



## ALGAL SITUATION IN SWEDISH MARINE WATERS No 12 19-25 July , 1998

### DETAILS

\* POTENTIALLY HARMFUL SPECIES

---

### Sampling in the Skagerrak, Kattegat and the Baltic Sea

#### SKAGERRAK

##### Station M6, 20 June

Chlorophyll concentrations in the upper 15 m about 1-1.5  $\mu\text{g.L}^{-1}$  and a peak of about 9  $\mu\text{g.L}^{-1}$  at 17 m depth.

Rich plankton flora. Several species of dinoflagellates present in small amounts. Ceratium longipes, C. tripos, C. macroceros common. Dinophysis norvegica\* very common with approximately 40 000 cells.L<sup>-1</sup>. Diatoms very common with several species. Dominance of Thalassiosira sp., Thalassiosira nordenskiöldii, Chaetoceros curvisetus, Chaetoceros radians, Leptocylindrus danicus and Proboscia alata. followed by Leptocylindrus danicus, Guinardia flaccida and Pseudo-nitzschia delicatissima. Chrysochromulina sp.\* present in small amounts.

#### KATTEGAT

##### Station Anholt E, 20 July

Chlorophyll concentrations in the upper 10 m about 1.5  $\mu\text{g.L}^{-1}$  and a peak of about 3  $\mu\text{g.L}^{-1}$  at 19 m depth.

Diatoms dominated. Guinardia flaccida followed by Proboscia alata and Dactyliosolen fragilissimus were most common. Dinoflagellates were dominated by Ceratium longipes and C. tripos. Small numbers of Dinophysis norvegica\* present.

#### BALTIC SEA

##### Arkona basin. Station BY2, 21 July

Chlorophyll concentrations down to 20 m about 2  $\mu\text{g.L}^{-1}$ .

The bluegreen algae Aphanizomenon sp. dominated with about 4 m.L<sup>-1</sup>. Nodularia spumigena\* and Anabaena sp. were present in about 1 m.L<sup>-1</sup> each. Small amounts of Prorocentrum minimum\* and Heterocapsa rotundatum observed. The diatom Chaetoceros sp. A (danicus) not uncommon. Small amounts of Chrysochromulina sp.\*.

##### Bornholm basin. Station BY5, 22 July

Chlorophyll concentrations down to 20 m about 2  $\mu\text{g.L}^{-1}$ .

Very similar to BY2, but higher amounts of bluegreen algae. Aphanizomenon sp. dominated over Nodularia spumigena\* and Anabaena sp.. The diatom Chaetoceros sp. A (danicus) not uncommon. Small amounts of Chrysochromulina sp.\*. Single cells of Ebria tripartita, Planktonema lauterbornii and Oocystis sp..

### **Southeast Baltic, Station BCS III 10, 22 July**

Chlorophyll concentrations down to 40 m 1.5-2 µg.L<sup>-1</sup>.

Accumulations of bluegreen algae visible on the surface. In the upper 10 m the bluegreen algae Aphanizomenon sp. dominated with about 8.2 m.L<sup>-1</sup>. Nodularia spumigena\* also very abundant with about 4 m.L<sup>-1</sup>. Anabaena sp. present in smaller amounts. Dinophysis norvegica and Heterocapsa rotundatum observed. The diatom Chaetoceros sp. A (danicus) not uncommon. Small amounts of Chrysochromulina sp.\*. as well as Planktonema lauterbornii.

### **Eastern Gotland basin, Station BY15, 22 July**

Chlorophyll concentrations down to 20 m 1-2 µg.L<sup>-1</sup>.

The bluegreen algae Aphanizomenon sp. common with about 5 m.L<sup>-1</sup> in the upper 10 m. Nodularia spumigena\* and Anabaena sp. also common. Dinophysis norvegica\* present with about 1 500 cells.L<sup>-1</sup> in the upper 10 m and 8 300 cells.L<sup>-1</sup> between 15 and 20 m depth. Small amounts of Chrysochromulina sp.\*. as well as Planktonema lauterbornii.

### **Northern Baltic, Station BY29, 23 July**

Chlorophyll concentrations down to 20 m 1-2 µg.L<sup>-1</sup>.

The bluegreen algae Aphanizomenon sp. common with about 4 m.L<sup>-1</sup> in the upper 10 m. Nodularia spumigena\* and Anabaena sp. also common. Dinophysis norvegica\* present with about 2 500 cells.L<sup>-1</sup> in the upper 10 m. Small amounts of Chrysochromulina sp.\*. and Pyramimonas sp..

### **Western Gotland basin, Station BY38, 26 June**

Chlorophyll concentrations down to 15 m 1-1.5 µg.L<sup>-1</sup>.

The bluegreen algae Aphanizomenon sp. common with about 3 m.L<sup>-1</sup> in the upper 10 m. Nodularia spumigena\* and Anabaena sp. also common. Dinophysis norvegica\* present with about 1 000 cells.L<sup>-1</sup> and Heterocapsa triquetra with about 60 000 cells.L<sup>-1</sup> in the upper 10 m. Small amounts of Pyramimonas sp..

This report is based on an overview of quantitative. Chlorophyll values are rough estimates based on profiles of fluorescens.

## **FORECAST**

In the Skagerrak and Kattegat blooms of diatoms may continue the next few weeks. Dinoflagellates are likely to increase in abundance. In the Baltic bluegreen algae, dominated by Aphanizomenon sp., are common. In the southeast part accumulations on the surface were observed, despite the low temperature (less than 16°C). There is considerable amount of bluegreens in the water and with a period of calm and sunny weather surface blooms will develop over larger areas.