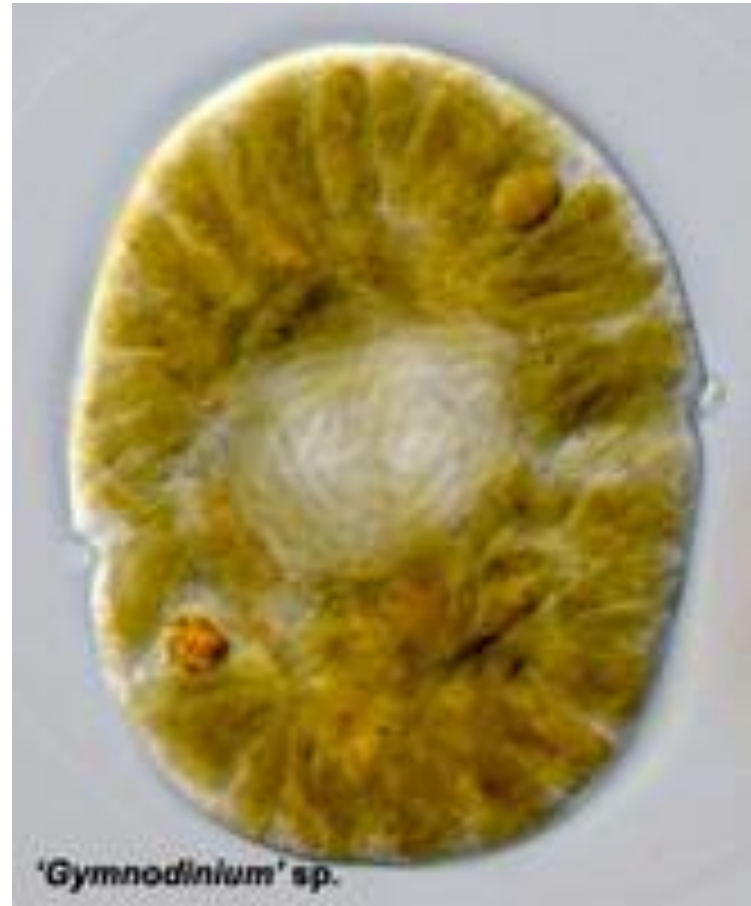
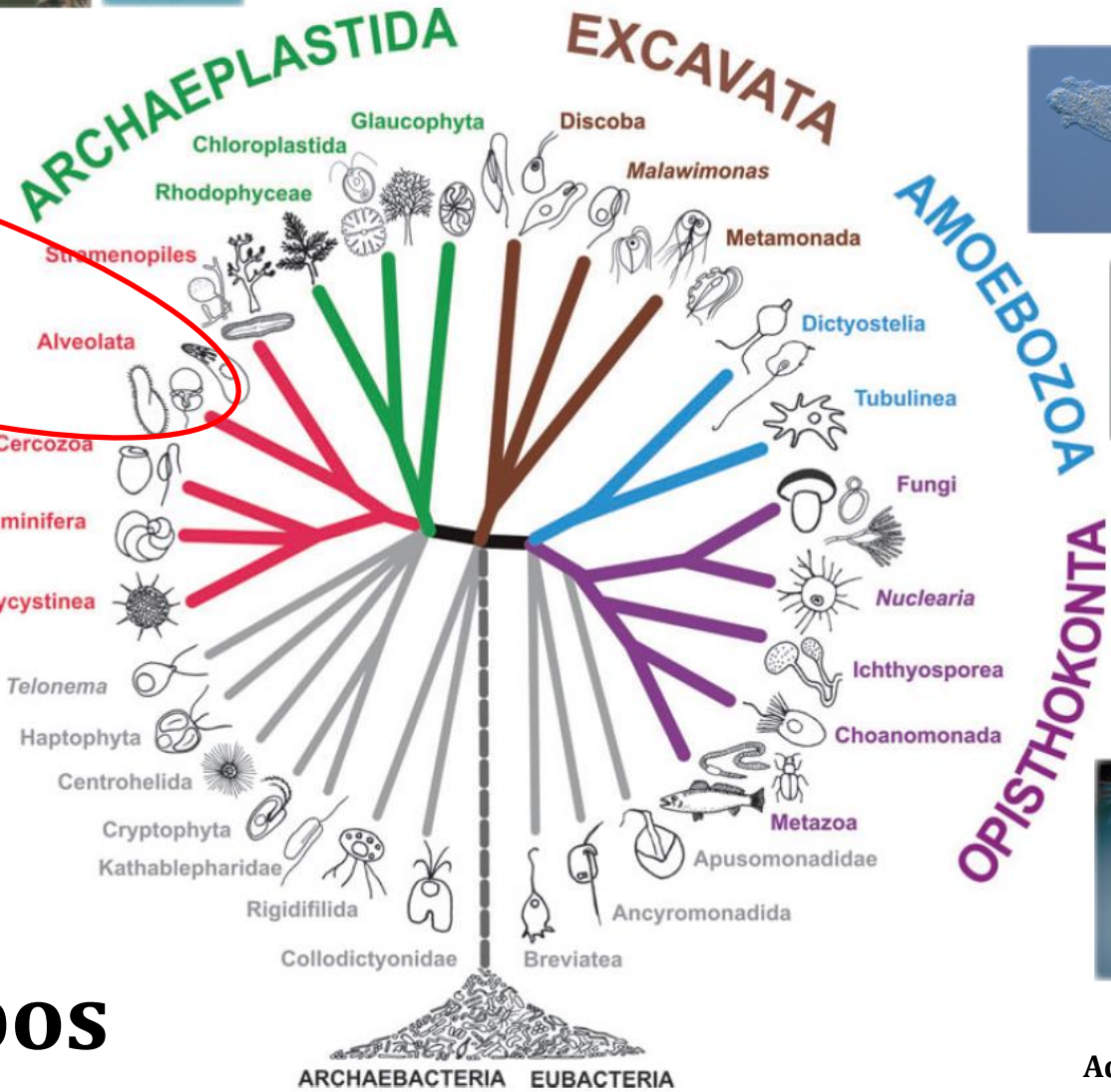
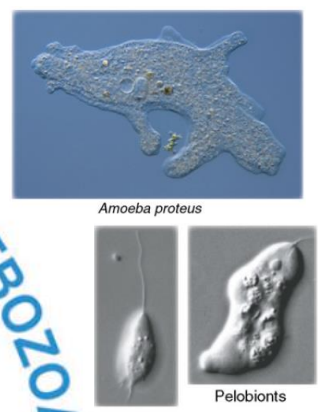
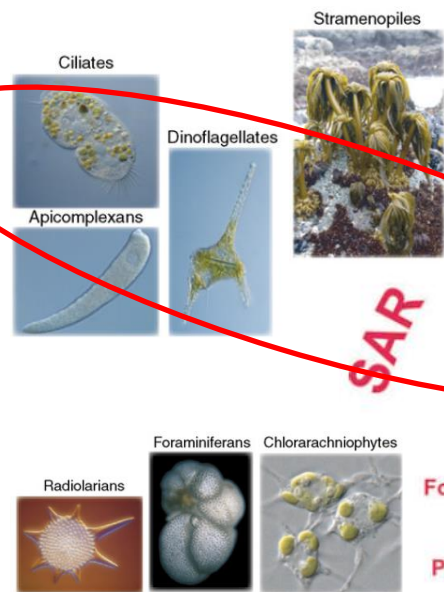
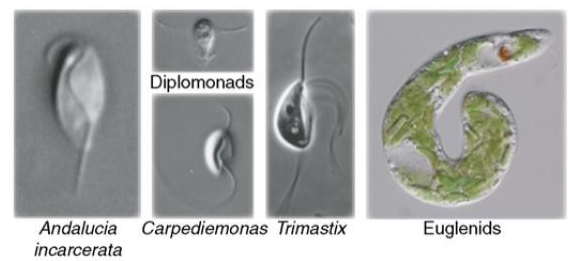
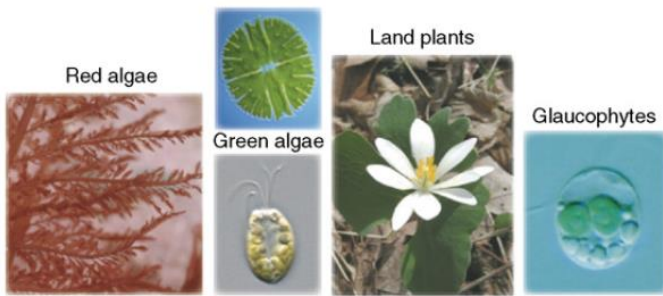


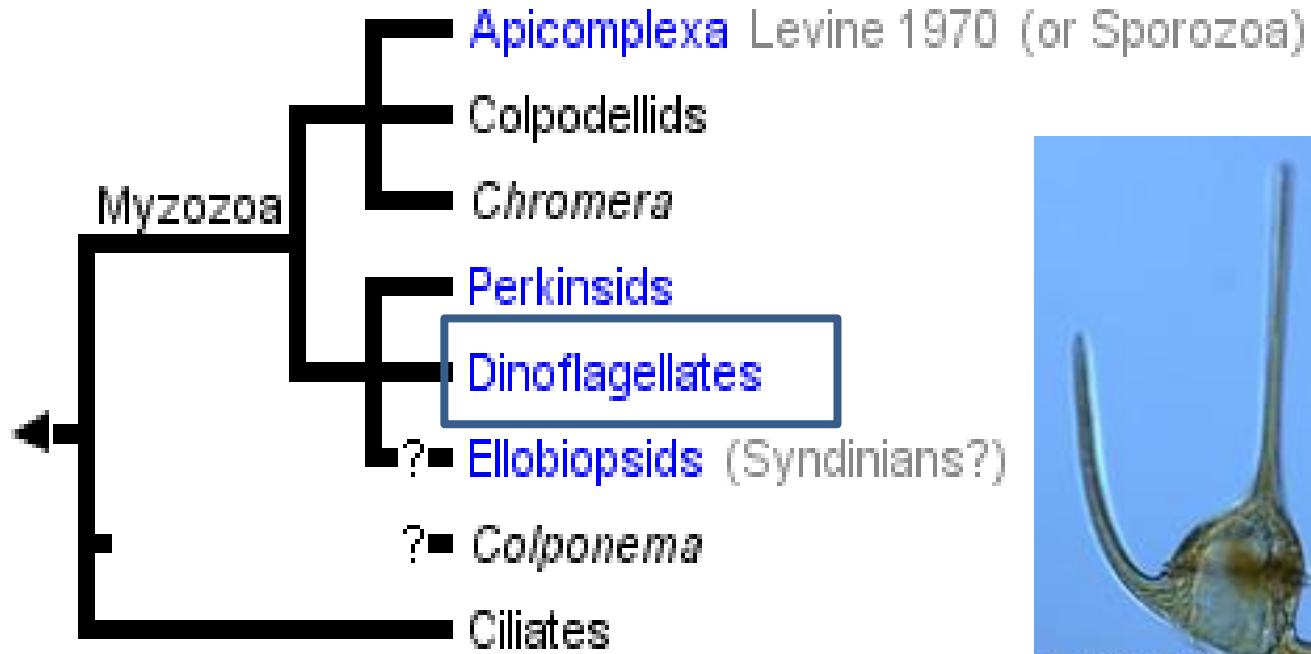
Dinophyceae



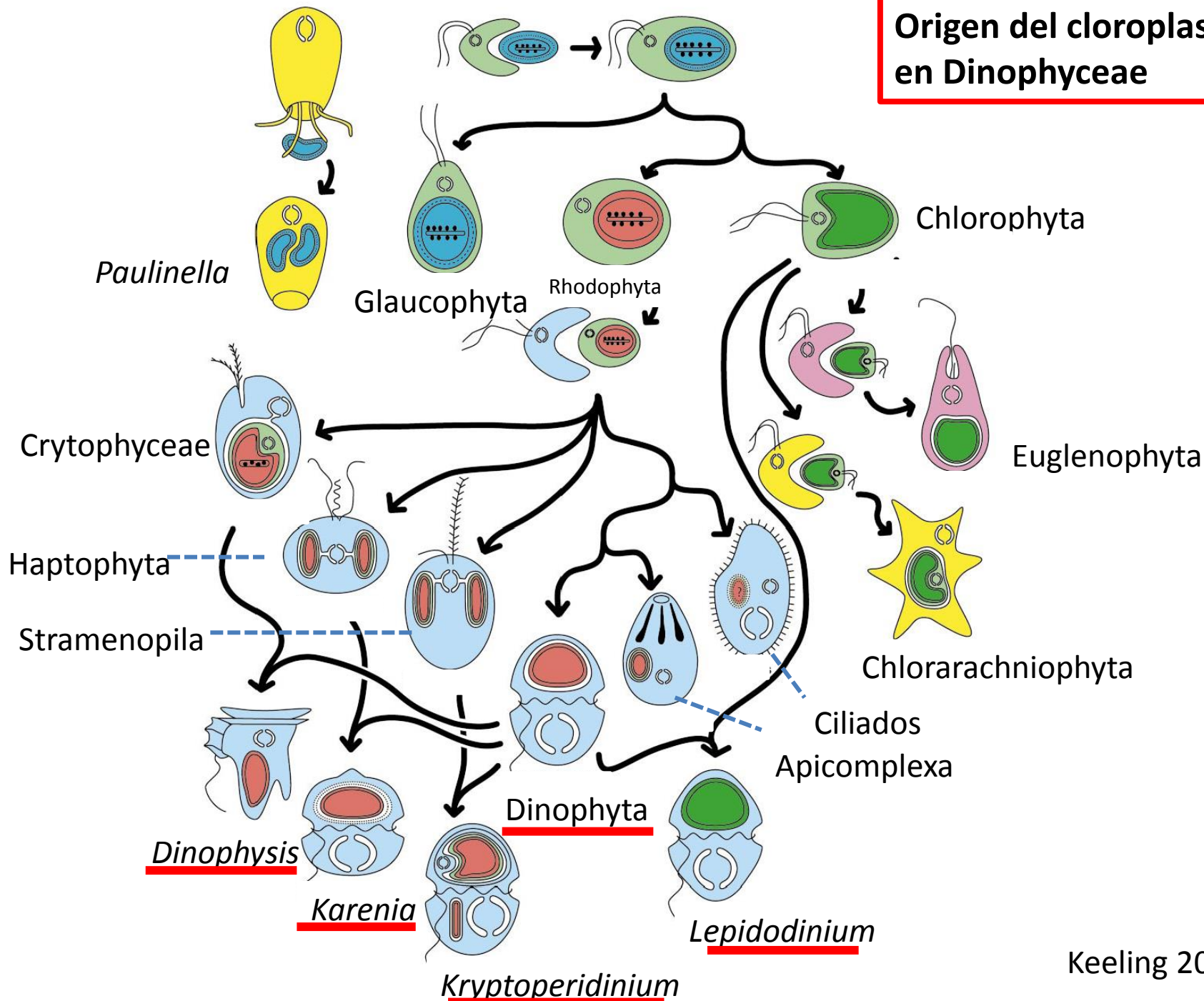


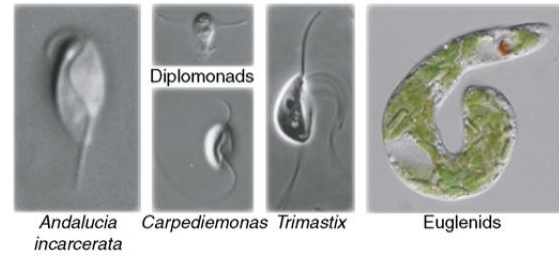
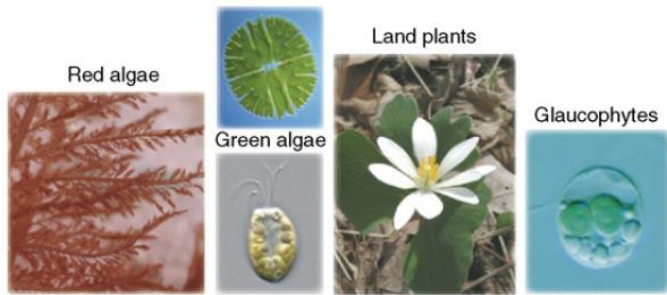
Supergrupos

Alveolata



Origen del cloroplasto en Dinophyceae





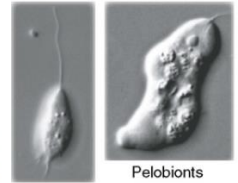
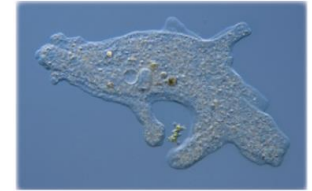
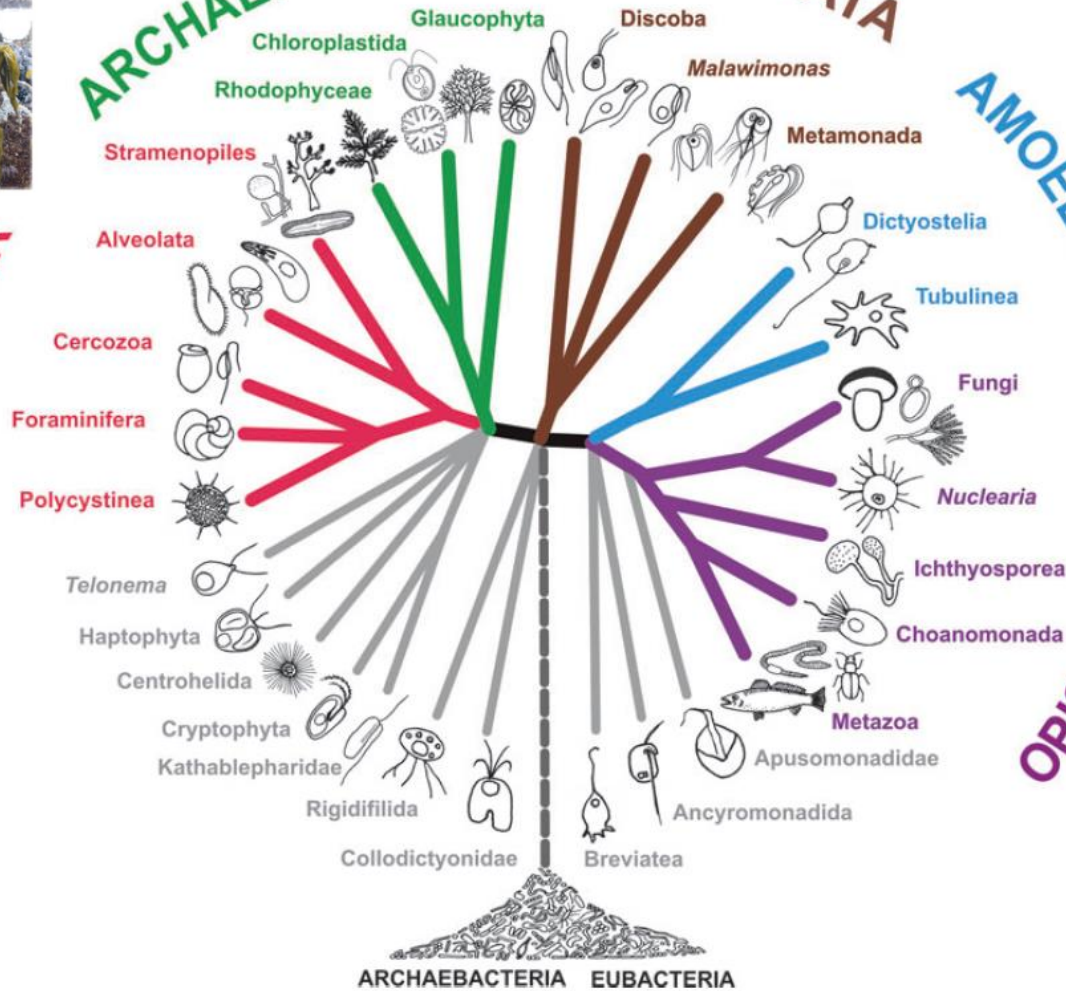
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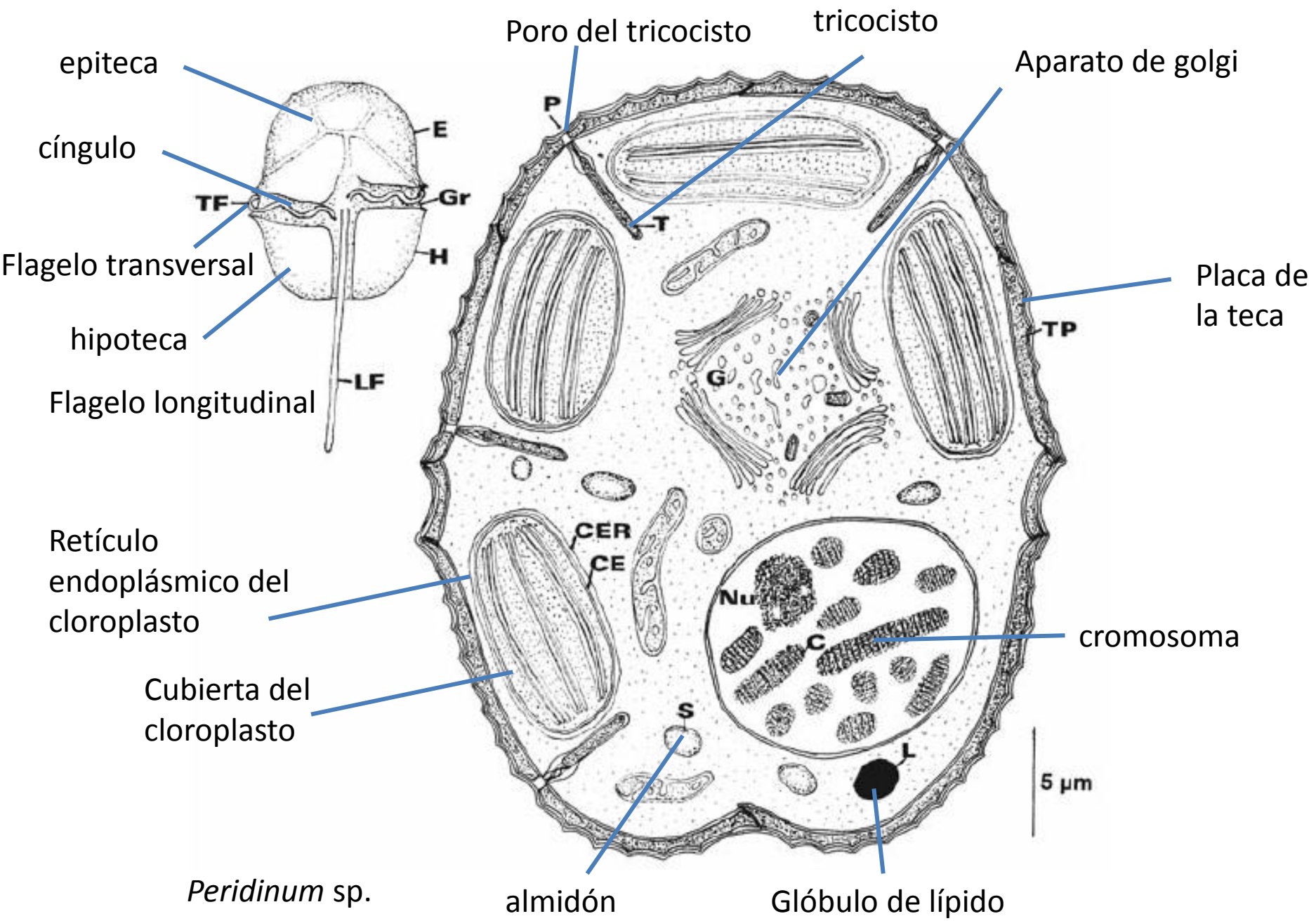
ARCHAEPLASTIDA

EXCAVATA

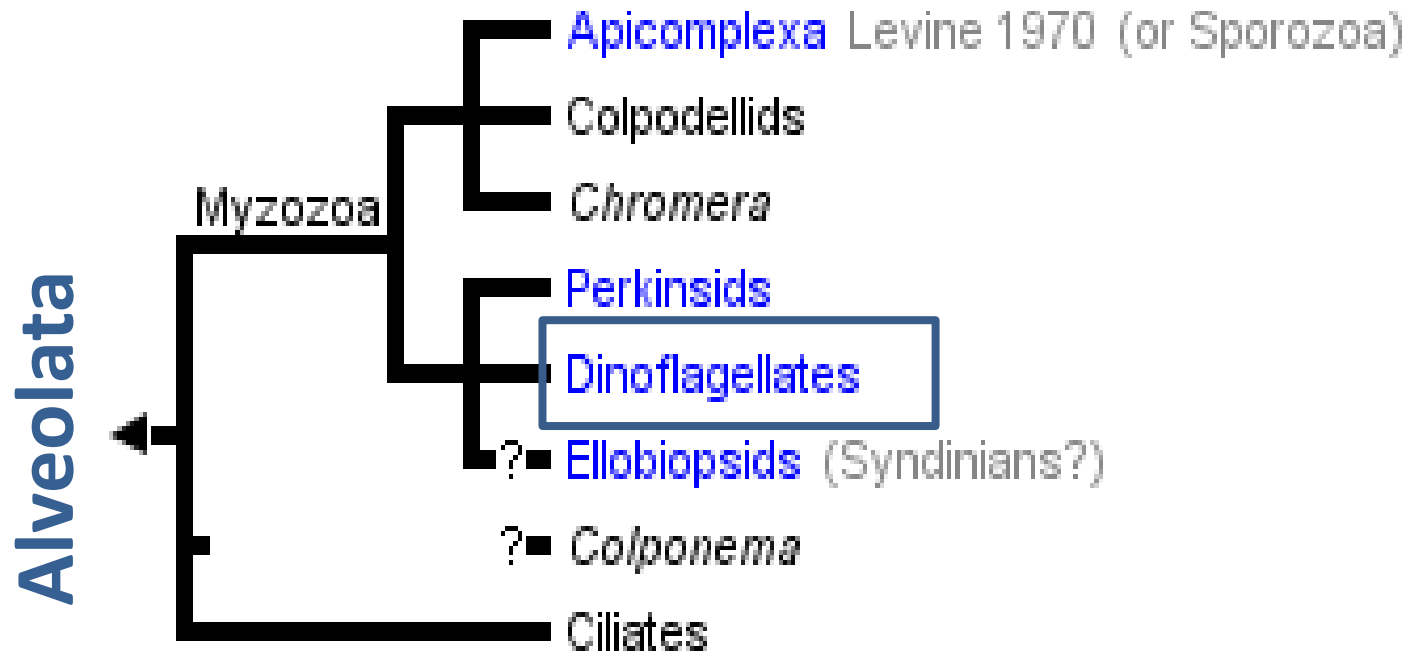
AMOEBOSOA

OPISTHOKONTA



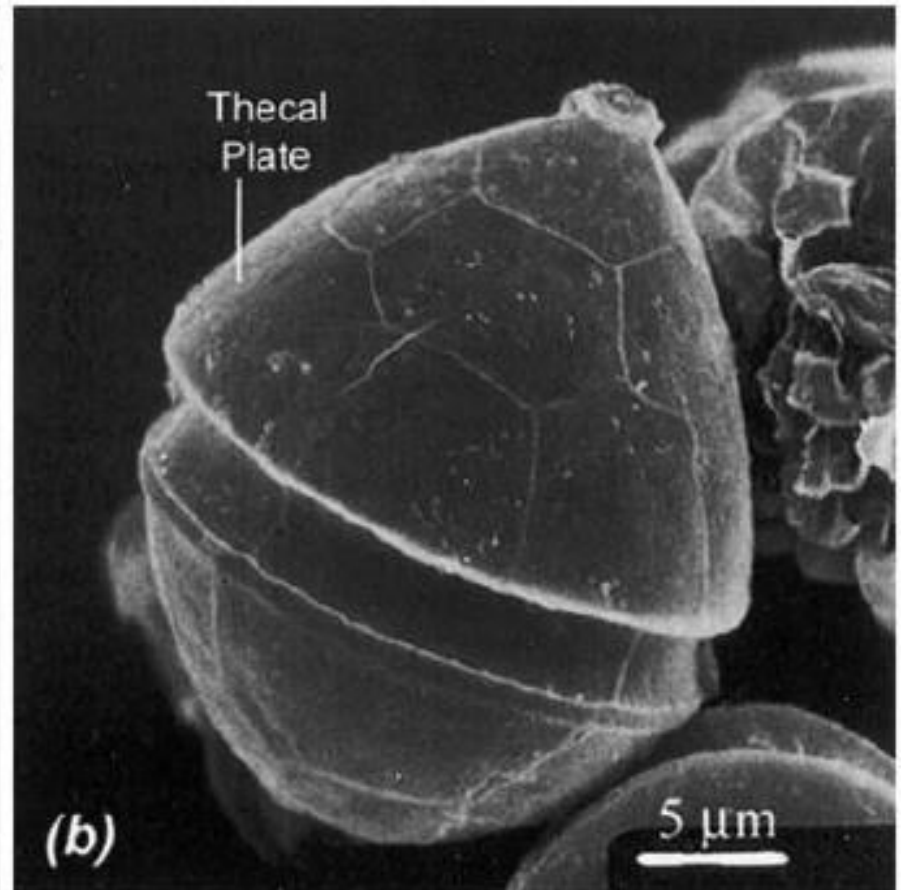
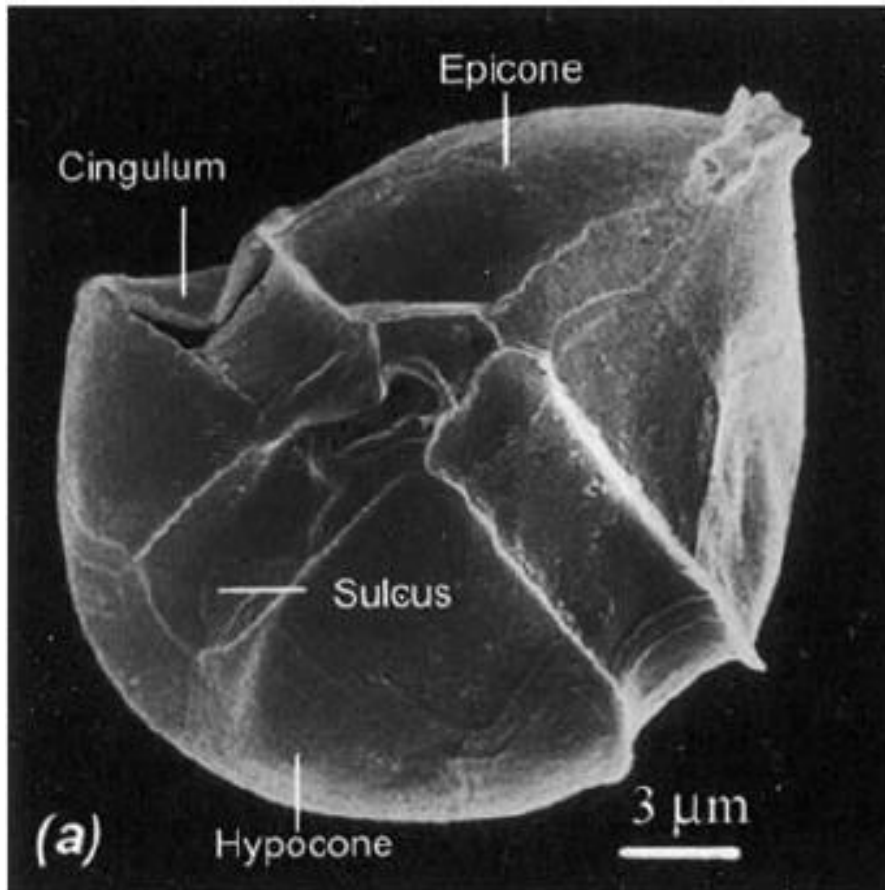


Peridinium sp.

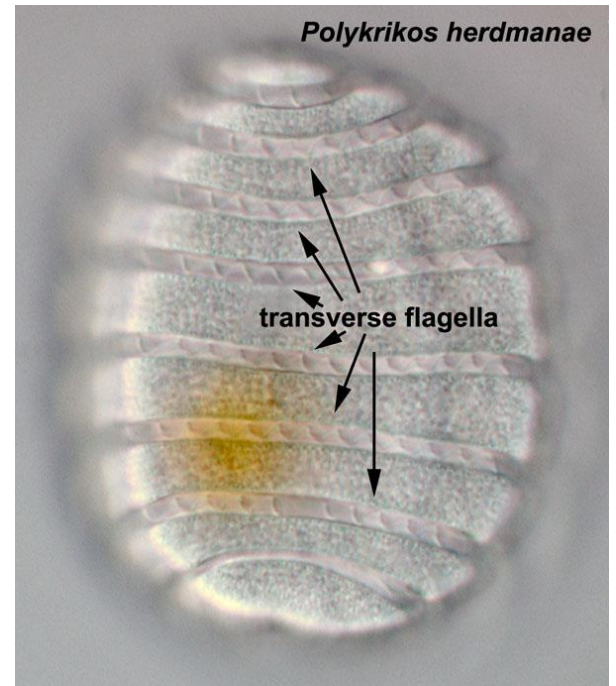
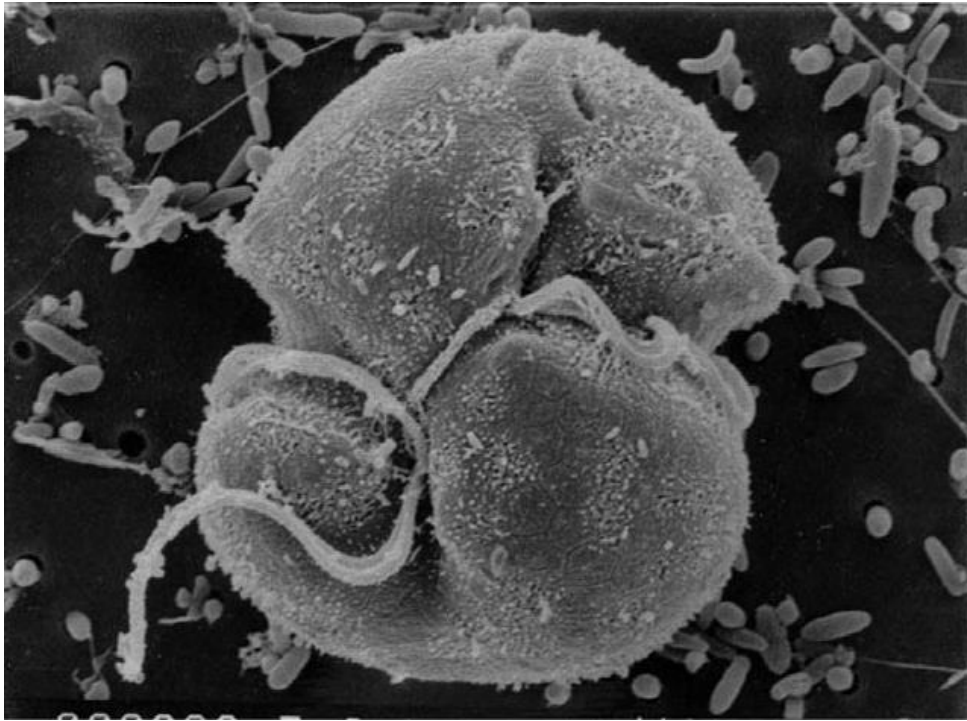


Características generales

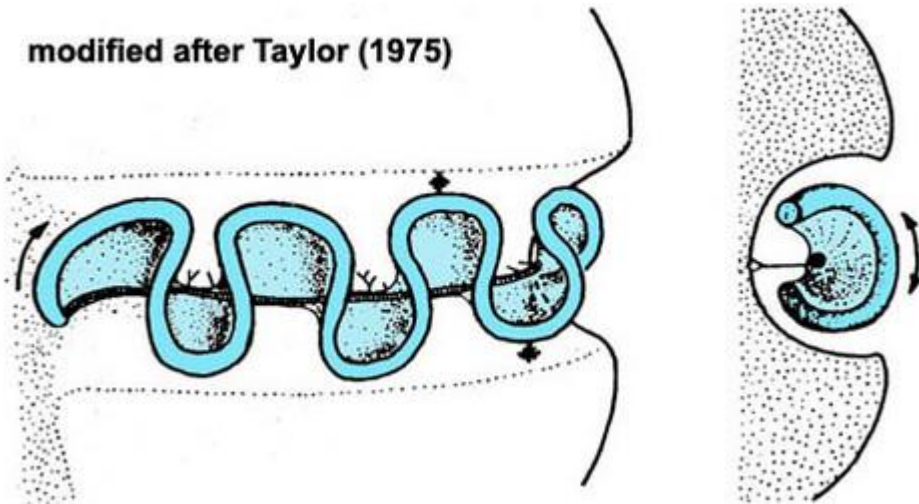
- organismos fotosintetizadores y no fotosintetizadores predominantemente unicelulares aunque algunos pueden ser filamentosos cocoides
- Poseen dos flagelos, uno transversal y uno longitudinal
- La célula está rodeada por vesículas poligonales que pueden estar vacías o más frecuentemente con placas de celulosa
- Pigmentos: clorofila a y c
- Almacenan almidón por fuera del cloroplasto
- En algunos casos poseen mancha ocular

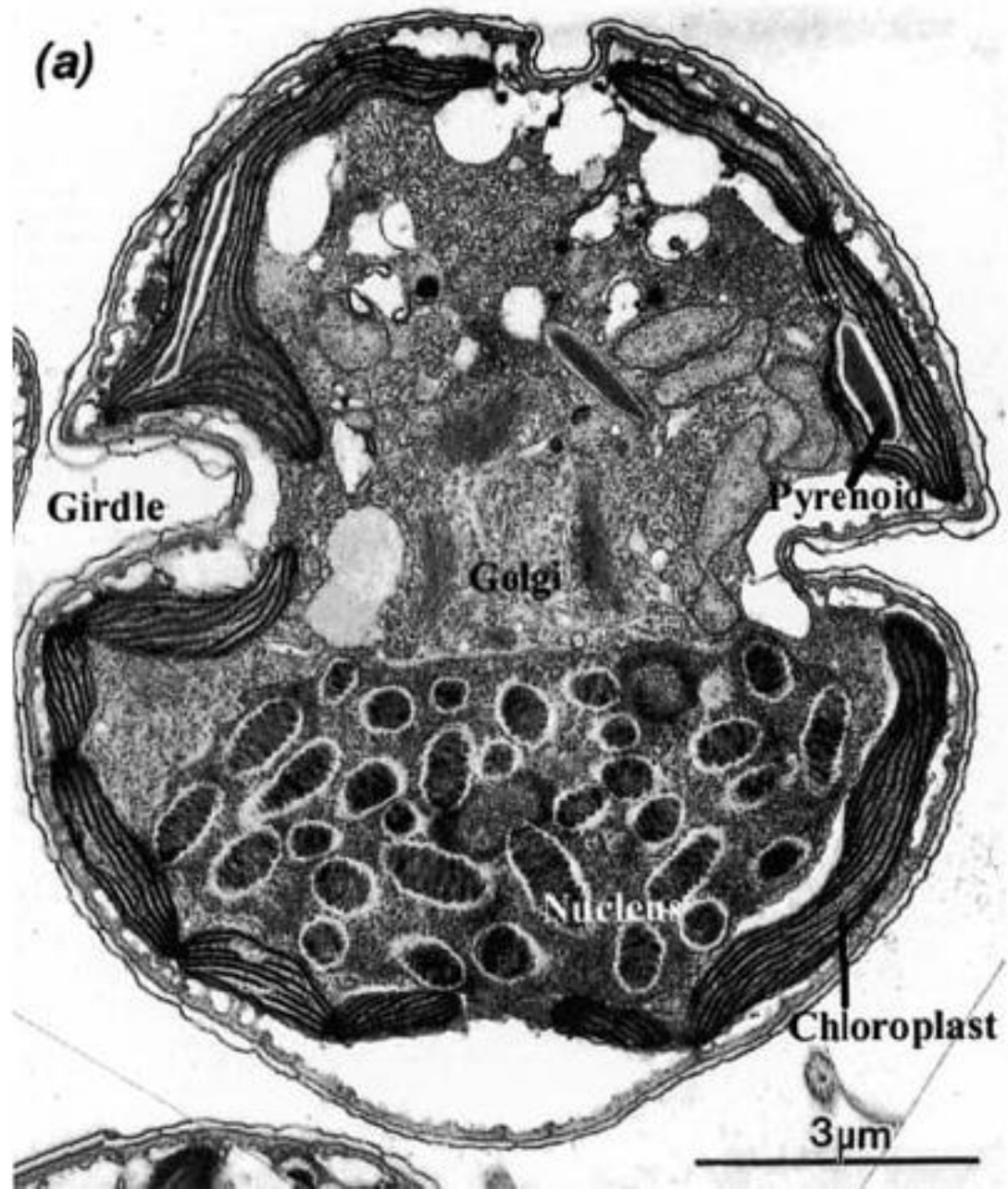


Scrippsiella trochoidea



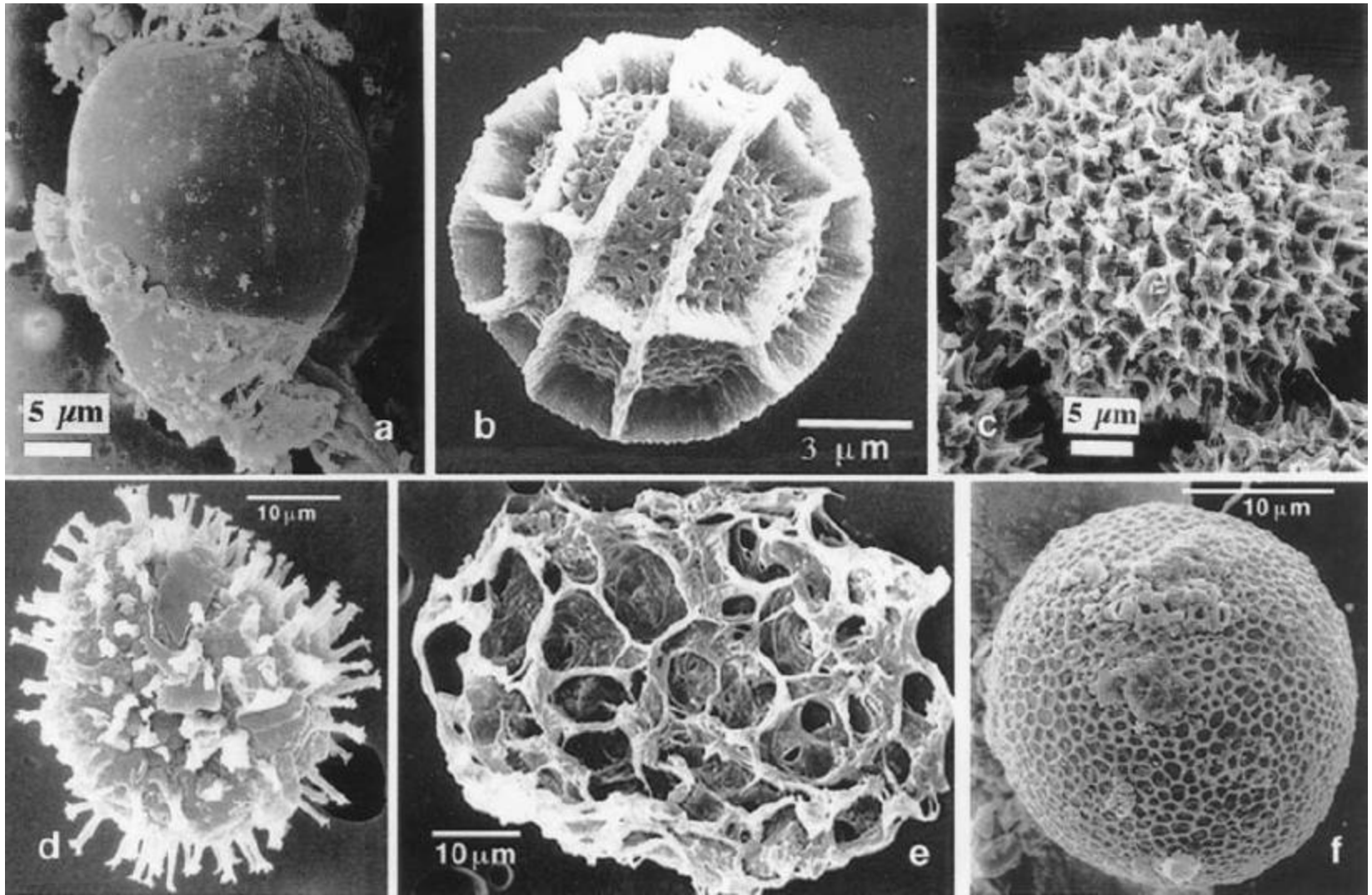
modified after Taylor (1975)

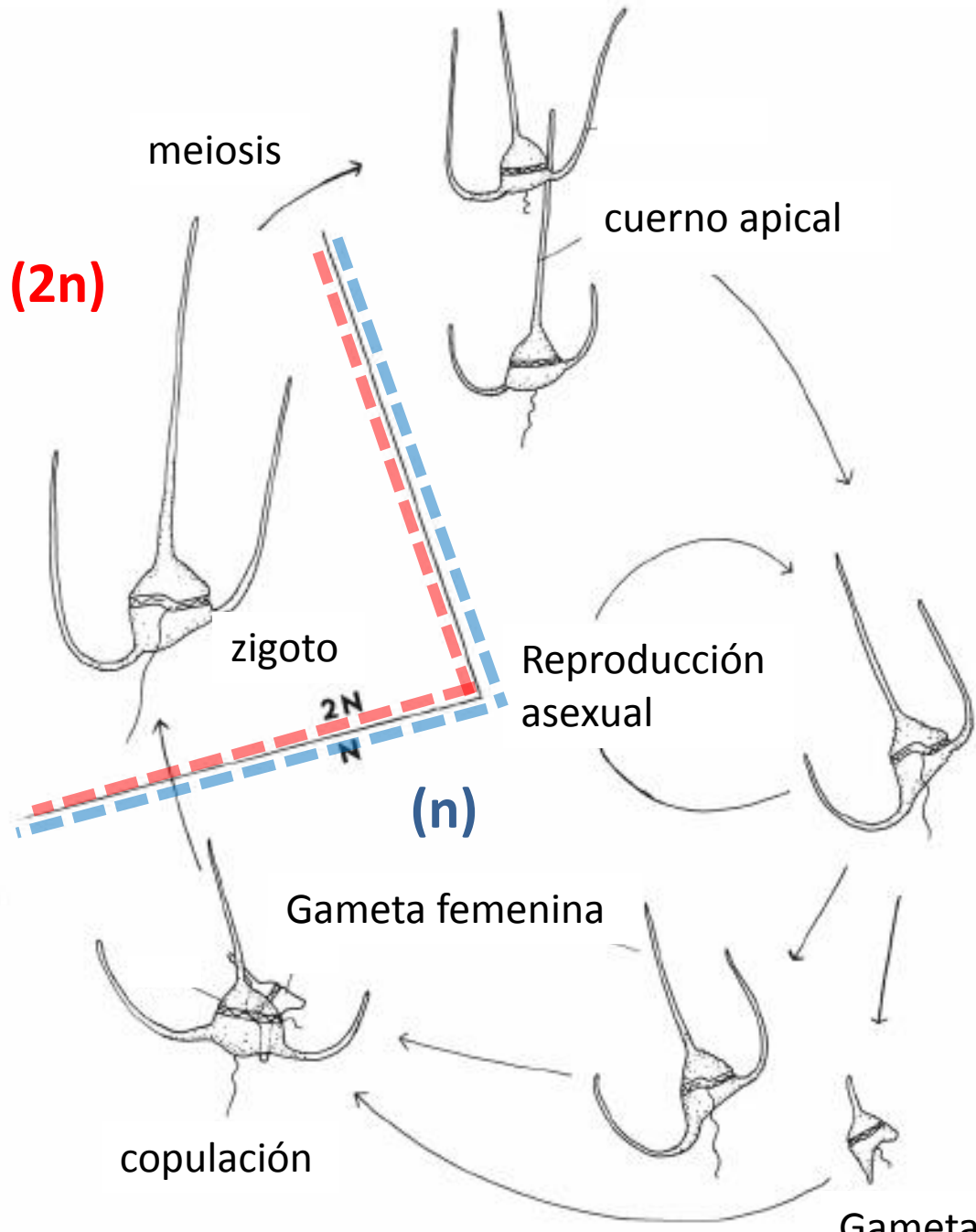




Karloodium beneficum

Cistos





(2n)

meiosis

cuerno apical

zigoto

Reproducción asexual

2N

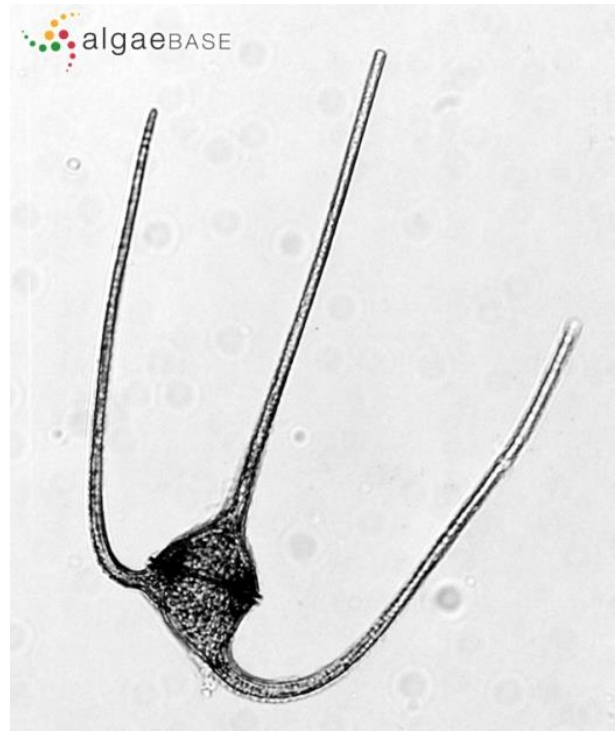
(n)

Gameta femenina

copulación

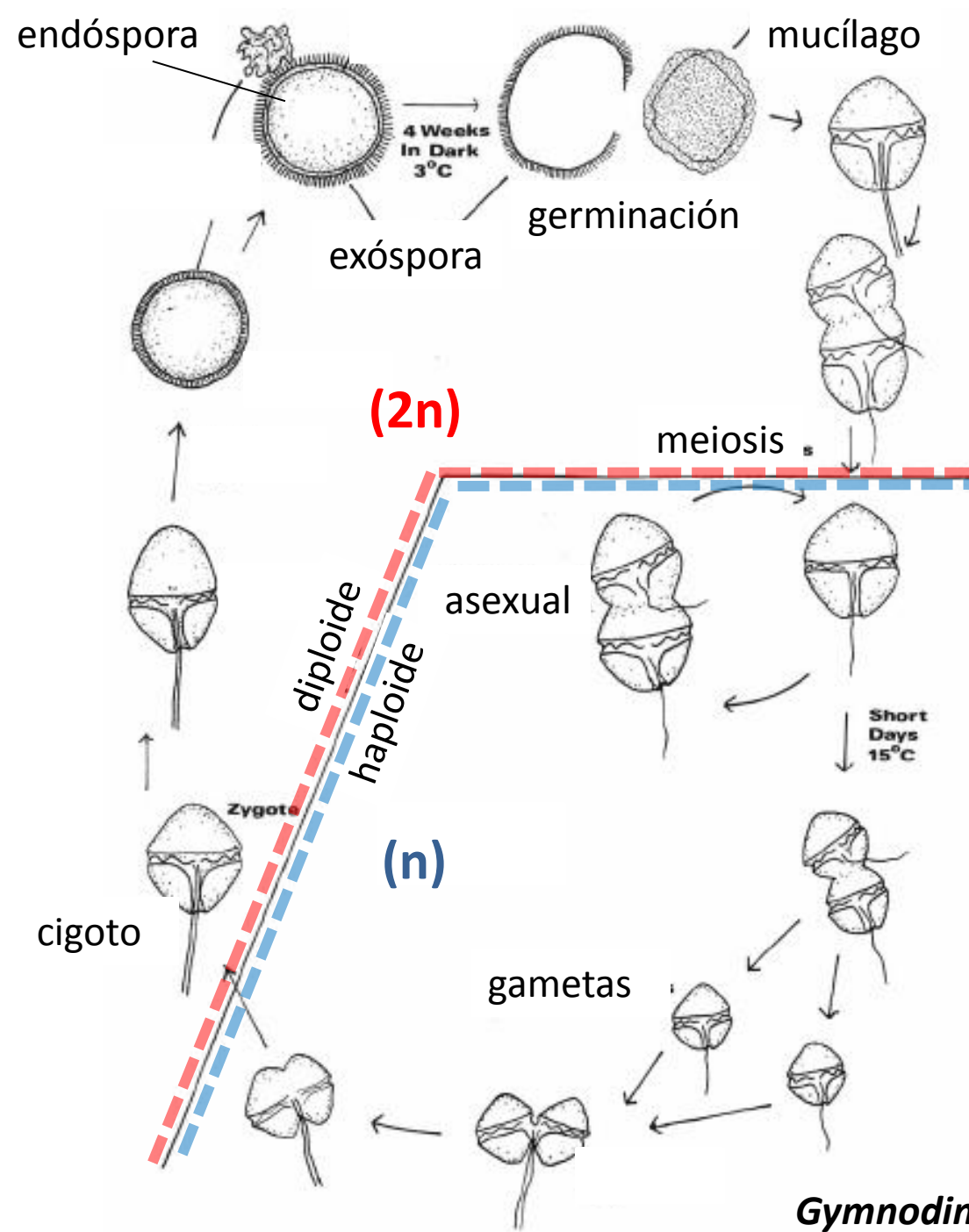
Gameta masculina

Ceratium horridum



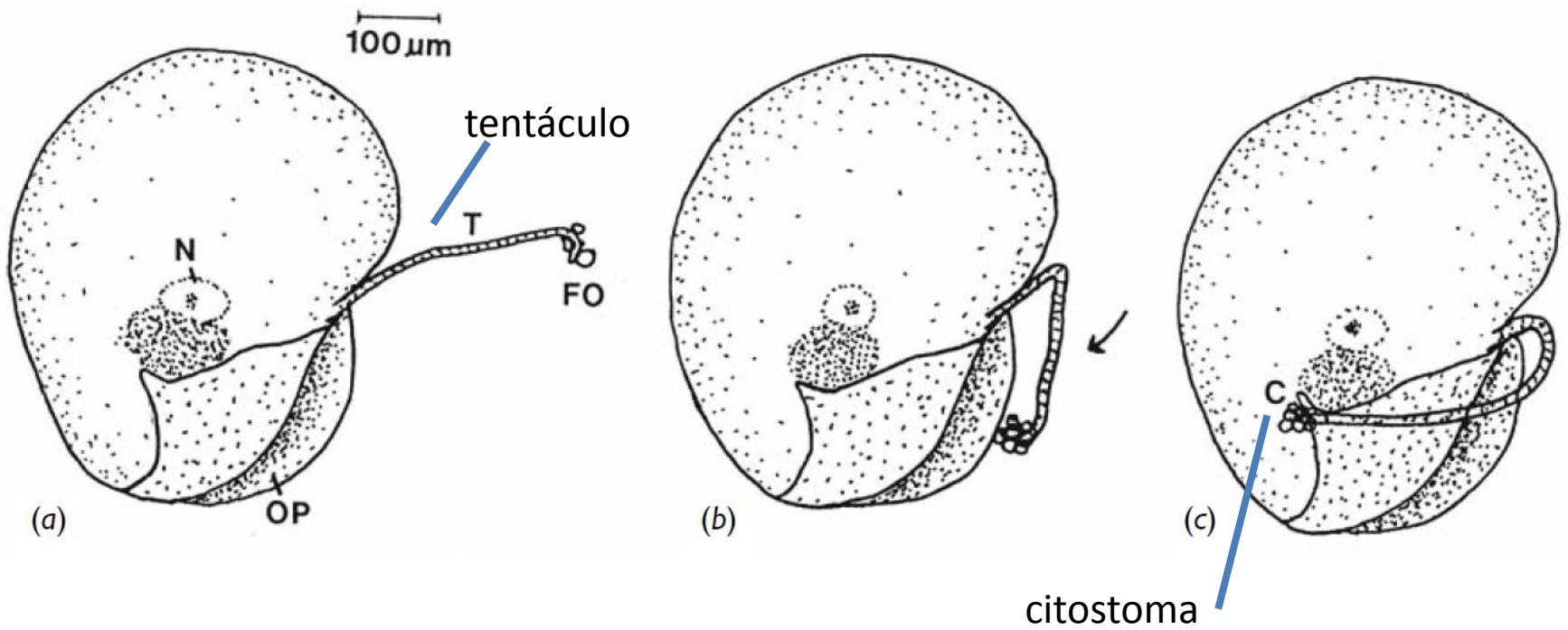
algaeBASE

Lee 2008



Gymnodinium sp.

Noctiluca sp



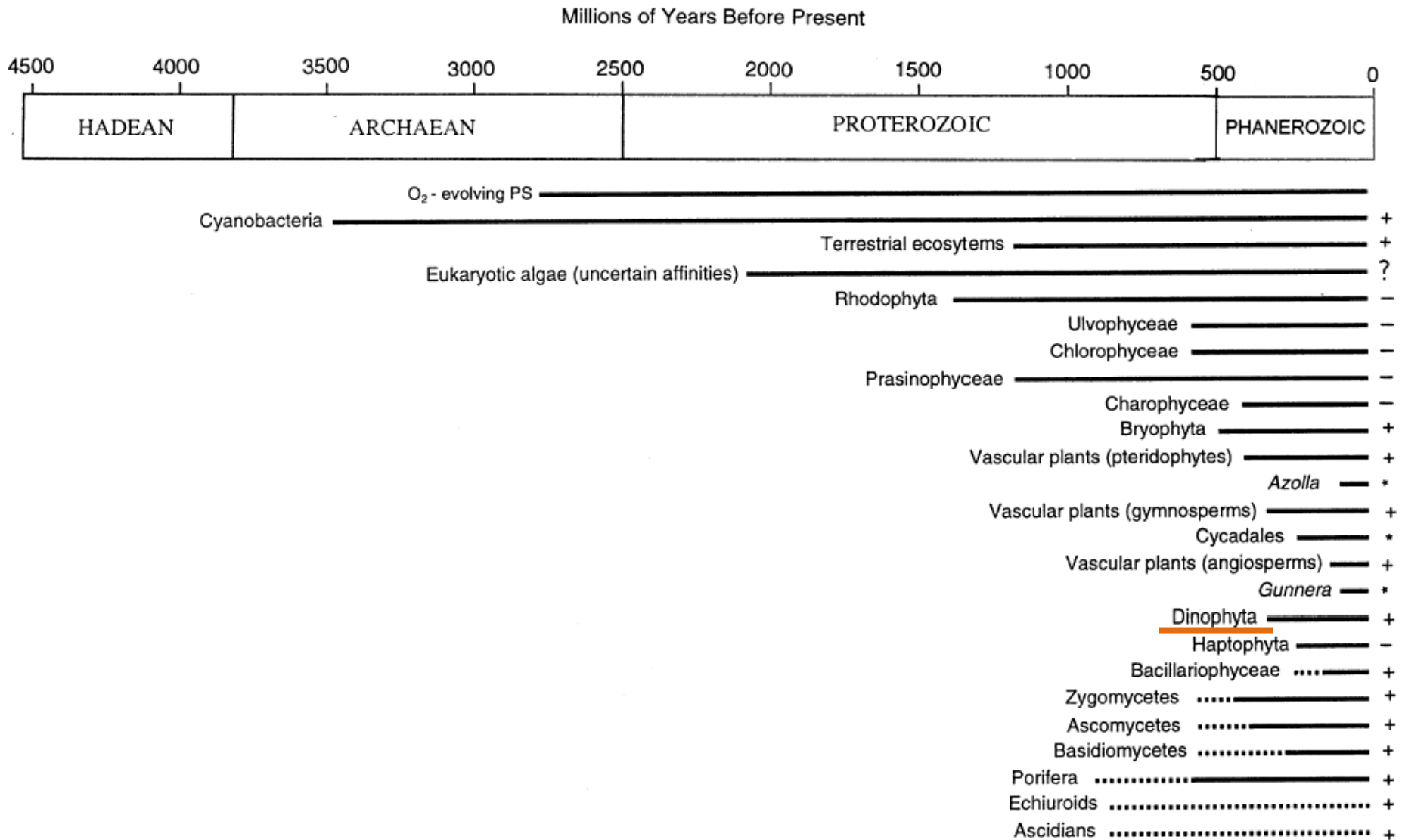


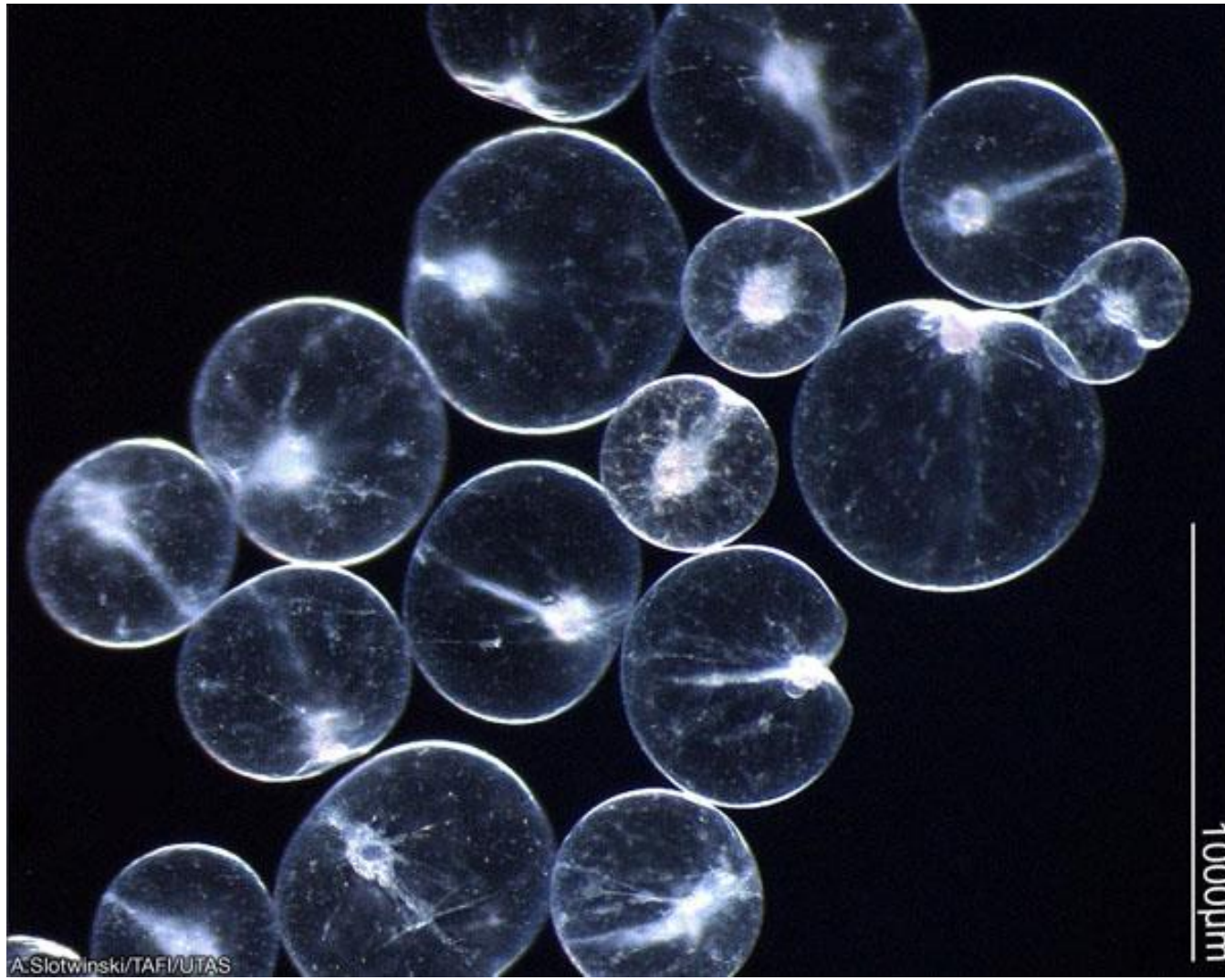
Fig. 1—Fossil (full lines) and ‘inferred molecular’ (dotted lines) record of cyanobacteria and of host eukaryotes. Only in the case of the extinct *Winfrenatia reticulata* does the fossil record show the presence of the cyanobionts. Based on Taylor and Taylor (1994), Taylor *et al.* (1997) and Falkowski 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.

Se conocen entre 2000-4000 especies

Pueden ser de agua dulce pero son principalmente marinas, tanto bénticas como planctónicas – predominan en regiones templadas a cálidas

Existen muchos géneros y especies cosmopolitas

Ecología



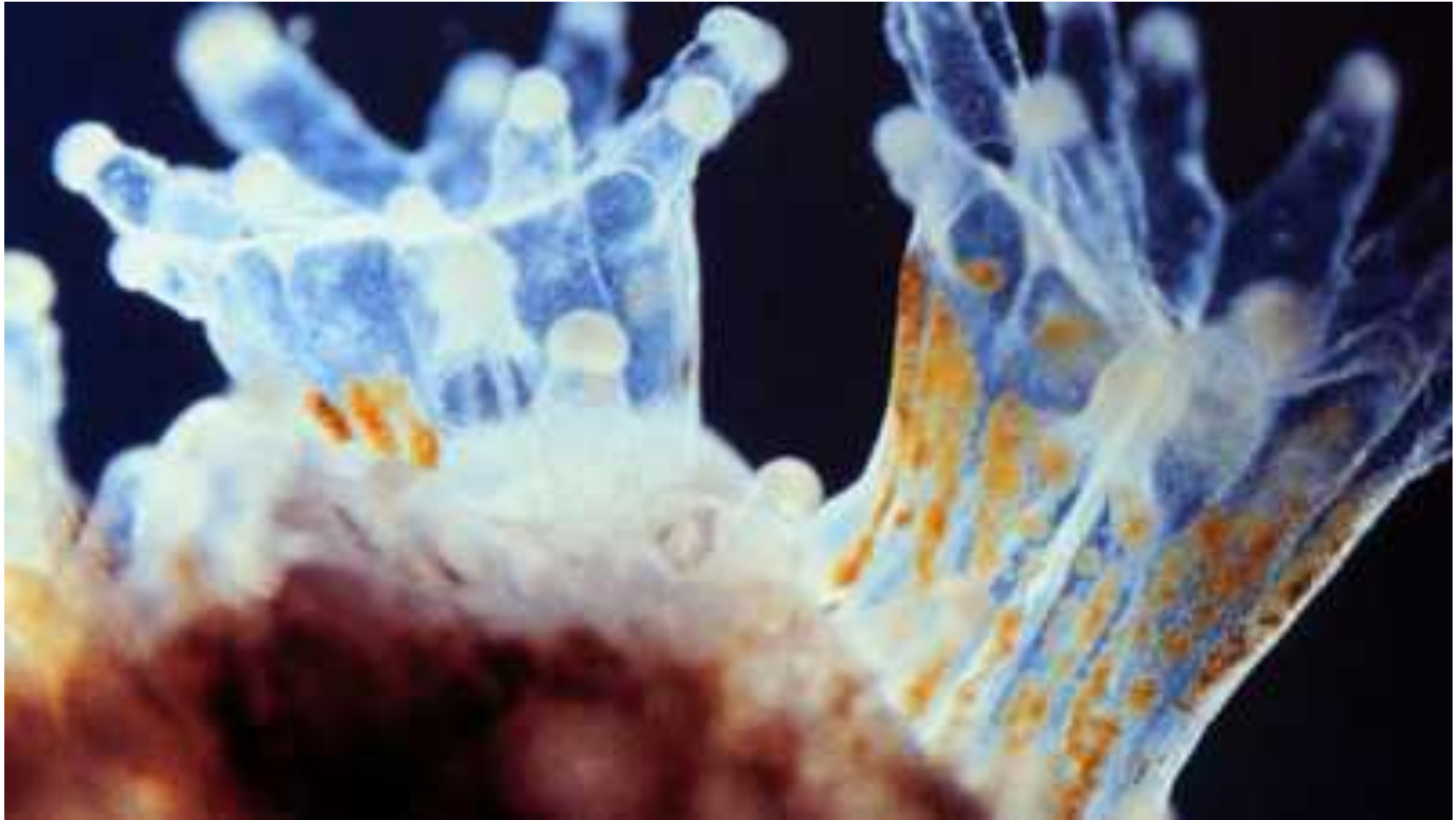
Bioluminiscencia (*Noctiluca* sp)

Ecología



Marea roja (<http://http://oceana.org>)

Ecología



Zooxantelas (<http://serc.carleton.edu>)

Caracteres para identificar géneros y especies

- Células con placas / células desnudas



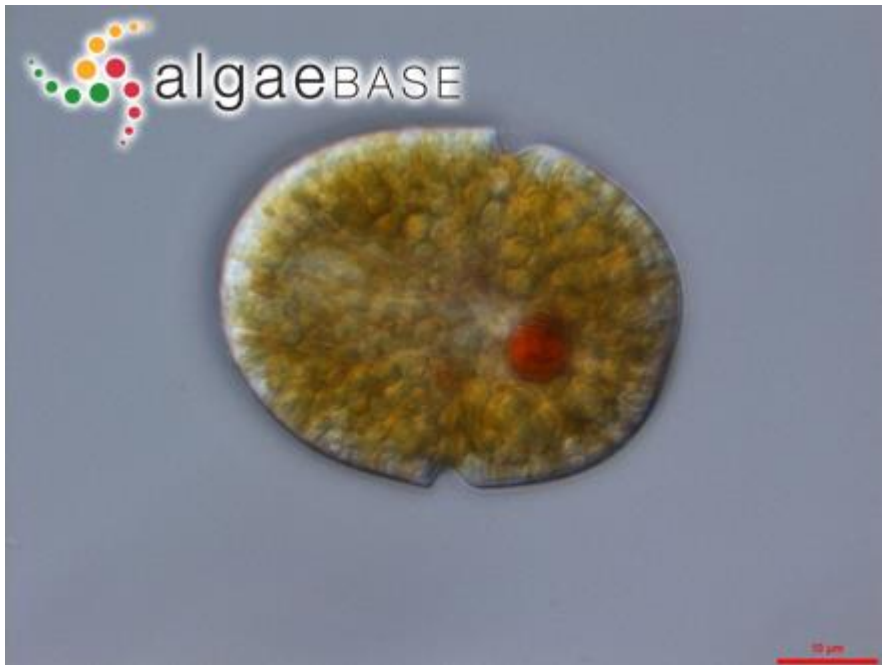
Ceratium



Gymnodinium

Caracteres para identificar géneros y especies

- Células con surco o sin surco



Gymnodinium



Noctiluca

Caracteres para identificar géneros y especies

- Células con apéndices o prolongaciones / sin ellas



Ceratium



Peridinium

Síntesis de Dinophyceae

