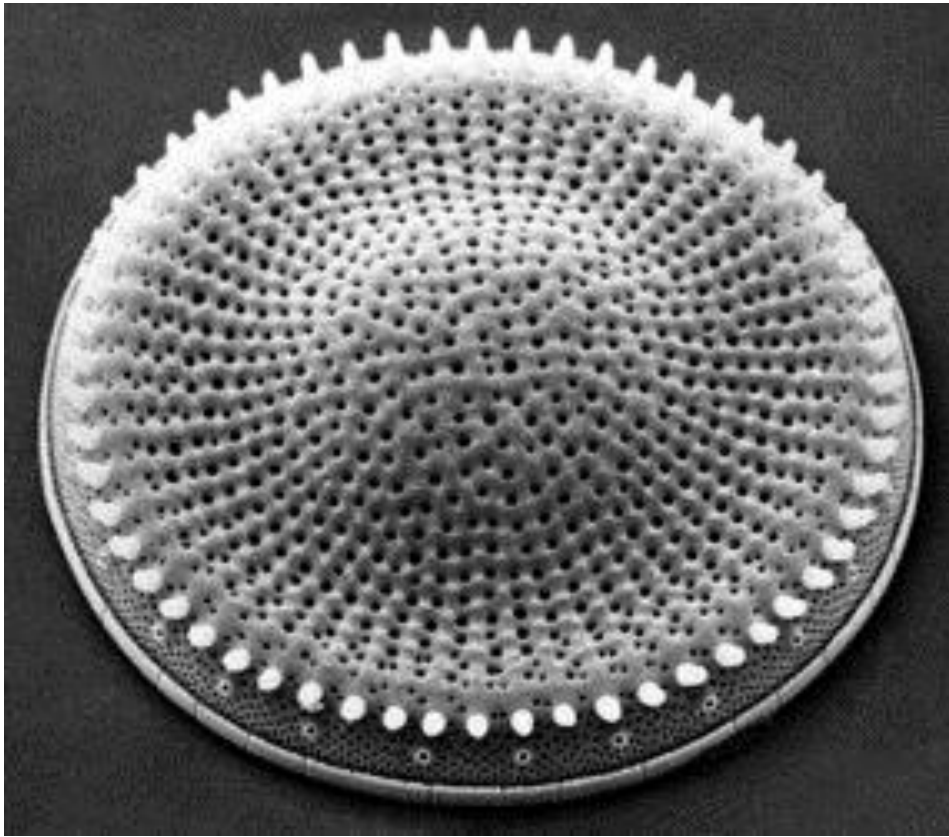


Bacillariophyceae





Supergrupos

Características generales

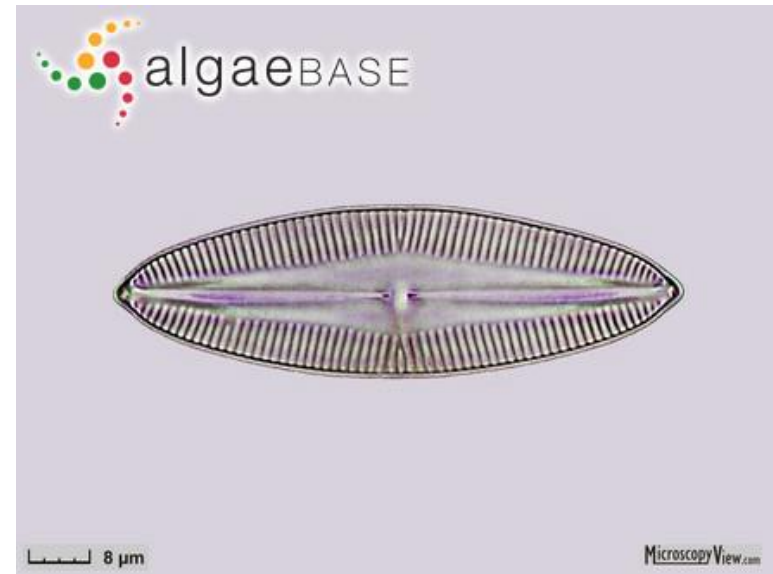
-Unicelulares, solitarias o coloniales

-Sin flagelos con la excepción de las gametas masculinas

-Pigmentos: Clorofila a y c, fucoxantinas

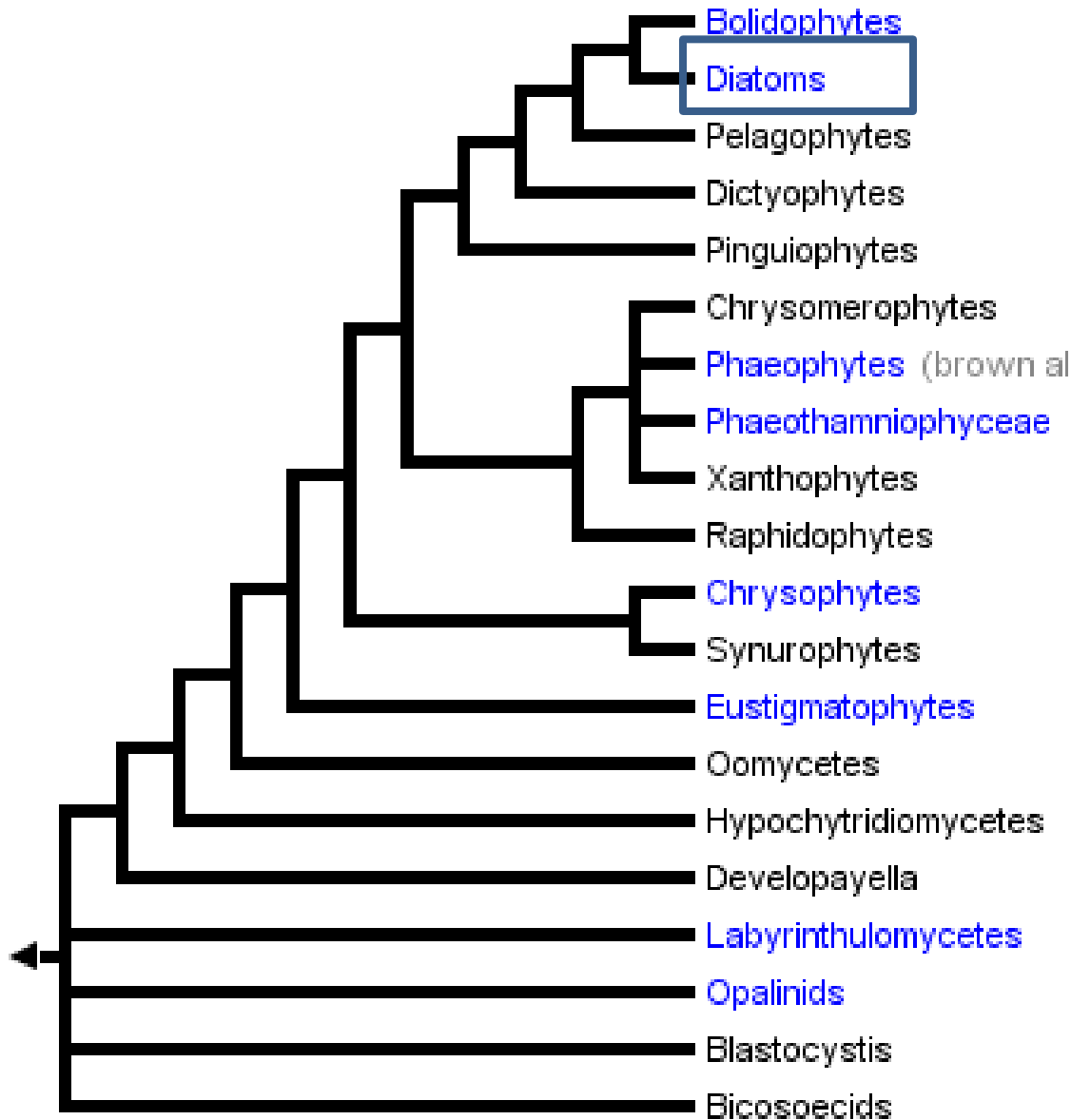
-Almacenan en forma de crisolaminarina

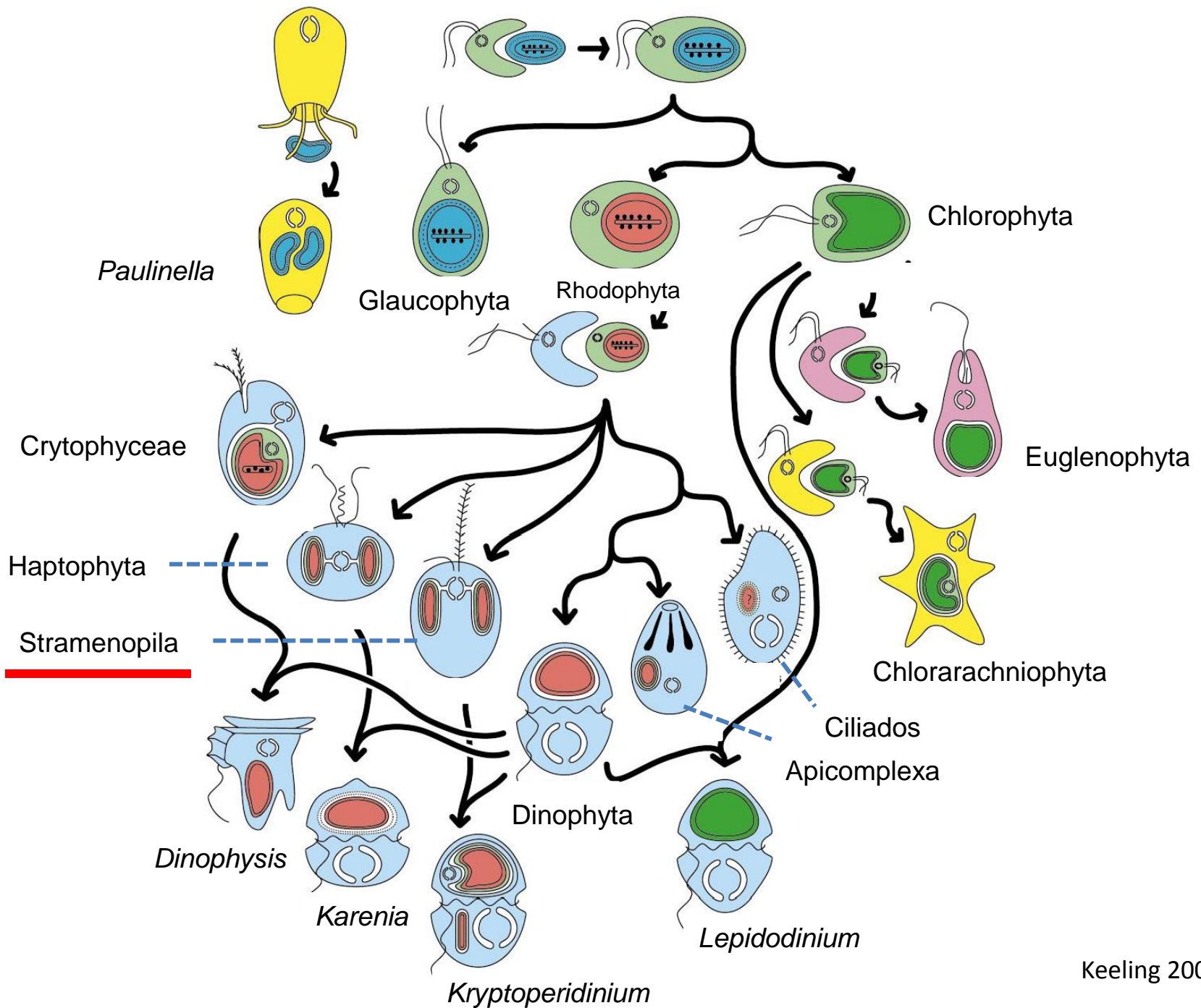
-La pared está constituida por dos valvas de sílice; pueden tener simetría radial o bilateral



Características filogenéticas y evolutivas

Stramenopila





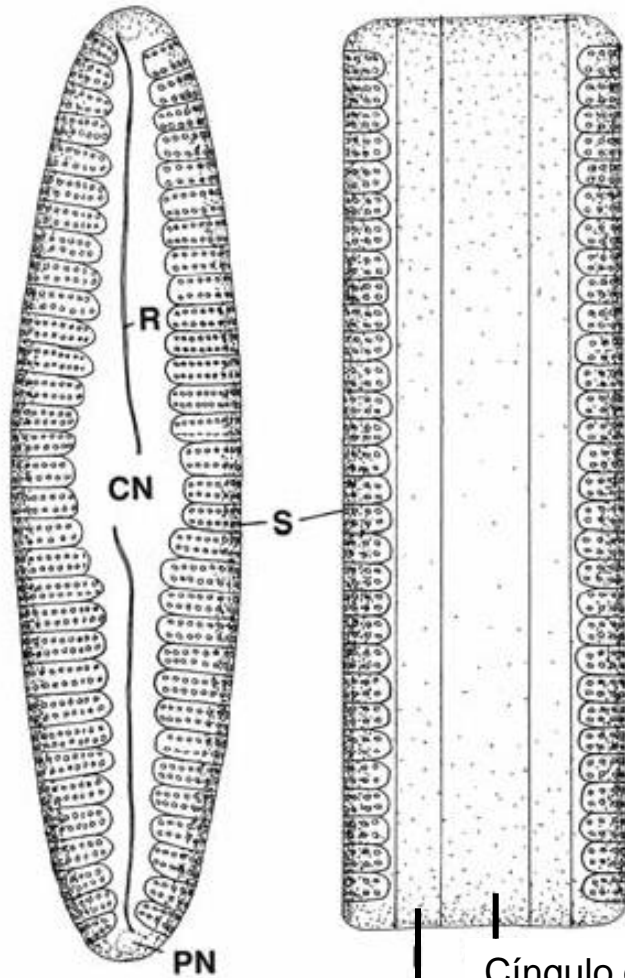
Características morfológicas



Vista valvar

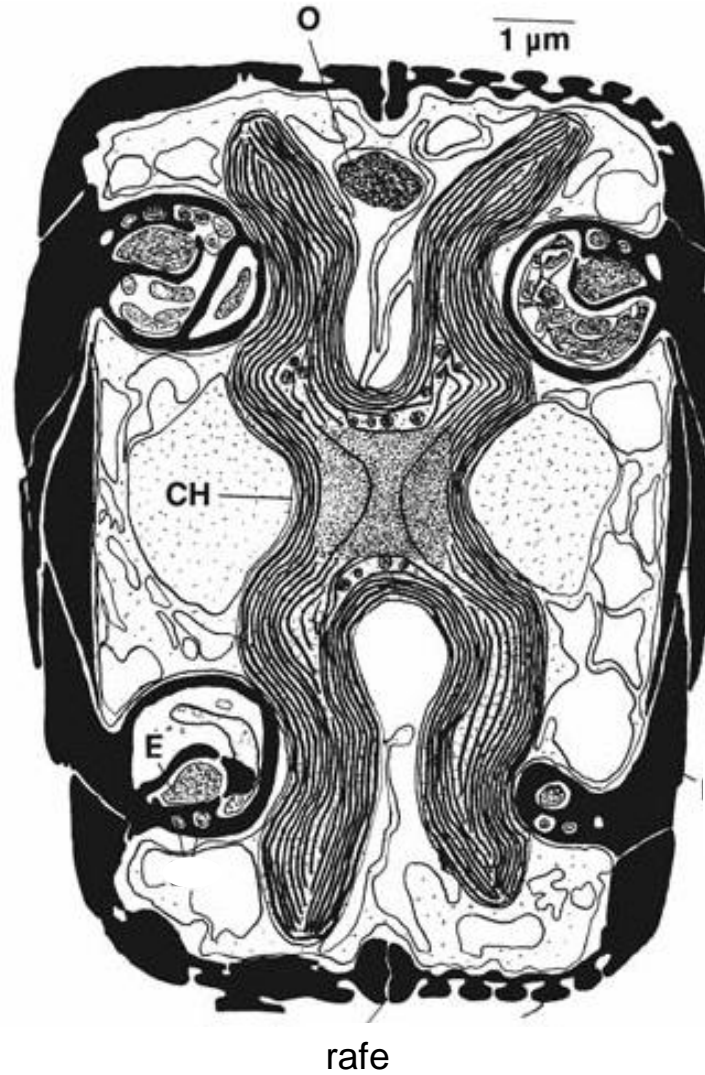
Vista cingular

Mastoglia sp.



CN: nódulo central
 R: rafe
 PN: nódulo polar
 S: estría

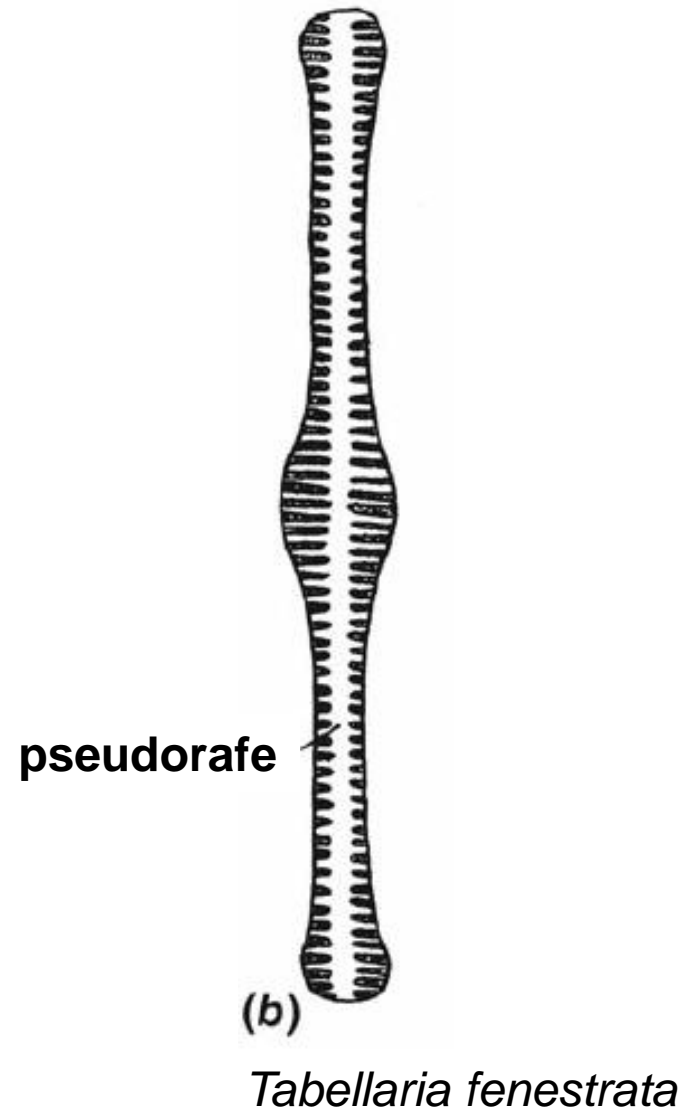
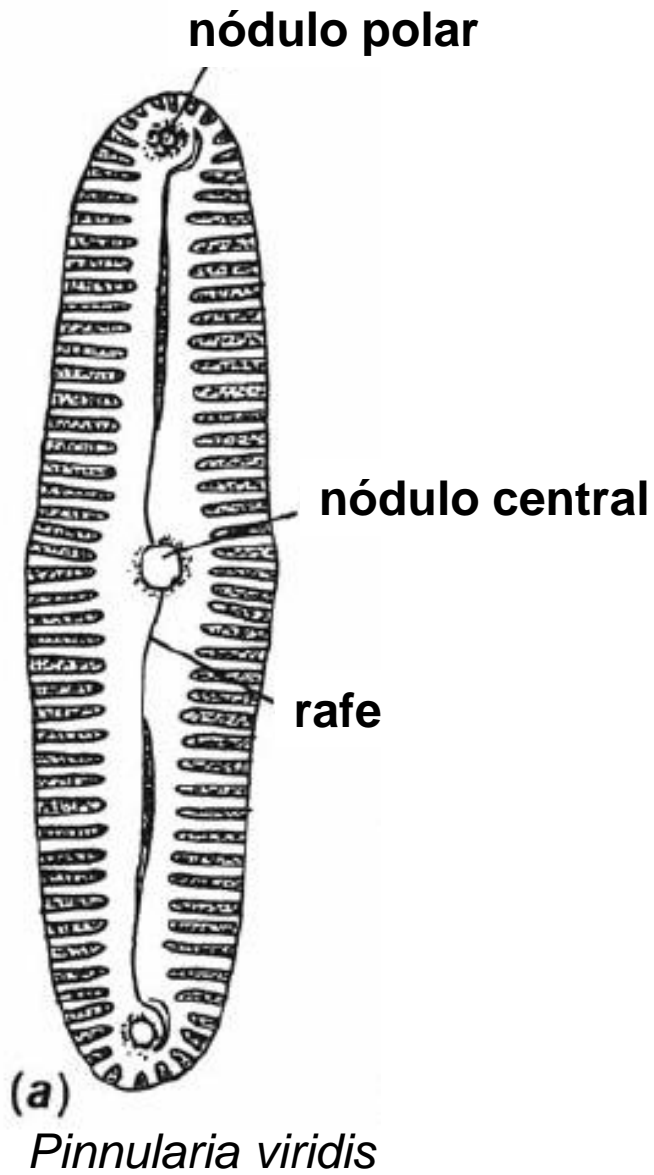
Cíngulo o cinturón
 Banda intercalar



banda intercalar de la epiteca
 Cíngulo o cinturón
 banda intercalar de la hipoteca

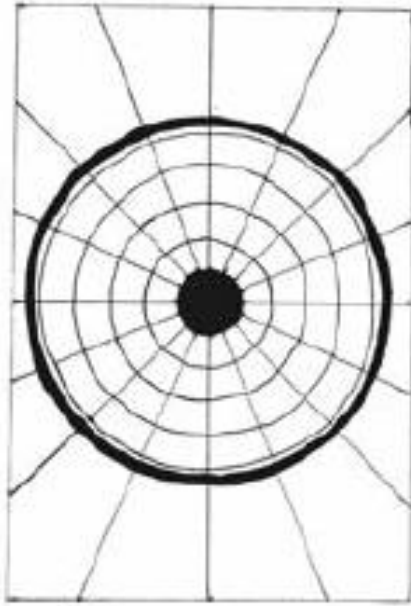
O: lípido
 CH: cloroplasto

Caracteres para identificar géneros y especies

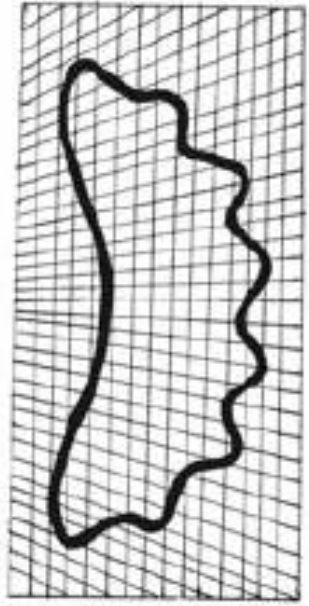


Caracteres para identificar géneros y especies

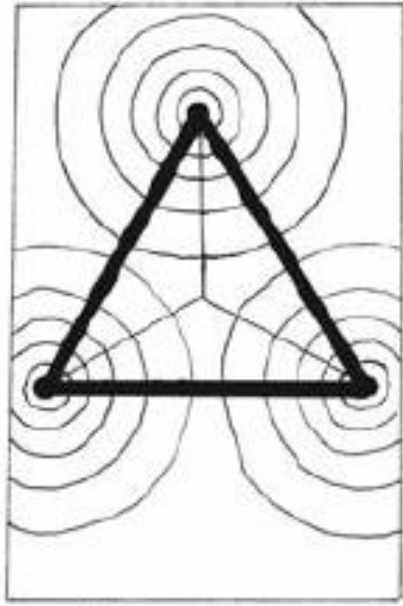
Ornamentación



(a)



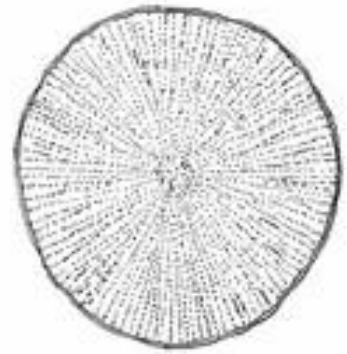
(b)



(c)



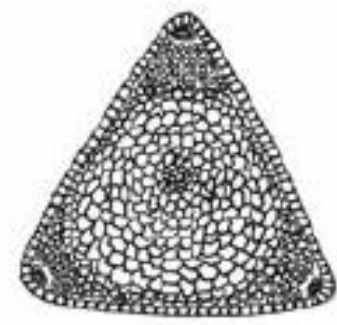
(d)



Céntricas o radiales



Trelisoide



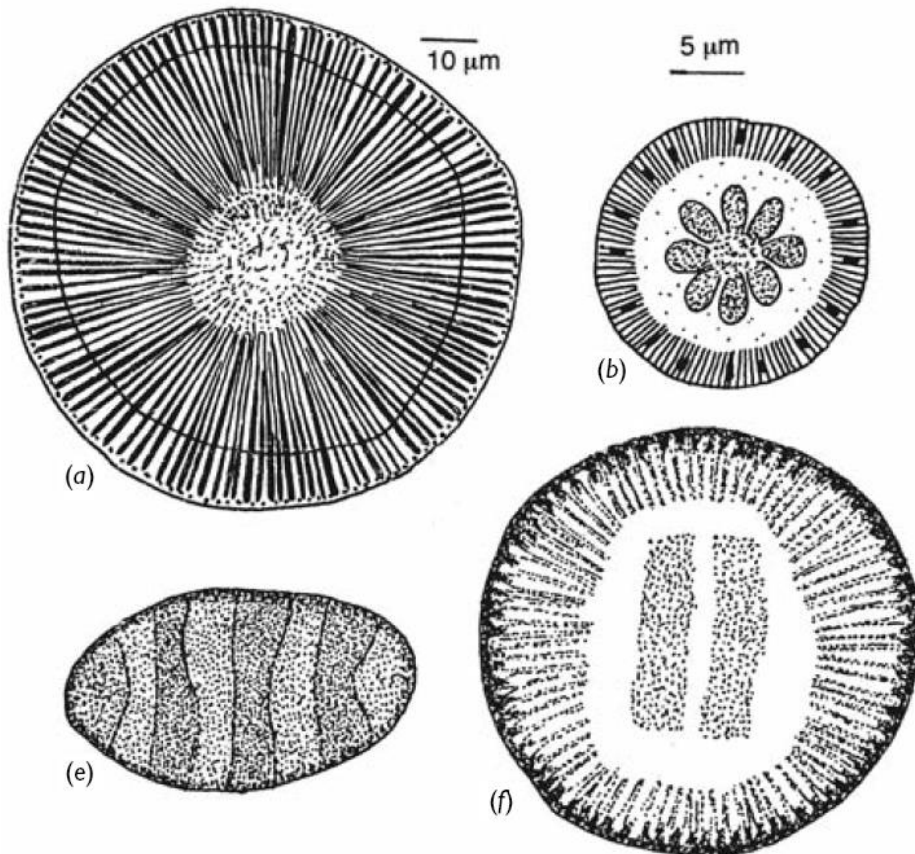
Gonoide



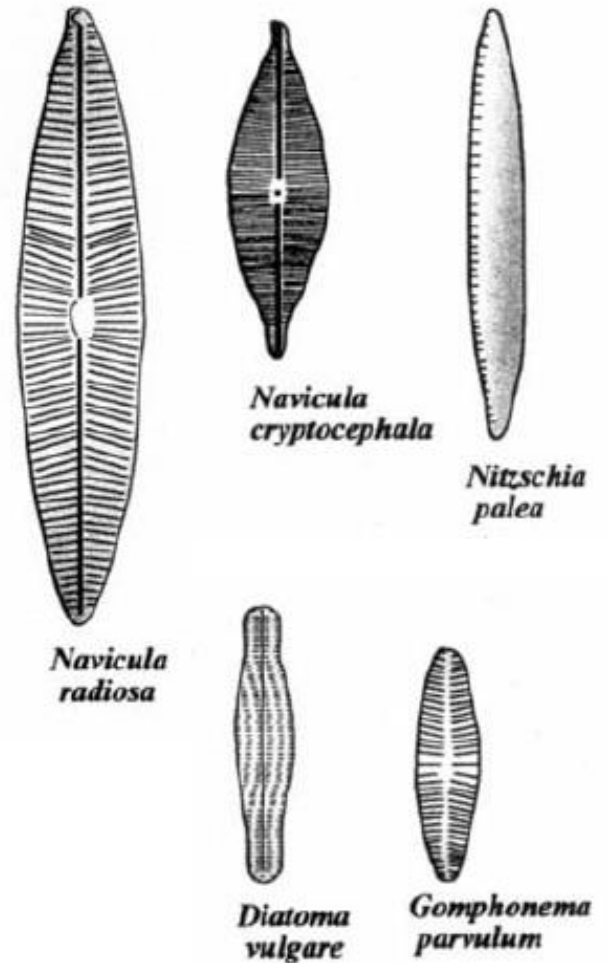
Pennada

Clasificación

Centrales o Bidduphiales



Pennales o Bacillariales

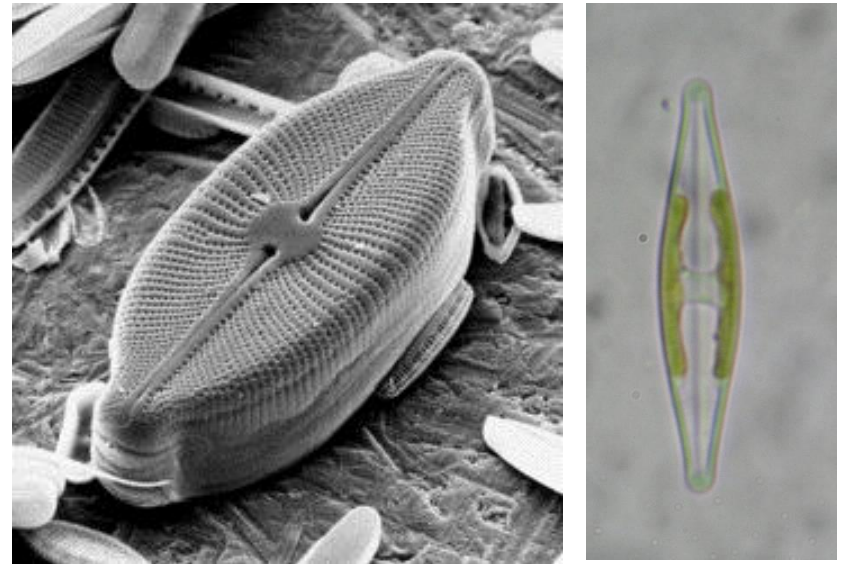


Centrales o Bidduphiales



- Ornamentación radial o gonoide
- numerosos cloroplastos
- rafe ausente
- formación de esporas de resistencia
- espermatozoides móviles
- reproducción sexual oógama
- principalmente marinas

Pennales o Bacillariales

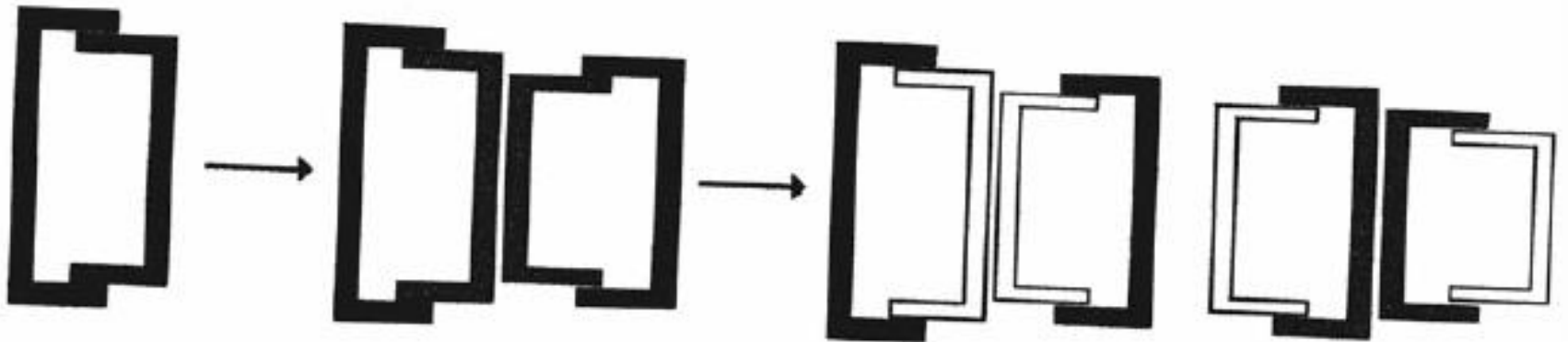


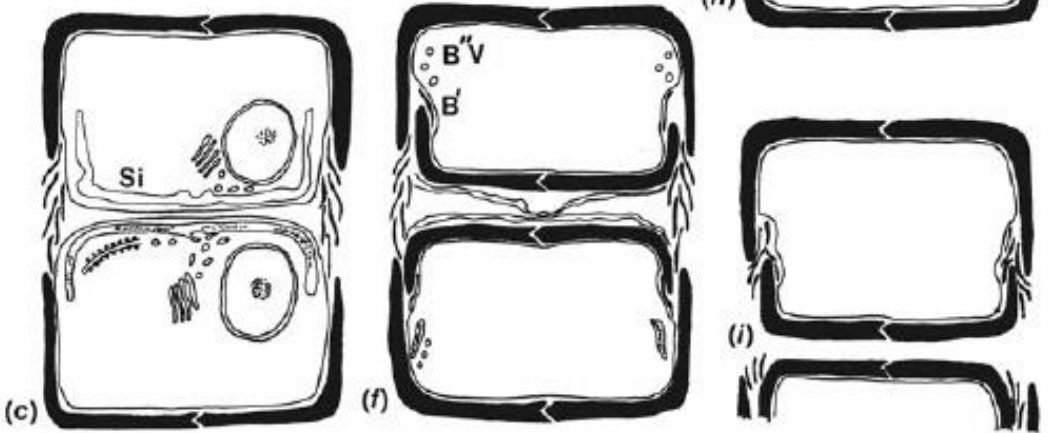
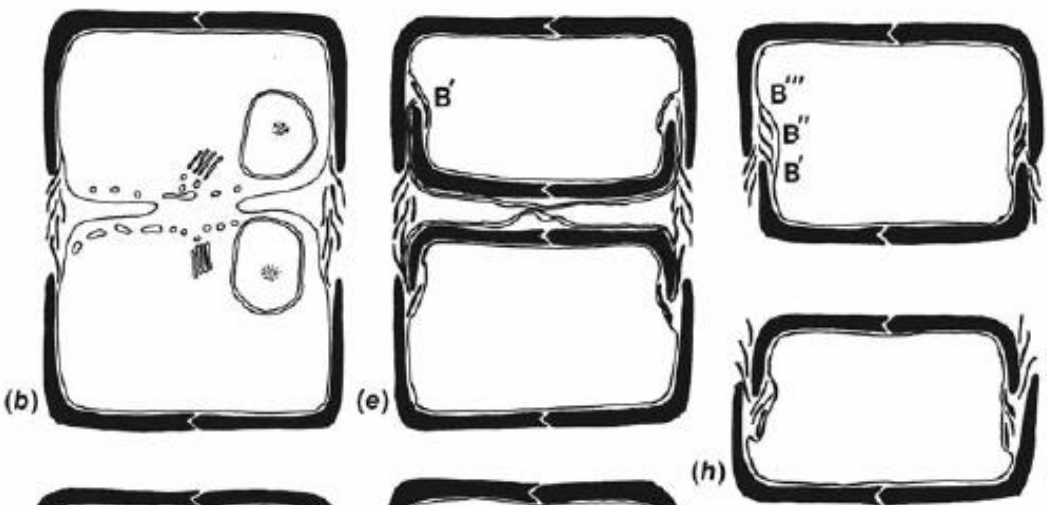
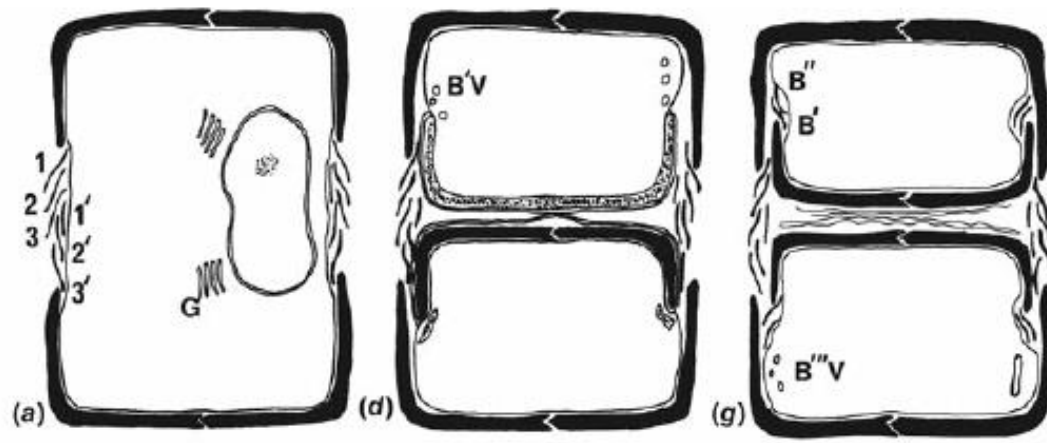
- Ornamentación pennada o treliosoide
- uno o dos cloroplastos
- rafe presente
- sin espermatozoides móviles
- Reproducción sexual por conjugación
- marinas y de agua dulce

Características reproductivas

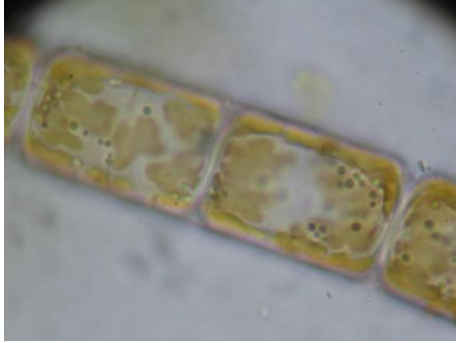


Reproducción asexual

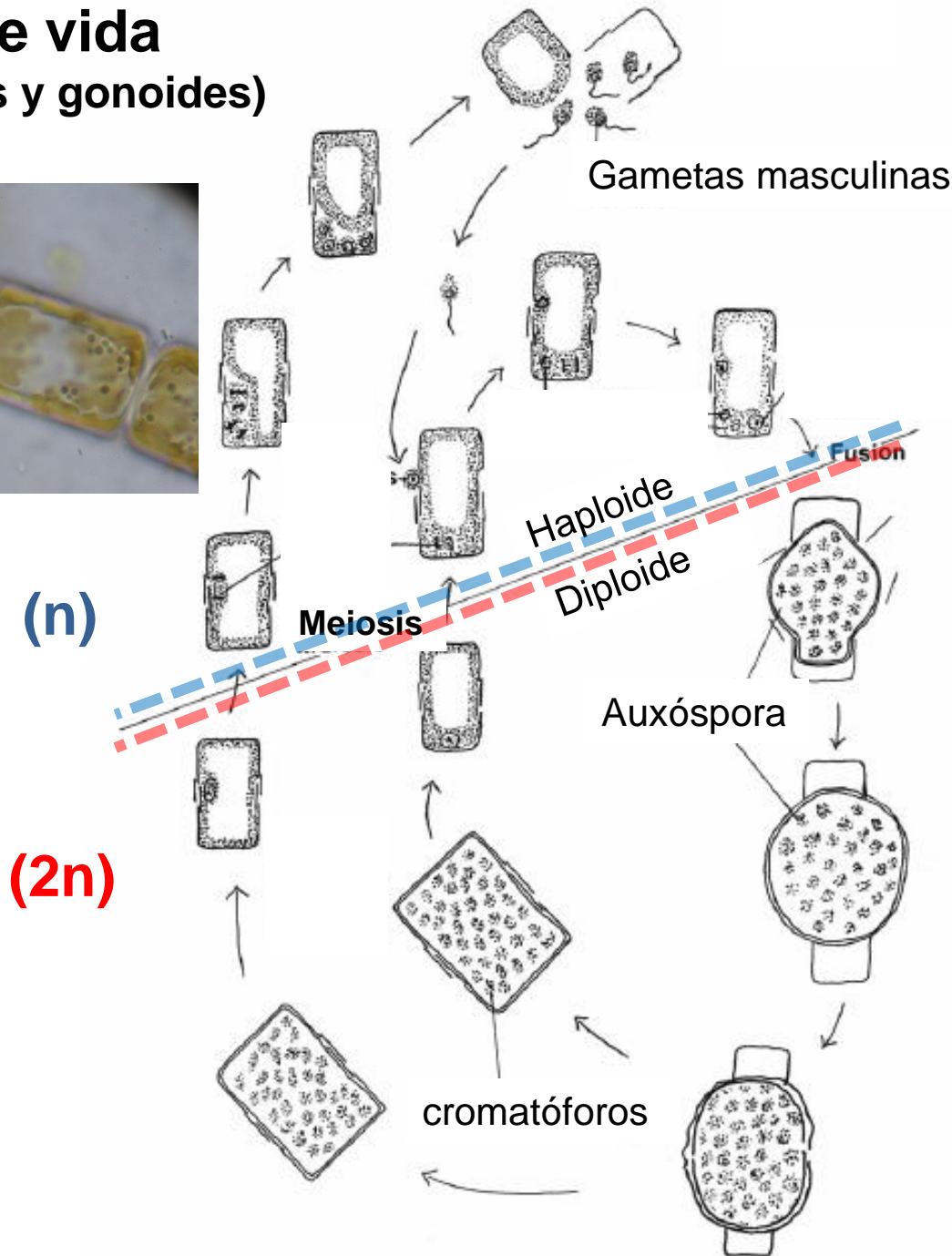




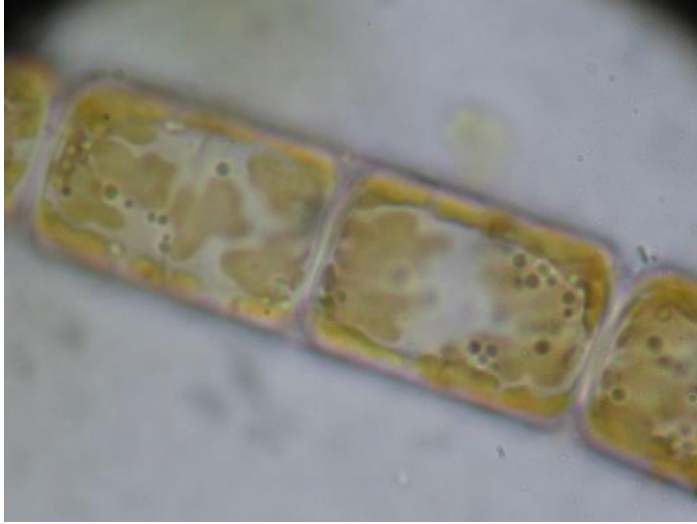
Ciclo de vida (céntricas y gonoides)



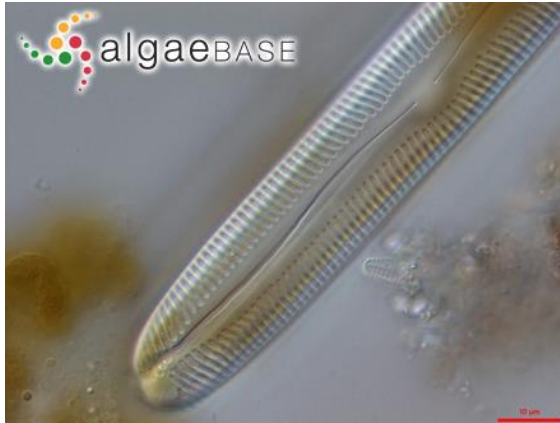
Melosira varians
(Centrales)



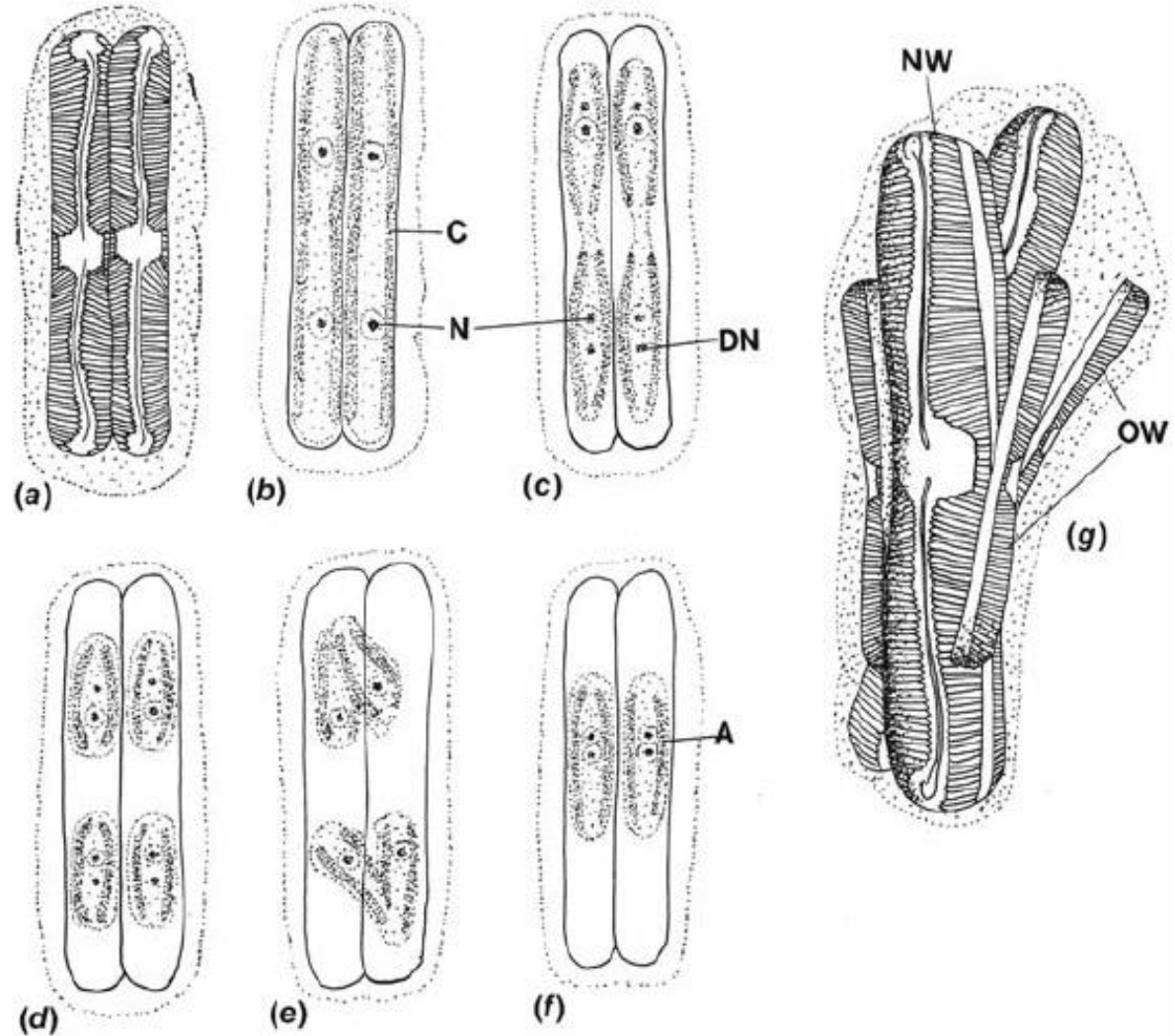
Auxóspora de *Melosira varians*



Ciclo de vida (pennadas y trelisoides)

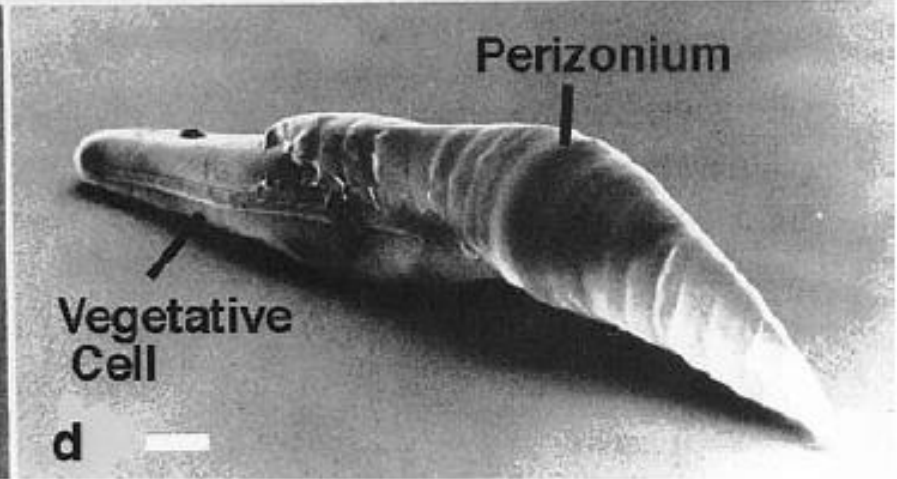
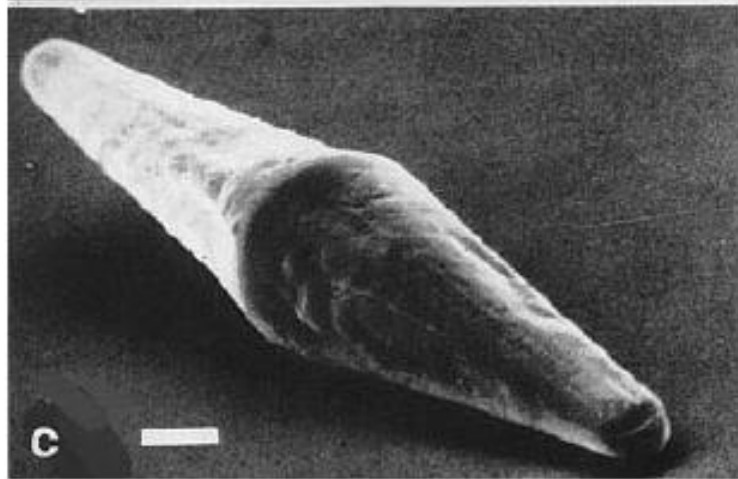
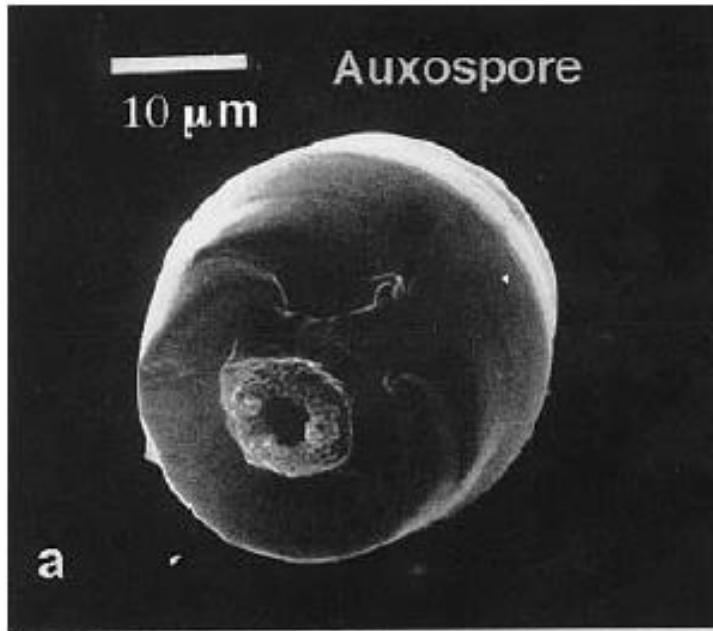


Pinnularia sp. (Pennales)



- C: cloroplasto
- N: núcleo
- DN: núcleo que degenera
- A: auxóspora
- NW: célula hija
- OW: paredes celulares originales

Auxóspora de *Navicula cuspidata*



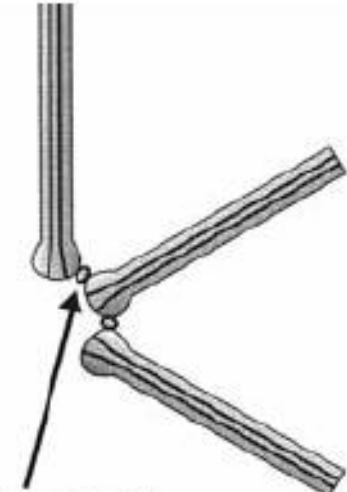
Movimiento en las diatomeas



Mucílago extracelular



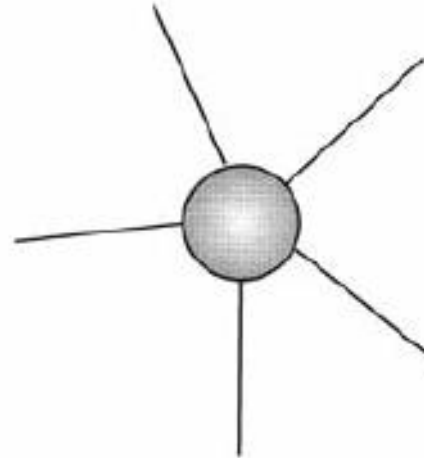
Tube Of *Navicula*



Pads Of *Asterionella*



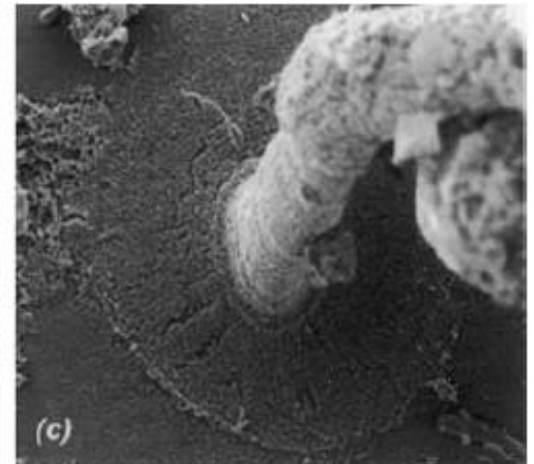
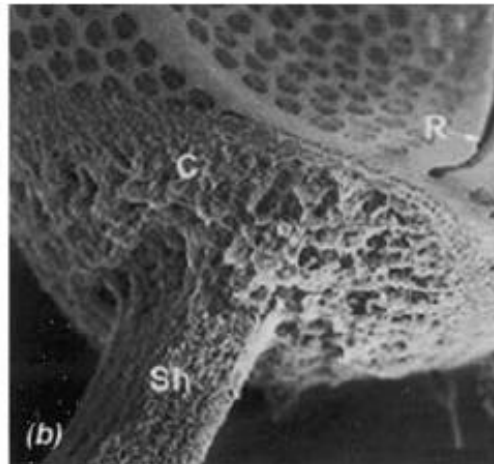
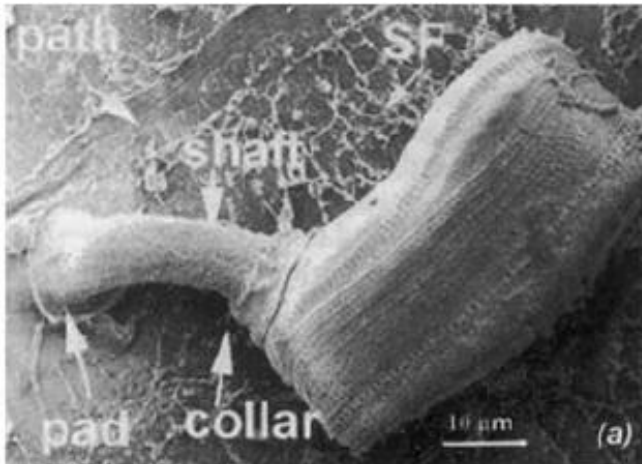
Stalk Of *Gomphonema*



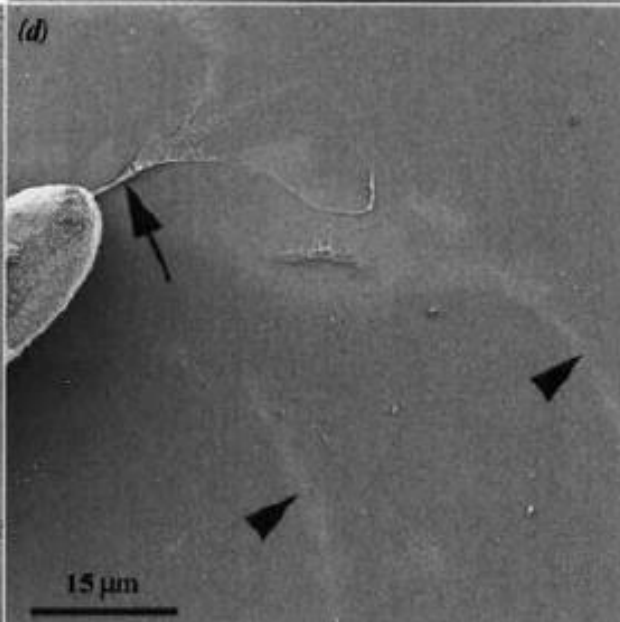
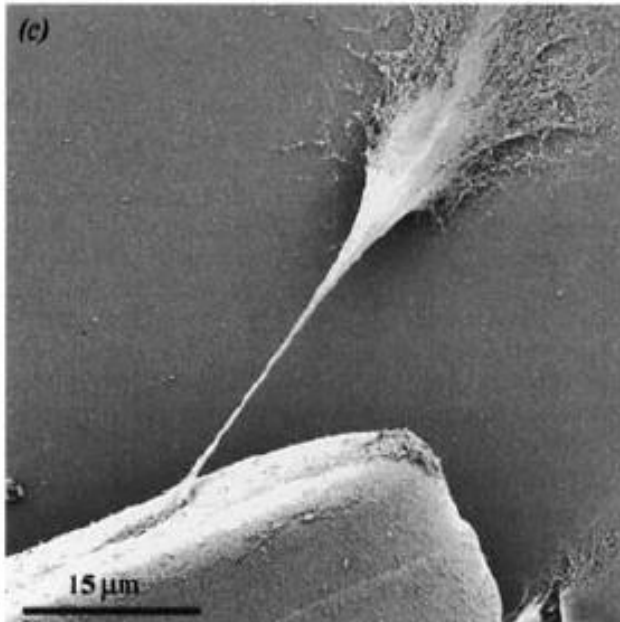
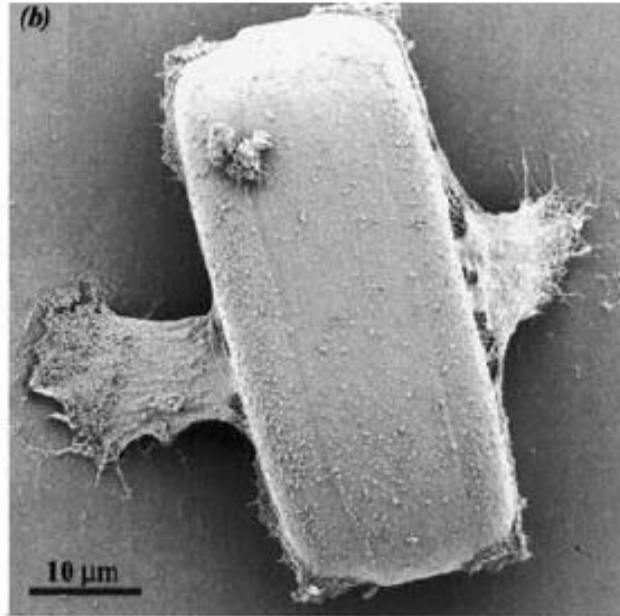
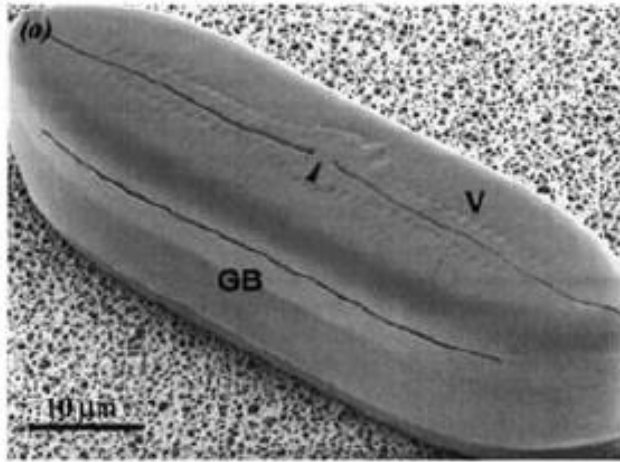
Fibrils Of A Centric Diatom



Adhering Film Of A Pennate Diatom



Secreción de mucílago



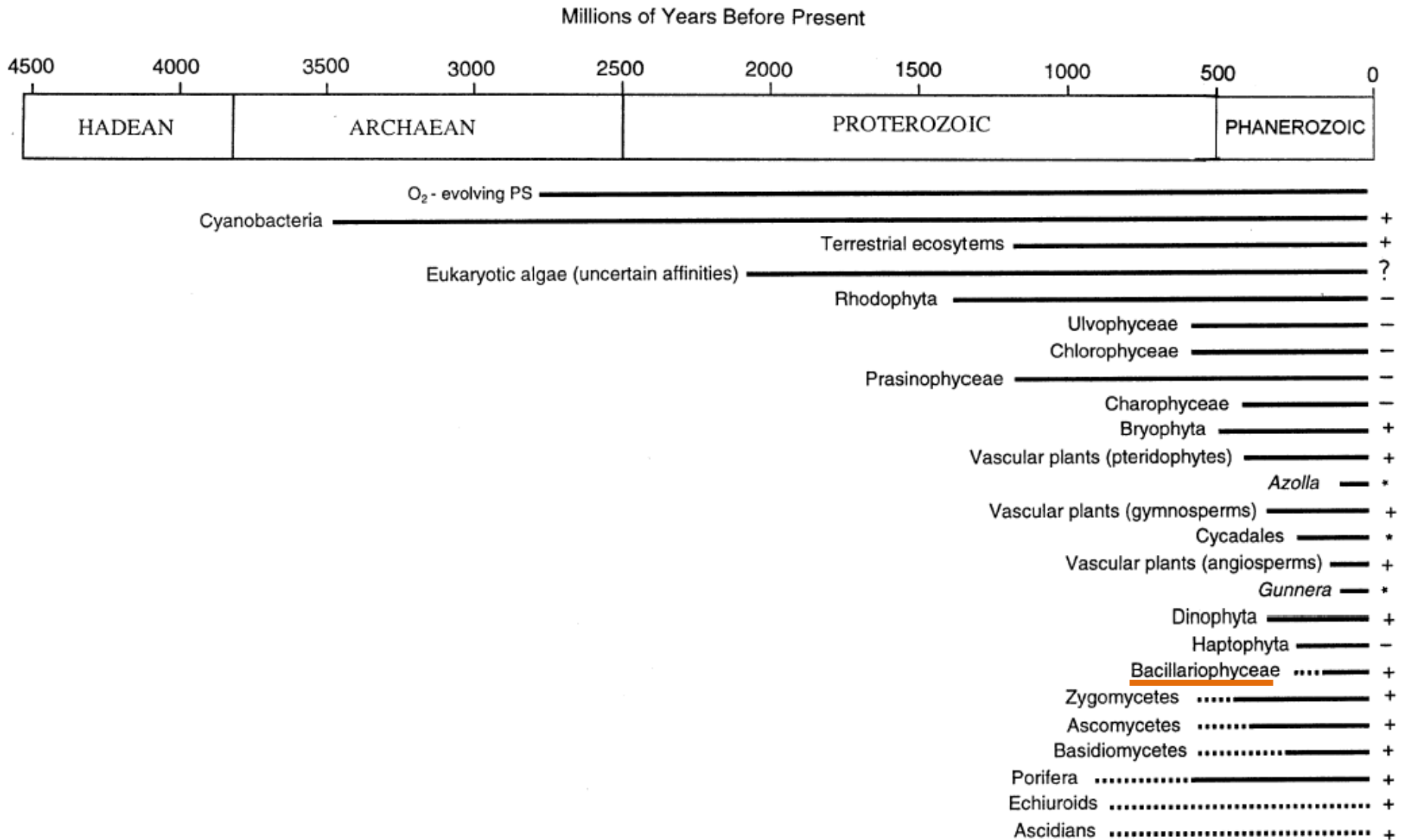
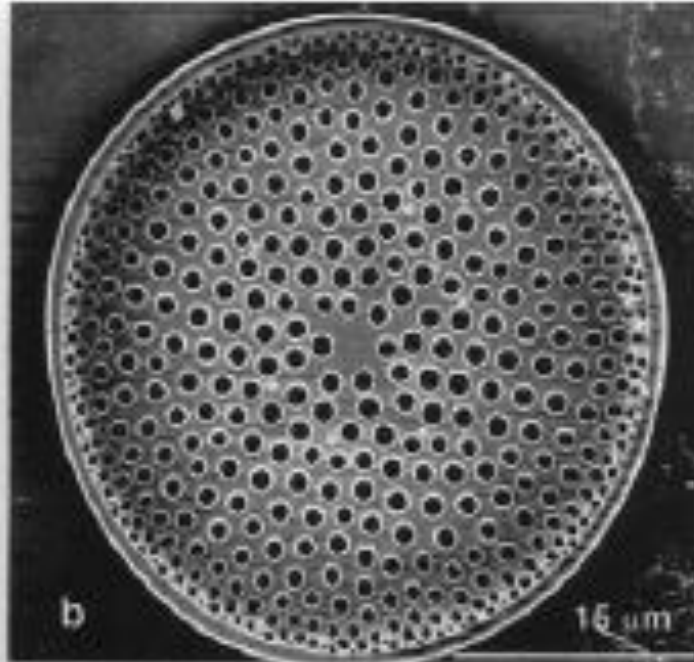
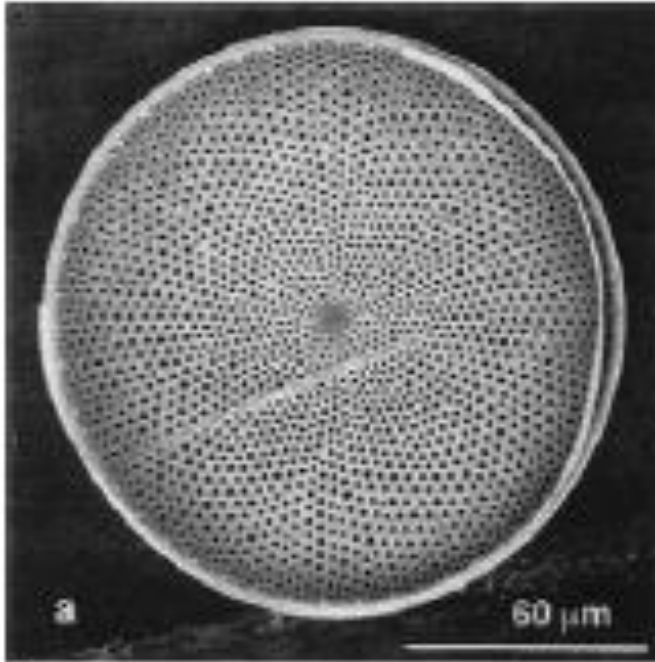


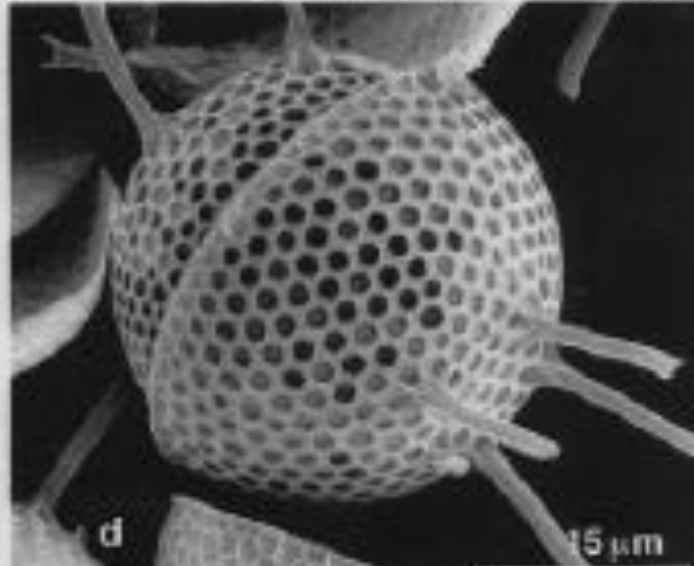
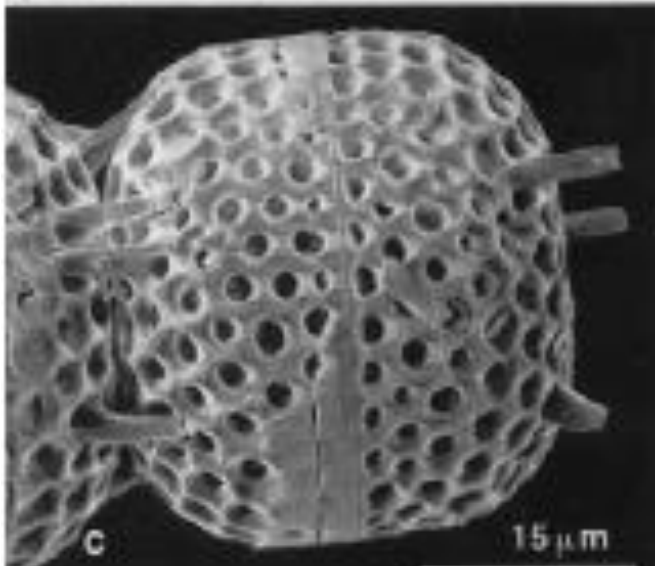
Fig. 1—Fossil (full lines) and ‘inferred molecular’ (dotted lines) record of cyanobacteria and of host eukaryotes. Only in the case of the extinct *Winfrenatia reticulata* does the fossil record show the presence of the cyanobionts. Based on Taylor and Taylor (1994), Taylor *et al.* (1997) and Falkowski and Raven (1997). Key: - = absence of diazotrophy in the taxon; + = presence of diazotrophy in some members of the taxon; * = presence of diazotrophy in all members of the taxon.

Diatomeas fósiles



A, *Coscinodiscus radiatus* de sedimentos cretácicos

B, *Coscinodiscus radiatus*, especie planctónica



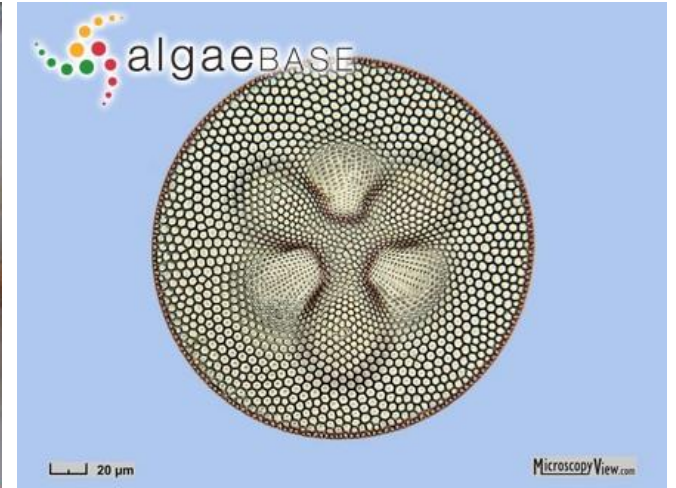
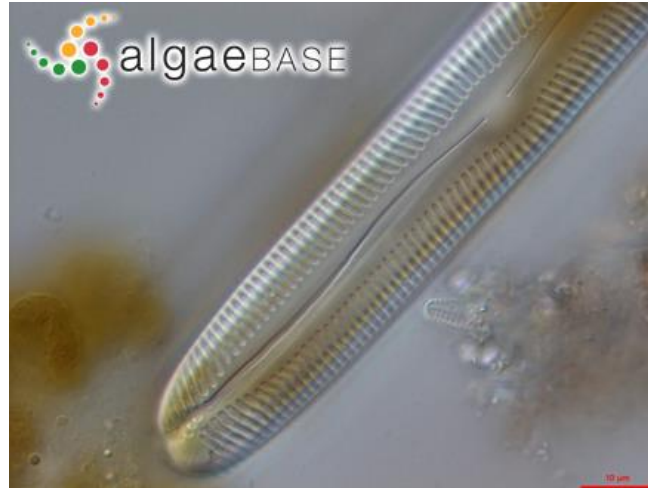
C, *Stephanopyxis turris* de sedimentos cretácicos

B, *Stephanopyxis broschi*, especie planctónica

Mina de tierra de diatomeas

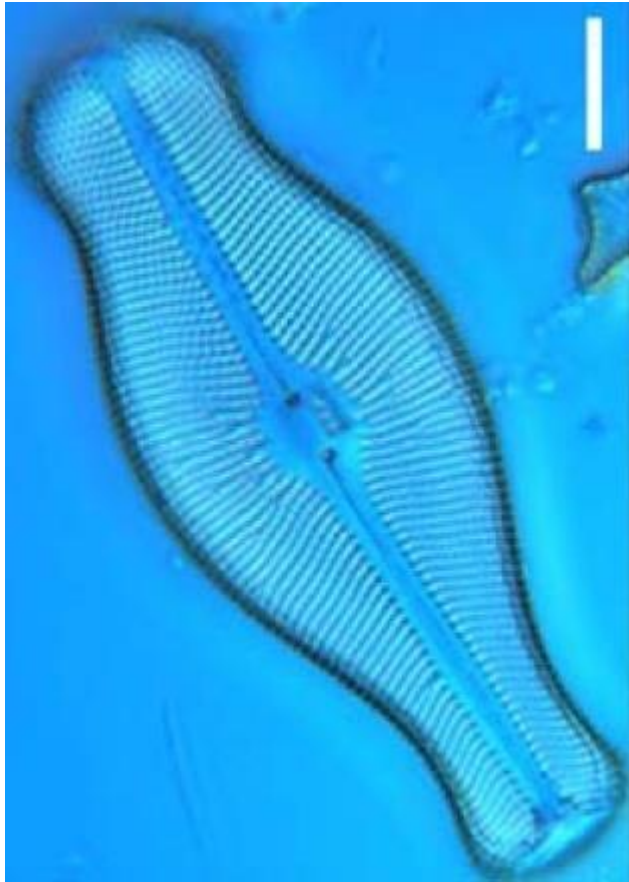


- Se conocen entre 10.000-12.000 especies pero se estiman entre 100.000-1.000.000
- Mayoritariamente de agua dulce pero también hay marinas, tanto bénticas como planctónicas
- Existen numerosos géneros y especies cosmopolitas



Didymosphenia geminata(Lyngb.)

M. Schmidt



24 y 25 de noviembre
desde las 9:00 hrs.
El Arriero
Calle Manantiales #759

1er WORKSHOP
INTERNACIONAL de
DIDYMO

DIDYMOSPHENIA GEMINATA

DIAGNOSTICO E IMPACTO EN LOS ECOSISTEMAS ACUATICOS PATAGONICOS

"EL CUIDADO DE LOS RIOS ES RESPONSABILIDAD DE TODOS, PROTEGELOS DEL DIDYMO"



"Transferencia Técnica para Generar Medidas de Prevención y Evitar el Ingreso de la Plaga Didymo (*Didymosphenia geminata*) en la Región" (Programa Didymo Magallanes).
Financiado por FONDEMA.

Síntesis de Bacillariophyceae

