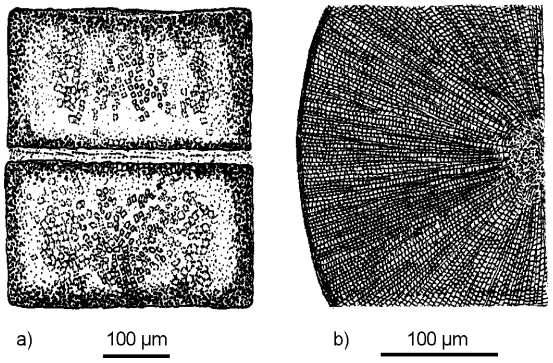
Coscinodiscus wailesii (Gran & Angst 1931), Bacillariophyceae, Centrales, Coscinodiscaceae

A centric diatom.



Coscinodiscus wailesii (after [13]). a) Girdle, b) valve face with scattered labiate processes.

Location of known blooms of *C. wailesii*, not the overall distribution.

Impact:

(* = possibly harmful, ** = harmful, *** = very harmful, ? = not known, $ = beneficial)

Resources/Environment			**Uses of the Sea**		
Commercial stocks	***	Forms dense blooms, up to 90 % total algal biomass [1].	Fisheries	***	Clogging of fishing nets with extensive mucus [5].
Other biota	***	Large size, not easily grazed by zooplankton [1, 2].	Aquaculture	***	Clogging of cages [5]. Strips nutrients, reducing availability to algae food species and affects seaweed culture [6].
Human health	?		Water abstractions	-	
Water quality	**	Decay of bloom causes anoxia [3, 4].	Aquatic transport	-	
Habitat modification	**	Produces copious mucilage, which can aggregate, sink and blanket seabed [5].	Tourism	-	

Vulnerable habitats: Blooms may occur in coastal waters, in some cases cells may advected from frontal areas further offshore. Benthic habitats, especially in fishery and aquaculture areas, could be affected.

Biology: Forms resting cells, found in sediments. About 70 % of the resting cells rejuvenate, given adequate light, temperature and nutrients [7], and most finish their first cell division within 48 hours. Continues to multiply by binary division. A doubling of biomass in 70 h is estimated. Cells produce copious mucilage as blooms develop.