

Určování sinic ze skupiny
Gomphosphaerioidae
a dalších kokálních koloniálních
sinic s buňkami na periférii

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Determinační kurz 2011

Javorník

upraveno pro www – bez obrázků z
Hindákova atlasu sinic

květákovitvaré (některé)

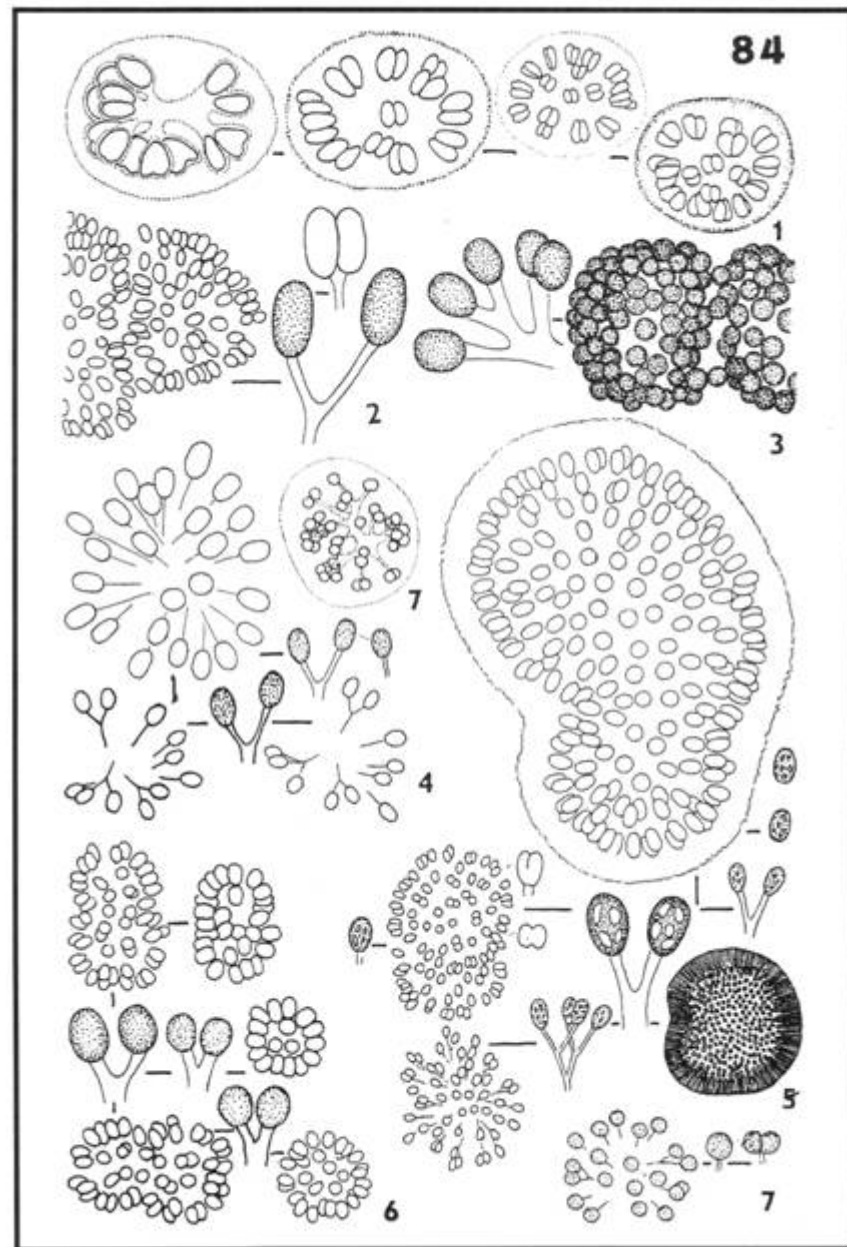
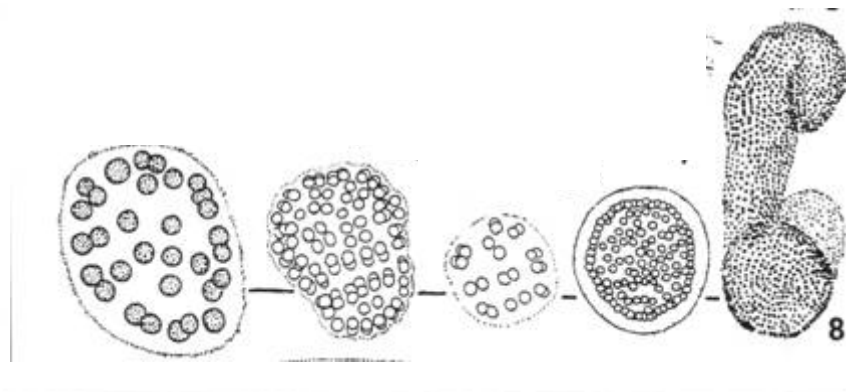


Obrazová tabule 84: *Cyanophyceae* - sinice, řád *Chroococcales*, 4. část,
Gomposphaerioidae 2

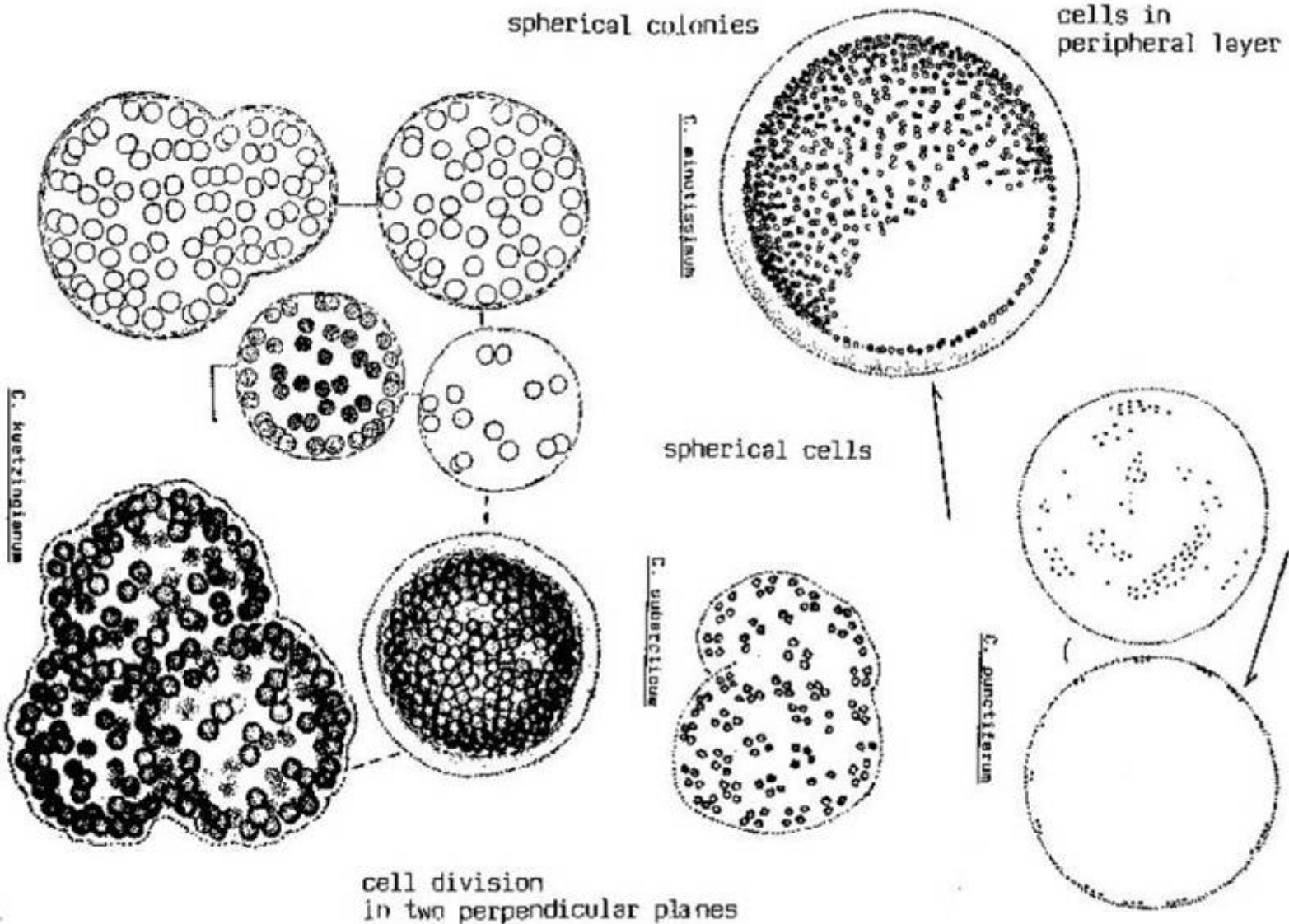
Č.	Taxon	x	o	β	α	p	l _i	S _i
1.	<i>Gomposphaeria aponina</i> KÜTZING	-	8	2	-	-	4	1,2
2.	<i>Woronichinia ruzickae</i> KOMÁREK et HINDÁK	-	9	1	-	-	5	1,1
3.	<i>Woronichinia fusca</i> (SKUJKA) KOMÁREK et HINDÁK	-	3	7	-	-	4	1,3
4.	<i>Snowella lacustris</i> (CHODAT) KOMÁREK et HINDÁK	-	5	5	-	-	3	1,5
5.	<i>Woronichinia naegelliana</i> (UNGER) ELENKIN, syn. <i>Gomposphaeria naegelliana</i> (UNGER) LEMMERMANN	-	2	7	1	-	3	1,9
6.	<i>Coelomoron pusillum</i> (VAN GOOR) KOMÁREK, syn. <i>Gomposphaeria pusilla</i> (VAN GOOR)	-	2	6	2	-	3	2,0
7.	<i>Snowella litoralis</i> (HÄYRÉN) KOMÁREK et HINDÁK, syn. <i>Gomposphaeria rosea</i> (SNOW) LEMMERMANN	-	5	5	-	-	3	1,5

Pozn.: Všechny uvedené druhy patří dříve do rodu *Gomposphaeria*.
Z vodárenského hlediska o nich platí totéž jako u druhů na předchozí obraz. tabuli č. 83.

8.	<i>Coelosphaerium kuetzingianum</i> NÄGELI	-	4	6	-	-	3	1,6
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Coelosphaerium



FROM: Komárek (1958), Skuja (1956, 1964), Tikkanen (1986), Hindák (1988).

Coelosphaerium sp.

Morfologie:

Průměr buněk:

1 – 5,5 μm

Tvar buněk:

kulovité, po dělení polokulovité

Kolonie - velikost a tvar:

mikroskopické, kulovité, někdy složené z dílčích kolonií; buňky v jedné vrstvě po obvodu kolonie

Typ slizu:

bezbarvý, ohraničený

Rozmnožování:

dělení buněk ve dvou rovinách; rozpad kolonií až na malé shluky buněk

-Toxicita:

- není známa

Druhy:

Coelosphaerium sp.

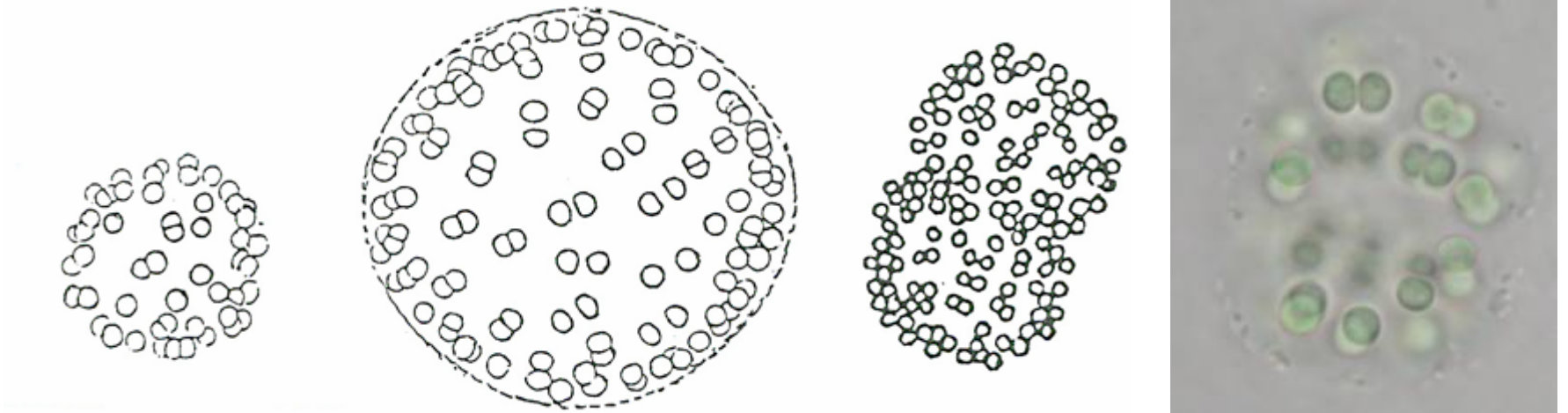


Fig. 60. *Coelosphaerium kuetzingianum*

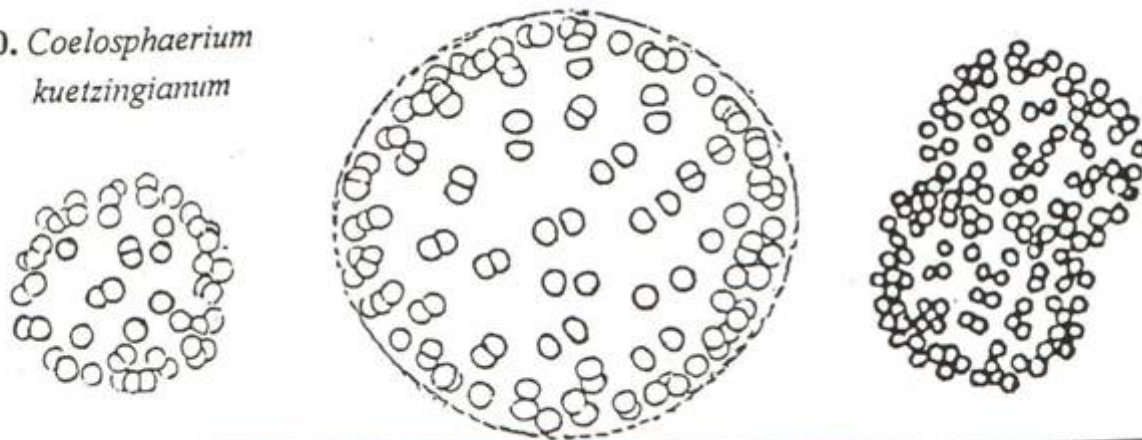


Fig. 61. *Coelosphaerium aerugineum*

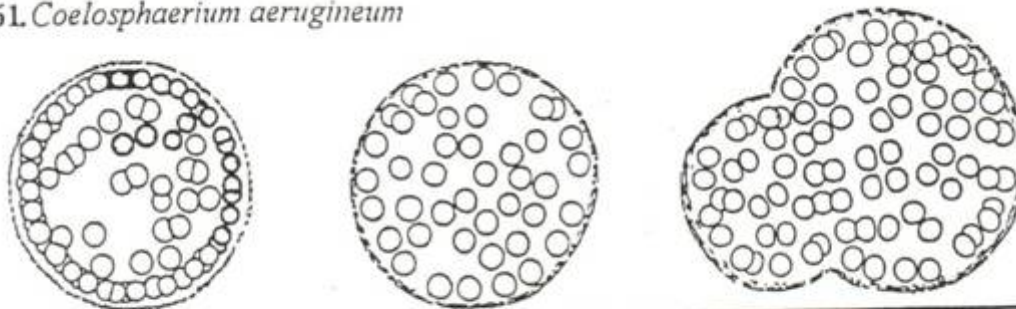


Fig. 62. *Coelosphaerium dubium*

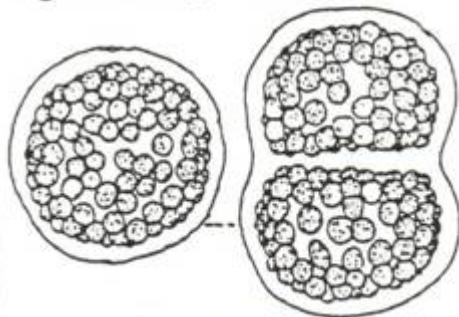
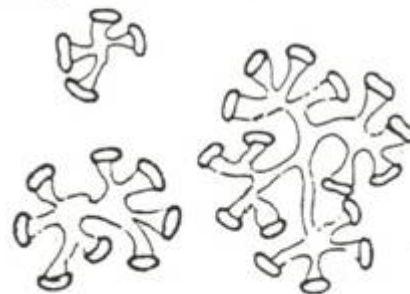


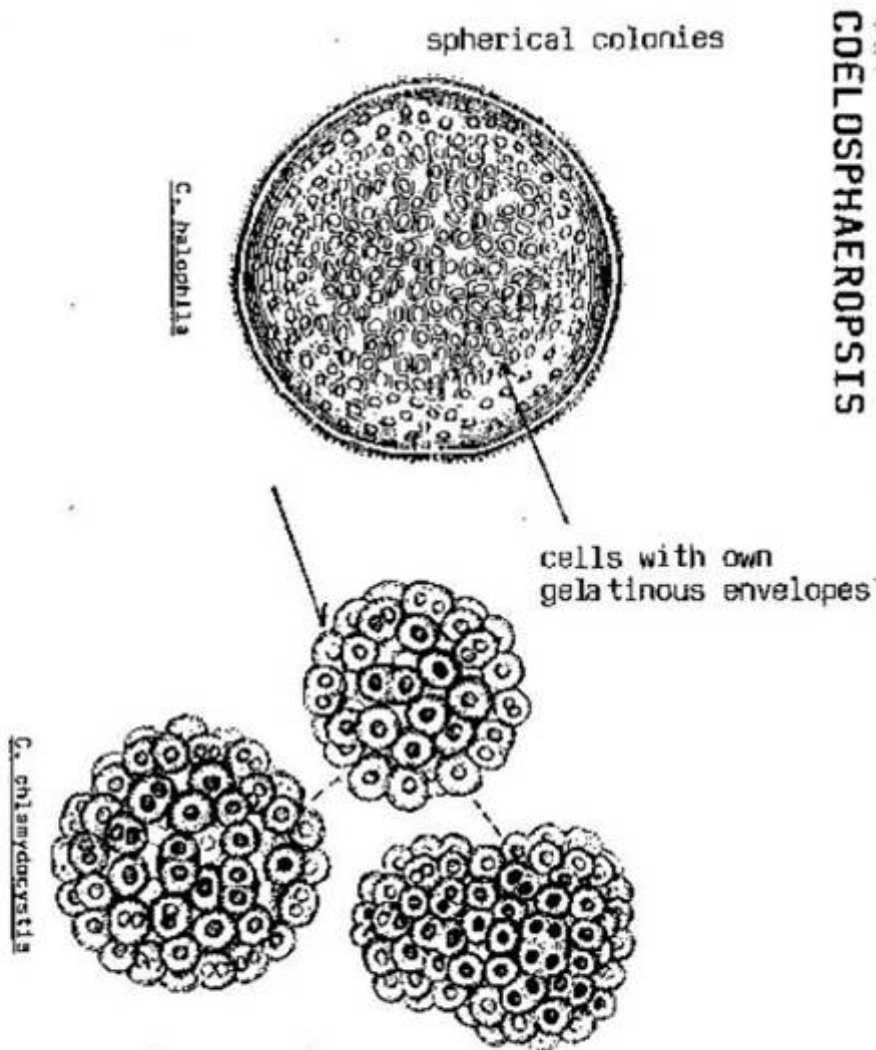
Fig. 63. *Cyanonephron styloides*



Coelosphaeropsis

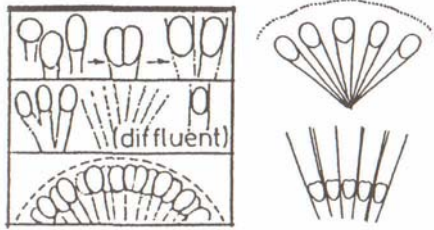
Začátečníci – ihned zapomeňte!

FROM: Lemmermann ex Geitler (1942), Skuja (1964).



WORONICHINIA

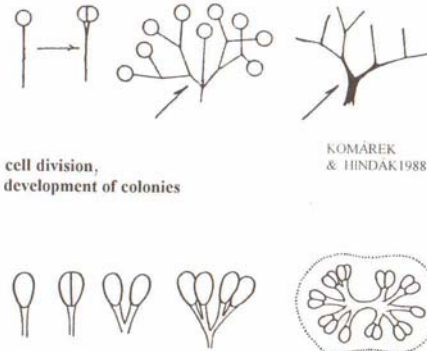
cell division,
structure of colonies



KOMÁREK
& HINDÁK 1988

SNOWELLA

cell division,
development of colonies



KOMÁREK
& HINDÁK 1988

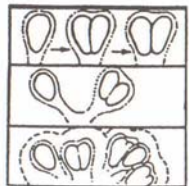
HINDÁK 1988

GOMPHOSPHAERIA

cell division,
development of colonies



HINDÁK 1988



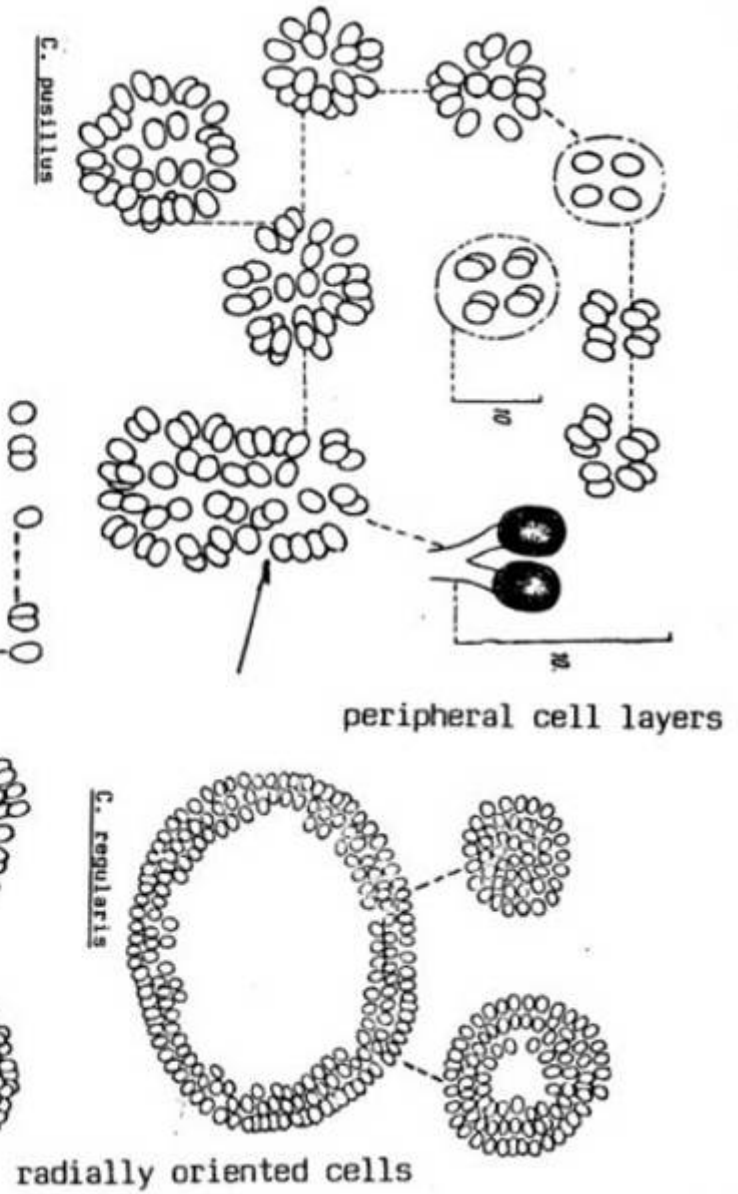
KOMÁREK
& HINDÁK 1988



G.M. SMITH 1920

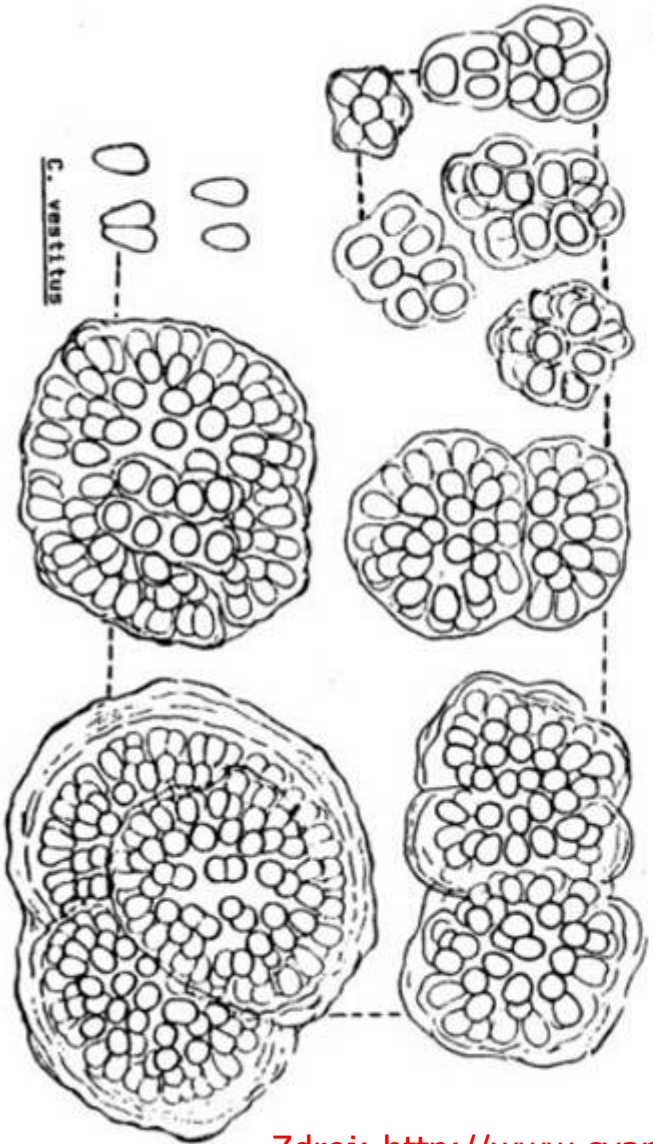
Coelomoron

COELOMORON



spherical colonies

C. microcystoides



Coelomoron

Morfologie:

<u>velikost buněk:</u>	2,2 - 4,5 x 1,8 – 4 μm
<u>Tvar buněk:</u>	široce oválné
<u>Kolonie:</u>	sférické, do 30 μm v průměru,
<u>Typ slizu:</u>	jemný, bezbarvý, rozplývavý, slizové stopky nejsou vidět
<u>Uspořádání buněk:</u>	buňky radiálně uspořádané po obvodu kolonie
<u>Rozmnožování:</u>	buněčné dělení ve dvou rovinách kolmých k sobě a k povrchu kolonie, rozpad kolonií

Rozšíření:

- ČR: v planktonu stojatých nebo mírně tekoucích eutrofních vod

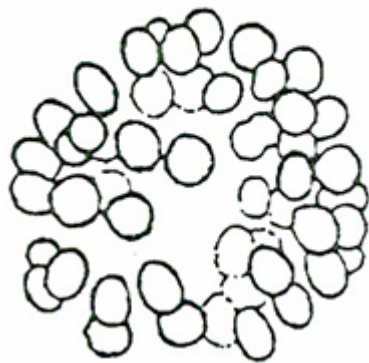
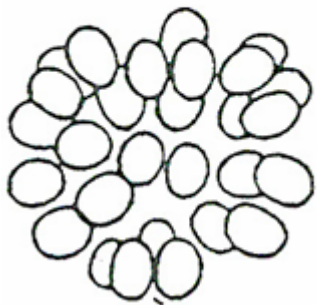
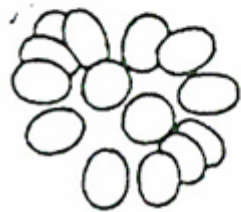
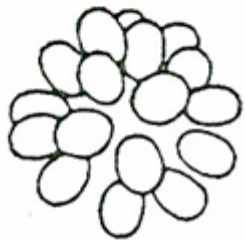
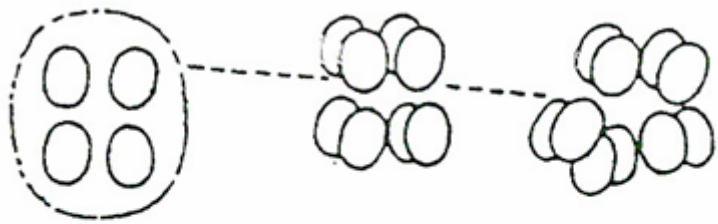
Toxicita:

- není známa

Druhy:

- Evropa: 1 druh *Coelomoron pusillum*

Coelomoron pusillum



Snowella ??????

stopky nebyly vidět

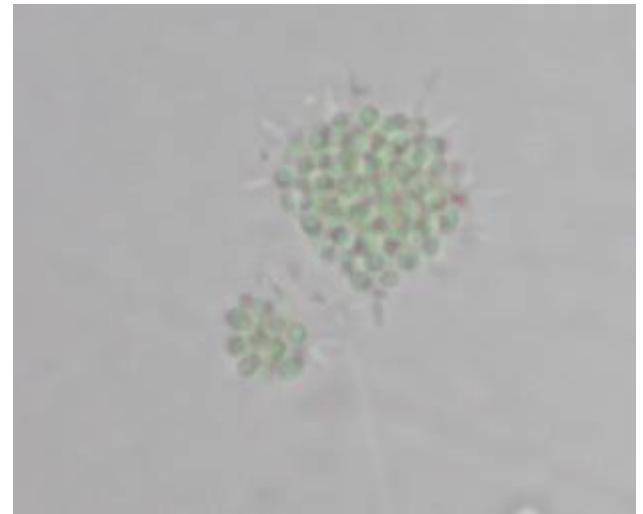
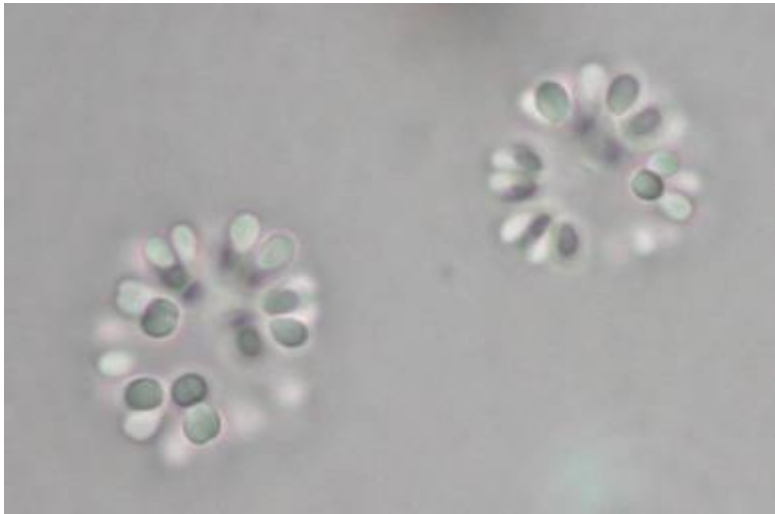






Pro začátečníky

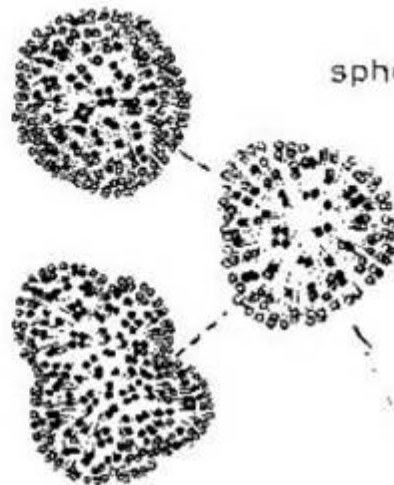
Coelomorona x *Aphanocapsa*



Woronichinia

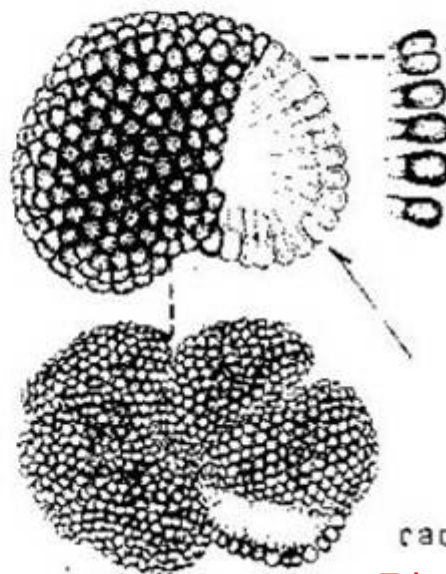
WORONICHINIA

spherical colonies



W. delicatula

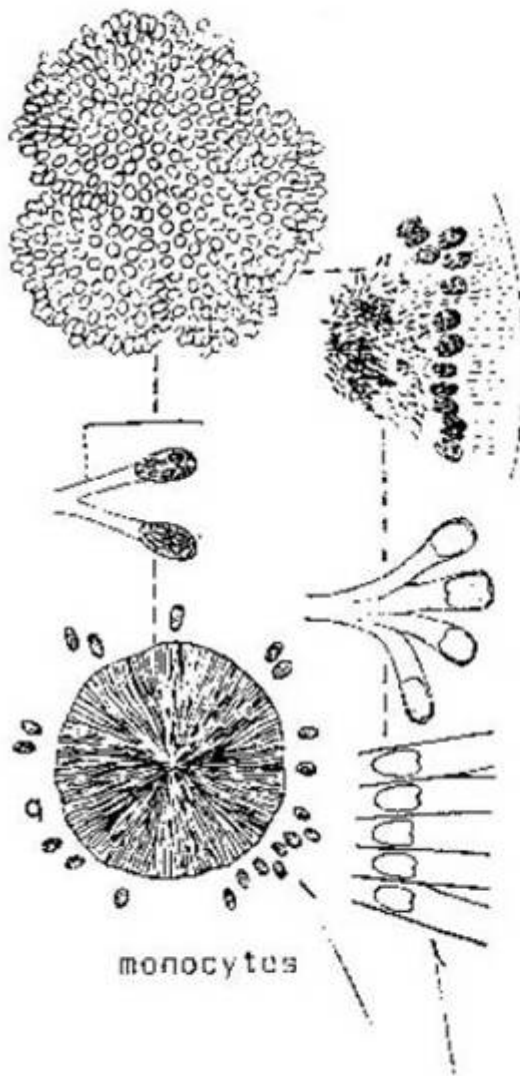
special central stalk system



W. robusta

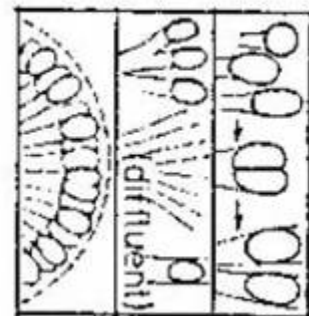
radially arranged cells

radial tube-like stalks

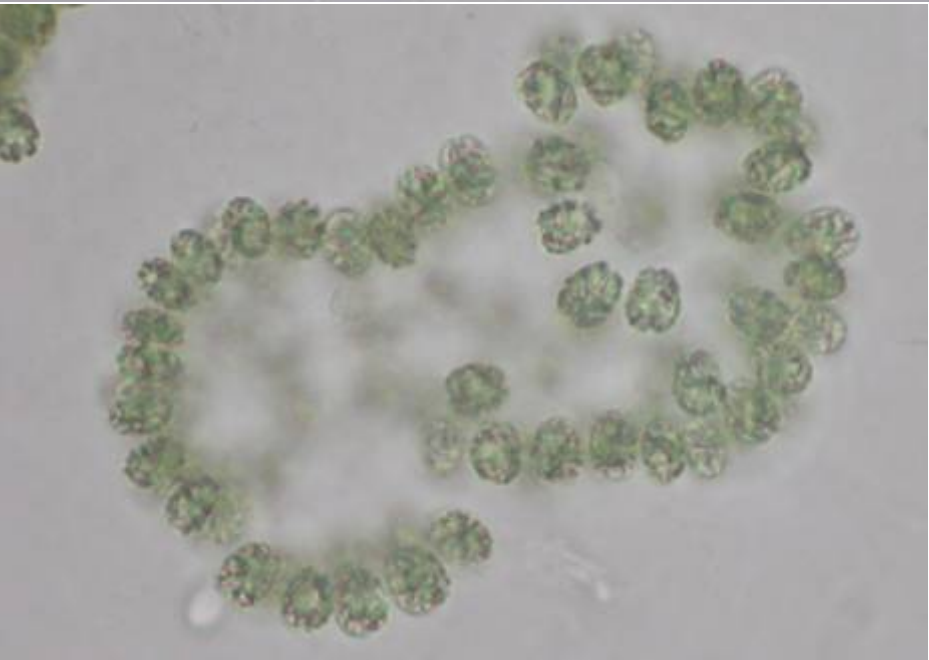


W. nagegellana

monocytes



From: Buchemann (1907), Kuzmárek (1958), Skuja (1964), different authors from Kondratyeva (1968), Kuzmárek et al Hindák (1980).

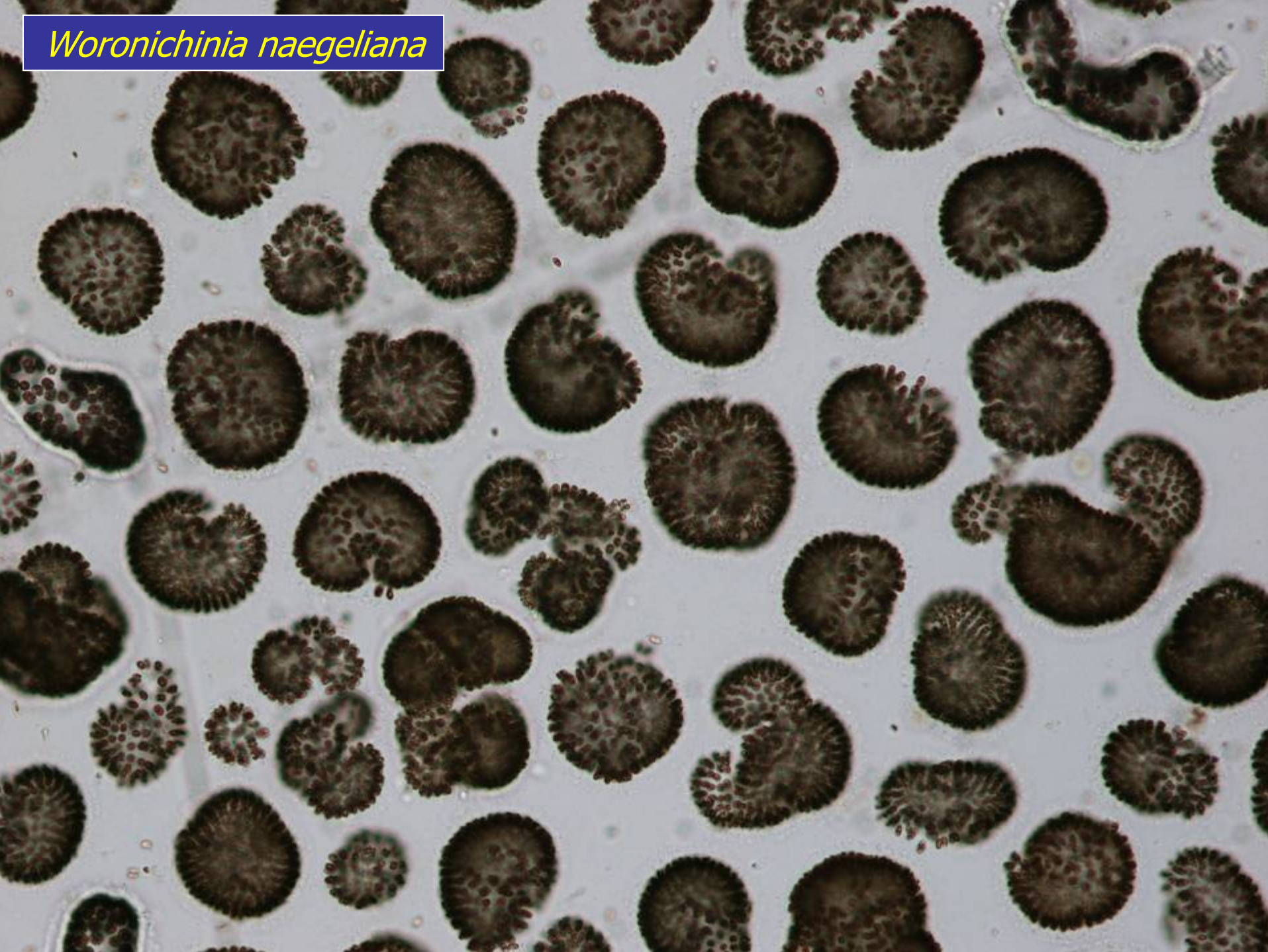


Woronichinia naegeliana

práškový vodní květ *Woronichinia naegeliana*



Woronichinia naegeliana

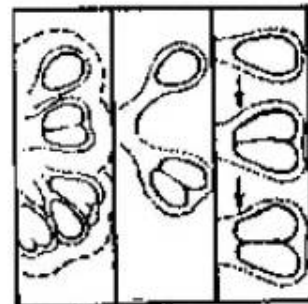


Woronichinia naegeliana

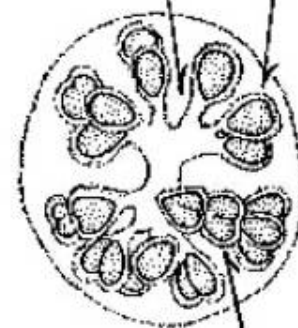


Gomphosphaeria

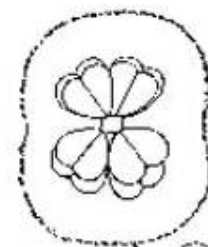
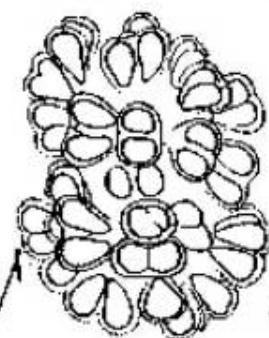
GOMPHOSPHAERIA



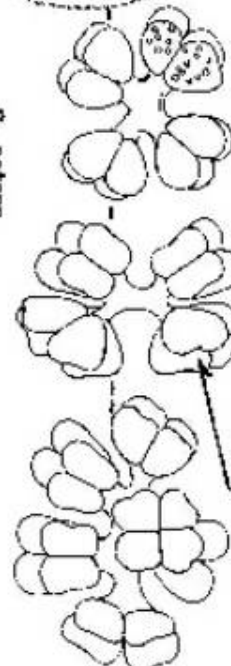
radial stalks



G. sporing

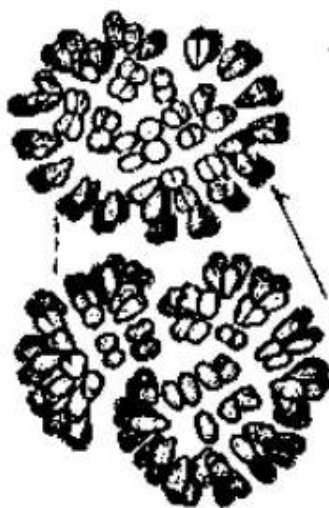


G. natans

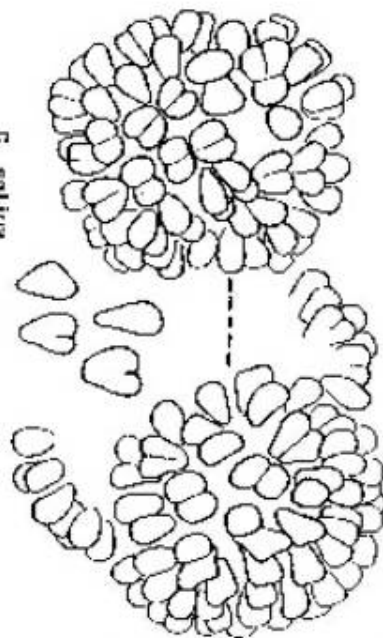


cordiform
cell-groups

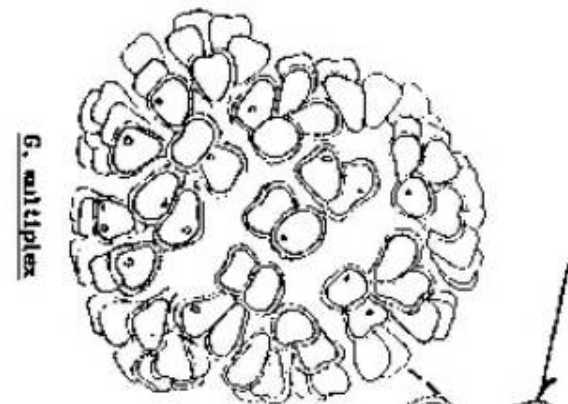
spherical colonies



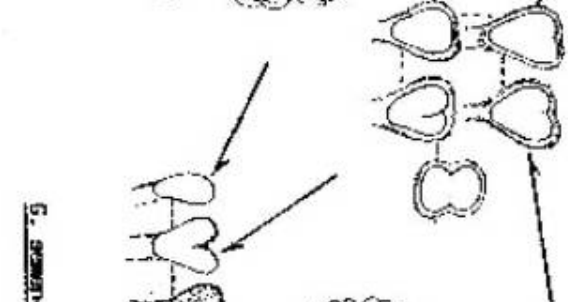
G. vitellum



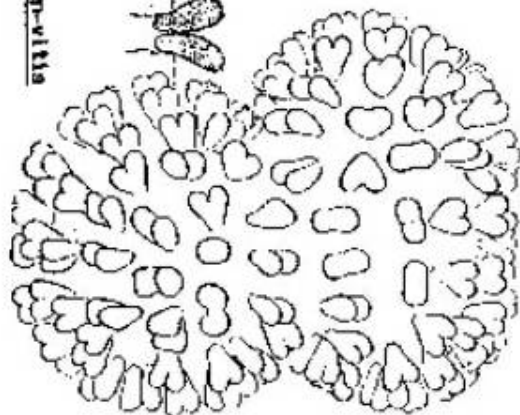
G. sordidum



G. multipes



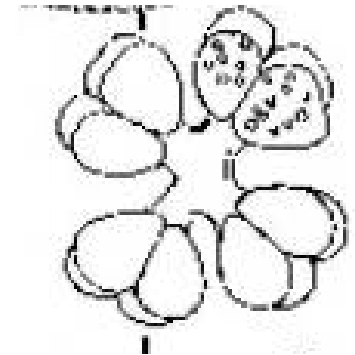
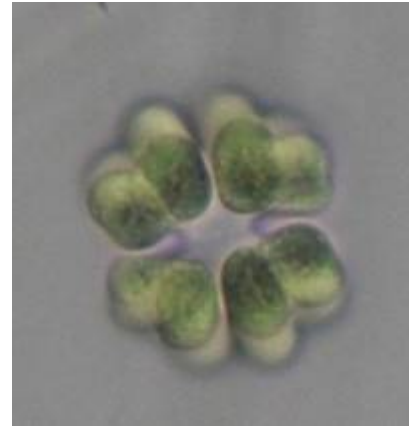
G. gemm-vittis



Gomphosphaeria

G.natans – Máchovo jezero

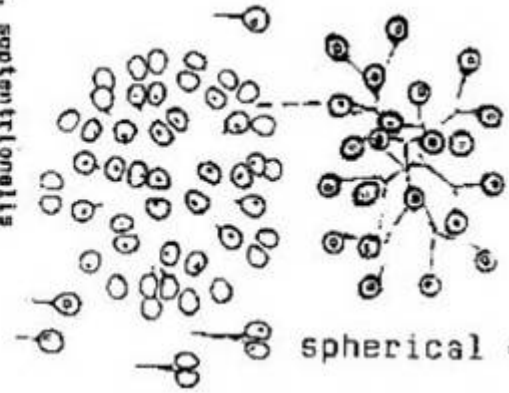
*i když Susswasserflora uvádí,
že evropské nálezy jsou
diskutabilní*



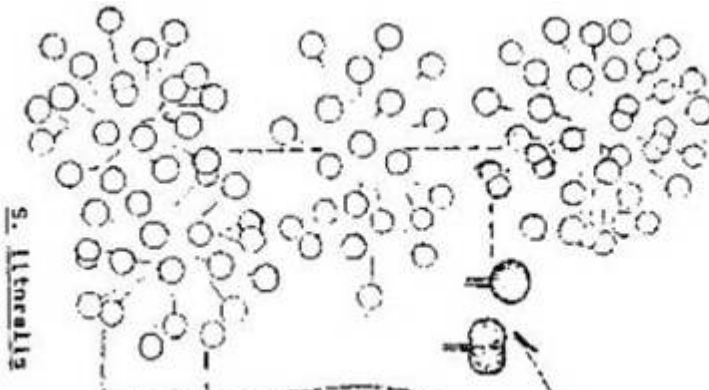
Snowella

SNOWELLA

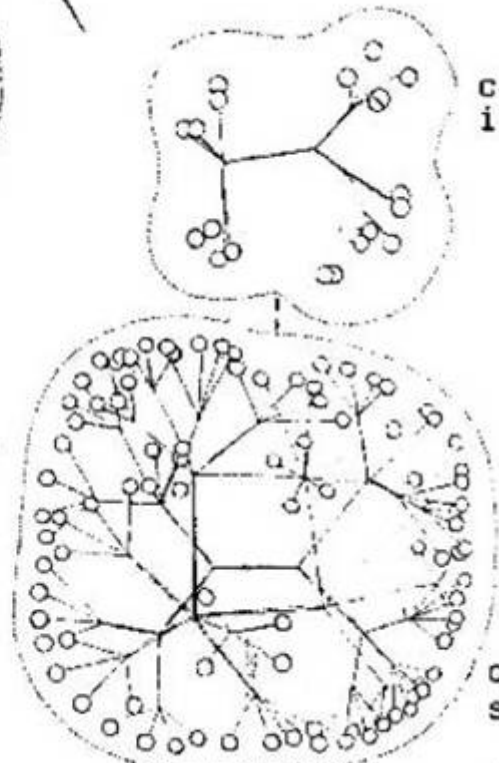
S. septentrionalis



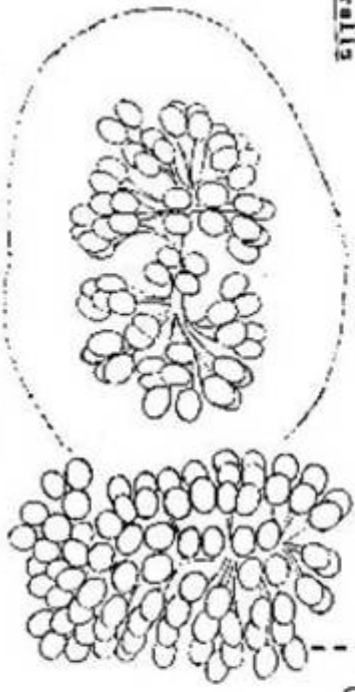
S. littoralis



S. arachnoides



S. lacustris



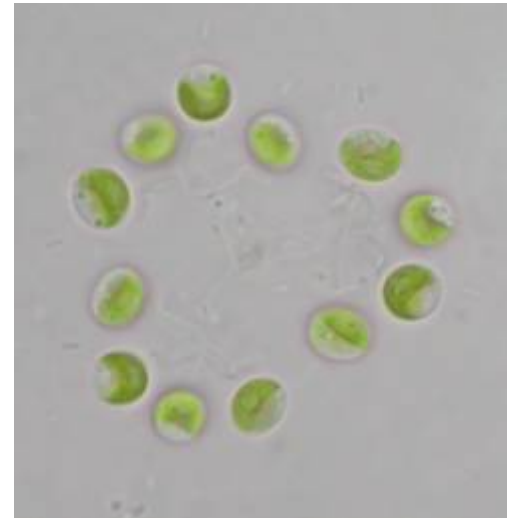
From: Komárček (1950), Komárček et al. (1988).

Snowella

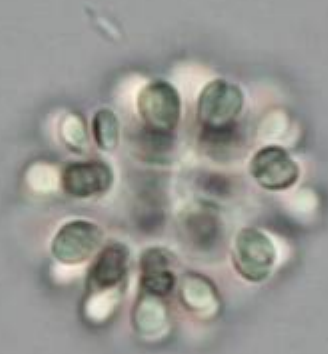


Pro začátečníky

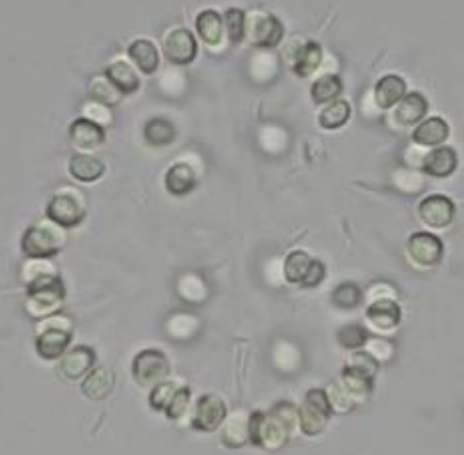
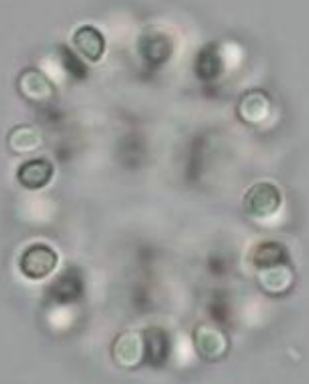
Snowella x *Dictyosphaerium*



Ceolemoron pusillum



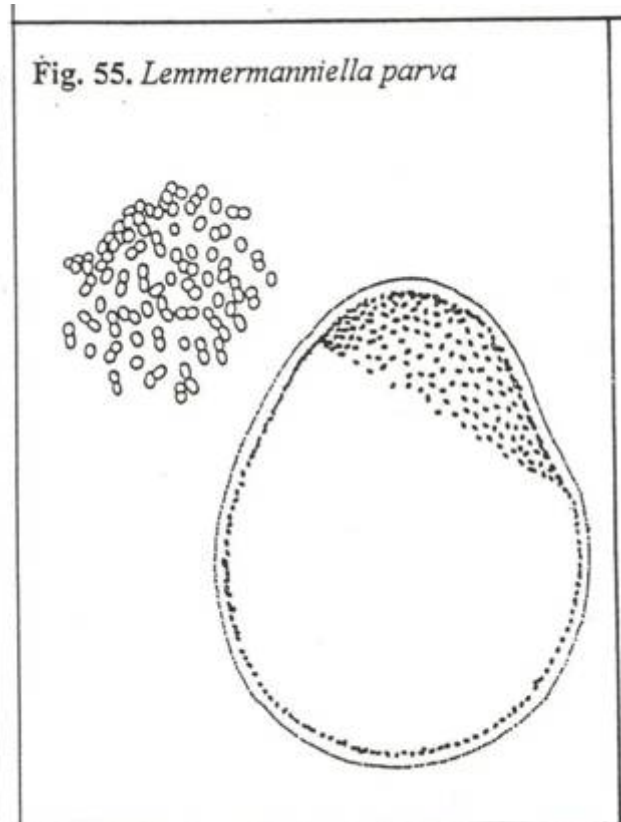
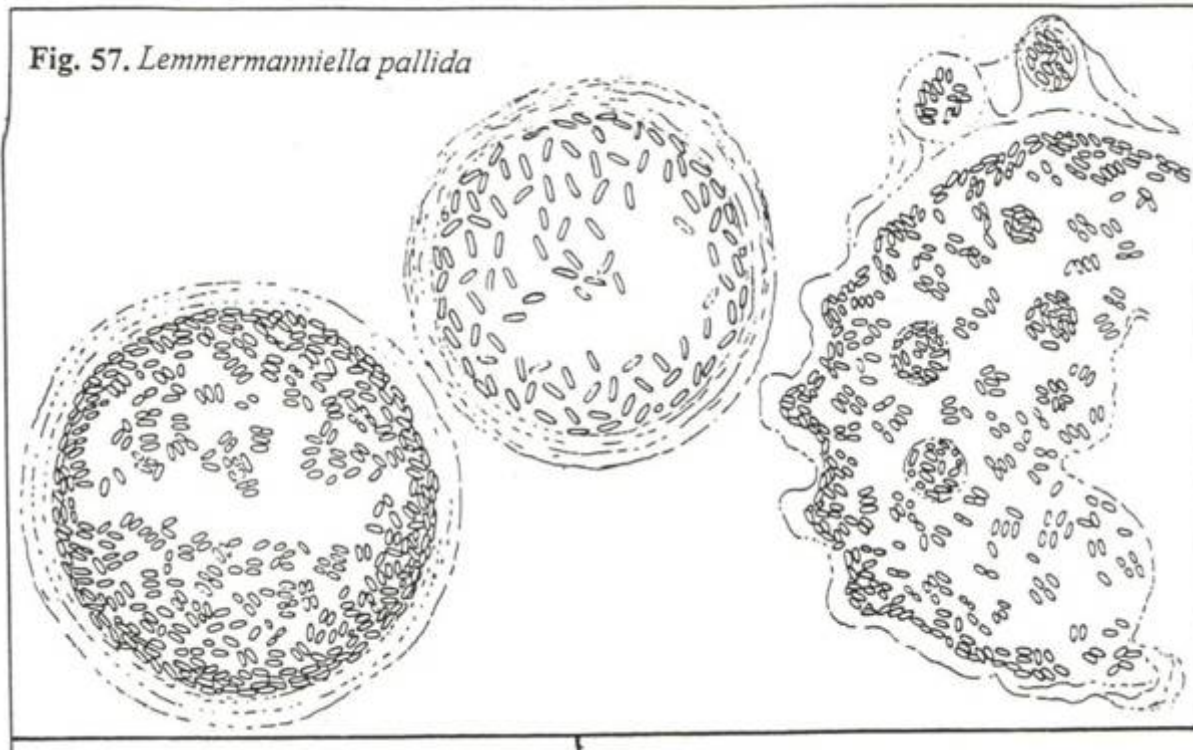
Snowella lacustris



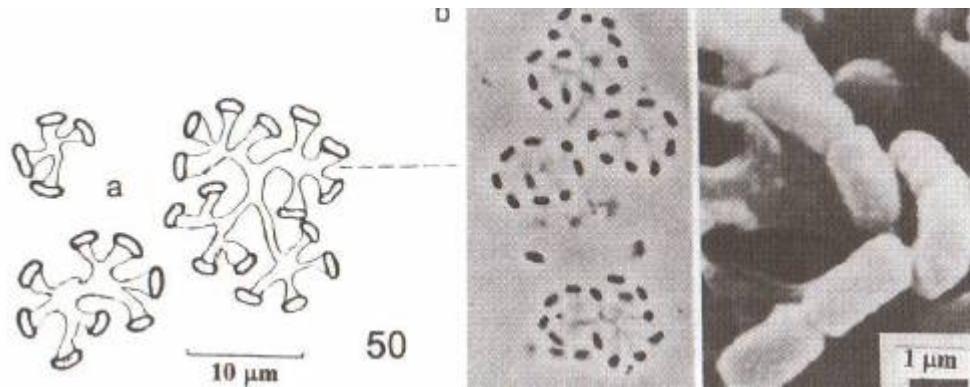
Další (nepříbuzné) taxony s buňkami
pouze na periferii

Lemmermanniella

- buňky – oválné až tyčinkovité, nerovnoměrně rozmístěné
- *L.parva* – rybníky, řeky



Cyanonephron styloides



Komárek, J. & Anagnostidis, K. (1999), Cyanoprokaryota 1. Teil
Chroococcales, in Süßwasserflora von Mitteleuropa Band 19/1, Gustav
Fischer Verlag, Stuttgart.

- planktonní v mělkých hypertrofních jezerech

Děkuji za pozornost

