



SAHIN F., BAT L., SATILMIS H.H., USTUN F., BIRINCI Z., KIDEYS A.E., DEVELİ E.-
Seasonal changes in net phytoplankton of the central Black Sea off cape Sinop, Turkey.
International Conference, Scientific and Policy Challenges Towards an Effective Management
of The Marine Environment in Support of Regional Sustainable Development, emphasis on
the Black Sea and the Mediterranean regions.
12-18 October 2003, Albena, Bulgaria.

SEASONAL CHANGES IN NET PHYTOPLANKTON
OF THE CENTRAL BLACK SEA OFF CAPE SINOP, TURKEY

F. SAHIN¹, L. BAT¹, H. SATILMIS¹, F. USTUN¹, Z. BIRINCI¹,
A. KIDEYS² and E. EKER DEVELİ²

1. Sinop Fisheries Faculty, 57000 Sinop, TURKEY
2. Institute of Marine Sciences, METU Erdemli, İçel, TURKEY

ABSTRACT

In this investigation, species compositions, seasonal qualitative and quantitative fluctuation of net phytoplankton population have been studied at 2 stations near Cape Sinop in the central part of the southern Black Sea coast during January 2002-September 2002. Samples were preserved in formalyn solution, concentrated by setting and concentration of each species of phytoplankton was enumerated under the microscope. O₂, pH, temprature, salinity, posphate, nitrate, silicate, chlorophyll-a measurement carried out montly intervals. The time series data were then processed to study the biochemical characteristics of the region.

- SAHIN F., BAT L., SATILMIS H., USTUN F., BIRINCI Z., KIDEYS A., DEVELI E.- Seasonal changes in net phytoplankton of the central Black Sea off cape Sinop, Turkey.
- Sapojnikov F.- Colonial diatoms – the companions of molluscs-filterers.
- Satilmis H ., BAT L., SAHIN F., USTUN F., BIRINCI Z., KIDEYS A.- Ichthyoplankton distribution in Sinop area (the Southern Black Sea).
- Sergeeva N. - Meiobenthos of a methane seep area South-West of the Crimean Peninsula (the Black Sea).
- Shiganova T., Sorokin P., Chsovnikov V.- Structural functional alterations in low food webs under influence of Ctenophores *Mnemiopsis leidyi* (A.Agassiz) development in the Black Sea ecosystem.
- Shtereva G, Krastev A., Hristova O.- Vertical distribution of the nutrients in the Western Black Sea area.
- Shtereva G., Hristova O., Dzhurova B.- The investigation of sea Surface microlayer.
- SUVOROV A. , SHOKUROVA I.- Seasonal and decadal variability of the available potential energy in the Black Sea .
- Svetlichny L, KIDEYS A, Hubareva E.- Energy strategy and lipid accumulation in *Calanus euxinus* in deep and shallow zones of the Black and Marmara Seas .
- Todorova E .- Education and sustainability.
- TONEVA Z.- Sustainability and health status of the black sea region population.
- Ustun F., Bat L., Satilmis H., Sahin F., Birinci Z., Kideys A.- The composition of zooplankton of the central Black Sea Turkey .
- Vassilev A.- On-board heat flow measurements: deep water method & Black Sea results.
- Velev V., Dimitrov L., Kozuharov E., Petrov P., Rankova T.- Early boosted “frozen” maturation and hydrocarbon potential of pre-Palaeogene sediments from Bulgarian onshore and shelf zones.
- Vershinin A, Moruchkov, A. and Sukhanova I .- Harmful algae at North-East Black Sea coast.
- Yakubenko V. - The hydrological and current measurements on the Northeastern part of the Black Sea in last decade.
- YAKUSHEV E ., CHASOVNIKOV V ., PAKHOMOVA S .- Hydrochemical studies in r / v " Knorr " 172-05 cruise , March 10 - April 07, 2003 .
- Zagorodnyaya Ju.- The state of zooplankton community in Crimea coastal waters of the Black Sea (a review).

- Zaika V.- Comparative specific growth rate of Ctenophores and other water invertebrate.
- ZATSEPIN A., ZHURBAS V., EREMEEV V., GRIGORIEVA YU., KREMENETSKIY V., MOTYZHEV S. , POYARKOV S., POULAIN P., RATNER YU. , STANICHNY S., SOLOVIEV D.- Black Sea upper layer circulation, water dynamics and lateral mixing.
- ZODIATIS G., DRAKOPOULOS P. -The modified Atlantic water in the southeast Levantine basin (1996-2002).



International Conference on “Scientific and Policy Challenges towards an Effective Management of the Marine Environment in Support of Regional Sustainable Development 12-18 Ekim 2003, Varna, Bulgaria, p. 90.

THE QUALITATIVE AND QUANTITATIVE DISTRIBUTION IN NET PHYTOPLANKTON OF CENTRAL BLACK SEA OFF CAPE SINOP, TURKEY IN 2000

Fatih SAHIN¹, Levent BAT¹, Hasan Huseyin SATILMIS¹, Funda ÜSTÜN¹,

Zekiye BIRINCI¹, Ahmet E. KIDEYS², Elif EKER DEVELI²

¹ University of Ondokuz Mayıs, Sinop Fisheries Faculty, 57000 Sinop, Turkey.

² Institute of Marine Sciences, Middle East Technical University, Erdemli, 33731 Icel, Turkey.

Abstract

In this investigation, species composition, seasonal qualitative and quantitative fluctuation of net phytoplankton population have been studied at 2 stations near Cape Sinop in the central part of the southern Black Sea coast during January 2002-September 2002. Samples were preserved in formalin solution, concentrated by settling and concentration of each species of phytoplankton was enumerated under the microscope. O₂, pH, temperature, salinity, phosphate, nitrate, silicate, chlorophyll-a measurements carried out monthly intervals. The time series data were than processed to study biochemical characteristics of the region.

Key Words: Cape Sinop, phytoplankton, physico-chemical parameters

In the present study, seasonal composition, qualitative and quantitative distributions of micro- and nanophytoplankton have been studied at two stations in the southern Black Sea during March 2000-October 2000. The samples collected by Nansen Sampling Bottle. Samples were preserved in formaldehyde solution (4%), concentrated by setting and concentration of each species of phytoplankton was enumerated under the microscope. Physico-chemical parameters of environment which includes Temperature, Salinity, pH, chlorophyll-a and nitrite were determined.

According to data, species from the classis of Bacillariophyceae and Dinoflagellatae were the dominant groups. The relative abundancy was found higher in the genera Rhizosolenia and Ceratium than those the others in almost every sampling period.