SARBATORIREA SEMICENTENARULUI OCEANOLOGIEI ROMANESTI
(LE CINQUANTENAIRE DE L'OCEANOGRAPHIE ROUMAINE INSTITUEE)

Marian-Traian GOMOIU

The author presents a short report on the celebration of the fifty years of Romanian Oceanology.

REALIZARI ALE OCEANOLOGIEI ROMANESTI IN PERIOADA 1926-1976
(REALISATIONS DE L'OCEANOLOGIE ROUMAINE PENDANT LA PERIODE 1926-1976)

GH.SERPOIANU

In the paper are presented the main activities carried on and the results obtained in oceanological field within the 50 years passed from the year 1926 when the first marine research Institution from Romania, "Zoological Station Agigea" was created. The investigations carried on are exposed separatly in the four research units that worked up to 1970 when the Romanian Institute for Marine Research was founded.The activity of the Institute is stated as four main fields of research: hydrology, fisheries resources, marine technology, geology and pollution.

CONTRIBUTIA DIRECTIEI HIDROGRAFICE MARITIME LA STUDIUL HIDROGRAFIC SI OCEANOGRAFIC AL ZONEI MARITIME ROMANESTI
(LA CONTRIBUTION DE LA DIRECTION HYDROGRAPHIQUE MARITIME ROUMAINE A L'ETUDE HYDROGRAPHIQUE ET OCEANOGRAPHIQUE DE LA ZONE MARITIME DE ROUMANIE)

Cpt.rg 1 ing. Corneliu ENACHESCU

The paper presents the hydrographical activities of Romanian Navy beginning in 1882 at the Danube and extended at Black Sea since 1885-1886. In the year 1926 was founded the Hydrographic Service of the Romanian Navy and so a new development of the specific work appeared with a mainly aim in placing a naval base and navigation problems in the zone of the Danube mouths. In the year 1935 was founded the Hydrographical Direction of the Romanian Navy, properly organised to face the present time problems.

TRADITII GLORIOASE ALE OCEANOLOGIEI ROMANESTI
(TRADITIONS GLORIEUSES DE L'OCEANOLOGIE ROUMAINE)

Constantin TOMESCU

On the occasion of the 50th celebration of Romanian Oceanology, the author evokes the great predecessors, prof. Emil Racovitza, dr. Gr.Antipa and prof. Ioan Borcea.

SCURGEREA DE IONI DIZOLVATI IN APA DUNARII LA VARSAREA IN MAREA NEAGRA
(L'ECOULEMENT D'IONS DISSOUS DANS LE DANUBE A SA CONFLUENCE AVEC LA MER NOIRE)

C.BONDAR şi Georgeta STATE

Some data concerning the ionic composition of the Danube river waters at the entrance into the Black Sea are presented in this paper.

CONSIDERATII ASUPRA DINAMICII CONDITIILOR FIZICO-CHIMICE IN LACUL SINOE IN PERIOADA 1971-1975
(CONSIDERATIONS SUR LA DYNAMIQUE DES CONDITIONS PHYSICO-CHIMIQUES DU LAC SINOE DANS LA PERIODE 1971-1975)

Viorica BOGHICI

The paper presents the dynamic of the physico-chemical parameters in water and unconsolidated sediments. The frequent of the salinity changes and pregnant tendency of diminution year in year out were materialized by passing from 5.5-9.0 g NaCl/l concentration in 1971 to 0.5-1.0 g NaCl/l in 1975.

ASPECTE ALE MORFODINAMICII ACTUALE A LITORALULUI ROMANESC
(SOME ASPECTS OF THE ACTUAL MORPHODYNAMICS OF THE ROMANIAN COAST)

Metodiu RADULESCU

On the basis of several certain traces on the beaches of the north side of the Romanian coast, between the Danube mouths and Constantza, the contribution provides new estimates on the direction and rate of shore dynamical processes.

PROGNOZA INFLUENTEI APELOR DULCI ASUPRA FITOPLANCTONULUI IN PERSPECTIVA DESCHIDERII CANALULUI DUNARE-MAREA NEAGRA (PROGNOSE DE L'INFLUENCE DES EAUX DOUCES SUR LE PHYTOPLANCTON DANS LA PERSPECTIVE DE L'OUVERTURE DU CANAL DANUBE-MER NOIRE)

Nicolae BODEANU şi Mioara USURELU

Data obtained on the planktonic algoflora of mixed water bodies of the Romanian Black Sea sector are presented. Subsequently there are considerations concerning the forecast of the influence on phytoplankton development of the water discharge through the future Danube - Black Sea canal.

ELEMENTE PRIVIND PRODUCTIA ZOOPLANCTONULUI TROFIC DE LA LITORALUL ROMANESC AL MARII NEGRE IN ANUL 1976 (ELEMENTS CONCERNANT LA PRODUCTION DU ZOOPLANCTON TROPHIQUE DU LITTORAL ROUMAIN DE LA MER NOIRE PENDANT L'ANNEE 1976)

Adriana PETRAN

The author presents in the paper the seasonal structure and dynamic of zooplankton populations in the areas off the Danube Delta and Constantza in 1976. In front of the Danube Delta there is an important trophic reserve according the values of the annual zooplankton production.

MODIFICARI IN STRUCTURA BIOCENOZELOR BENTALE DE LA LITORALUL ROMANESC AL MARII NEGRE (MODIFICATIONS DANS LA STRUCTURE DES BIOCENOSES BENTHIQUES SUR LE LITTORAL ROUMAIN DE LA MER NOIRE)

M.-T. GOMOIU

On the basis of the analysis of more than 430 quantitative samples collected in 1976 the author finds a series of changes in the structure of the benthic associations in the sedimentary zones of the Romanian littoral (the dominance of the *Mya* populations - a new species in the Black Sea, the impoverishment of the associations and their area of distribution).

OBSERVATII ASUPRA POPULATIILOR BENTALE DIN COMUNITATEA Spisula-Syndesmia-Cardium DIN ZONA GURILOR DUNARII

(OBSERVATIONS SUR LES POPULATIONS BENTHIQUES DE LA COMMUNAUTE Spisula-Syndesmia-Cardium DE LA ZONE DES EMBOUCHURES DU DANUBE)

Victoria TIGANUS

Research during 1976 concerning the Spisula - Syndesmia - Cardium community in the predeltaic area of the Danube, showed important modifications in both its qualitative and quantitative structure, comparativ to the status as known since 1960-1961. The most relevant change consists in overhelming development of the Syndesmia fragilis populations. Melinna palmata, Oligochaeta and certains meiobenthic groups, such as Nematoda, Harpacticoida and Kinorhyncha, where also very abundant. Mya arenaria, which is a species recently penetrated in this area, became the dominant element of the over-all biomass.Due to these modifications, the productivity of the community increased as well.

OBSERVATII ASUPRA BENTOSULUI MARIN DIN ZONA CONSTANTA IN CONDITIILE ANULUI 1975

(OBSERVATIONS SUR LE BENTHOS MARIN DE LA ZONE CONSTANTA DANS LES CONDITIONS DE L'ANNEE 1975)

Victoria TIGANUS

Effects of the Exuviaella cordata bloom during the summer 1975 on the benthos has been evaluated comparing data obtained from samples taken in April an September,between depths of 16-53m,near Constantza.Oxygen depletion induced by excess organic matter sink produced mass mortality among benthic animals, especially on depths between 28-38 m, where Mollusca were completly eliminated. Mean biomass values decreased in September by 99.80-99.98%, comparative to those from April,within the depth range 16-40 m.Below this depth the modifications were insignificant.

MODIFICARI IN CAPTURILE ROMANESTI LA MAREA NEAGRA SI PERSPECTIVA EXPLOATARII
(CHANGEMENTS DANS LES CAPTURES ROUMAINES EN MER NOIRE ET L'EXPLOITATION EN PERSPECTIVE)

Ileana CAUTIS şi Florica VERIOTI-MARINESCU

In this paper are presented Romanian and Bulgarian catches evolution on a 25 years period. There are observed the same total catches and main species oscillations. Becomes visible some modifications after 1964 year in ratio between catch's species as effect of the predators stocks reserves. There are evidenced changes in importance of various Romanian Sea shore zones as result of different environmental conditions for last period. In the future the fishing must to rely on especially on small size species for which will have to improve fishing gears and utilization.

PESCUITUL SPECIILOR BENTALE DE PESTE IN DREPTUL LITORALULUI ROMANESC

(LA PECHE DES POISSONS BENTHAUX SUR LA PLATE-FORME CONTINENTALE ROUMAINE)

N. BACALBASA-DOBROVICI

The paper gives a brief presentation of the benthonic fishes on the Romanian Black Sea continental shelf. In the past years the catches of these species have decreased and some proposals are made for turning into account these valuable species.

CONTRIBUTII LA CUNOASTEREA POSIBILITATILOR DE PESCUIT ALE SPECIILOR DE MERLUCIU DIN ZONA SUD-VEST AFRICANA A OCEANULUI ATLANTIC

(CONTRIBUTIONS A LA CONNAISSANCE DES POSSIBILITES DE PECHE DES ESPECES DE MERLU DE LA ZONE SUD-OUEST AFRICAINE DE L'OCEAN ATLANTIQUE)

N.JELESCU şi N.C.PAPADOPOL

This work aims to giving some useful elements to contribute to the optimum activity of the Romanian ocean fishing fleet in the Northwest Africa area of the Atlantic Ocean. The authors have taken into consideration the results of the Romanian trawlers fishing in this area in 1970-1971 and 1976.The work includes elements of hydrology,biology, data on the fishery of the species of Merluccius and fishing technology, emphasing the interests of the national fleet in the possibilities of organizing the future fishery.

DATE ASUPRA CONTINUTULUI PIGMENTILOR CLOROFILIENI LA UNELE ALGE MACROFITE DE LA LITORALUL ROMANESC AL MARII NEGRE

(DONNEES SUR LA TENEUR EN PIGMENTS CHLOROPHYLLIENS CHEZ QUELQUES ALGUES MACROPHYTES DU LITTORAL ROUMAIN DE LA MER NOIRE)

AL.S.BOLOGA

The chlorophyll content of three macrophytes was spectrophotometrically determined during 1973 and 1975. Determinations of dry weight and hydrature respectively for these species have been simultaneously done. Pigment content data constitue an indication about algal bioproductive contribution within the framework of littoral ecosystems.

DINAMICA LUNARA A COMPOZITIEI BIOCHIMICE GLOBALE SI A AMINOACIZILOR LA *Actinia aequina* (L.)
(MONTHLY DYNAMICS OF TOTAL BIOCHEMICAL COMPOSITION AND OF AMINOACIDS AT *Actinia aequina* (L.))

Natalia ROSOIU şi Mihai BADEA

Monthly content of water, ash, organic substance, proteins, lipids, total carbohydrats, glycogen, phosphorus and aminoacids in *Actinia aequina* (L.) from the Black Sea is presented in the paper. 18 aminoacids have been recorded by mean of the cromatography technique.

DATE PRIVIND VALOAREA NUTRITIVA A DOUA SPECII DE ALGE MICROFITE PENTRU LARVELE DE MIDII
(ON THE FOOD VALUE OF TWO ALGAL SPECIES TO THE LARVAE OF MUSSELS)

Elena CSERNOK

The results obtained in the trophological experiments purposed to show the relative food value of two species of algae for feeding larvae of *Mytilus galloprovincialis* are presented.

PARTICULARITATI FUNCTIONALE ALE MUSCHIULUI LATERAL ROSU LA PESTI
(FUNCTIONAL PECULIARITIES OF THE LATERAL RED MUSCLE IN FISH)

C. WITTENBERGER

A synopsis is given on the data concerning ultrastructure and metabolism of the lateral red muscle (superficial myotomal muscle) of fishes.

SINTEZA SI UTILIZAREA SUBSTANTELOR TENSIOACTIVE LA DEPOLUAREA APEI DE MARE DE PRODUSE PETROLIERE
(SYNTHESE ET UTILIZATION DES SUBSTANCES TENSIO-ACTIVES POUR LA DEPOLLUTION DE L'EAU DE MER DE PRODUITS PETROLIERS)

Emilia BARBULESCU, O. SERBANESCU şi Victoria PIESCU

Fighting the oil pollution on beaches and shores by the emulsionants products is a very facile method because of the efficiency and rapidity. A large number of anionic emulsionant products were synthetized based on fat acids and polyethoxilated fat alcohols. The obtained products showed good emulsionant qualities, they are biodegradable and present no toxicity.

OBSERVATII ASUPRA FUNCTIONARII TRAULULUI 9o-53/226 (228o OCHI) CU AJUTORUL INSTRUMENTELOR SUBACVATICE
(OBSERVATIONS CONCERNANT LE FONCTIONNEMENT DU CHALUT 9o-53/226 (228o MAILLES) A L'AIDE DES INSTRUMENTS SOUS-AQUATIQUES)

Simion NICOLAEV

The paper contains the results of observations and measurements carried out with midwater trawl 9O-53/226 on"Atlantic II" trawler type (2320 H.P.) referring to tensions distribution in bellyline , codend position facing to the sea bed and mesh opening coefficient value.The paper is ending with recommandations referring to trawls construction and research methods improvement.

APLICAREA IMITATIEI MECANICE IN PROIECTAREA TRAULELOR PE FRINGHII
(APPLICATION DE L'IMITATION MECANIQUE AUX PROJETS DE CHALUTS A CORDAGES)

Simion NICOLAEV

The paper contains the basis arguments for mechanical imitation method application in designing of the trawls with wings made by ropes. Their are presenting results obtained by application of this method in bathypelagic trawl designing 86-54/79 together with practical recommandations.

CONTRIBUTII ROMANESTI PRIVIND TAIEREA SI SUDAREA ELECTRICA SUB APA
(ROMANIAN CONTRIBUTIONS CONCERNING UNDERWATER CUTTING AND WELDING)

Dumitru DOROGAN

The present paper reports a new technology in Romania - a very important tool for divers: arc welding and oxiarc cutting underwater. As a result of many tests was carried out a new type of underwater torch,perfectly insulated very comfortable in handling and flash-back proof in wet oxiarc cutting.