



P S A M M O N A L I A

Newsletter of the Association of Meiobenthologists

Number 25

August 1974

Editor: Bruce C. COULL, Belle W. Baruch Institute
for Marine Biology and Coastal Research,
University of South Carolina, Columbia,
South Carolina 29208 USA

This document is not part of the scientific literature and is not to be cited, abstracted or reprinted as a published document.

Cover by Brian M. Marcotte, Dalhousie University

OFFICERS OF THE ASSOCIATION OF MEIOBENTHOLOGISTS

Executive Committee

Chairman: Bruce C. COULL, Belle W. Baruch Institute for Marine Biology and Coastal Research, University of South Carolina, Columbia, South Carolina 29208, U.S.A.

Treasurer: John H. TIETJEN, Department of Biology, City College of New York, 138th St. at Convent Ave., New York, N. Y. 10031, U.S.A.

Committee Members:

Günter ARLT, Sektion Biologie, Universität Rostock, 25 Rostock, Freiligrathstr. 7-8, East Germany (GDR)

William D. HUMMON, Marine Laboratory, P. O. Box 101, Victoria Road, Torry, Aberdeen, AB9 8DB, Scotland

Alasdair D. MCINTYRE, Marine Laboratory, P. O. Box 101, Victoria Road, Torry, Aberdeen, AB9 8DB, Scotland

Jeanne RENAUD-MORNANT, Laboratoire de Zoologie, Museum d'Histoire Naturelle, 57 Rue Cuvier, F-75 Paris V^e, France

Wilfried WESTHEIDE, II. Zoologisches Institut der Universität, D-34 Göttingen, Berliner Str. 28, West Germany (GFR)

Board of Correspondents

Alain DINET, Station Marine d'Endoume, Rue de la Batterie-des-Lions, F-13007 Marseille, France

Liliana FORNERIS, Instituto de Biociências, Universidade de São Paulo, Caixa Postal 20.520, São Paulo, Brazil

John S. GRAY, Wellcome Marine Laboratory, Robin Hood's Bay, Yorkshire, YO22 4SL, England

Eike HARTWIG, Zoologisches Institut u. Museum, Universität Hamburg, D-2000 Hamburg, Papendamm 3, West Germany (GFR)

W. Duane HOPE, Department of Invertebrate Zoology, National Museum of Natural History, Smithsonian Institution, Washington, D. C. 20560, U.S.A.

G. C. RAO, Zoological Survey of India, 27 Chowringhee Road, Calcutta 13, India

Franz RIEMANN, Institut für Meeresforschung, D-285 Bremerhaven, Am Handelshafen 12, West Germany (GFR)

L. v. SALVINI-PLAWEN, I. Zoologisches Institut/Universität, A-1010 Wien 1, Dr. Karl-Lueger-Ring 1, Austria

Ryohei YAMINISHI, Kyoto University, Seto Marine Biological Laboratory, Sirahama, Wakayama-Ken, Japan

Donald J. ZINN, P. O. Box 589, Falmouth, Massachusetts 02541, U.S.A.

EDITORIAL

John Tietjen and I urge each of you who has not yet paid your dues to send your \$3 (1974 dues) or \$6 (1974/1975 dues) to John immediately. If you are located in North America you have paid your dues or you would not be receiving this issue of PSAMMONALIA. Unfortunately, we were forced to drop 19 North American members from the membership for non-payment of dues. For those outside North America that have not paid their dues, this issue of PSAMMONALIA (#25) will be your last unless your dues are paid. This ultimatum, of course, excludes those members in countries unable to export currencies. We cannot continue to operate with a small percentage of the membership paying for the printing, mailing, etc. Each issue costs us between \$130-\$180 to produce. Based on the current Treasurer's report, we can produce 3 more issues of PSAMMONALIA after this one - so if you have not paid - please do so as soon as possible.

Please note the increased foraminiferan references in the recent literature section of this issue. Bob Ellison of the University of Virginia kindly supplied these and they make a most welcome addition to our newsletter. Dr. Ellison assures me he will continue to send these in and we thank him very much.

Fifty (50) members have returned the ballot which appeared in PSAMMONALIA No. 24 on the proposed constitutional amendment to change the Association's name to International Association of Meiobenthologists. If you have not yet mailed in your ballot, please do so at your earliest convenience - every vote counts.

Bruce C. Coull
Bruce C. Coull, Editor

FINANCIAL REPORTCredits

Balance on hand (prior to PSAMMONALIA #24)	\$376.12
Dues and Contributions received (4/19- 7/7/74)	<u>487.41</u>
TOTAL	\$863.53

Debits

Cost to produce PSAMMONALIA #24	\$168.80
Bank Service Charges (foreign currency exchange etc.)	<u>15.23</u>
TOTAL	\$184.03
TOTAL BALANCE on hand 10 July 1974	\$670.50

John H. Tietjen, Treasurer

NEW MEMBERS

Frank Cantelmo
 Department of Biology
 City College of New York
 138th St. at Convent Ave.
 New York, N. Y. 10031 USA

Allen Z. Paul
 Marine Biology Program
 Lamont-Doherty Geological Observatory
 Palisades, New York 10964 USA

M. Selvakumaran
 Department of Oceanography
 Florida State University
 Tallahassee, Florida 32306 USA
 (Deep sea meiofauna)

J. Kevin Shaw
 Department of Biology
 University of West Florida
 Pensacola, Florida 32504 USA

Brigitte Volkmann
 Instituto di Biologia del Mare, C.N.R.
 Riva 7 Martiri 1364/A
 30122 Venezia, Italy
 (Biology of harpacticoids, particularly
Tisbe)

Michael L. Williams
 214 NE 11th Street
 Delray Beach, Florida 33444 USA
 (Sublittoral interstitial fauna of
 reef areas)

CHANGE OF ADDRESS

Guy Boucher
 Station Biologique
 Place Georges-Teissier
 F-29211 Roscott
 FRANCE

David Dow
 Great Lakes Research
 University of Michigan
 North University Building
 Ann Arbor, Michigan 48104 USA

John W. Fleeger
 Department of Biology
 University of South Carolina
 Columbia, S. C. 29208 USA

S. R. Gelder
 Department of Pure and Applied Zoology
 University of Leeds
 Leeds 2, England

W. D. Hummon
 Marine Laboratory
 P. O. Box 101
 Victoria Road
 Torry, Aberdeen AB9 8DB
 Scotland

Jean A. Merriman
 1403 Cornell Street
 McKeesport, PA 15132 USA

Janet W. Reid
 12817 Bushey Drive
 Silver Spring, MD 20906 USA

Hjalmar Thiel
 Institut für Hydrobiologie
 Universität Hamburg
 D-2 Hamburg 50
 Palmaille 55
 West Germany

Richard M. Warwick
 I.M.E.R.
 13/14 St. James Terrace
 Citadel Road
 Plymouth PL1 3AY
 England

Donald J. Zinn
 P. O. Box 589
 Falmouth, Massachusetts 02541 USA

NEWS FROM THE MEMBERS

B. R. BURNETT, R. R. HESSLER, H. THIEL, D. THISTLE, Scripps Institution of Oceanography: During October-November 1973 we sampled macro-, meio-, and microfauna in the San Diego Trough, 15 miles off San Diego at a depth of 1200m. Sampling was done with modified Ekman grabs of 20 x 20 cm; each grab was subdivided into 4 subcores of 10 x 10 cm. The samples were taken by RUM (Remote Underwater Manipulator) and all its actions on the bottom were observed by television on board ORB (Oceanographic Research Buoy). This method allowed very careful sampling. The grabs were pushed very slowly into the sediment, and no bow wave was created. The grabs are sealed top and bottom and brought to the surface in upright position. Five grab samples as well as other type of samples could be taken in one lowering. Using transponder position location, each of the samples can be accurately located within the 500 m triangular sampling site. Our studies are part of a cooperative program, which includes investigations on mega-, macro-, meio-, and microfauna; bacterial activity; ATP measurements, in situ respiration of single fishes and of the benthic community. A 15-minute movie has been made highlighting the actions of RUM on the bottom. Meiofauna was taken from subcores (100 cm²) to a depth of 1 cm for the study of harpacticoid small-scale spatial distribution and from meiostecher subsamples (10 cm²) to a depth of 6 cm for quantitative analyses of total meiofauna. In all 50 grabs were taken. We will obtain information on number and biomass variation for the different taxa on transects of varying length e.g. sampling intervals of 0.1, 1, 10 and 100 m.

G. BOUCHER, Roscoff: I am presently studying the seasonal distribution of marine nematodes in sublittoral fine sand in the West Channel near Roscoff. Monthly samples (collected by SCUBA) are sectioned at 1 cm levels to study nematode vertical distribution. So far, I have been working mainly on systematics, since many of the species encountered are new. Two papers are presently in press, one on the genus Rhynchonema, and the other on the Desmodorida and soon I hope to complete a study of Chromadoridae. The nematode population is stable, although some species do show seasonal changes in their number. Specific species occupy certain depths in the cores, and often only in that particular layer. To delineate the factors affecting nematode distribution, a bacteriologist (S.CHAMROUX) and myself, are maintaining an enclosed laboratory ecosystem with sand from my station. We hope to correlate the distribution of nematodes and bacteria, under controlled physical and nutritional parameters.

B. C. COULL, University of South Carolina: Besides our (Winona Vernberg and myself) long-term study on ecology, physiology and systematics of South Carolina estuarine meiofauna (a topic I will report on in more detail in an issue of PSAMMONALIA that does not have much news from the members), 9 colleagues and I recently completed a meiobenthos cruise on the R/V EASTWARD. Participating on the cruise were R. E. Ellison, R. P. Higgins, W. D. Hope, W. D. Hummon, R. M. Rieger, W. E. Sterrer, H. Thiel, and J. H. Tietjen. We quantitatively, replicate sampled 3 stations off the North Carolina coast (400, 800, 4000 m) with a box cover. Upon retrieval meiostecher subsamples were immediately split into cm layers. After 6 days at sea, we all returned to shore and engaged in sorting the samples. Live samples were sorted first, then stained for further examination. After one week in our on-shore meiobenthos workshop, many samples were sorted, taxa identified and a good deal of comradery established. The project, supported by NSF, was a most beneficial experience - the results of which we hope to publish next year.

J. S. GRAY, Robin Hood's Bay: Following on from a recent study of effects of interacting heavy metals on protozoan growth rates are two projects. Only by Ph. D. Student Jim Parker is a comparison, using response surface analyses of effects of interacting pollutants on Uronema marina from unpolluted and polluted areas in order to ascertain the range of adaptation to pollutants. Field work, together with Eike Hartwig has produced seventy species of ciliates most new to Britain. The second project by Ned Ashby is a study of Uronema marina in continuous culture using a two stage chemostat. The chemostat has been run twice for over 3 months and even with constant rates of bacterial input populations of ciliates fluctuate in a cyclical manner, but with more complex cycles than predicted by the Lotka-Volterra equations. Computer simulations are being run to try and unravel the cycles. A new run of the chemostat with added heavy metals will be made in an attempt to measure adaptation rates to the pollutant.

For myself I have completed a review paper on animal-sediment relationships (Oceanogr. and Marine Biology, 1974) which is in press and have completed the first part of a two-year study of the meiofauna of the Tees estuary. Using classificatory and ordination techniques, the annelid fauna appears to be related to sediment stability. No major influences of pollutants could be observed. This work is being written up.

Two research projects are planned. One a study of energetics of a mud-living copepod (Platychelipus) with an added component on the influence of pollutants. The second project is a simulation study of a tidal beach varying dissolved organic matter input in order to study community structure and function.

C. HEIP, Universiteit Gent: We recently started an investigation on the ecology of nematodes in the brackish water locality which I have been studying since 1968 (the results on copepods and ostracods will be published in the near future). The importance of nematodes in all marine benthic environments is not reflected in the amount of work on this group; this is probably due to the very considerable systematic difficulties encountered in studying the group. In our laboratory is a team of well known nematode specialists and this, we hope, will enable us to overcome systematic problems. We have started to study the vertical distribution of nematodes; the results agree with published accounts as to the point that nematodes occur to considerable depths in completely anaerobic sediments. This particular sample corresponded to a density of five million nematodes per m². We developed a good method to extract nematodes from mud in a nearly quantitative way. We hope to study the density of all nematode species (around 20) during a year and to correlate these results with culture experiments in the laboratory.

R. M. RIEGER, University of North Carolina: At present our research group includes, besides myself (Systematics and Ecology of Interstitial Turbellaria and Archiannelida), my wife, Gunda E. Rieger, as a visiting postdoctoral fellow from the University of Vienna (Comparative fine structure analysis of the body wall of soft-bodied marine meiofauna), 6 graduate students: M. Crezee (Systematics and Ecology of the Acoel Turbellaria Solenophilomorphidae), D. Doe (Comparative fine structure and study of the pharynx bulbosus in higher Turbellaria), R. Farris (Systematics and Ecology of Gnathostomulida from N. C. and Bermuda, in collaboration with W. E. Sterrer), D. Nixon (Microdistribution and tidal dynamics of Taumastoderma bunti FENCHEL 1970); E. Rupper (Systematics and Ecology of Gastrotrichs from N. C. and Archachon, France); S. Tyler (Comparative fine structure analysis of adhesive organs in interstitial fauna). In a general framework we are concentrating our efforts in two major lines of research: 1) Comparative microanatomy at the ultrastructure level with special emphasis on the construction of body wall and pharynx in soft-bodied marine meiofauna. 2) Character variability population analysis and speciation mechanisms in soft-bodied marine meiofauna. This part is carried out jointly with W. E. Sterrer, Bermuda Biological Station.

G. C. RAO, Calcutta: Another expedition to the Andaman Archipelago was recently undertaken by the Zoological Survey of India during February-April, 1974. This time favorable weather conditions allowed me to make satisfactory collections of the fauna, which appeared quite rich with representatives of almost all the animal groups typical of the habitat. In addition to the collection of certain ecological data, preliminary examination of some taxa i.e. Hydrozoa, Archiannelida, Polychaeta, Gastrotricha, Kinorhyncha, Copepoda, Isopoda, Amphipoda, Tardigrada, Gastropoda and Holothuroidea, was carried out during the expedition. It will take a long time to complete a detailed taxonomic study of the major groups, the fauna probably has many a new species, in addition to the previously known ones. I hope to publish these results slowly in several papers (some in collaboration with other specialists), although difficulties are arising concerning publication of these articles in Indian scientific periodicals. Some of the faunal results from earlier investigations of the area are at different stages of publication.

W. D. HUMMON, Ohio University: I taught "Ecology of Benthic Micrometazoa" during the first summer session at The College of Marine Studies Field Station, University of Delaware. The class, with four graduate students and three post graduate participants, conducted a project applying identical sampling programs to two parallel whole-beach transects. Differences in density and distribution of major meiofaunal taxa between them were assessed. The two transects, 20 m apart, had similar sediments but reflected a hydrographic gradient, in that the profile distance of one was twice that of the other. Preliminary analysis indicates that the shorter, steeper transect had reduced numbers of nematodes, ostracods, juvenile brachiuran decapods, rotifers, oligochaetes and tardigrades (in decreasing order of sampled numbers), but increased numbers of gastrotrichs and nauplii. Turbellarians and copepods remained essentially unchanged. Of unexpected importance was the finding that egg masses of Limulus polyphemus could have a striking effect on meiofaunal numbers. Based on weighted averages from ten sets of sample duplicates, with and without eggs, in zones where eggs were present there occurred an increase of nematodes, gastrotrichs, turbellarians, rotifers and oligochaetes, and a decrease in ostracods, copepods, nauplii and tardigrades.

I received one of 33 NATO Postdoctoral Fellowships awarded this year by the U. S. to scientists and social scientists, and the only one in ecology. I will work for the year 1974-75 with Alasdair McIntyre at the Marine Laboratory in Aberdeen. The research, entitled "Dynamics and variations of intra-generic biological accommodation in marine beach communities," will be conducted primarily at the Loch Ewe and Firth of Clyde sites. Data to be analyzed will include that collected during the year's tenure as well as that already available from previous collections.

ANNOUNCEMENTS

Meetings:

INTERNATIONAL SYMPOSIUM ON EVOLUTION OF POST-PALEOZOIC OSTRACODA,
18-26 August 1974. For further information contact:

Prof. Dr. G. Hartmann
Zoologisches Institut u. Museum
Universität Hamburg
D-2 Hamburg 13
Papendamm 3, West Germany

1st INTERNATIONAL MEETING OF MEIOFAUNA PHYSIOLOGICAL ECOLOGY,
25-29 September 1974, Arcachon, France. For further information contact:

Dr. Pierre Lasserre
Institut de Biologie Marine
Université de Bordeaux
2 rue du Professeur Joyet,
F-33120 Arcachon, France

9th EUROPEAN SYMPOSIUM ON MARINE BIOLOGY, 2-8 October 1974, Oban, Scotland.
Theme: "Biochemistry, physiology, and behaviour of marine organisms in
relation to their ecology." For further information contact:

Dr. Harold Barnes
Dunstaffnage Marine Research Laboratory
P. O. Box 3
Oban, Argyll, Scotland

Publications:

The first issue of a new journal, PALEOBIOLOGY, is scheduled for publication in the Spring of 1974. The journal, sponsored by the Paleontological Society, has as its objective to bring together papers of general interest that emphasize the biological aspects of paleontology. Dr. Ralph G. Johnson, Co-Editor writes, "We also hope to publish papers concerning research utilizing recent organisms and systems if they have strong paleobiological implications. I would hope the journal would attract papers on fossil meiobenthos (forams, ostracodes, etc.) as well as general papers on their evolution." Subscriptions are \$8/year for members of the Paleontological Society, \$12/year for non-members. Potential contributors or subscribers should contact: PALEOBIOLOGY, Department of Geophysical Sciences, University of Chicago, 5734 S. Ellis Ave., Chicago, Ill. 60637 USA.

RECENT LITERATURE

- ANDRASSY, I. 1972. Catalogue of free-living nematodes in Hungary. Alattani Kozlemenek 59(1-4):161-171.
- ANDREN, A. W. & R. C. HARRISS. 1973. Methyl mercury in estuarine sediments. Nature 245:256-257.
- ANDREWS, A. R & G. D. FLOODGATE. 1974. Some observations on the interactions of marine protozoa and crude oil residues. Mar. Biol. 25:7-12.
- APOSTOLOV, A. 1973. Apport vers l'etudes d'harpacticoides pontiques habitant les algues marines. Zool. Anz. 191(3/4):263-280.
- APOSTOLOV, A. 1973. Harpacticoides des eaux saumâtres et des étangs côtiers. Zool. Anz. 191(3/4):281-294.
- ARGO, A. D. 1972. Four new species of the genus Ironus Bastian, 1865 (Nematoda:Ironidae) from South Africa. Phylactia 412:59-66.
- ~~✓✓3/~~ARLT, G. 1973. Vertical and horizontal microdistribution of the meiofauna in the Greifswalder Boden. Oikos, suppl. 15:105-111.
- ATKINSON, H. J. 1973. The respiratory physiology of the marine nematodes Enoplus brevis (Bastian) and E. communis (Bastian) I. The influence of oxygen tension and body size. J. exp. Biol. 59:255-266.
- ATKINSON, H. J. 1973. The respiratory physiology of the marine nematodes Enoplus brevis (Bastian) and E. communis (Bastian) II. The effects of changes in the imposed oxygen regime. J. exp. Biol. 59:267-274.
- AX, P. & R. AX. 1974. Interstittielle Fauna von Galapagos V. Otoplanidae (Turbellaria, Proseriata). Mikrofauna des Meeresbodens 26:28 pp.
- AX, P. & R. AX. 1974. Interstittielle Fauna von Galapagos. VII. Nematoplanidae, Polystyliphoridae, Coelogynoporidae (Turbellaria, Proseriata). Mikrofauna des Meeresbodens 29: 28 pp.
- BAGRI, I. Z. & M. S. JAIRAJPURI. 1973. Studies on Mononchida. V. The Mononels of El Salvador with descriptions of two new genera Aetus and Paracrassibucca. Nematologica 19:326-383.
- BARTSCH, I. 1974. Simognathus minutus (Hodge) (Halacaridae, Acari), eine Wiederbeschreibung nebst Bermerkungen zur Unterfamilie der Simognathinae. Cah. Biol. Mar. 15:275-284.
- BEDINI, C. & F. PAPI. 1974. Fine structure of the Turbellarian epidermis. IN: Biology of the Turbellaria, pp.108-147. (Eds. N. W. Riser & M. P. Morse). McGraw-Hill Co., New York.
- BILES, J. E. 1973. A simple device for counting microorganisms. Bull. W. H. O. 48(4):506-507. ~~X York?~~
- BISHOP, J. A. 1974. The fauna of temporary rain pools in Eastern New South Wales. Hydrobiologia 44(2-3):319-323.
- BLAKE, J. R. & M. A. SLEIGH. 1974. Mechanisms of ciliary locomotion. Biol. Rev. 49:85-125.
- BONADUCE, G. & M. MASOLI. 1970. Benthic marine Ostracoda from Malta, Pubbl. Stn. Zool. Napoli 38:47-56.
- de BOVÉE, F. 1973. Metacyatholaimus effilatus n. sp. espèce nouvelle de Cyatholaimidae (Nematoda) de Banyuls-sur-Mer. Vie Milieu 23(2A):219-226.
- de BOVÉE, F., J. SOYER & Ph. ALBERT. 1974. The importance of the mesh size for the extraction of the muddy bottom meiofauna. Limnol. Oceanogr. 19(2):350-354. ~~X~~
- BROOKS, W. W. 1973. Distribution of recent Foraminifera from the southern coast of Puerto Rico. Micropaleont. 19(4):385-416.
- BROWN, A. C. 1973. The ecology of the sandy beaches of the Cape Peninsula, South Africa. Part 4. Observations on two intertidal Isopoda, Eurydice longicornis (Stüder) and Exosphaeroma truncatitelson Barnard. Trans. R. Soc. South Afr. 40: 381-404.

- Cairns, J. and W. H. Yongue. 1974. Protozoan colonization rates on artificial substrates suspended at different depths. *Trans. Amer. Microsc. Soc.* 93(2):206-210.
- Carter, A. N. 1973. Foraminiferal associations of the backreef facies on the continental shelf of Queensland. IN: *Oceanography of the South Pacific 1972* (International Symposium held in Wellington, New Zealand, 9 to 15 Feb. 1972), compiled by Ronald Fraser. New Zealand National Commission for UNESCO, Wellington, 1973, p. 229-231.
- Chekhoverkaya, M. P. 1973. Distribution of benthonic foraminifers in the north-eastern part of the Bering Sea. *Okeanologija* 13(4):691-696 (In Russian).
- Christiansen, O. 1971. Notes on the biology of Foraminifera. *Vie et Milieu, Suppl.* 22:465-478.
- Corliss, J. O. 1974. The changing world of ciliate systematics: Historical analysis of past efforts and a newly proposed phylogenetic scheme of classification for the protistan phylum Ciliophora. *Syst. Zool.* 23:91-138.
- Cotarelli, V. 1973. Arenopontia gussoae n. sp. nuovo Arpacticoide de acque interstiziali littorali del' isola de Cuba. *Fragm. Entomol.* 9(2): 49-59.
- Cox, N. and J. O. Young. 1974. Some observations on two populations of *Dalyellia viridis* (G. Shaw) (Turbellaria:Neorhabdocoela) living in temporary habitats in England. *Hydrobiologia* 44(2):161-176.
- Craig, P. C. 1973. Orientation of the sand-beach amphipod, *Orchestoidea corniculata*. *Anim. Behav.* 21:699-706.
- Crowe, J. H. and C. G. Camara. 1973. Studies on acarine cuticles-I. Cuticular pores in a marine mite. *Comp. Biochem. Physiol.* 45A(3):757-766.
- Damodaran, R. 1972. Meiobenthos of the mud banks of Kerala coast. *Proc. Ind. natn. Sci. Acad.* 38B(3-4):288-297.
- Dastych, H. 1973. Some Tardigrada from Karakorum, Pakistan. *Bull. Acad. Pol. Sci. Ser. sci. Biol.* 21(7/8):545-549.
- Davis, R. B. 1974. Tubificids alter profiles of redox potential and pH in a profundal lake sediment. *Limnol. Oceanogr.* 19(2):342-346.
- den Hartog, C. 1974. Salt-marsh Turbellaria. IN: *Biology of the Turbellaria*, pp. 229-247. (Eds. N. W. Riser & M. P. Morse). McGraw Hill Co., New York.
- De Rautlin De La Roy, Y. 1973. Contribution à l'écologie bactérienne de l'océan Atlantique Nord. La bactériologie, moyen d'étude supplémentaire de la dynamique des océans. *Bull. Inst. Oceanogr. Monaco* 71:1-36.
- D'Hondt, J.-L. 1973. Contribution à la microfaune interstitielle des plages de l'ouest algérien. *Vie Milieu* 23(2A): 227-242.
- Doe, D. A. 1974. A new species of the order Acochlidiacea (Opistobranchia: Microhedyliidae) from New England. *Trans. Amer. Microsc. Soc.* 93(2):241-247.
- Dolitskaya, I. V. 1972. On the dependence of specific diversity in Foraminifera on the environmental conditions. *Akad. Nauk SSSR, Paleont. Zhurnal* 2:3-9 (In Russian).
- Duchart, P., S. E. Clavert, N. B. Price. 1973. Distribution of trace metals in the pore waters of shallow water marine sediments. *Limnol. Oceanogr.* 18:605-610.
- Ehlers, U., P. Ax. 1974. Interstitielle Fauna von Galapagos. VIII. Trigonomastominae (Turbellaria, Typhloplanoida). *Mikrofauna des Meeresbodens* 30: 32 pp.

- Eisma, D. 1973. Sediment distribution in the North Sea in relation to marine pollution. IN: North Sea Science (Ed., E. D. Goldberg), MIT Press, Collation:131-150.
- Eliaslivili, T. L. 1971. Two new soil-inhabiting nematode species (*Auplidelus paramonovi* and *Tylenchorhynchus georgiensis* n. sp.) of Eastern Georgia. Soobsch. Akad. Nauk Gruzinskoi (Tbilisi) 61:213-216 (In Russian).
- Elmgren, R. 1973. Methods of sampling sublittoral soft bottom meiofauna. Oikos, suppl. 15:112-120.
- Feder, H. M., G. J. Mueller, M. H. Dick, and D. B. Hawkins. 1973. Preliminary benthos survey. IN: Environmental Studies of Port Valdez (Eds., D. W. Hood, et al.), Occas. Publ., Inst. Mar. Sci., Univ. Alaska 3:305-391.
- Fenchel, T. 1974. Intrinsic rate of natural increase: the relationship with body size. Oecologia (Berl.) 14: 317-326.
- Feyling-Hanseen, R. W. 1972. The foraminifer *Elphidium excavatum* (Terquem) and its variant forms. Micropaleont. 18(3):337-354.
- Giaccone, G., B. Scammacca, F. Cinelli, G. Sartoni, and G. Furnari. 1972. Studio preliminare sulla tipologia della vegetazione sommersa del Canale di Sicilia e isole vicine. G. Bot. Ital. 106:211-229.
- Gibson, R. 1974. A new littoral hoplonemertean (*Divanella evelinae*, gen. et sp. nov.) from the coast of Brazil. Bull. Mar. Sci. 23(4):793-810.
- Giese, A. C. and J. S. Pearse (eds.). 1974. Reproduction of Marine Invertebrates. Vol. I, Acoelomate and Pseudocoelomate Metazoans. Academic Press, N. Y. 546 pp.
- Glasby, G. P. 1973. Interstitial waters in marine and lacustrine sediments: A review. J. Roy. Soc. N. Z. 3(1):43-59.
- Glemarec, M. 1973. The benthic communities of the European North Atlantic continental shelf. Oceanogr. Mar. Biol. Annu. Rev. 11:263-289.
- Gorlenko, V. M., E. N. Chebotarev, and E. N. V. I. Kachalkin. 1973. Microbiological oxidation of hydrogen sulphide in the Repnoe Lake (Slavonic lakes). Mikrobiologiya 42:723-728 (In Russian).
- Goulder, R. 1974. The seasonal and spatial distribution of some benthic ciliated Protozoa in Esthwaite water. Fshwat. Biol. 4(2):127-148.
- Grant, K., T. B. Hoare, K. W. Ferrall, and D. C. Steinker. 1973. Some habitats of Foraminifera, Coupon Bight, Florida. Compass 50(4):11-16.
- Groza-Rojancovski, E. 1973. Contributions to the study of free-living nematodes from The Black Sea. Trav. Mus. Hist. natur. "Gr. Antipa," 13:3-25.
- Hallas, T. 1972. Some consequences of varying egg sizes in Eutardigrada. Vidensk. Medd. Dan Naturhist. Foren. Khb. 135:21-31.
- Hamond, R. 1972. Some marine and brackish water copepods from Wells-next-the-Sea, Norfolk England. Trans. Norfolk Norwich Nat. Hist. Soc. 22(4):237-243.
- Hamond, R. 1974. The marine and brackish-water non-Amphipodan Peracaridan Crustacea of Norfolk. Cah. Biol. Mar. 15:197-213.
- Hartmann, G. 1973. Zum gegenwärtigen Stand der Erforschung der Ostracoden interstitieller Systeme. Ann. Spéléol. 28:417-426.
- Hartmann, L. and M. Boes. 1973. Mathematische Formulierung und Behandlung von Lebensgemeinschaften. Z. Wass.-Abwasserforsch. 6:140-150.
- Hartmann-Schröder, G. 1974. Zur Kenntnis des Eulitorals der afrikanischen Westküste zwischen Angola und Kap der Guten Hoffnung und der afrikanischen Ostküste von Südafrika und Mosambique Unter besonderer Berücksichtigung der

- Polychaeten und Ostracoden. Teil II. Die Polychaeten des Untersuchungsgebietes. Mitt. Hamburg. Zool. Mus. Inst., Ergbd. 69:95-228.
- Hartmann-Schröder, G. 1974. Polychaeten von Expeditionen der "Anton Dohrn" in Nordsee und Skagerrak. Veröff. Inst. Meeresforsch. Bremerh. 14:169-274.
- Hausmann, K. 1973. Cytologische Studien an Trichocysten. IX. Die Organisation der Spindeltrichocysten von *Frontonia* im Vergleich zu *Paramecium*-Trichocysten. J. Microsc. 17:199-205.
- Heitzer, R. D. and J. C. G. Ottow. 1973. Halophile denitrifizierende Bakterien aus Sedimenten des Roten Meeres. Naturwissenschaften 60:520.
- Hendelberg, J. 1974. Spermiogenesis, sperm morphology, and Biology of fertilization in the Turbellaria. IN: Biology of the Turbellaria, pp. 148-164. (Eds. N. W. Riser & M. P. Morse). McGraw Hill Co., New York.
- Henley, C. 1974. Platyhelminthes (Turbellaria). IN: Reproduction of Marine Invertebrates, Chap. 5, Vol. I, pp. 267-337. (Eds. A. C. Giese and J. S. Pearse). Academic Press, N. Y.
- Hessler, R. R. and P. A. Jumars. 1974. Abyssal community analysis from replicate box corers in the central North Pacific. Deep Sea Res. 21(3): 185-209.
- Higgins, R. P. 1974. Kinorhyncha. IN: Reproduction of Marine Invertebrates, Chap. 11, Vol. I, pp. 507-518. (Eds. A. C. Giese and J. S. Pearse). Academic Press, N. Y.
- Hiltermann, H. 1973. The sociology of agglutinated Foraminifera from Polar, Scandinavian and Equatorial Seas. Geol. Jahrb., Hannover, Reihe A. 6:101-120.
- Hobson, K. D. 1974. *Orbiniella nuda* new species (Orbiniidae) and nine new records of other sedentary polychaetous annelids from Washington and British Columbia. Can. J. Zool. 52(1): 69-75.
- Hope, W. D. 1974. Nematoda. IN: Reproduction of Marine Invertebrates, Chap. 8, Vol. I, pp. 391-460. (Eds. A. C. Giese and J. S. Pearse). Academic Press, N. Y.
- Hopper, B. E. and R. C. Cefalu. 1974. Free living marine nematodes from Biscayne Bay, Florida. VII. Enoplidae: *Enoplus* species in Biscayne Bay, with observations on the culture and bionomics of *E. paralittoralis* Wieser, 1953. Proc. Helminth. Soc. Wash. 40(2):275-280.
- Huang, T. 1972. Species diversity of benthonic foraminifers in the Taiwan Strait, Taiwan, China. Proc. Geol. Soc. China 15:99-110.
- Hummon, W. D. 1974. Some taxonomic revisions and nomenclatural notes concerning marine and brackish-water Gastrotricha. Trans. Amer. micros. Soc. 93(2):194-205.
- Hummon, W. D. 1974. Gastrotricha. IN: Reproduction of Marine Invertebrates, Chap. 10, Vol. I, pp. 485-404. (Eds. A. C. Giese and J. S. Pearse) Academic Press, N. Y.
- Hunding, C. 1973. Diel variation in oxygen production and uptake in a microbenthic littoral community of a nutrient-poor lake. Oikos 24(3):352-360.
- Hynes, H. B. N. 1974. Further studies on the distribution of stream animals within the substratum. Limnol. Oceanogr. 19(1):92-99.
- Ibanez, M. G. 1973. Contribucion al estudio ecologico de los Anelidos Poliquetos de la peninsula Iberica. Thesis Doctoral, Univ. Complutense Madrid. Ser. A 197:1-125.
- Imajima, M. 1974. Occurrence of species of three families, Eulepethidae, Apistobranchidae, and Heteropsonidae (Polychaeta) from Japan. Bull. Nat. Sci. Mus. Tokyo 17(1):57-64.
- Ito, T. 1974. A new species of marine interstitial isopod of the genus *Microcerberus* from Hokkaido. J. Fac. Sci. Hokkaido Univ. ser. VI Zool. 19(2): 338-345.

- Jansson, A.-M. 1974. Community structure, modelling and simulation of the Cladophora ecosystem. Contr. from the Askö Lab. No. 5.
- Jennings, J. B. 1974. Digestive physiology of the Turbellaria. IN: Biology of the Turbellaria, pp. 173-197. (Eds. N. W. Riser and M. P. Morse). McGraw Hill Co., New York.
- Juario, J. 1974. Neue freilebende Nematoden aus dem sublittoral der Deutschen Bucht. Veröff. Inst. Meeresforsch. Bremh. 14:275-303.
- Kaplan, E. H., J. R. Welker and M. G. Krause. 1974. A shallow-water system for sampling macrobenthic infauna. Limnol. Oceanogr. 19(2): 346-350.
- Kautsky, N. 1974. Quantitative investigations of the red algal belt in the Askö area, Northern Baltic proper. Contr. Askö Lab, Univ. Stockholm, No. 3, 29 pp.
- Kolasa, J. and J. O. Young. 1974. Studies on the genus Stenostomum O. Schmidt (Turbellaria:Catenulida). I. The status of *S. anatirostrum* Marcus 1945 and *S. bryophilum* Luther 1960. Fshwat. Biol. 4(2):149-156.
- Kolasa, J. and J. O. Young. 1974. Studies on the genus Stenostomum O. Schmidt (Turbellaria:Catenulida). II. A new sub-species and records of two species new to Poland. Fshwat. Biol. 4(2):157-162.
- Kolasa, J. and J. O. Young. 1974. Studies on the genus Stenostomum O. Schmidt (Turbellaria:Catenulida). III. A new species from Kenya, East Africa. Fshwat. Biol. 4(2):163-166.
- Kolasa, J. and J. O. Young. 1974. Studies on the genus Stenostomum O. Schmidt (Turbellaria:Catenulida). IV. New records of established species from E. Africa, with notes on their anatomy and distribution. Fshwat. Biol. 4(2):167-176
- Krapp, F. 1973. A fourth Mediterranean Rhynchothorax and remarks on the genus (Pycnogonida). Bull. Zool. Mus. Univ. Amsterdam 3(17):119-124.
- Kurian, C. V. 1972. Ecology of benthos in a tropical estuary. Proc. Ind. nat. Sci. Acad. 38B(3-4):156-163.
- Lagaaïj, R. 1973. Shallow-water bryozoa from deep-sea sands of the Principe Channel, Gulf of Guinea. IN: Living and Fossil Bryozoa, London, pp. 139-151.
- Lamb, G. M. 1972. Distribution of Holocene Foraminiferida in Mobile Bay and the effect of salinity changes. Geol. Survey Alabama, Circ. 82:1-12.
- Le Calvez, Y. and D. Cesana. 1972. Détection de l'état de vie chez les Foraminifères. Ann. Paléont. 58(2):129-134.
- Lipps, J. H., T. E. Delaca, W. Krebs, and W. Stockton. 1972. Shallow-water foraminifera studies, Antarctic Peninsula, 1971-1972. Antarctic Jour. U. S. 7(4):82-83.
- Loden, M. S. 1974. Predation by chironomid (Diptera) larvae on oligochaetes. Limnol. Oceanogr. 19(1):156-159.
- Loden, M. S. 1974. Observations on the fresh-water Nemertean, *Prostoma rubrum* (Leidy) in Alabama. Amer. Midl. Nat. 91(2):434-435.
- Lorenzen, S. 1974. Die Nematodenfauna der sublitoralen regim der Deutschen Bucht, Insbesondere im Titan. Abwassergebeit bei Helgoland. Veröff Inst. Meeresforsch., Bremh. 14:305-327.
- Mack-Fira, V. 1974. The Turbellarian fauna of the Romanian littoral waters of the Black Sea and its annexes. IN: Biology of the Turbellaria, pp. 248-290. (Eds. N. W. Riser & M. P. Morse). McGraw Hill Co., New York.
- Mack-Fira, V. and M. Kawakatsu. 1972. The fauna of the Lava Caves around Mt. Juji-san XII. Proseriata and Tricladida (Turbellaria). Bull. Nat. Sci. Mus. Tokyo 15(4):637-648

- Maddock, R. F. 1973. Zenker's organ and a new species of Saipahetta (Ostracoda). *Micropaleontology* 19 (2):193-208.
- Mangum, C. and W. Van Winkle. 1973. Responses of aquatic invertebrates to declining oxygen conditions. *Am. Zool.* 13:529-541.
- Malakhov, V. V. 1974. Life cycle of a free-living marine nematode Pontonema vulgare in the White Sea. *Vestn. Moskovsh. Univ.* 1-1974:10-14 (In Russian).
- Malikcy, H. 1974. Eine im marinen Gezeitenbereich lebende europäische Trichapterinlarve. *Arch. Hydrobiol.* 73(2):266-269.
- Marinov, T. 1973. Quelques harpactioides psammophiles inconnus pour le bassin de la Mer Noire. *Vie Milieu* 23(2A):309-326.
- Marshall, S. M. 1973. Respiration and feeding in copepods. *Adv. Mar. Biol.* 11:57-120.
- Martin, R. E. and D. Steinker. 1973. Evaluation of techniques for recognition of living Foraminifera. *Compass* 50 (4):26-30.
- Matoba, Y. and H. Nakagawa. 1972. Recent foraminiferal assemblages from the continental shelf and slope off Akita, Japan Sea coast of northeast Japan. *Prof. Jun-Ichi Iwai Mem. Vol.* : 657-671 (In Japanese).
- McLachlan, A. J. 1974. Recovery of the mud substrate and its associated fauna following a dry phase in a tropical lake. *Limnol. Oceanogr.* 19(1):74-83.
- Meadows, P. S. and A. H. Bird. 1974. Behaviour and local distribution of the freshwater oligochaete Nais pardalis Piguet (Eam. Naididae). *Hydrobiologia* 44(2):267-278.
- Michailova-Neikova, M. 1971. Harpactioida (Crustacea, Copepoda) reported from mountain waters in Bulgaria. III. Lyulin mountain (water moss and wet forest leaves). *God. Sofii Uni. Fak. Kn. I. Zool. Fiziol. Biochem. Zhitov.* 65: 89-99.
- Milbrink, G. and T. Wiederholm. 1973. Sampling efficiency of four types of mud bottom samples. *Oikos* 24(3):479-482.
- Murray, J. W. 1973. *Distribution and Ecology of Living Benthic Foraminiferids.* Crane, Russak & co., Inc., New York. 274 pp.
- Nagabhushanam, A. K. 1972. Studies on the marine intertidal ecology of the Orissa coast. *Proc. Ind. natn. Sci. Acad.* 38B(3-4):308-315.
- Nair, B. N. and A. G. Govindankutty. 1972. Observations on the colonization of graded sands by the interstitial fauna of the south-west coast of India. *Proc. Ind. natn. Sci. Acad.* 38B (3-4):251-258.
- Newell, R. C. 1973. Factors affecting the respiration of intertidal invertebrates. *Am. Zool.* 13:513-528.
- Noodt, W. 1973. Artenreichtum und Monardsches Prinzip beim Crustacea des Limnoparammons der Neotropis. *Amazoniana* 4:255-261.
- Noodt, W. 1974. Bathynellacea (Crustacea, Syncarida) auch in Nord Amerika? Die Naturwissenschaften 61(3):132.
- Oertel, G. F. 1972. Patterns of sediment transport at nearshore zones influenced by wave and tidal currents: a study utilizing fluorescent tracers. *Tech. Rep. Ser., Mar. Sci. Program., Univ. Syst. Ga.* 72: 1-28.
- Olsson, I., R. Rosenberg, and E. Olundh. 1973. Benthic fauna and zooplankton in some polluted Swedish estuaries. *Ambio* 2:158-163.
- Pamatmat, M. M. and A. M. Bhagwat. 1973. Anaerobic metabolism in Lake Washington sediments. *Limnol. Oceanogr.* 18:611-627.
- Paul, A. Z. and R. J. Menzies. 1971. Sub-tidal isopods of the Fosa de Cariaco, Venezuela, with descriptions of two new genera and twelve new species. *Bol. Inst. Inst. Oceanogr., Univ. Oriente* 10:29-48.

- Petr, T. 1974. Dynamics of benthic invertebrates in a tropical man-made lake (Volta Lake 1964-68). Standing crop and bathymetric distribution. *Arch. Hydrobiol.* 73(2):245-265.
- Pierce, S. and M. E. Nathanson. 1974. Electron microscopical investigations on surface-related structures in *Allogromia* (Protozoa: Foraminiferida). *Trans. Amer. Microsc. Soc.* 93(2):170-179.
- Plante-Cuny, M. R. 1973. Recherche sur la production primaire benthique en milieu tropical. I. Variations de la production primaire et des teneurs en pigments photosynthétiques sur quelques fonds sableux. *Cah. O.R.S. T.M. ser. Hydrobiol.* 11(3):317-358.
- Platonova, T. A. 1968. Klass crugli cervi.-Nematoda. IN: Akad. nauk. USSR, 1st. Biol. juschnide morjei Verlar "naukpwa dinka" Kiev 1968. "opred. fauni Cernogo i Azovskogo morei 1:111-183 (Well illustrated compilation of Black Sea and Sea of Azov nematodes).
- Popovici, I. 1973. Nematode du sol in fauna roumanie. St. Si. Cerc. Biol. (Bucaresti), ser. Zool. 25(1): 9-15.
- Por, F. D. 1972. Priapulida from deep bottoms near Cyprus. *Isr. J. Zool.* 21: 525-528.
- Preston, A. 1973. Cadmium in the marine environment of the United Kingdom. *Mar. Pollut. Bull.* 4(7):105-107.
- Pujos, M. 1972. Repartition des Foraminifères benthiques sur le plateau continental du Golfe de Gascogne a l'ouest de l'embouchure de la Gironde. *Revista Espanola de Micro-paleont.* 4(2):141-155.
- Ramm, A. E. and D. A. Bella. 1974. Sulfide production in anaerobic micro-cosms. *Limnol. Oceanogr.* 19(1):110-118.
- X Rao, G. C. 1972. On the geographical distribution of interstitial fauna of marine beach sand. *Proc. Ind. natn. Sci. Acad.* 38B(3-4):164-178.
- Ribas, L. B. 1971. Nota preliminar sobre a composição qualitativa de fauna de Foraminíferos da plataforma e de bancos submarinos ao largo da costa leste Brasileira. *Anais Acad. Brasil. Ciencias* 43, Simposio Brasileiro de Paleontologia: 629-642.
- Rieger, R. M. 1974. A new group of Turbellaria-Typhloplanoida with a proboscis and its relationship to the Kalyptorhynchia. IN: *Biology of the Turbellaria*, pp. 23-62. (Eds. N. W. Riser & M. P. Morse). McGraw Hill Co., New York.
- Riser, N. W. 1974. Nemertinea. IN: *Reproduction of Marine Invertebrates*, Chap. 5, Vol. I, pp. 359-385. (Eds. A. C. Giese and J. S. Pearse). Academic Press, N. Y.
- Riznyk, R. Z. 1973. Interstitial diatoms from two tidal flats in Yaquina Estuary, Oregon, USA. *Bot. Mar.* 16:113-138.
- Rodrigues, M. 1971. Foraminiferos Recentes da Ilha de Trindade. *Anais Acad. Brasil. Ciencias* 43: Simposio Brasileiro de Paleontologia, p. 643-654.
- Rosenfield, D. C. and B. C. Coull. 1974. Adult morphology and larval development of *Paramphiascella fulvofasciata* n. sp. (Copepoda, Harpacticoida). *Cah. Biol. Mar.* 15:295-317.
- Rosset-Moulinier, M. 1972. Étude des Foraminifères des côtes nord et ouest de Bretagne. *Lab. Géol. l'École normale supérieure*, Paris, 225 p.
- Röttger, R. 1973. Die Ektoplasmahülle von *Heterostegina depressa* (Foraminifera: Nummulitidae). *Mar. Biol.* 21:127-138.
- Rouville, A. 1972. Biocoenose de Foraminifères en relation avec les conditions physico-chimiques du milieu dans les bassins et l'avant-port de Saint-Malo (Ille-et-Vilaine). *Cah. Micro. paléont.* 3(1):1-10.
- Salvat, B. 1973. Recherches d'écologie quantitative dans les écosystèmes coralliens de Polynésie. *Terre Vie* 27:456-480.

- Salvini-Plawen, L.v. 1974. Zur Morphologie und Systematik der *Priapulida: Chaetostephanus praeposteriens*, der Vertreter einer neuen Ordnung *Seticoronaria*. *Z. zool. Syst. Evolut.-forsch.* 12(1):31-54.
- Schafer, C. T. 1973. Distribution of foraminifera near pollution sources in Chaleur Bay. *Water Air Soil Pollut.* 2(2):219-233.
- Scheibel, W. 1973. Zur Taxonomie des Harpacticoiden (Cop.) *Amphiascus graciloides trisetatus* Klie aus der Kieler Bucht. *Kieler Meeresforsch.* 29: 148-150.
- Schiemer, F. and A. Duncan. 1974. The oxygen consumption of a freshwater benthic nematode, *Tobrilus gracilis* (Bastian). *Oecologia (Berl.)* 15: 121-126.
- Schmidt, P. 1974. Interstitielle Fauna von Galapagos. IV. Gastrotricha. *Mikrofauna des Meeresbodens* 26: 76 pp.
- Schnitker, D. 1971. Distribution of foraminifera on the North Carolina continental shelf. *Tulane Stud. Geol. Paleontol.* 8(4):169-215.
- Schoepfer-Sterrer, C. 1974. Five new species of Urodasyids and remarks on the terminology of the genital organs in Macrodasyidae (Gastrotricha). *Cah. Biol. Mar.* 15:229-254.
- Sellier de Civrieux, J. M. 1970. Biofacies bentónicas de foraminíferos en la plataforma continental de Cumaná, Venezuela. *Inst. Oceanogr. Bol., Univ. Oriente* 9:21-70.
- Sellier de Civrieux, J. M., and P. J. Bermudez. 1972. Las biofacies de Foraminíferos bentónicos del Golfo de Santa Fe, Venezuela Oriental.- Venezuela Minist. Minas e Hidrocarburos, Bol. Geol. Publ. Especial No. 5, Memoria, Cuarto Congr. Geol. Venez., Tomo III, Geol. General y Estrat., Parte III, p. 1924-1982.
- Sen Gupta, B. K. 1972. Distribution of Holocene benthonic Foraminifera on the Atlantic continental shelf of North America. *Internat. Geol. Congr.*, 24th, Montreal, Sec. 8:125-135.
- Shearer, R. I. 1974. A simple and efficient benthos sorting dish. *Rice Creek Biol. Field. Sta. Bull.* 1(1):75.
- Silver, M. L. 1972. Handling and storage of chemically and biologically active ocean sediments. *Mar. Tech. Soc. Jour.* 7(5):32-36.
- Simmons, K. L. and B. J. Landrum. 1973. Bottom photographs of antarctic benthos. *Antarct. J. U. S.* 8:41-43.
- Sliter, W. V. 1974. Test ultrastructure of some living benthic foraminifers. *Lethaia* 7(1):5-16.
- Soyer, J. 1973. Contribution à l'étude des copépodes harpacticoides de Méditerranée Occidentale 7. Le genre *Bradya Boeck* (Ectinosomidae Sars, Olofsson). Systematique, Ecologie. *Vie Milieu* 23 (2A):327-342.
- Stehman, C. F. and M. Gregory. 1973. A preliminary account of benthonic and planktonic Foraminifera in Baffin Bay, Davis Strait and the Labrador Sea. IN: Hood, P. J., ed., *Earth Science Symposium on Offshore Eastern Canada*, Ottawa, Feb. 1971. *Canada Geol. Survey Paper 71-23*: 499-507.
- Sterrer, W. 1974. Gnathostomulida. IN: *Reproduction of Marine Invertebrates*, Chap. 6, Vol. I, pp. 345-357. (Eds. A. C. Giese and J. S. Pearse). Academic Press, N. Y.
- Sterrer, W. and R. M. Rieger. 1974. Retronectidae-A new cosmopolitan marine family of Catenulida (Turbellaria). IN: *Biology of the Turbellaria*, pp. 63-92. (Eds. N. W. Riser & M. P. Morse), McGraw Hill Co., New York.

- Stschendrina, Z. G. 1972. Foraminifera of the Tonking Gulf. IN: The Fauna of the Tonking Gulf and Conditions of Life In It. Acad. Sci. U.S.S.R., Zool. Institut, p. 257-276 (In Russian).
- Tezuka, Y. 1974. An experimental study on the food chain among bacteria, Paramecium and Daphnia. Int. Revue ges. Hydrobiol. 59:31-37.
- Thane, A. 1974. Rotifera. IN: Reproduction of Marine Invertebrates, Chap. 9, Vol. I, pp. 471-483. (Eds. A. C. Giese and J. S. Pearse). Academic Press, N. Y.
- Torres, J. J. and C. P. Mangum. 1974. Effects of hyperoxia on survival of benthic marine invertebrates. Comp. Biochem. Physiol. 47:17-22.
- Van Khanh, N., I. Drzycimski, and J. Chojnacki. 1972. Feeding and food composition of sprat from Bornholm Depth. Acta Ichthyol. Piscatoria 2:55-66.
- Walker, K. R. and R. K. Bambach. 1974. Feeding by benthic invertebrates: Classification and terminology for paleoecological analysis. Lethaia 7(1):67-78.
- Walz, B. 1973. Zur Feinstruktur der Muskelzellen des Pharynx-Bulbous von Tardigraden. Z. Zellforsch. Mikrosk. Anat. 140(3):389-399.
- Webster, R. M. 1974. An inexpensive sampler for studying the microbiology of river mud. Limnol. Oceanogr. 19 (1):159-161.
- Westheide, W. 1973. Nouvelles récoltes d'annélids interstitielles dans les plages sableuses du Bassin d'Arcachon. Vie Milieu 23(2A):365-370.
- Westheide, W. 1974. Interstitielle Polychaeten aus brasiliianischen Sandstränden. Mikrofauna des Meeresbodens 31:18 pp.
- Westheide, W. and P. Schmidt. 1974. Interstitial fauna von Galapagos. VI. Aeolosoma maritimum dubiosum nov. ssp. (Annelida, Oligochaeta). Mikrofauna des Meeresbodens 28:11 pp.
- Westheide, W. and E. Wawra. 1974. Organisation, Systematik und Biologie von Microhedyle cryptophthalma nov. spec. (Gastropoda, Opisthobranchia) aus dem Brandungsstrand des Mittelmeeres. Helgoländer wiss. Meeresunters. 26: 27-41.
- Williams, D. D. and N. E. Williams. 1974. A counterstaining technique for use in sorting benthic samples. Limnol. Oceanogr. 19(1):152-153.
- Woodin, S. A. 1974. Polychaete abundance patterns in a marine soft-sediment environment: The importance of biological interaction. Ecol. Monogr. 44:171-187.
- Young, J. O. 1972. The Turbellaria of some Friesland lakes with incidental records of Gastropoda and Hirundinea. Zool. Bijdr 13:59-70.
- Young, J. O. 1973. The occurrence of micro turbellaria in some British lakes of diverse chemical content. Arch. Hydrobiol. 72(2):202-224.
- Zakhidov, M. T. 1973. Nematodes of some biotopes in Kurssky Bay of the Baltic Sea. Zool. Zh. 52(9):1404-1405 (In Russian).