

This paper not to be cited without prior reference to the author.

INTERNATIONAL COUNCIL FOR THE
EXPLORATION OF THE SEA

C.M. 1977/K: 5
Shellfish Committee

ON THE GREEN COLORATION OF THE EUROPEAN FLAT OYSTER
(*Ostrea edulis* L.) BY A COCCOLITHOPHORID

by

Marie Kat

Netherlands Institute for Fishery Investigations,
Haringkade 1, P.O. Box 68, Ymuiden, The Netherlands.

This paper not to be cited without prior reference to the author.

INTERNATIONAL COUNCIL FOR
THE EXPLORATION OF THE SEA

C.M. 1977/K : 5
Shellfish Committee.

ON THE GREEN COLORATION OF THE EUROPEAN FLAT OYSTER
(*Ostrea edulis* L.) BY A COCCOLITHOPHORID.

=====

by

Marie Kat
Netherlands Institute for
Fishery Investigations,
Haringkade 1, P.O. Box 68,
Ymuiden, The Netherlands.

The phenomenon of coloration of the oyster gill was mentioned in literature. In some publications in which coloration in Shellfish was described ^{1.2.3.}) this phenomenon was caused by a diatom: *Navicula ostrearia* (Gaillon) Bory ⁴). When I observed a grayish-green coloration in gills of the *Ostrea edulis* from a Zealand oyster pit, it appeared that stomach and intestine content were full of the coccolithophorid: *Anthosphaera robusta* (Lohmann) Kamptner ⁵).

Since start of my phytoplankton investigations in 1971 in the Easterschedt area during summer period, this micro organism was not observed.

It seems very likely therefore, that together with oysters from abroad this coccolithophorid was introduced in the oyster pit, where it found favourable circumstances to maintain.

VERDISSEMENT DES BRANCHIES D'HUITRE PLAT (*Ostrea edulis* L.)
PRODUIT PAR UNE COCCOLITHOPHORIDE.

Un échantillon d'huîtres plats (*Ostrea edulis* L.) séjourné dans un bassin Zélandais, montraient un grisâtre verdissement des branchies. Cette phénomène était la conséquence de la nourriture par une coccolithophoride.

Anthosphaera robusta (Lohmann) Kamptner.

References

1. Bachrach, E. Mlle, 1935
Le bleuissement des diatomées et le verdissement des huîtres.
Revue critique. Revue Trav. Pêches Marit., Vol. 8, pag. 112-113.
2. Mitchell Philip H and Raymond L. Barney, 1917.
The occurrence in Virginia of green-gilled oysters similar to
those of marennes.
Bulletin of the U.S. Bureau of Fisheries, Vol. 35
for 1915-1916, pp 135-150 (Document 850).
3. Ryder , John, 1885
On the green coloration of the Gills and Palps of the Clam
(*Mya arenaria*).
Bulletin of the United States Fish Commission Vol. 5, pp 181-185.
4. Mlle Dóminique Neuville et M. Philippe Daste,
Presentée par M. Roger-Heim.
Sur la singularité de la production d'un pigment bleu-vert
par la Diatomée *Navicula ostrearia* (Gaillon) Bory
C.R. Acad. Sc. Paris t 276 (25 juni 1973).
5. Halldal Per and Markali Joal, 1954.
Morphology and micro structure of Coccoliths Studied in the
Electron Microscope.
Observations on *Anthosphaera robusta* and *Calyphosphaera*
papillifera.
Nytt Mag. Bot., Vol. 2, pp 117-119, pl. I.

Anthosphaera robusta
in oyster stomach

(1400 x).

1750

