

# Algal situation in marine waters surrounding Sweden Argos June 6-11, 2007

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At each station and at locations between stations, phytoplankton samples from the surface water and from 10-20m depth were filtered through 10 um polycarbonate filters. These were examined under a light microscope. Cell numbers for certain toxic species were counted when necessary.

## Abstract

In the Skagerrak, the phytoplankton flora was poor both in species diversity and cell densities. Dinoflagellates were more common than diatoms. In the Kattegat the situation was similar. *Dinophysis acuta* was found in both regions though in small numbers (50 cells/l). In the Sound, diatoms were more common and were mostly represented by *Cerataulina pelagica*, *Skeletonema costatum* and *Pseudo-nitzschia* spp. A few filaments of *Nodularia spumigena* were observed. Its density increased towards Drogden E, without forming a bloom. In the Arkona basin, the density of *Nodularia* filaments increased further, but still did not form a bloom. *Aphanizomenon* sp. and *Anabaena* sp. were present in low densities. The diatom *Chaetoceros danicus* was common. A bloom of *Nodularia* appeared at BY10 (southern East Gotland basin) and formed distinct and isolated patches. The bloom remained until BY15 (central East Gotland Basin) before disappearing. More patches of *Nodularia* appeared on the surface at 57° 59' N, 19° 25' E. These remained dense for few kilometres before disappearing for the rest of the expedition. *Dinophysis norvegica* was observed at all stations and reached its highest density at BY38 (640 cells/l).

## The Skagerrak

The phytoplankton flora was generally poor. *Dinoflagellates* were more common than diatoms and were mostly represented by *Ceratium furca*, *C. fusus*, *C. tripos* and *Prorocentrum micans*. *Dinophysis acuta* was present in small numbers. The most common diatoms were *Proboscia alata* and *Chaetoceros* spp.

## The Kattegat

Phytoplankton distribution appeared similar to that in the Skagerrak, but the numbers of *Pseudonitzschia* spp. were higher. Both *Dinophysis acuta* and *D. acuminata* were present in small numbers. No cyanobacteria filaments were present.