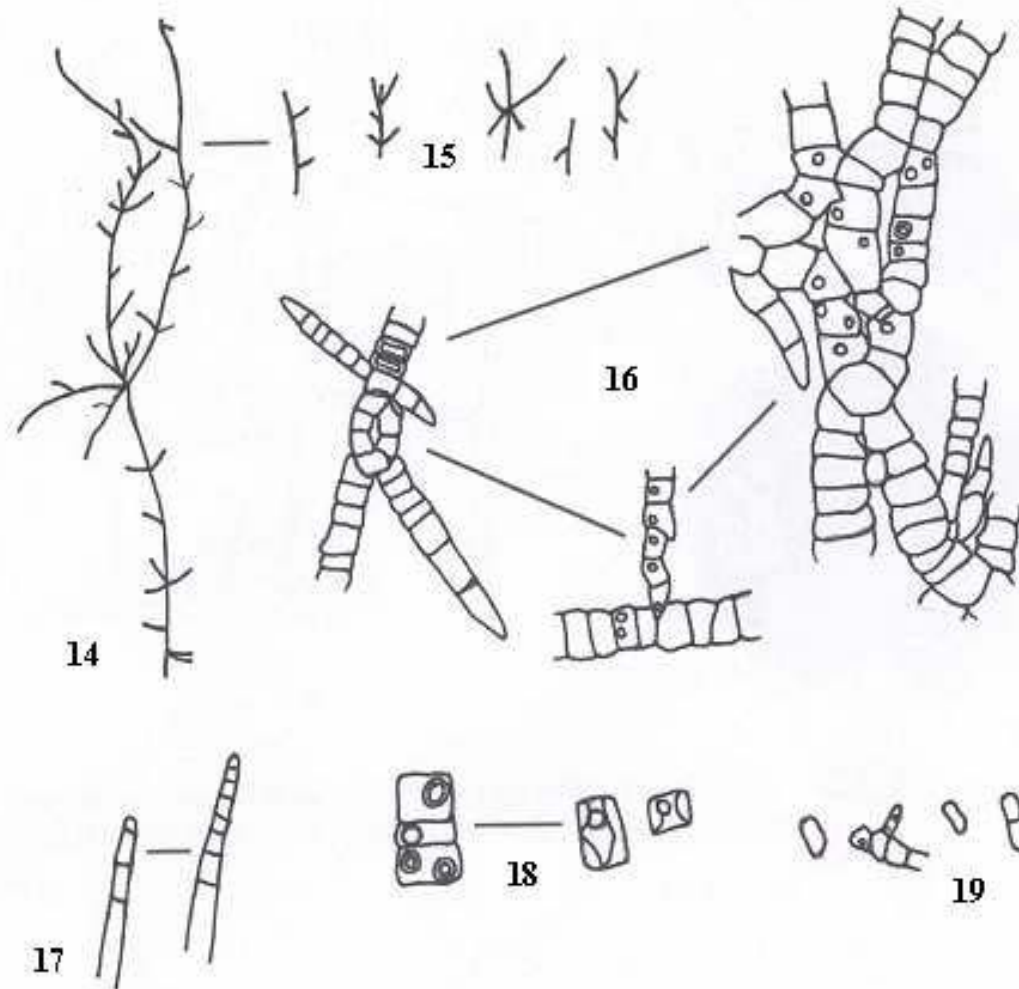
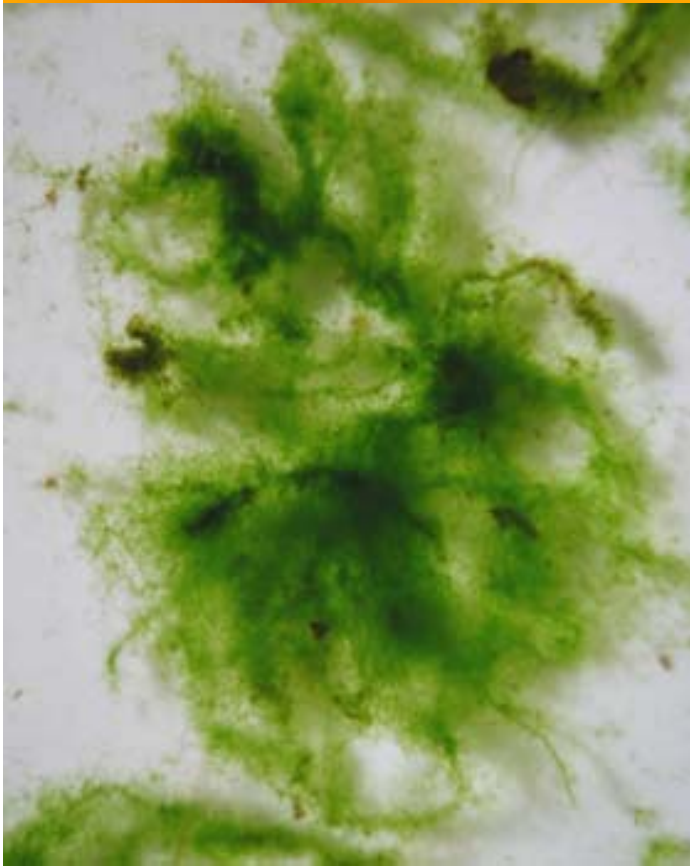
**Typ 3**



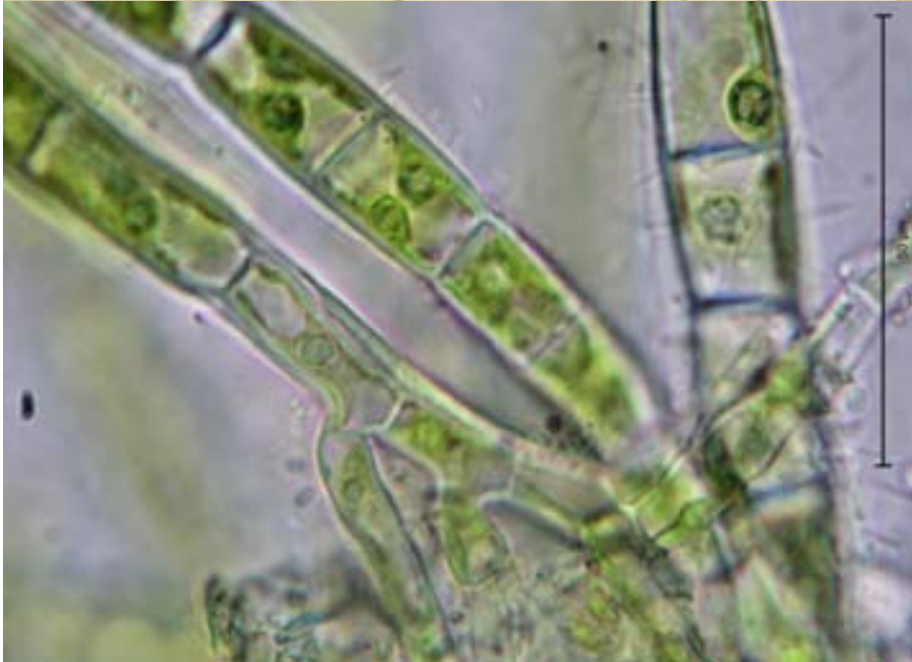
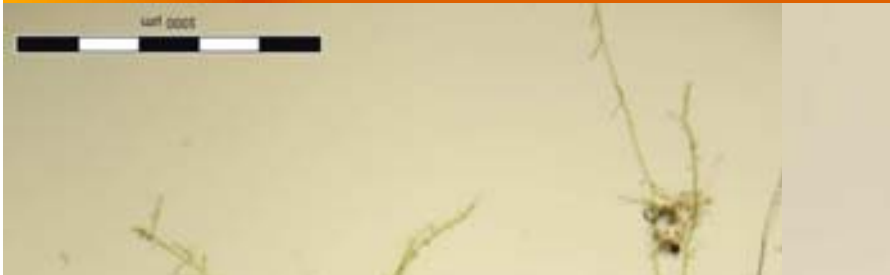
***S. longiphilum***



# *S. farctum*

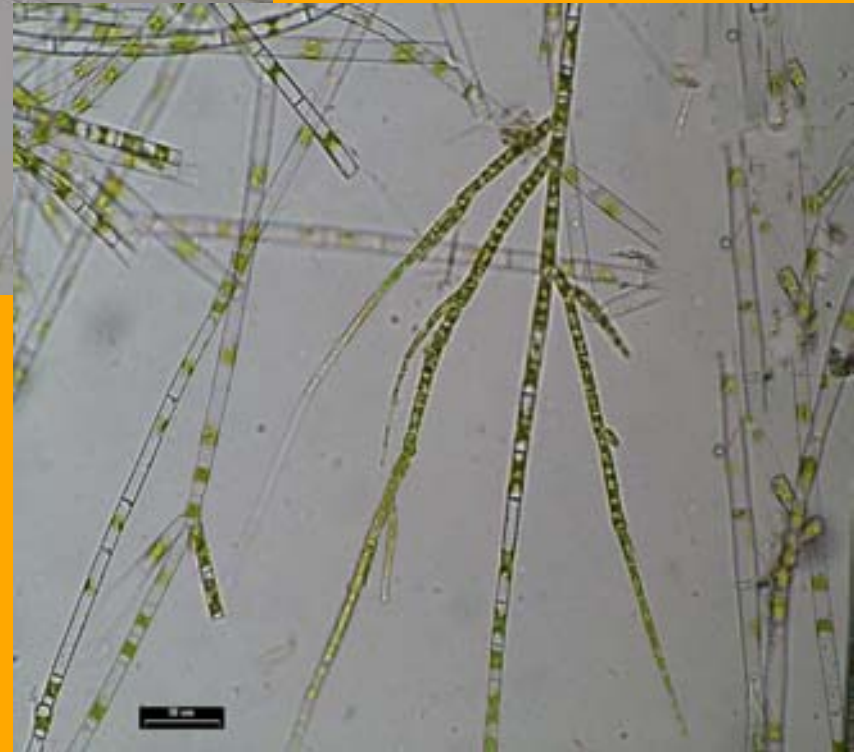


# *S. subsecundum*

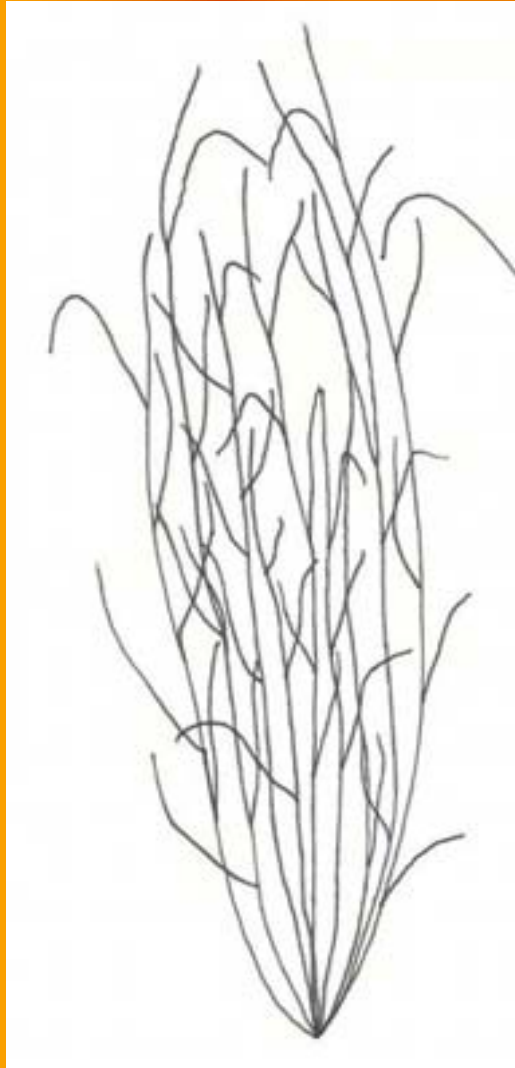




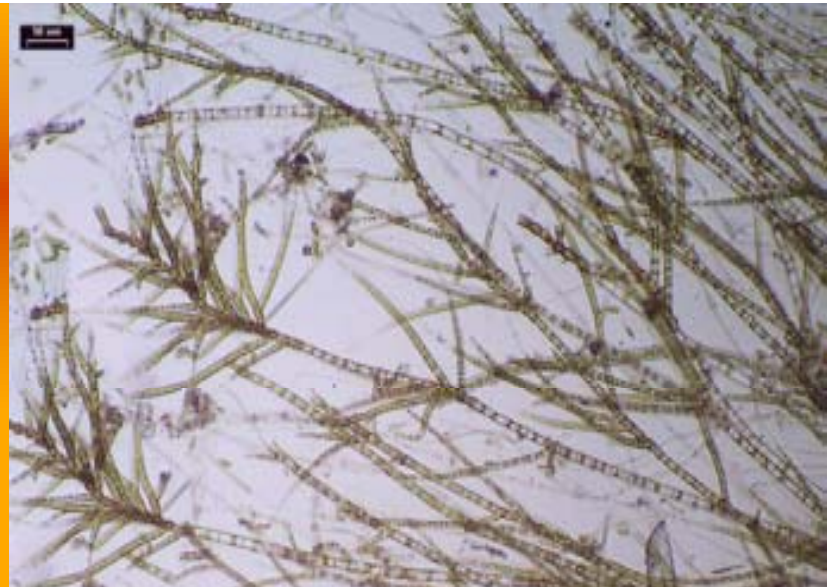
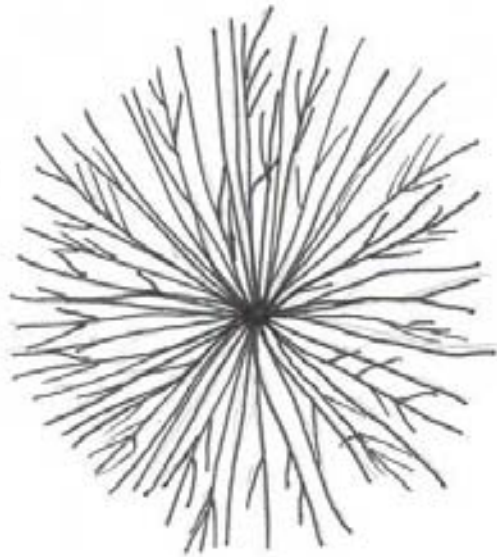
# *S. amoenum*



# *S. elongatum*



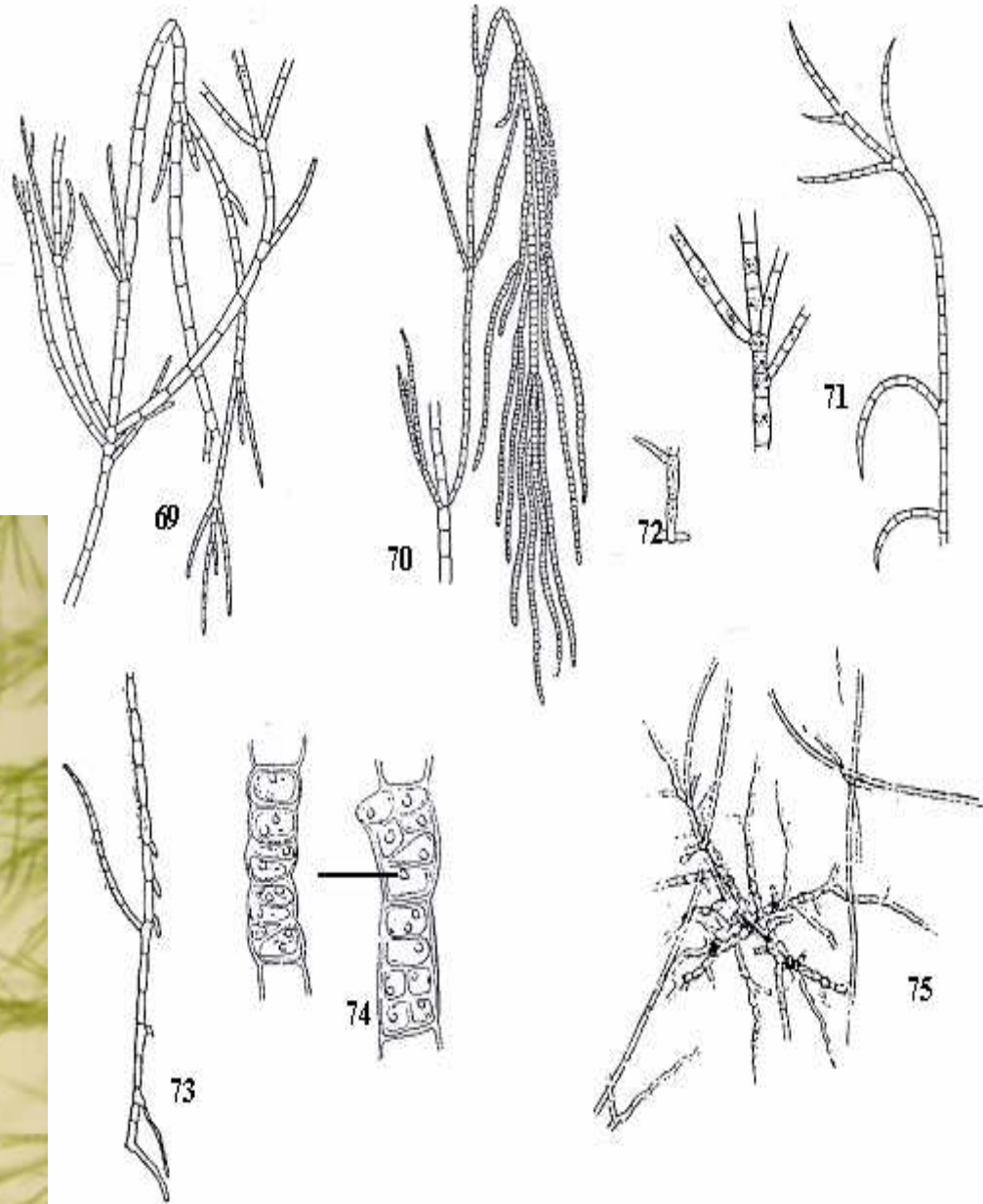
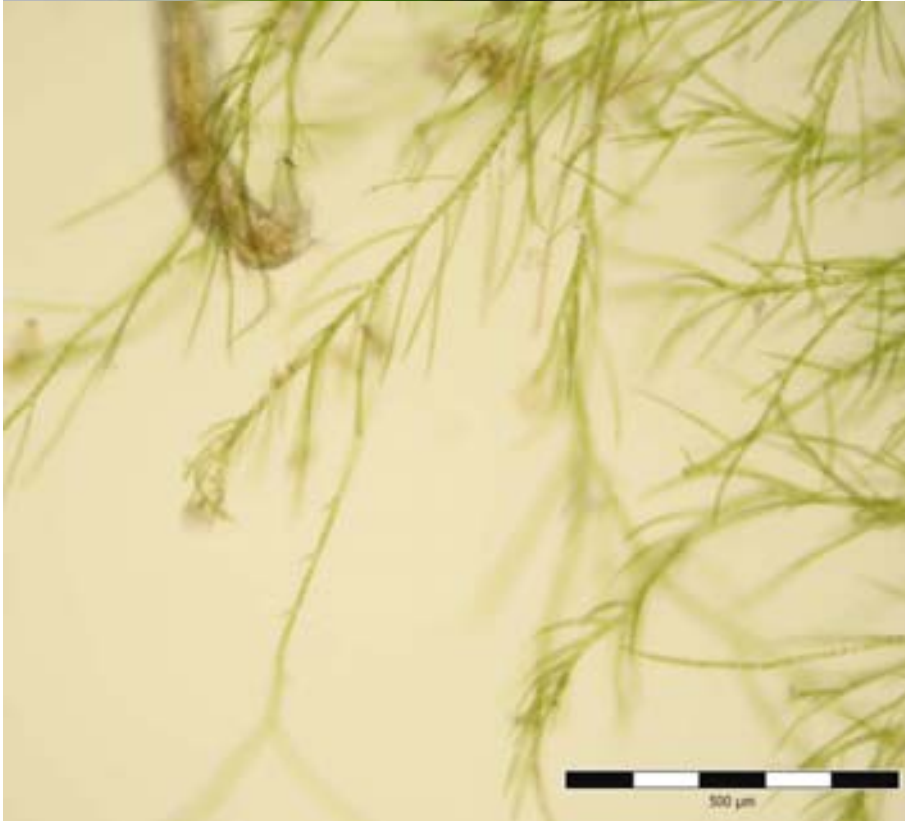
# *S. lubricum*



# *S. nanum*



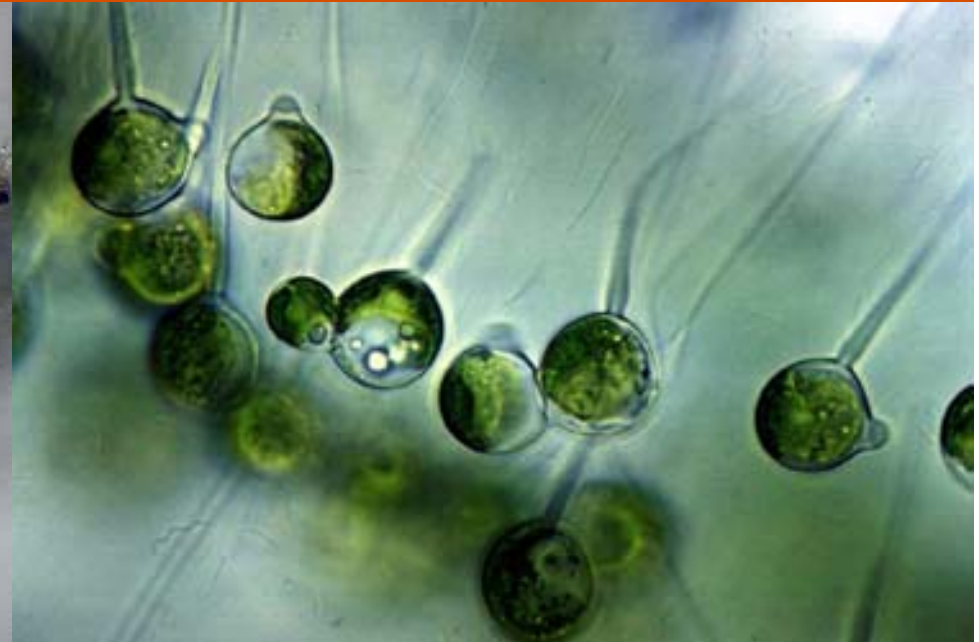
# *S. tenue*



# *Aphanochaete*

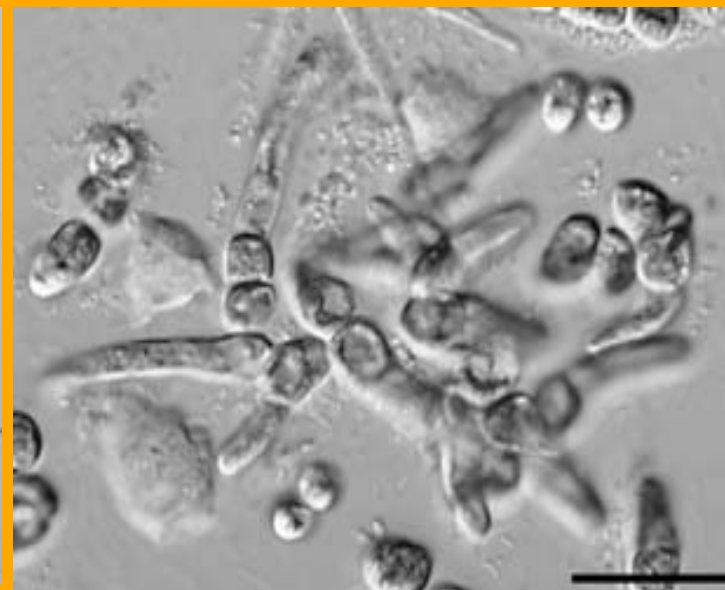
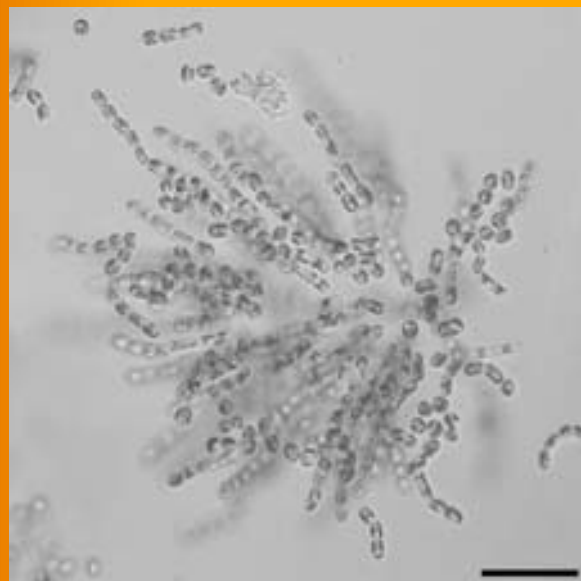
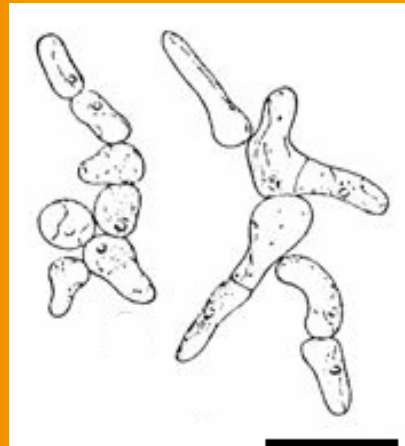


# *Chaetosphaeridium*



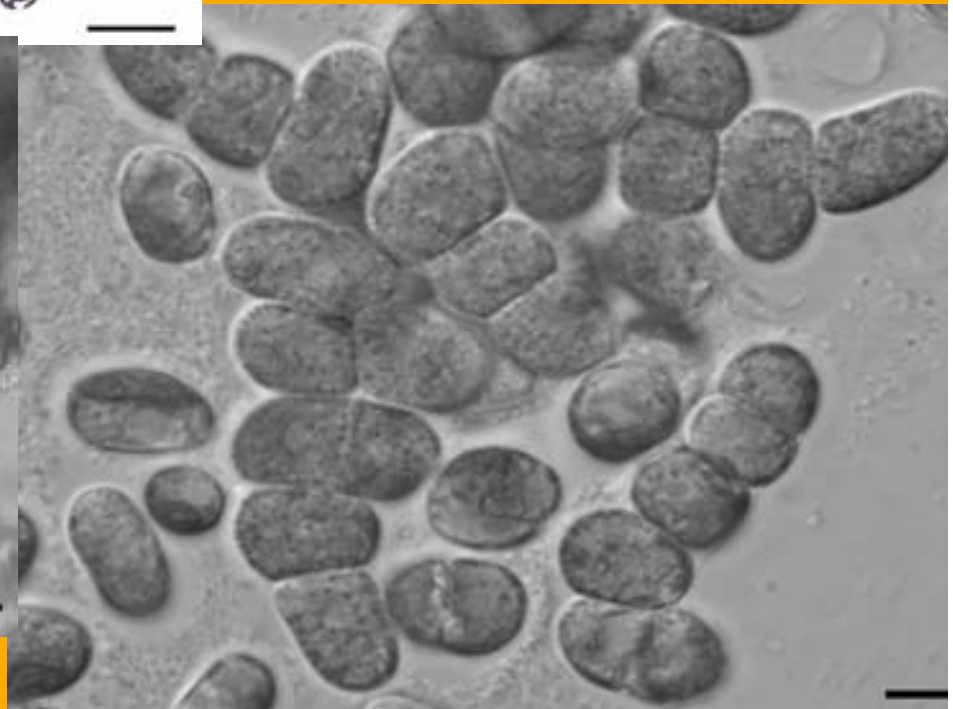
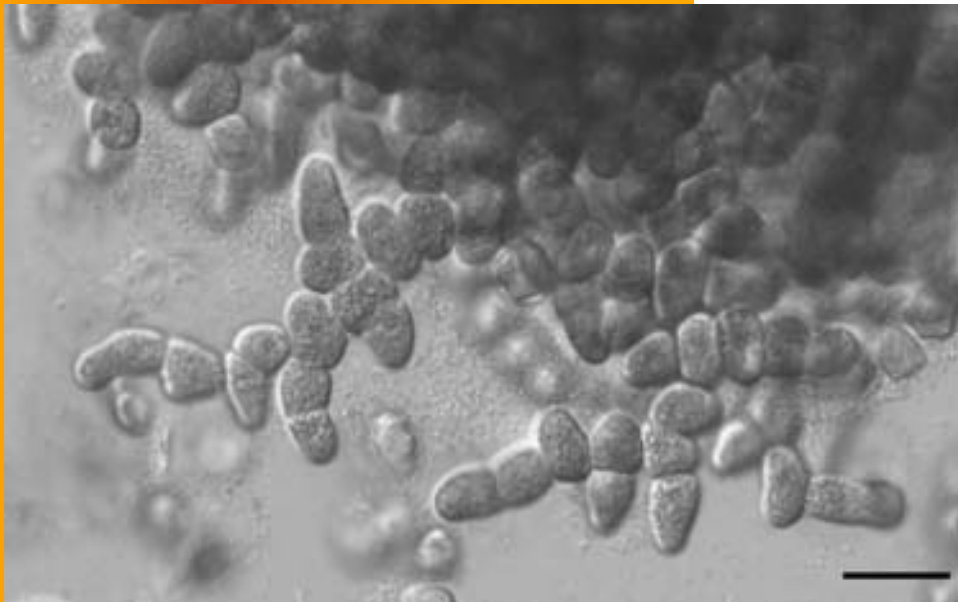
# *Rhexinema* Geitler 1942

## *R. paucicellulare*



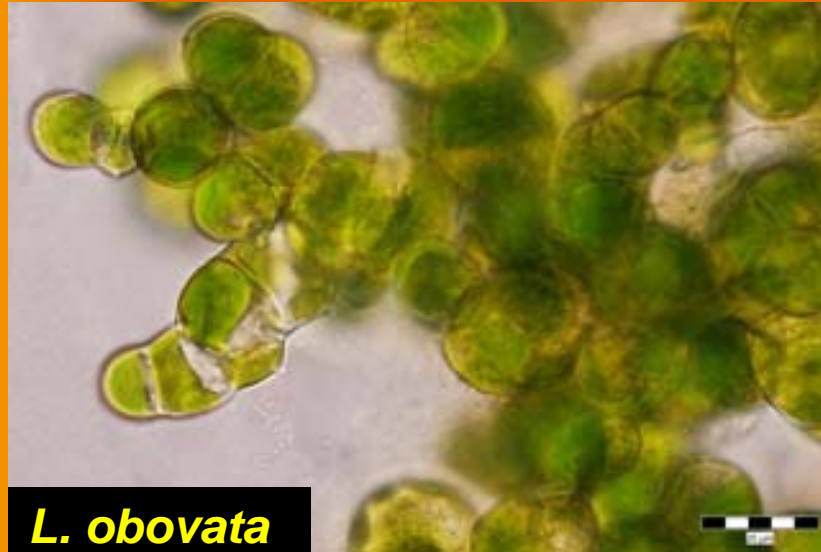
# *Chamaetrichon*

## *C. capsulatum*





# *Leptosira* a *Gongrosira* complex



*L. obovata*



*L. terrestris*



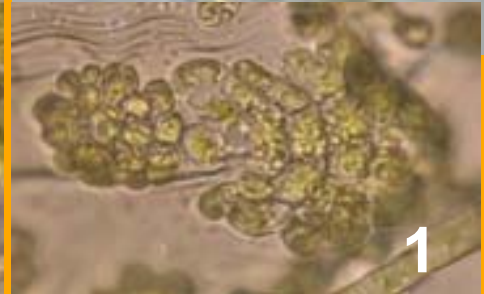
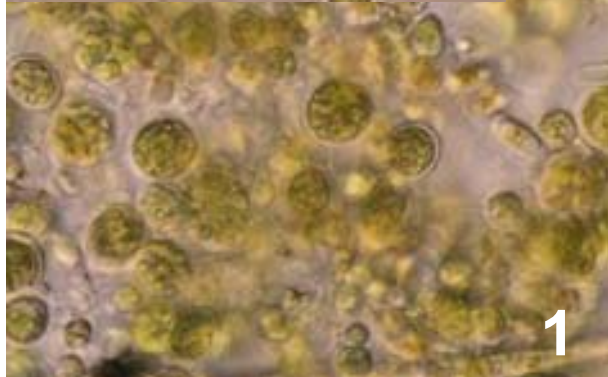
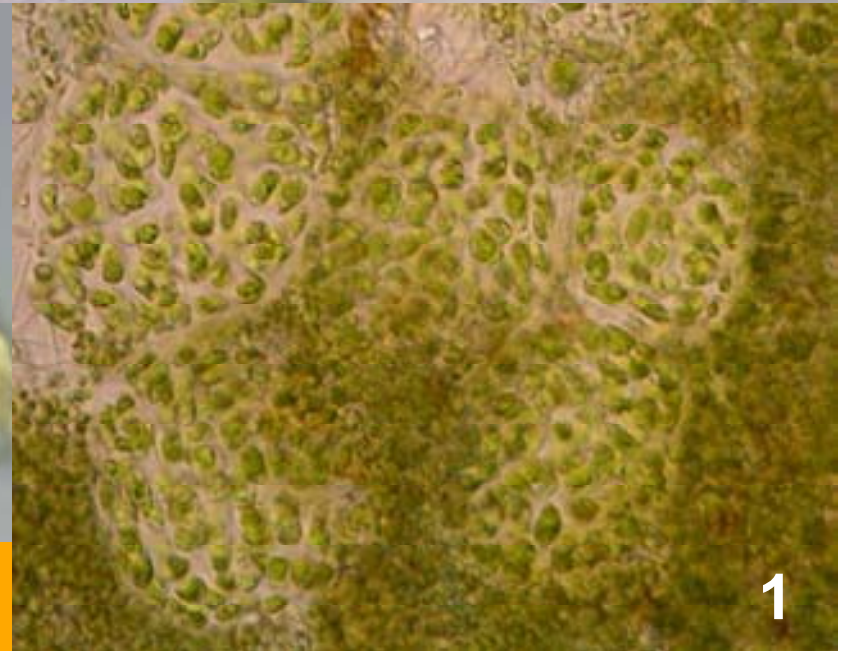
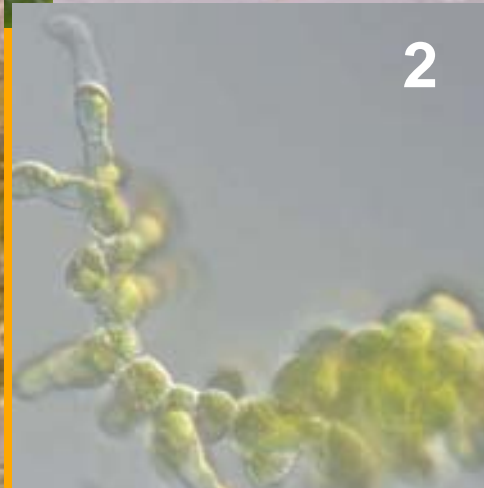
*L. cf. obovata*



*L. cf. obovata*

# Strain Kleni

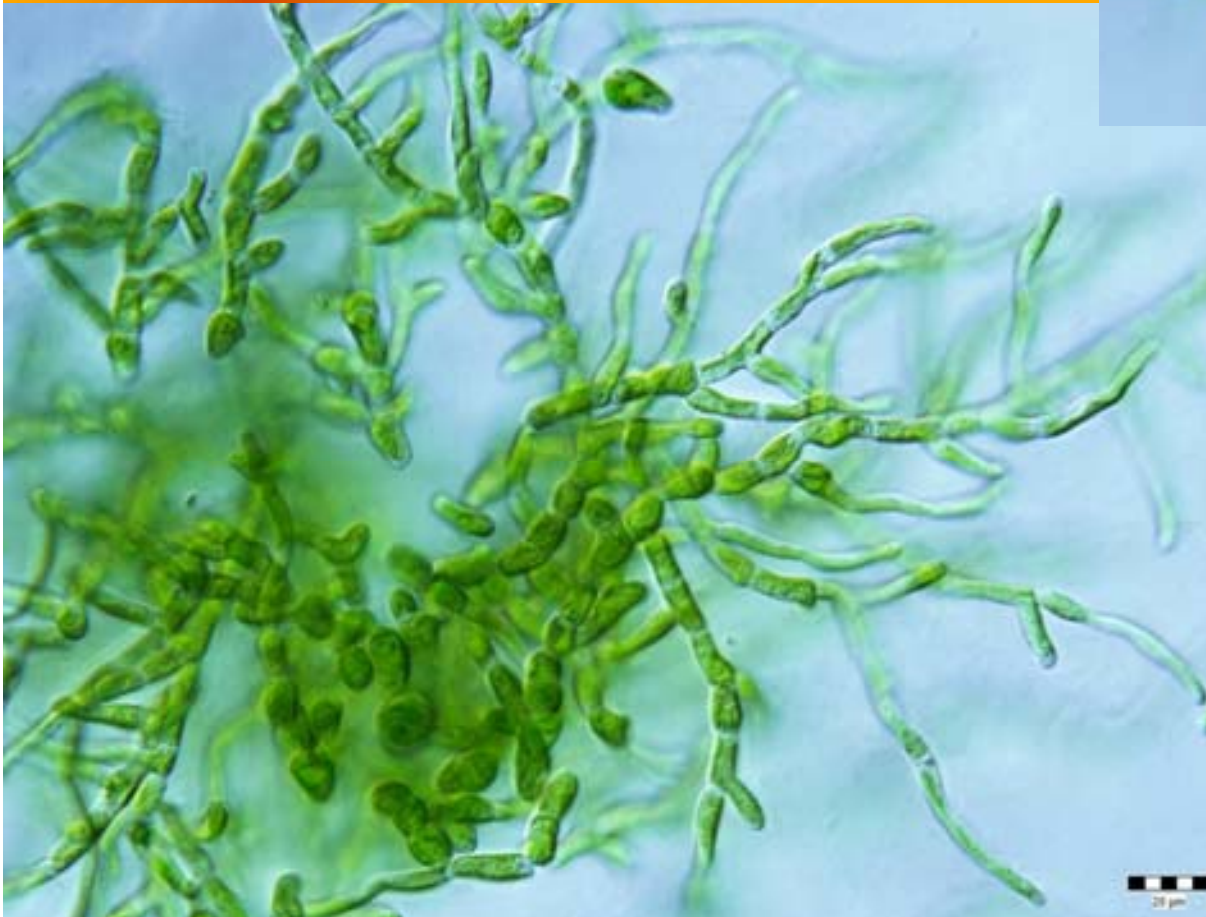
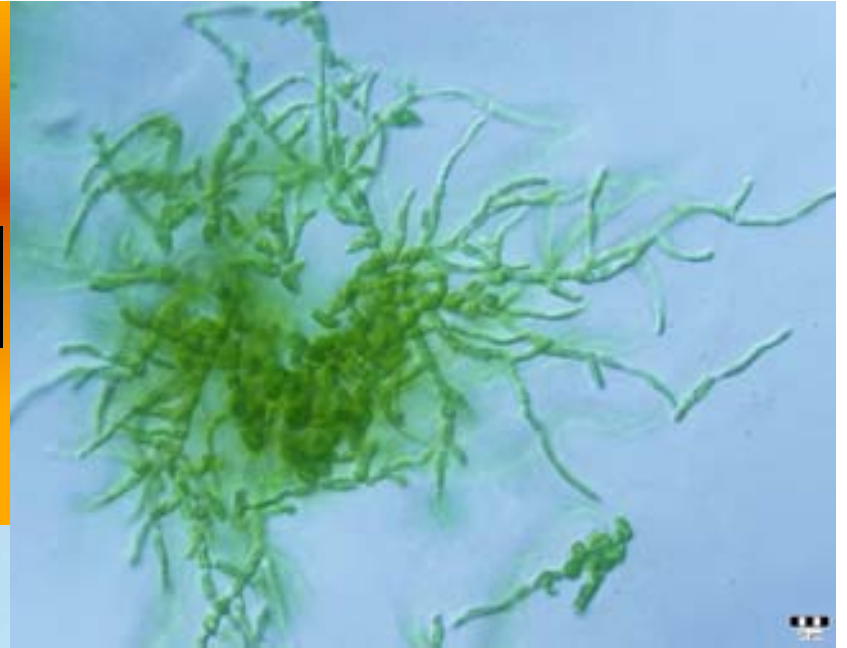
Stagnant water, Czech Republic



Nature population -1  
Cultivation of strain Klení - 2

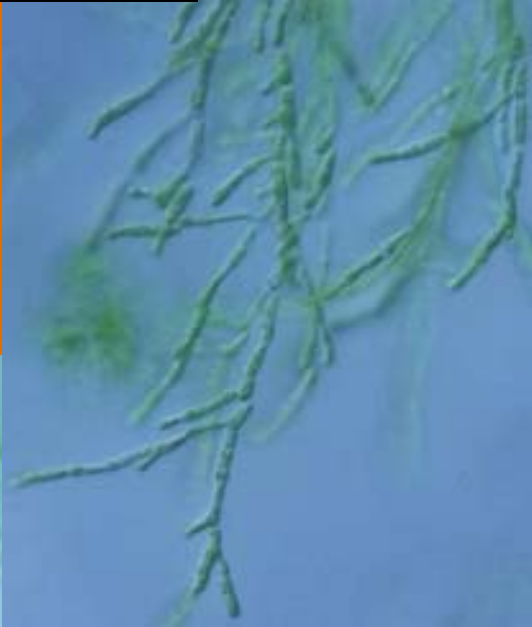
***Dilabifilum***

***D. arthopyreniae***

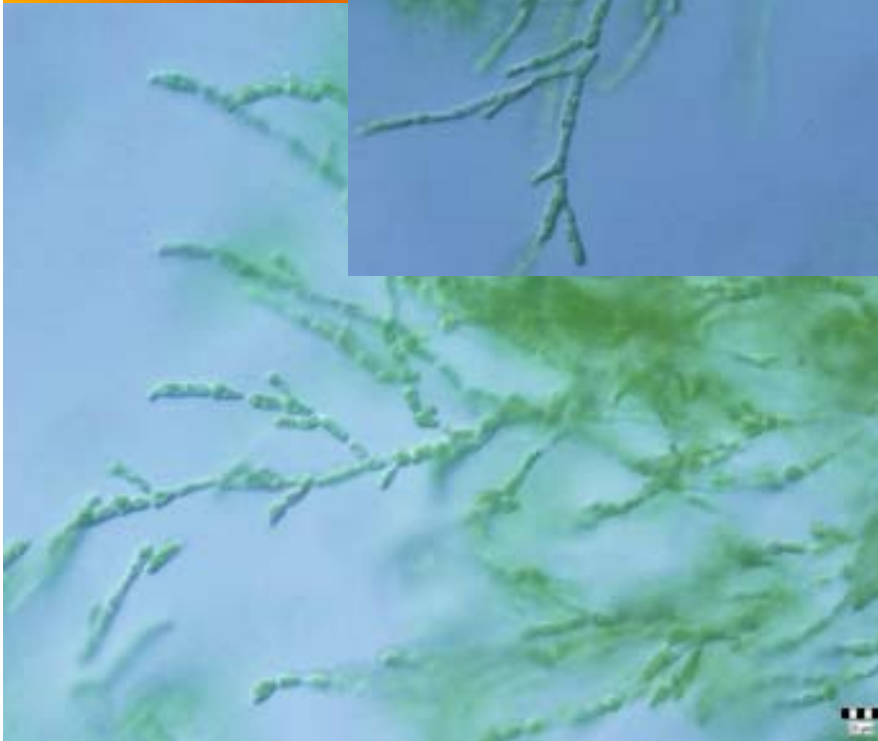


# *Pseudendoclonium*

*P. printzii*

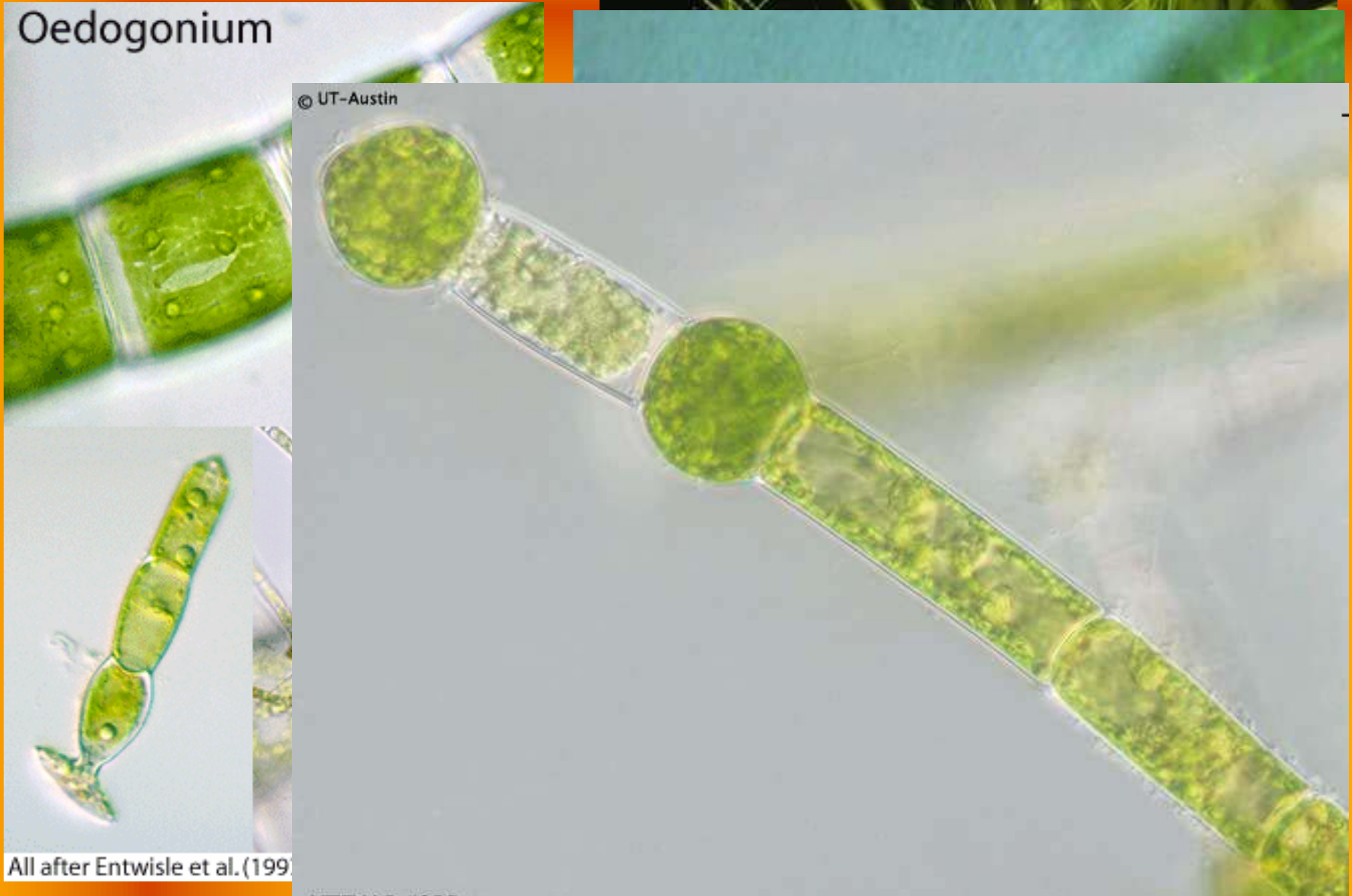


*P. baziliense*



# Oedogonium

Oedogonium



All after Entwisle et al. (199

# *Bulbochaete*

- heterotrichalni
- polarni
- epifyt

Determina

hya

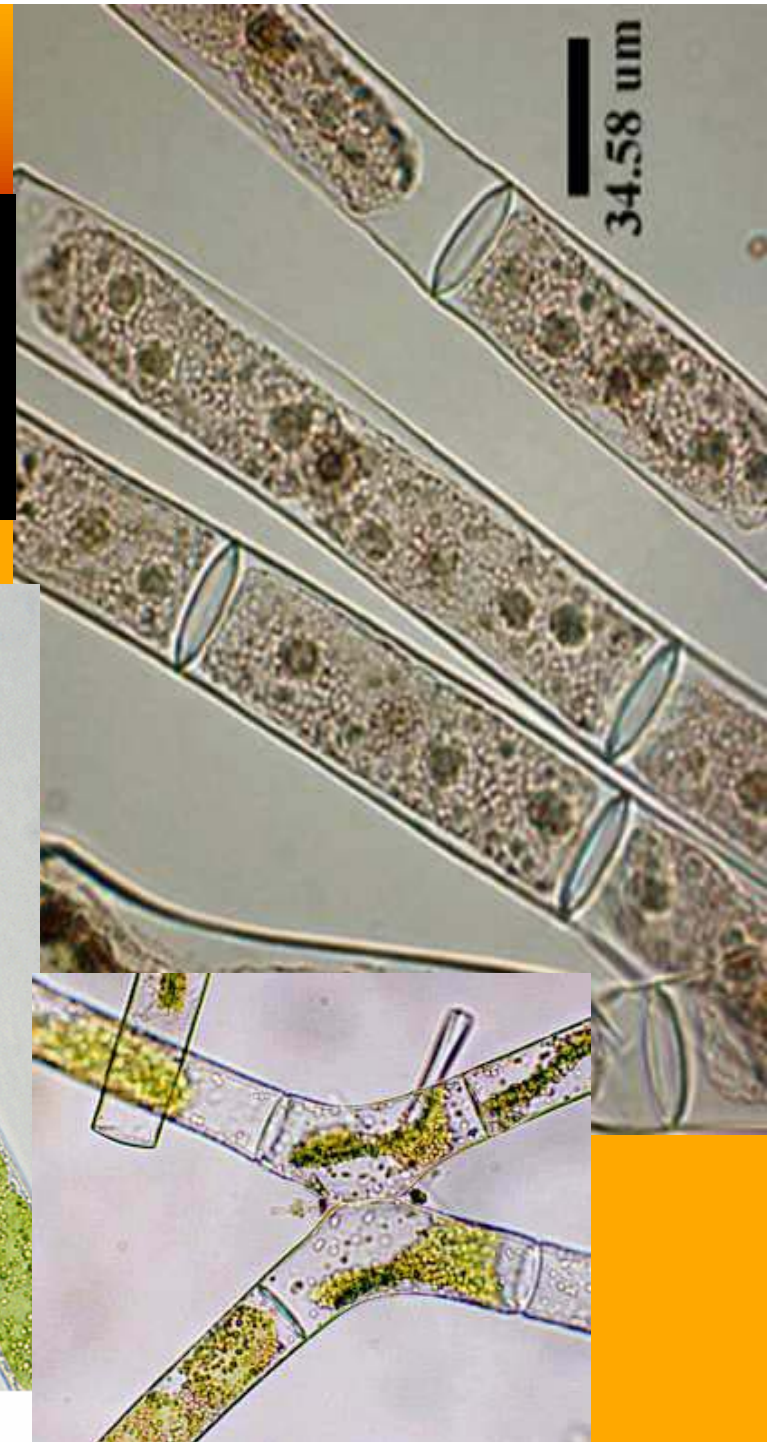
oo

Cistcí vo



# *Mougeotia*

- trichalni
- cockovite spojeni bunek
- chloroplast nastenny s pyrenoidy

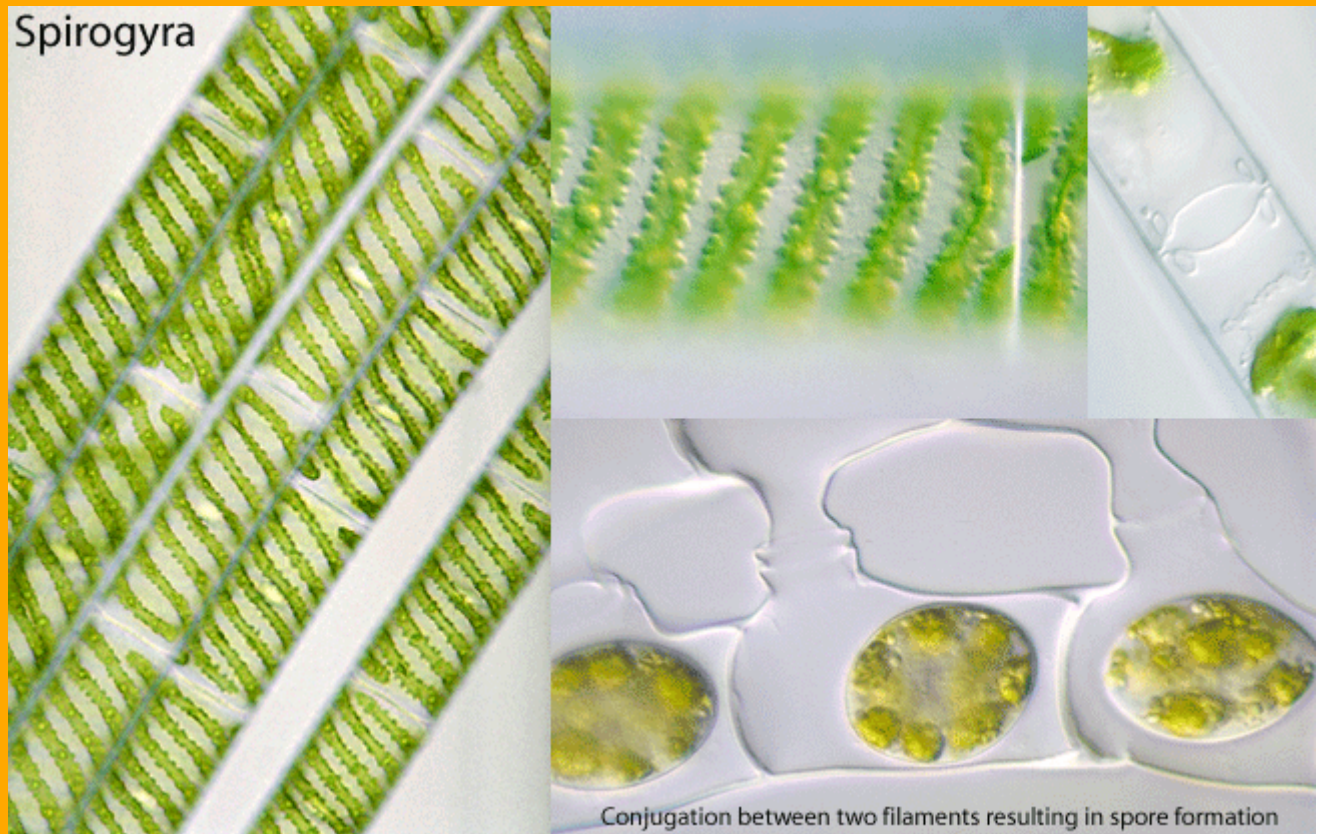


Mougeotia

A © Y. Tsukii, see [http://protist.i.hosei.ac.jp/Protist\\_menuE.html](http://protist.i.hosei.ac.jp/Protist_menuE.html)  
B,C after Entwisle et al. (1997)

# Spirogyra

- trichalni
- chloroplast spiralni s pyrenoidy
- taxonomicky slozity



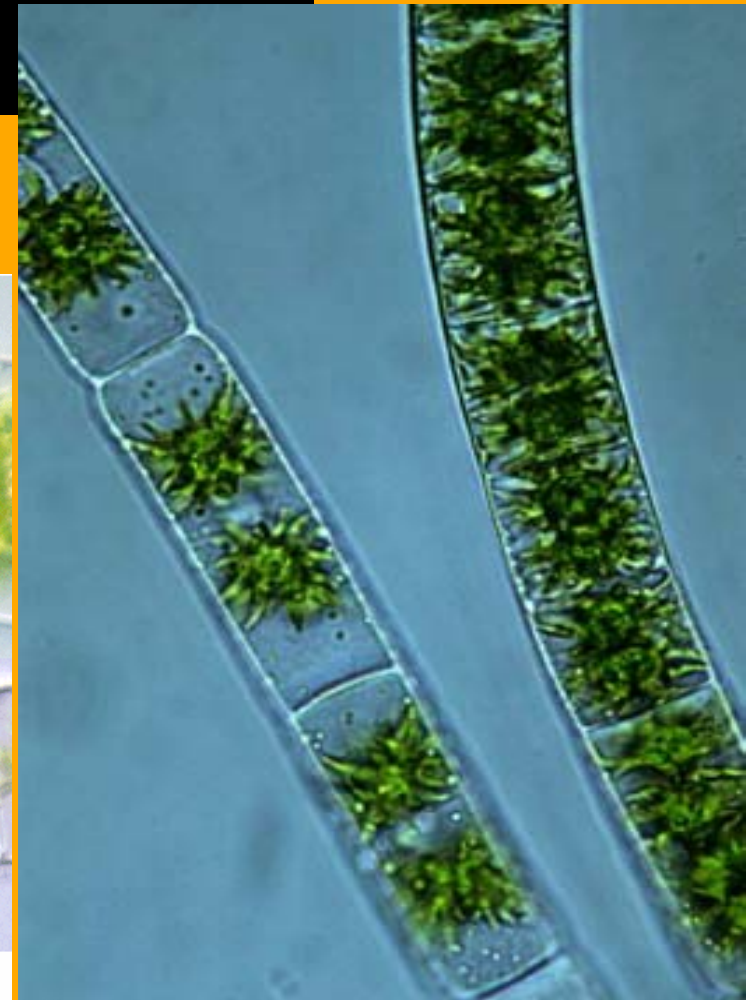
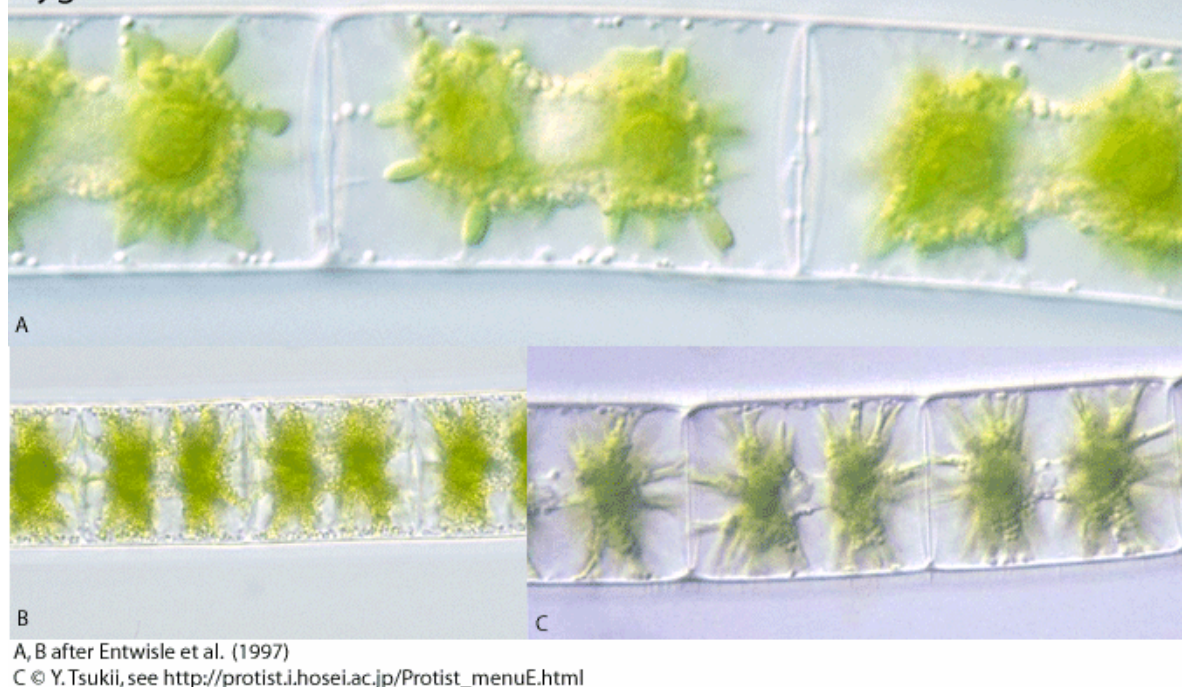
All after Entwisle et al. (1997)



# Zygnema

- trichalni
- chloroplast hvezdickovity s pyrenoidem
- taxonomicky slozity

Zygnema



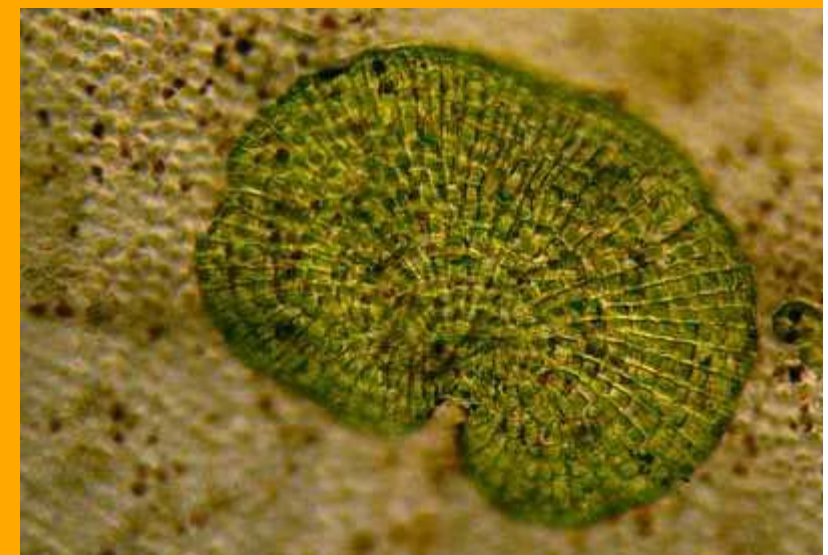
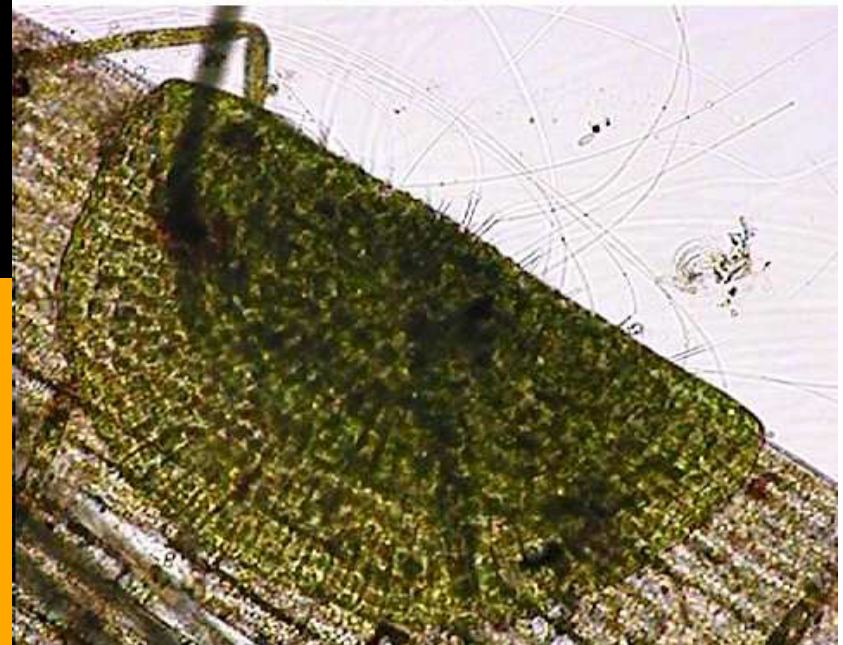
A, B after Entwisle et al. (1997)

C © Y. Tsukii, see [http://protist.i.hosei.ac.jp/Protist\\_menuE.html](http://protist.i.hosei.ac.jp/Protist_menuE.html)

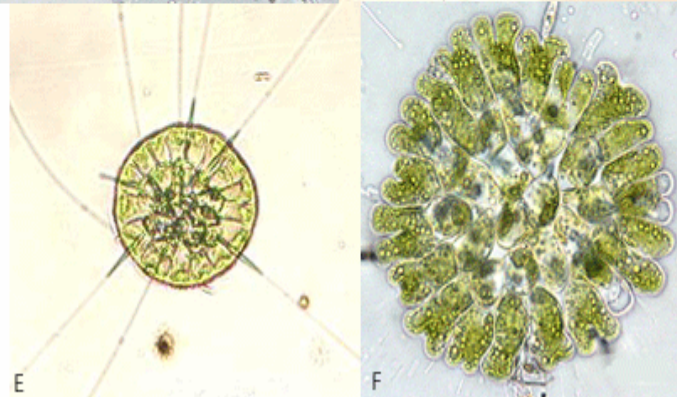
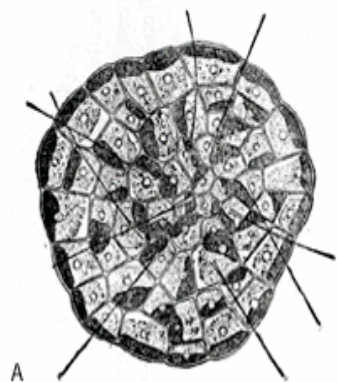
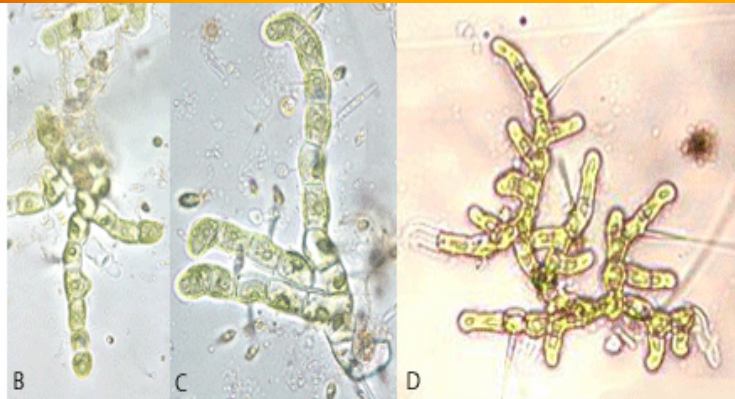
# Coleochaete

- heterotrichalni
- chloroplast s pyrenoidem
- epifyt

Coleochaete growing on edge of Elodea leaf



Coleochaete



A after Smith (1950)

B, C, D, E, F © J. Kinross, see <http://www.lifesciences.napier.ac.uk/JK/algaweb/algaweb2.htm>

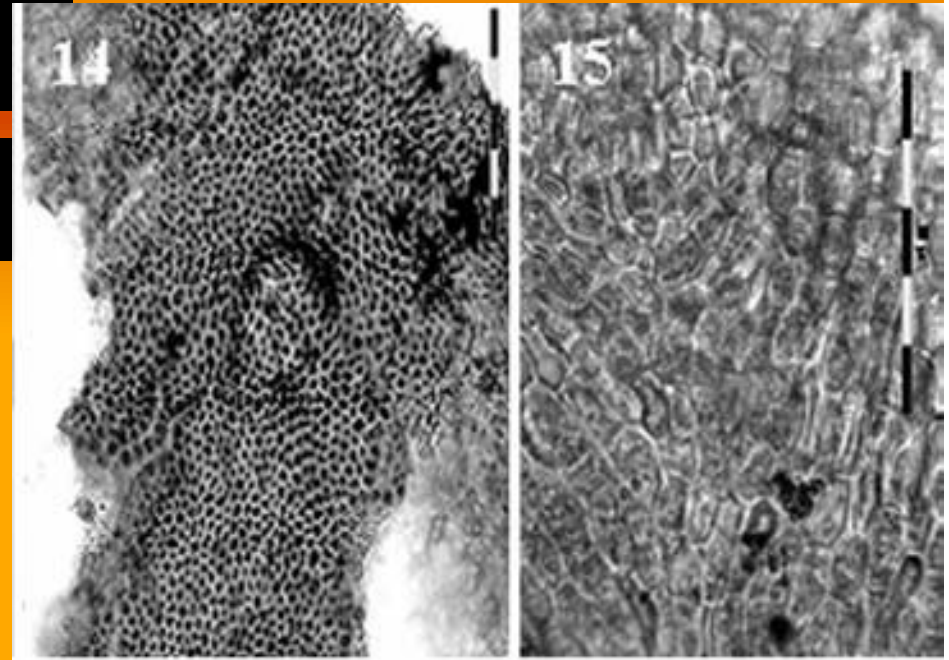
# Ruduchy

## *Audouinella*

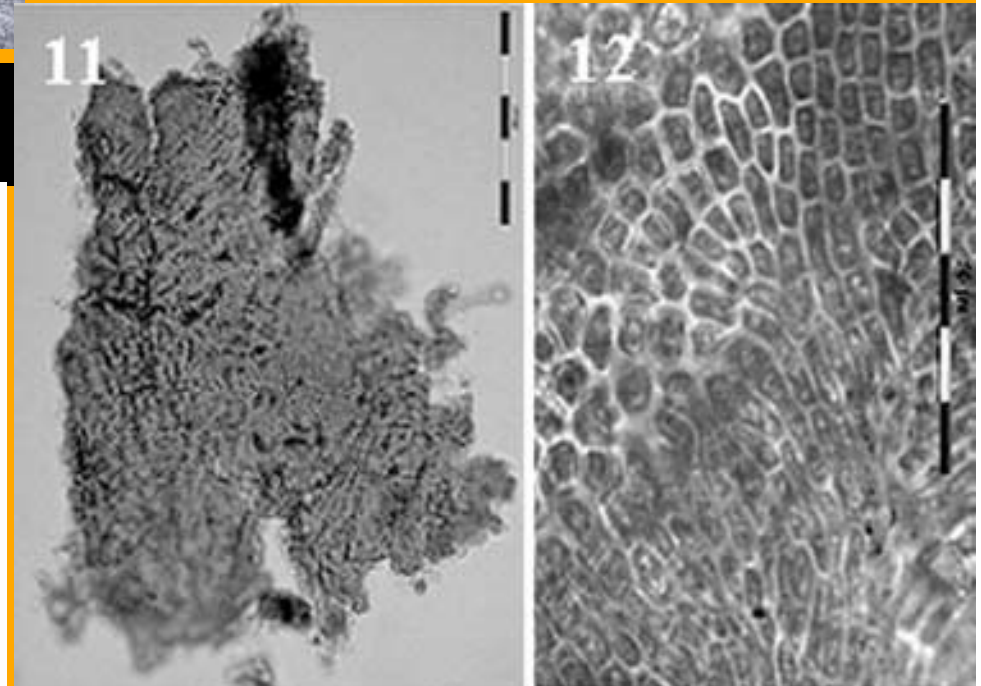
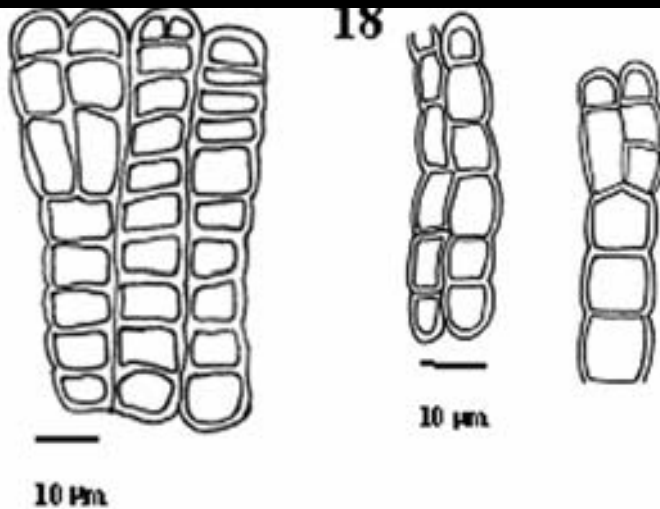


# *Hildenbrandia*

## *H. rivularis*

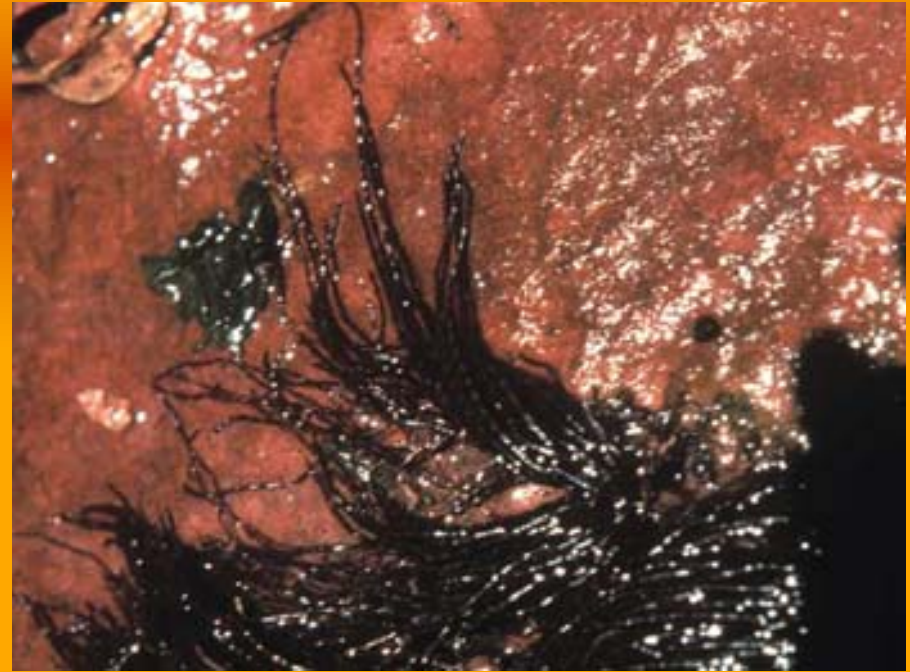


## *H. cuprea*



# *Lemanea*

*L. fluviatilis*



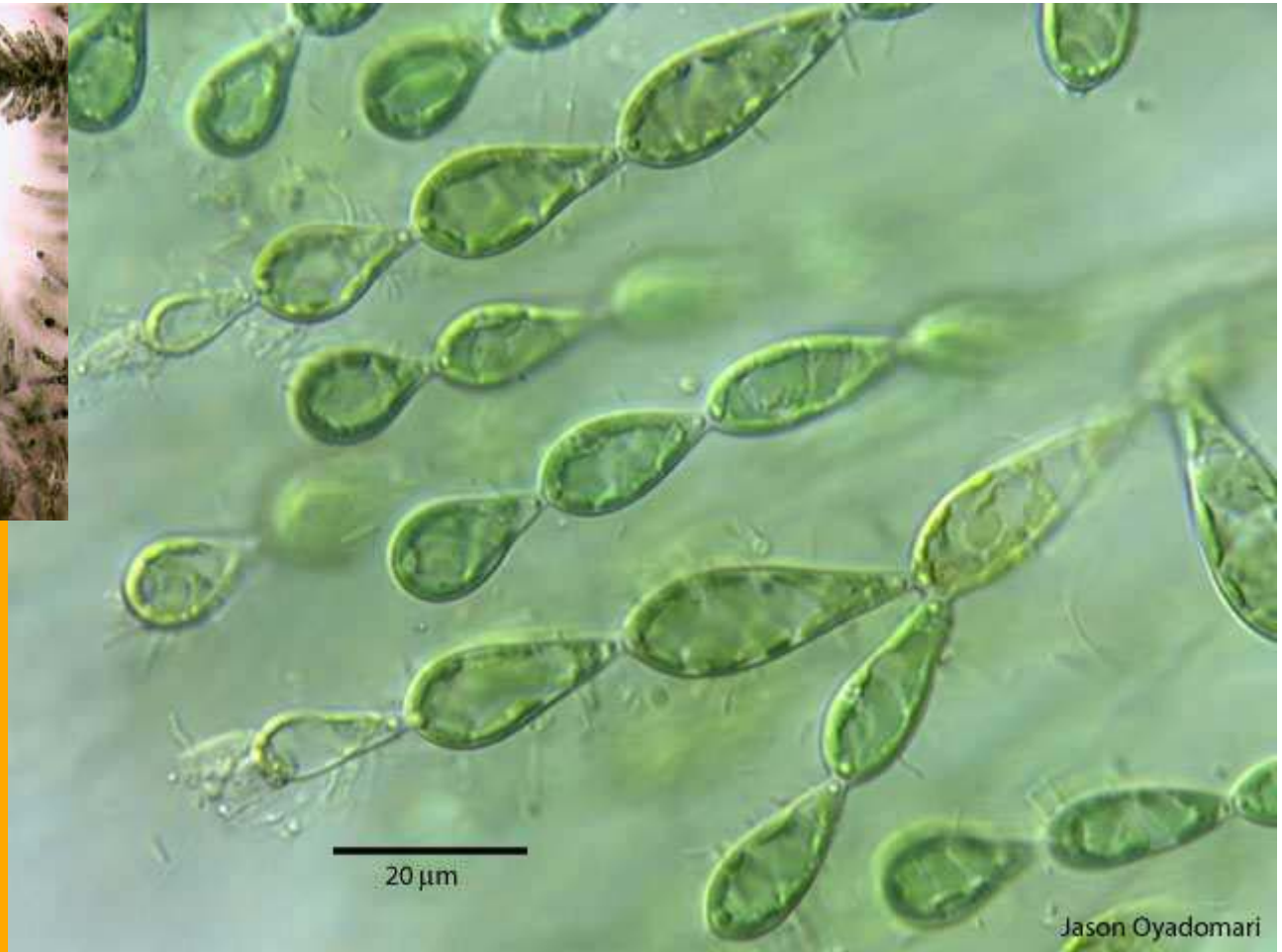
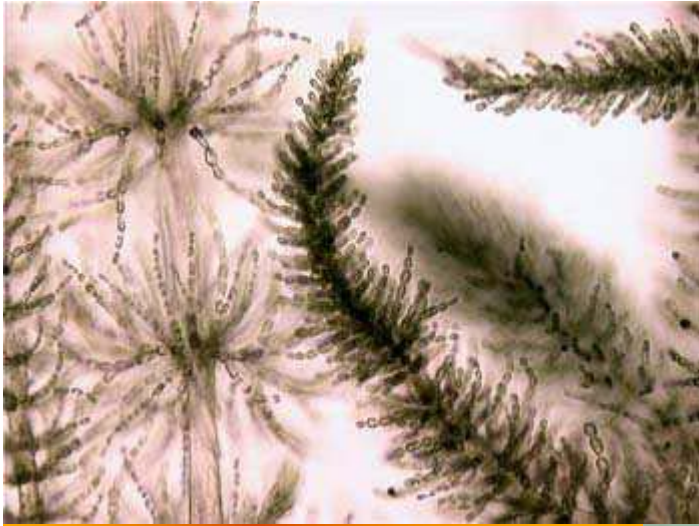
*L. torulosa*  
*L. nodosa*  
*L. annulata*



# *Batrachospermum*

## *B. moliniforme*





**B. vagum**  
**B. helminthosum**

**Dekuji za pozornost**