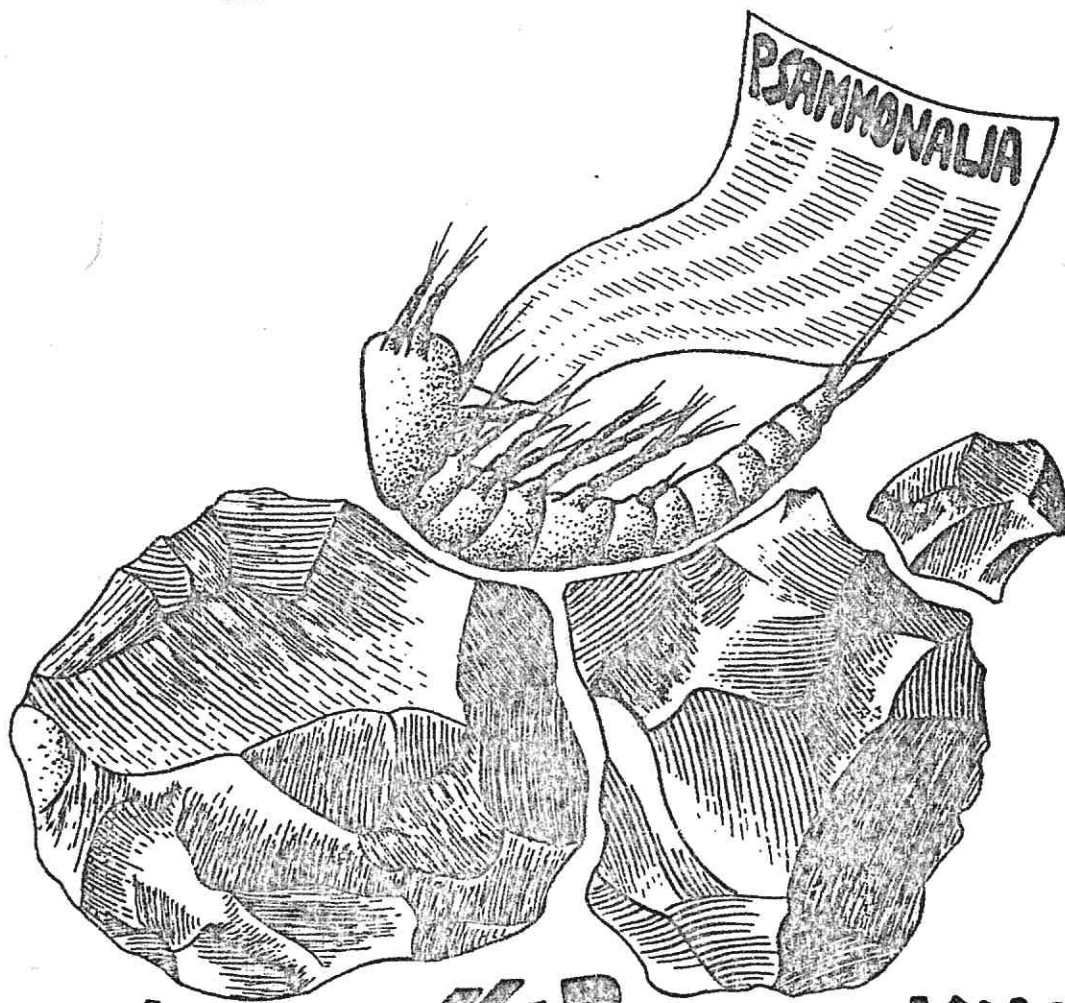


84

# PSAMMONALIA



**NEWSLETTER** OF THE **ASSOCIATION**  
OF **MEIOBENTHOLOGISTS**

**1972**

**NUMBER 76**

P S A M M O N A L I A

Newsletter of the Association of Meiobenthologists

Number 16

March, 1972

Editor: Wilfried WESTHEIDE, II. Zoologisches Institut  
der Universität, D-34 Göttingen, Berliner Str.28  
Germany (FRG)

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

OFFICERS OF THE ASSOCIATION OF MEIOBENTHOLOGISTS

Executive Committee

Chairman : Wilfried WESTHEIDE,  
II. Zoologisches Institut der Universität  
D-34 Göttingen, Berliner Str. 28  
Germany (FRG)

Committee

Members : John S. GRAY, Wellcome Marine Laboratory,  
Robin Hood's Bay, Yorkshire, England  
W. Duane HOPE, Department of Invertebrate  
Zoology, Museum of Natural History,  
Smithsonian Institution, Washington D.C.  
20560, U.S.A.  
A.D. MCINTYRE, Marine Laboratory, P.O.Box 101,  
Victoria Road, Aberdeen, Scotland, England.  
Jeanne RENAUD-MORNANT, Laboratoire de Zoologie,  
Museum d'Histoire Naturelle, 57 Rue Cuvier,  
F-75, Paris V<sup>e</sup>, France.

Board of

Correspondents : Bruce C. COULL, Clark University, Department  
of Biology, Worcester, Massachusetts 01610  
Tom FENCHEL, Zoologisk Institut, Laboratorium B,  
Økologi, Ole Worms Allé, Aarhus Universitet,  
DK-8000 Århus C, Denmark  
William D. HUMMON, Ohio University, College of  
Arts and Sciences, Department of Zoology and  
Microbiology, Athens, Ohio 45701, U.S.A.  
Claude JOUIN, Faculté des Sciences de Paris,  
Laboratoire de Zoologie, 9. Quai Saint-Bernard,  
Paris V<sup>e</sup>, France  
Leland W. POLLOCK, Marine Biological Laboratory,  
Woods Hole, Massachusetts 02543, U.S.A.  
Franz RIEMANN, Institut für Meeresforschung,  
D-285, Bremerhaven, Am Handelshafen 12, Germany  
Donald J. ZINN, University of Rhode Island,  
Rhode Island, Kingston, 02881, U.S.A.  
(not complete)

E D I T O R I A L

In the past years Psammonalia has become a valuable help for all of us and a means of a lively interchange of personal and scientific informations.

Initially put to live by Robert P.Higgins; W.Duane Hope and Donald J. Zinn, John S. Gray was the Editor for the last two years. Thanks to his enthusiasm and his many new ideas the Newsletter has been given further impulses. During his Editorship the Association of Meiobenthologists came formally into existence. He was deeply concerned in it. We owe Dr. Gray thanks and acknowledgement.

The issues for 1972-1973 will come from Göttingen. I express my sincere hopes that again in the future a good deal of the members will take active part in forming Psammonalia. I am looking forward to your suggestions and critique and ask for any reports and letters concerning our field of interest.

One of the good ideas of John Gray was that Psammonalia should not only be a vehicle for the dissemination of literature but as well a forum for new or debatable problems. That was started by him with his comments on "The Future of Meiofaunal Research". I catch up the idea and invite the members of the Association to bring forward problems they are concerned with.

=====

The new cover was animated by John Masry, we are grateful for this. I intend to replace it as soon as I get a new qualified design.

Göttingen, 28.3.1972

Wilfried Westheide  
Editor

F I N A N C I A L R E P O R T

|                        |    |                 |
|------------------------|----|-----------------|
| Brought forward        | DM | 453.44          |
| Subscriptions received |    | <u>168.41</u>   |
| Total                  |    | 521.85<br>===== |

John Gray has handed over the Chairmanship the finances being well satisfactory. To preserve this healthy position it is absolutely necessary that all members pay their contributions. They amount to 3 Dollar per year and should transferred by international money order to account Dr. Wilfried Westheide Kreissparkasse Göttingen No.100034057.

=====

C H A N G E S O F A D D R E S S

|  |   |
|--|---|
| Dr. Gieselbert Apelt<br>Zoologisches Institut<br>D-852 <u>Erlangen</u><br>Universitätsstr. 19<br>Germany (FRG)   | Dr. Karl Schilke<br>Institut für Pädagogik der<br>Naturwissenschaften<br>D-23 <u>Kiel</u><br>Olshausenstr. 40/60  |
| Dr. B.E. Hopper<br>Division of Biology<br>Rosenstiel School of Marine<br>and Atmospheric Sciences<br>University of Miami<br>10 Rickenbacker Causeway<br>Miami, Florida 33149, U.S.A. | Dr. Gertraut Teuchert<br>Uni-Fachbereich Biologie<br>Abteilung für Anatomie<br>und Morphologie<br>D-84 <u>Regensburg</u><br>Universitätsstr.<br>Germany (FRG) |
| Dr. K.C. Rajan<br>Mar Athanasius College<br>Kothamangalam College P.O.<br>Kerala, S. India   |   |

N E W M E M B E R S

Personal data and fields of interest of new members are often a bit too poor or are even completely missing. I should be pleased if future members gave a more detailed account of their projects and plans.

Dr. G. Arlt  
Sektion Biologie  
Universität Rostock  
DDR-25 Rostock  
East Germany  
Freiligrathstr. 7-8  
(Quantitative investigations  
in meiofauna, especially Ostra-  
coda and Copepoda)

B.M.C. Marcotte  
Department of Biology  
Clark University  
Worcester, Massachusetts 01610  
U.S.A.

T. Imamura  
Department of Biology,  
Ibaraki University,  
Mito, Japan

A.S. Sasekumar  
School of Biological Sciences  
University of Malaya  
Kuala Lumpur, Malaya

J.V. Juario  
Institut für Meeresforschung  
D-285 Bremerhaven  
Am Handelshafen 12  
Germany (FRG)

(" I am presently working for my doctoral degree under Prof.Gerlach through a DAAD Scholarship. My primary interest is in the taxonomy, ecology and distribution of the freeliving marine nematodes. For my dissertation, I am currently working on the ecology of sublittoral meiobenthos in the German Bay with special reference to the nematodes.")

Dr. Eike Rachor  
Institut für Meeresforschung  
D-285 Bremerhaven  
Am Handelshafen 12

("I work in the I.f.M. in Bremerhaven where I investigate the dynamics of the benthic fauna in the German Bight, especially the macrobenthos of the sublittoral. My special interest covers the effects of pollution to marine communities. Moreover I work on the nematodes of the marine meiobenthos (material from 2 "Meteor" expeditions to the Iberian deep sea, nematodes from the Suez canal, revision of the genus *Viscosia* )

NEWS FROM THE MEMBERS

Cl. Delamare Deboutteville: "The book "Biologie des Eaux Souterraines Littorales et Continentales", issued in 1960, is still available in Hermann bookseller, 115 Bd Saint Germain Paris 6, but for a short time only, a few copies only are left."

K. C. Rajan: "I am happy to inform that I submitted my doctorate thesis to the University of Kerala in February 1972 on the subject "Studies on the interstitial fauna of the south-west coast of India". 328 pp.

The work was carried out at the Department of Aquatic Biology & Fisheries (formerly called The Marine Biological Laboratory) University of Kerala, Trivandrum, under the supervision of Prof. Dr. N. Balakrishnan Nair, Professor of Marine Biology & Fisheries, University of Kerala.

At present I am working as lecturer in Zoology, at Mar Athanasius College, Kothamangalam, Kerala."

P. Schmidt: "I am going to the Charles Darwin Research Station at Galápagos for a period of 15 months from from mid-January 1972. During this time, Prof.P.Ax, U.Ehlers, S.Hoxhold and W.Westheide will visit Galápagos for a two-months'stay each. We hope to be able to study nearly all groups of the soft fauna alive and to preserve the hard fauna for work at home. Starting with a qualitative survey, we will proceed to quantitative work on population densities, zonation within the beaches and life cycles of some selected species. We think that a comparison between these results (obtained in a region with fairly constant and high water temperature and those of our previous studies in the North Sea, the Baltic and Norway may draw on the importance of temperature as a factor in the interstitial environment. The study should further bear on the problem of island faunas. The comparison between the interstitial fauna of Galápagos and that of the Pacific coast of the continent will, however, need studies in the latter region, too."

My address till 1.4.73.: Estación Biológica Charles Darwin

Isla Santa Cruz / Galápagos, Casilla Especial C-H-D  
Guayaquil, Ecuador, South America

S. Lorenzen: "As a part of investigations in the benthos, carried out by the Zoological Institute in Valdivia (Chile) in the region between the island of Chiloe and the continent, I concentrate on the nematodes. Lentic and lotic zones were investigated in intertidal as well as in sublittoral biotopes, up to maximum depth of 30 m. The samples out of the sublittoral are taken by means of diving to render exact quantitative countings of meiofauna."

N E W F I L M S  
(and accompanying publications)

SCHMIDT, P., 1971: *Hypsibius dujardini* (Tardigrada). Organisation und Fortpflanzung. Encyclop. Cinemat. E 1658

SCHMIDT, P., 1971: *Milnesium tardigradum* (Tardigrada). Organisation und Fortpflanzung. Encyclop. Cinemat. E 1659

SCHMIDT, P., 1971: Organisation und Fortpflanzung von Tardigraden. Institut f.d. Wiss.Film Göttingen, C 1062



R E C E N T L I T E R A T U R E

The Smithsonian Institution has now published the lectures given during the Symposium on Meiofauna Research, 1-11 July 1969, Tunis. The lectures contributed give a review of the present knowledge of ecology and systematics of nearly all important taxa of meiofauna. Here they were cited apart from the other references.

HULINGS, N.C., 1971. Proceedings of the First International  
(Editor) Conference on Meiofauna.  
Smithsonian Contr. Zool. 76, 1-205.

CLAUSEN, C.: Interstitial Cnidaria: Present Status of Their Systematics and Ecology. 1-8.

STERRER, W.: Gnathostomulida: Problems and Procedures. 9-15

KIRSTEWER, E.: The Interstitial Nemertean Fauna of Marine Sand. 17-19.

HUMMON, W. D.: The Marine and Brackish-Water Gastrotricha in Perspective. 21-23.

HIGGINS, R.P.: A Historical Overview of Kinorhynch Research. 25-31.

HOPE, W.D.: The Current Status of the Systematics of Marine Nematodes. 33-36.

GRAY, J.S.: The Meiobenthic Bryozoa. 37-39.

SWEDMARK, B.: A Review of Gastropoda, Brachipoda, and Echinodermata in Marine Meiobenthos. 41-45.

JOVIN, C.: Status of the Knowledge of the Systematics and Ecology of Archiannelida. 47-56.

WESTHEIDE, W.: Interstitial Polychaeta (Excluding Archiannelida). 57-70.

LASSERRE, P.: Oligochaeta from the Marine Meiobenthos: Taxonomy and Ecology. 71-86.

HESSLER, R.R.: Biology of the Mystacocarida: A Prospectus. 87-90.

HULINGS, N.C.: Summary and Current Status of the Taxonomy and Ecology of Benthic Ostracoda Including Interstitial Forms. 91-96.

NOODT, W.: Ecology of the Copepoda. 97-102.

NEWELL, I.M.: Problems in the Study of Subtidal Halacaridae (Acari). 103-107.

RENAUD-MORNANT, J., and L.W.POLLOCK: A Review of the Systematics and Ecology of Marine Tardigrada. 109-117.

MONNIOT, F.: Les Ascidies littorales et profondes des sédiments meubles. 119-126.

JANSSON, B.-O.: The "Umwelt"  
of the Interstitial Fauna.  
12-140.

POLLOCK, L.W.: Ecology of Inter-  
tidal Meiobenthos. 141-148.

MCINTYRE, A.D.: Observations on  
the Status of Subtidal Meio-  
fauna Research. 149-154.

GOMOIU, M.T.: Ecology of Sub-  
tidal Meiobenthos. 155-160.

= = = = =

WELLS, J.B.J.: A Brief Review  
of Methods of Sampling the Meio-  
benthos. 183-186.

HESSLER, R.R.: Problems of  
Meiobenthic Sampling in the  
Deep Sea. 187-190.

GRAY, J.S.: Sample Size and  
Sample Frequency in Relation to  
The Quantitative Sampling of  
Sand Meiofauna. 191-197.

= = = = =

HUSMANN, S.: Ecological Studies  
on Freshwater Meiobenthos in  
Layers of Sand and Gravel.  
161-169.

KÜHL, H.: On Changes of the  
Interstitial Water after  
Decomposition of Organic  
Matter. 171-179.

WILLIAMS, R.: A Technique for  
Measuring the Interstitial  
Voids of a Sediment Based on  
Epoxy Resin Impregnation.  
199-205.

AMOUREUX, L. 1972.

Annélides polychètes recueillies sur les pentes du Zalus continental, au large de la Galice (Espagne). Campagnes 1967 et 1968 de la "Thalassa". Cah. Biol. Mar. 13: 63-89.

APOSTOLOV, A. 1971.

Recherches sur la systematique et la distribution des Copepodes harpacticoides de la côte bulgare. Zool. Ann. 186: 337-347.

ARGUE, C.W. 1971.

Some terrestrial tardigrades from New Brunswick, Canada. Can. J. Zool. 49: 401-416.

ARGUE, C.W. 1972.

Tardigrades from New Brunswick, Canada. 2. Can. J. Zool. 50: 87-94.

X BACCETTI, B. & F. ROSATI. 1971. Electron microscopy of tardigrades: III. The integument. J. Ultrastructure Res. 34: 214-243.

BAUCHHENS, J. 1971.

Die Kleinturbellarien Frankens. Ein Beitrag zur Systematik und Ökologie der Turbellaria excl. Tricladida in Süddeutschland. Int. Revue Ges. Hydrobiol. 56: 609-666.

H BECKER, H.-K. 1970.

Beitrag zur Kenntnis der Copepoda Harpacticoides sublittoraler Weichböden in der Kieler Bucht. Kiel. Meeresforschung 26: 56-73.

BELLO, A. 1970.

Nematodes encontrados en los suelos de Canarias. An. edafor. Agrobiol. 29: 575-600.

BERTOLANI, R. 1971.

Mitosi somatiche e constanza cellulare nemerica nei Tardigradi. Atti Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur. Sez III, 48: 739-742.

BLAKE, L.A. 1971.

Revision of the genus Polydora from the East coast of North America (Polychaeta: Spionidae). Smithsonian Contribution to Zoology Number 75: 1-32.

BOCQUET, Ch. 1971.

Espèces nouvelles décrites de la région de Roscoff entre 1945 et 1970. Cah. Biol. Mar. 12: 381-404.

BOGUTA, K.K. 1970.

A new representative of turbellarians (Acoela) Anaperus biaculeatus sp.n. from the sublittoral of the White Sea. (In Russian). Zool. Zh. 49: 198-208.

BOUCHER, G. 1970.

Deux espèces nouvelles de nématodes de la vase terrigène côtière de Banyuls-sur-Mer. Bull. Mus. nat. Hist. Nat. Paris, (2. Ser.) 42: 975-983.

BRESCIANI, J., & M. KØIE. 1970.

On the ultrastructure of the epidermis of the adult female of Kronborgia amphipodicola Christensen and Kanneworff, 1964 (Turbellaria, Neorhabdocoela). Ophelia, 8: 209-230.

BROWN, A.C. 1971.

The ecology of the sandy beaches of the Cape peninsula, South Africa. Part 1: Introduction. Trans. R. Soc. S. Afr. 39: 247-279.

BRUNET, M. 1970.

Turbellariés Schizorhynchidae de sables infralittoraux de la côte marseillaise. Cah. Biol. Mar. 11: 279-306

BRUNET, M. 1971.

Cheliplana varcauda n. sp., nouveau Turbellarié calyptorhynque de la famille des Karkinorhynchidae. Ann. Univ. Provence - Sciences, 45: 25-28.

CAIRNS, J. & K.L. DICKSON. 1970.

Reduction and restoration of the number of freshwater protozoan species following acute exposure to Copper and Zinc. Tran. Kans. Acad. Sci. 73: 1-10.

CALS, P., C. DELAMARE-DEBOUTTEVILLE et J. RENAUD-MORNANT. 1971.

Caractères anatomiques des Mystacocarides (Crustacea). Etude de Derocheilocaris remani Delamare-Deboutteville et Chappuis 1954. C. R. Acad. Sc. Paris, 272: 3154-3157.

CAZAUX, C. 1972.

Développement larvaire de Mocraspio meznikouvianis in D.J. Crisp. ed. Fouerth European Marine Biology Symposium, 247-258.

CHAWLA, M.L., E. KHAN &

S.K. PRASAD. 1970.

Wilsotylus bangaloreiensis gen. et sp. n. (Nematoda, Plectidae) from soil around roots of mango, (Mangifera indica) from Bangalore, India. Bull. entomol. India, 10: 146-149.

COGNETTI-VARRIALE, A.-M. 1971.

Sur un syllidien des eaux polluées du port de Livourne: Syllides edentula Claparède. Cah. Biol. Mar. 12: 111-115.

COINEAU, N. 1971.

Les isopodes interstitiels. Documents sur leur écologie et leur biologie. Mém. Mus. nation. Hist. Nat. Paris (A), 64: 1-170.

COOK, D.G. 1971.

Trichodrilus allegheniensis n. sp. (Oligochaeta, Lumbriculidae) from a cave in southern Tennessee. Trans. Amer. Microc. Soc. 90: 381-383.

COTTARELLI, V. 1970.

Parastenocaris tyrrhenidis n. sp., nuova harpacticide interstiziale de Sardegna (Crustacea, Copepoda). Fragm. Entomol. Roma, 7: 61-71.

COTTARELLI, V. 1971.

Delamarella galatae n. sp., nuovo Harpacticoida di acque sotteranee littorali di Sardegna. Frag. Entomol. Roma, 7: 289-301.

X CROWE, J.H., I.M. NEWELL & W.W. THOMSON. 1971.

Cuticle formation in the tardigrade, *Macrobiotus areolatus* Murray. *J. Microsc.* 11: 121-132.

X CROWE, J.H., I.M. NEWELL & W.W. THOMSON. 1971.

Fine structure and chemical composition of the cuticle of the tardigrade, *Macrobiotus areolatus* Murray. *J. Microsc.* 11: 107-120.

DAO, F. 1970.

Climatic influence on the distribution pattern of plant parasitic and soil inhabiting nematodes. *Mededel. Landbouwhogeschool Wageningen. Nederland* 70; 2: 1-181.

DÖRJES, J. 1970.

*Haplodiscus bocki* sp. n., eine neue pelagische Turbellarie der Ordnung Acoela von der Molukken-See mit einer Diskussion der Gattung. *Arkiv. Zool.* 23:255-266.

DÖRJES, J. 1971.

Monographie der Proporidae und Solenofilomorphidae (Turbellaria Acoela). *Senckenberg. Biol.* 52: 113-137.

DÖRJES, J. 1971.

Fanggeräte zur Erforschung bodenlebender Tiergemeinschaften. *Senckenberg. a. Meer, Natur u. Museum*, 101: 45-60

EVDONIN, L.A. 1971.

The interstitial Kalyptorhynchia (Turbellaria, Neorhabdocoela) from the bay of Great Peter of the Sea of Japan. *Isledovaniya fauni Morjei* 8 (16). Fauna i flora zaliva Posjeta japonskovo morja. 55-71. In Russian.

FANNING, K.A. & M.E.Q. PILSON 1971. Interstitial silicia and pH in marine sediments: some effects of sampling procedures. *Science* 173: 1228-1231.

FINCHAM, A.A. 1971.

Ecology and population studies of some intertidal and subtidal sand-dwelling amphipods. *J. Mar. Biol. Ass. U.K.*, 51: 471-488.

FRIESE, U.E. 1970.

Between the tides of the Puget Sound. *Underwater Nat.* 6: 16-21.

X FROLOV, L. 1971 (?)

Variations saisonnières de la densité du meiobenthos et des Nématodes des sables littoraux. in: *Ecology of marine organisms, Reports of Conference of Young Scientists of Moscou University, Moscou* : 89-90.

GAGARIN, V.G. 1971.

Novye i redkie vidy nematod iz Mchinskogo i Dubossarskogo vodo Khrannlnshch. (New and rare species of nematodes from the Uchinsky and Dubossarsky water reservoirs). *Zool. Zh.* 50: 474-482. in Russian.

- GERBAN, M., N.COINEAU et C.  
DELAMARE-DEBOUTTEVILLE. 1971.  
Des Gallobathynellinae, nouvelle  
sous-famille des Bathynellacea  
(Crustacea, Malacostraca).  
C. R. Hebd. Acad. Sci., Paris,  
Sér. D. 272: 2907-2909.
- GIERE, O. 1971.  
Marionina spicula - ein ökolo-  
gisch und morphologisch speziali-  
sierter mariner Enchytraeide  
(Oligochaeta). Helgoländer wiss.  
Meeresunters. 22: 350-361.
- GIERE, O. 1971.  
Pygidialporen bei marinen Enchi-  
traeidae (Oligochaeta), Struktur  
und Funktion einer coelo-recta-  
len Verbindung. Z. Morph. Tiere  
69: 273-282.
- GOULDER, R. 1971.  
Vertical distribution of some  
ciliated protozoa in two fresh-  
water sediments. Oikos 22: 199-  
203.
- HALL, J.R. 1972.  
Aspects of the biology of  
*Derocheilocaris typica* (Crusta-  
cea: Mystacocrida). II. Dis-  
tribution. Mar. Biol. 12: 42-52.
- HAMOND, R. 1971.  
The Australian species of  
*Mesochra* (Crustacea: Harpacti-  
coida) with a comprehensive key  
to the genus. Austr. J. Zool.,  
sup. 7: 32pp.
- HARTZBAND, D.J. 1971.  
Community structure in subtidal  
meiobenthic Harpacticoid. M. S.  
Thesis, Ohio univ., 36 pp.
- HAZEL, J.E. 1970.  
Atlantic continental Shelf and  
slope of the United States....  
Ostracode zoogeography in the  
southern Nova Scotian and  
Northern Virginian faunal  
provinces. U. S. G. S. Prof.  
Paper, 529-E: 21 pp., Figs, plates.
- HARRIS, R. P. 1972.  
The distribution and ecology of  
the interstitial meiofauna of  
a sandy beach at Whitesand Bey,  
East Cornwall. J.mar. biol.  
Ass. U. K., 52: 1-18.
- HEUNERT, H.H. 1971.  
Präparationsmethoden für Vital-  
beobachtungen an Mikroorganismen.  
Zeiss-Informationen, 1-14.
- HICKS, G. R. F. 1971.  
Checklist and ecological notes  
on the fauna associated with  
some littoral corallinean  
algae. Bull. Nat. Sci.  
Wellington, 2: 47-60.
- HICKS, G. R. F. 1971.  
Some littoral harpacticoid  
copepods, including five new  
species from Wellington,  
New Zealand. N. Z. J. Mar.  
Fshw. Res., 5: 86-119.
- HILLMANN, R. E. 1971.  
Effects of dredging on marine  
ecology. World Dredging and  
Mar. Constr. 7: 25.
- D'HONDT, J. L. 1971.  
Note sur quelques gastrotriches  
*Chaetonotidae*. Bull. Soc. Zool.  
Fr., 96: 215-235.

- D'HONDT, J. L. 1971.  
Gastrotricha. Oceanogr. Mar.  
Biol. Ann. Rev. 9: 141-192.
- HRABĚ, S. 1971.  
On *Trichodrilus pragensis* Vejd.  
(Olygochaeta, Lumbriculidae).  
Vestn. Česk. Spol. Zool. 35:  
205-208.
- HUNDING, C. 1971.  
Production of benthic microalgae  
in the littoral zone of a eutro-  
phic lake. *Oikos*, 22: 389-397-
- HUSMANN, S. 1971.  
Eine neue Methode zur Entnahme  
von Interstitialwasser aus sub-  
aquatischen Lockergesteinen.  
*Arch. Hydrobiol.* 68: 519-527.
- HUSMANN, S. 1971.  
Die gegenseitige Ergänzung  
theoretischer und angewandter  
Grundwasser-Limnologie; mit Er-  
gebnissen aus Wasserweken Wies-  
badens. Sicherstellung der  
Trinkwasserversorgung Wiesbadens.  
79-90.
- ITÔ, T. 1971.  
The biology of a harpacticoid  
copepod, *Harpacticus uniremis*  
Kröyer. *J. Fac. Sci. Hokkaido*  
*Univ.*, ser. 6, 18: 235-255.
- IVANOV, A. V. 1971.  
On the primitivism of Acoela.  
*Zool. Zh.* 50: 621-632.  
in Russian, Engl. Summ.
- JAIRAJPURI, M. S. 1971.  
Studies on Mononchida of India.  
IV. The genera *Sporonchulus*,  
*Bathyodontus* and *Oionchus* (Nema-  
toda). *Nematologica* 17: 407-412.
- KEMP, A.L.W., H.A. SAVILE,  
C.B. GRAY & A. MUDROCHOVA.  
1971. A simple corer and a  
method for sampling the mud-  
water interface. *Limnol.*  
*Oceanogr.* 16: 689-694.
- KOŁOSA, J. 1971.  
Two new species of Micro-  
turbellaria of the genera  
*Stenostomum* O. Schmidt and  
*Macrostomum* O. Schmidt. *Bull.*  
*Acad. Polon. Sci.* 19: 743-747.
- KRAUSE, H.R., und G. MAAK.  
1971. Versuch einer Zonierung  
des Brackwassergebietes der Ems  
mit Hilfe der Nematodenfauna.-  
Forschungsstelle für Insel-  
und Küstenschutz der Nieder-  
sächsischen Wasserwirtschafts-  
verwaltung, Jahrewbericht 1970,  
22: 57-63.
- KULINITCH, L.A. 1970.  
Two new Plagiostomids (Tur-  
bellaria, Prolecithophora) from  
the Bering Sea. *Zool. Zh.* 49:  
1614-1623. In Russian, Engl. Summ.
- KULINITCH, L. A. 1970.  
A new species of *Plicastoma*  
(Turbellaria, Prolecithophora)  
from the Sea of Japan. *Zool.*  
*Zh.* 49: 339-348. In Russian,  
Engl. Summ.
- LAFARGUE, F. 1972.  
Les Didemmidae (Prochordata)  
d'Helgoland. *Helgoländer wiss.*  
*Meeresunters.* 23: 100-116.



LASSERRE, P. 1971.

The marine Encyrtidae (Annelida, Oligochaeta) of the eastern coast of North America with notes on their geographical distribution and habitat. Biol. Bull. Mar. Biol. Lab., Woods Hole. 140: 440-460.

LASSERRE, P. et J. RENAUD-MORNANT. 1971.

Consommation d'oxygène chez un Crustacé meiobenthi interstitiel de la sous-classe des Mystacocarides. C. R. Acad. Sci. Paris, 272: 1011-1014.

LASSERRE, P. et J. RENAUD-MORNANT. 1971.

Interpretation écophysiological de température et de salinité sur l'intensité respiratoire de *Derocheilocaris remani biscayensis* Delamare 1953 (Crustacea, Mystacocarida). C. R. Acad. Sci. Paris, 272: 1159-1162.

LAUBIER, L. 1971.

*Prionospio salzi* sp. nov., un spionidien (Annélide, Polychète) des côtes méditerranéennes d'Israël. Isr. J. Zool. 19: 183-190.

LAUBIER, L. 1971.

*Schroederella berkeleyi* sp. n., un nouvel Orbiniidae (polychète sédentaire) de la faune interstitielle littorale du Massachusetts, U.S.A. J. Fish. Res. Bd. Can., 28: 1483-1486.

LINDGREN, E.W. 1971.

Psammolittoral marine tardigrades from North Carolina and their conformity to worldwide zonation patterns. Cah. Biol. Mar. 12: 481-496.

LORENZEN, S. 1971.

Die Nematodenfauna im Verklappungsgebiet für Industrieabwasser nordwestlich von Helgoland. I. Araeolaimida und Monhysterida. Zool. Anz. 187: 223-248.

LORENZEN, S. 1971.

Die Nematodenfauna im Verklappungsgebiet für Industrieabwasser nordwestlich von Helgoland. II. Desmodorida und Chromadorida. Zool. Anz. 187: 283-302.

LUPORINI, P., G. MAGAGNINI & P. TONIGORGI. 1971.

Contribution à la connaissance des Gastrotriches des côtes de Toscane. Cah. Biol. Mar. 12: 433-455.

MACK-FIRA, V. 1970.

Turbellariate din România (Archoophora, Prolecithophora, Proserata, Rhabdocoela, Lecithoepitheliata) - Studiu sistematic, ecologic și zoogeografic. Rezumatul tezei doctorat. Univ. Bucuresti, Fac. Biol., 70 pp.



MACK-FIRA, V., 1970: Sur la position systématique de l'espèce *Castradella otophthalma* (Plotnikov 1906). Rev. Roumain. Biol., Zool. 15: 3-10.

MACK-FIRA, V., 1971: Deux turbellariés nouveaux de la Mer Noire. Rev. Roum. Biol., Zool. 16: 233-240.

MAMKAEV, J.V., 1971: On the Convoluta (Turbellaria, Acoela) from the South Primorsk. (In Russian) *Isledovanija fauni morjei VIII(XVI)*, Fauna i flora zaliva Posjeta japonskovo morja. 31-54.

MAMKAEV, J. V., I.M. DROBYSHEVA 1971. O mnozhestvennoi zakladke semennykh sumok i ich nakonetschnikov u beskischetschnoi turbellarii *Convoluta convoluta*. Doklady akademii nauk UdSSR, 196: 1474-1476. (In Russian).

MARCUS, A. 1970. La liste des espèces de Copepodes trouvées dans les eaux du littoral roumain de la Mer Noire et dans la lagune Sinoe. Trav. Mus. Hist. Nat. "Gr. Antipa", 10: 7-17.

MARCUS, E. 1970. Turbellaria (Addenda). South African Animal Life-Results of the Lund University Expedition in 1950-1951. 14: 9-18.

MARCUZZI, G. & A.M. LORENZONI. 1970. Considerazioni ecologiche sul popolamento animale del Lago Santo di Cembra. Stud. Trentini Sci. Nat. Sez. B. Biol., 47: 81-90.

MATHIAS, J.A. 1971. Energy flow and secondary production of the amphipods *Hyaella azteca* and *Crangonyx richmondensis occidentalis* in Marion Lake, British Columbia. J. Fish. Res. Bd. Canada, 28: 711-726.

MICHAILOVA-NEIKOVA, M. 1965. About the Harpacticoid of Bulgaria. Ann. Univ. Sofia, Fac. Biol. 60: 201-223.

MICHAILOVA-NEIKOVA, M. 1968. Schizopera gligici Petk. 1957 (Cop., Harpacticoida) of Bulgaria, Frag. Balcan., V. 19: 129-133.

MICHAILOVA-NEIKOVA, M. & F. VOINOVA-STAVREVA. 1969. Contribution to the study on the Harpacticoida (Crust., Copepoda) of the Bulgarian Black Sea coast. Ann. Univ. Sofia, Fac. Biol. 63: 37-43.

MONNIOT, C. 1972. *Dicopia antirrhinum* n. sp., ascidie de la pente du plateau continental du Golfe de Gascogne. Interpretation nouvelle de la famille des Octacnemidae. Cah. Biol. Mar. 13: 9-20.

MONNIOT, Fr. 1971. Les ascidies des grandes profondeurs récoltées par les navires Atlantis et Chain. Cah. Biol. Mar. 12: 457-469.

MOORE, P. G. 1971. The Nematode fauna associated with holdfasts of kelp (*Laminaria hyperborea*) in North-East Britain. J. Mar. Biol. Ass. U.K. 51: 589-604.

- MÜLLER, U., und P. AX. 1971.  
Gnathostomulida von der Nordsee-  
insel Sylt mit Beobachtungen zur  
Lebensweise und Entwicklung von  
Gnathostomula paradoxa Ax. Akad.  
Wiss. Lit., Mainz, Mikrofauna d.  
Meeresbodens 9: 311- 349.
- NARANG, H. K.  
The excretory system of nematodes:  
Structure and ultrastructure of  
the excretory system of *Enoplus  
brevis*. Nematologica, 16: 517-  
522.
- NEDWELL, D.B., & G.D. FLOODGATE  
1971: The seasonal selection by  
temperature of heterotrophic  
bacteria in an intertidal sedi-  
ment. Mar. Biol. 11: 306-310.
- NIELSEN, C. 1971: Entoproct  
life-cycles and the entoproct/  
ectoproct relationship.  
*Ophelia* 9: 209-341.
- O'RIORDAN, C.E. 1971:  
Meiobenthic harpacticoida on the  
coast of Ireland. Proc. Roy.  
Irish Acad. 71: 191-210.
- PAMATMAT, M.M. 1971: Oxygen  
consumption by the seabed. IV.  
Shipboard and laboratory ex-  
periments. Limnol. Oceanogr.  
16: 536-550.
- PEARCE, J.B. & J.R. CHESS. 1972.  
Comparative investigations of the  
development of epibenthic  
communities from Gloucester,  
Massachusetts to ~~St~~ Thomas,  
Virgin Islands in D.J. Crisp, ed.  
Fourth European Marine Biology  
Symposium, 55-62.
- PENNAK, R.W. 1971: A fresh-  
water archiannelid from the  
Colorado Rocky Mountains. Trans.  
Amer. Microsc. Soc. 90: 372-375.
- PENNAK, R.W. 1971: Toward a  
classification of lotic habitats.  
*Hydrobiol.* 38: 321-334.
- PERSOONE, G.  
Ecology of fouling on submerged  
surface in a polluted harbour.  
*Vie et Milieu*, suppl. 22: 613-636.
- PFANNENSTIEL, H.-D.  
Zur sexuellen Differenzierung  
des Borstenwurmes *Ophryotrocha  
puerilis*. *Naturwiss.* 58: 367.
- PFANNENSTIEL, H.-D. 1972.  
Eine neue *Ophryotrocha*-Art  
(Polychaeta, Eunicidae) aus  
Japan. *Helgoländer wiss. Meeres-  
unters.* 23: 117-124.
- PILATO, G. 1971: Su una nova  
specie di *Doryphoribius* (Eu-  
tardigrada, Hypsibiidae) e  
considerazioni sulla posizione  
filogenetica del genere.  
*Boll. Zool.* 38: 145-149.
- PLATANOVA, T.A. 1971: Free-  
living marine nematodes from  
the Possjet Bay of the Sea of  
Japan. (In Russian) *Isledovanija  
fauni morjei* 8 (16). Fauna i  
flora zaliva Posjeta japns-  
kovo morja. 72.
- POLLOCK, L.W., & W.D. HUMMON  
1971: Cyclic changes in inter-  
stitial water content, atmos-  
pheric exposure, and temperature  
in a marine beach. *Limnology and  
Oceanography* 16: 522-535.

- X RAO, Ch. G. 1971: On two species of marine interstitial Tardigrada from the east coast of India. Proc. Indian Acad. Sci. (B), 73: 53-57.
- RENAUD-MORNANT, J. 1970(1971). Campagne d'essais du "Jean Charcot" (3-8 Décembre 1968). 8. Méio-benthos. II. Tardigrades. Bull. Mus. nat. Hist. Nat., Sér. 2, 42: 957-969.
- RENAUD-MORNANT, J. 1970(1971). Tardigrades marins des Bermudes. Bull. Mus. nat. Hist. Nat., Sér. 2, 42: 1268-1276.
- RENAUD-MORNANT, J., B. SALVAT & C. BOSSY. 1971: Macro-benthos and meiobenthos from the closed lagoon of a Polynesian Atoll, Maturei Vavao (Tuamotu). Biotropica 3: 36-55.
- REISH, D.J. 1970: The effects of varying concentrations of nutrients, chlorinity and dissolved oxygen on polychaetous annelids. Wat. Res. 4: 721-735.
- RIEDL, R.J. 1971: On Onychognathia, a new genus of Gnathostomulida from the tropical and subtropical West Atlantic. Int. Rev. ges. Hydrobiol., 56: 201-204.
- RIEDL, R.J. 1971: on the genus Gnathostomulida (Gnathostomulida). Int. Rev. ges. Hydrobiol., 56: 385-496.
- RIEDL, R.J. & R. MACHAN. 1972. Hydrodynamic patterns in lotic intertidal sands and their bioclimatological implications. Mar. Biol. 13: 179-209.
- RIEDL, R.J., N. HUANG, & R. MACHAN. 1972: The subtidal pump: a mechanism of interstitial water exchange by wave action. Mar. Biol. 13: 210-221.
- RIEGER, R.M. 1971. Bradynectes sterreri gen. nov., spec. nov., eine neue psammbionte Macrostomide (Turbellaria). Zool. Jb. Syst. 98: 205-235.
- RIEGER, R.M. 1971: Die Turbellarienfamilie Dolichomacrostomidae nov. fam. (Macrostomida). I. Teil. Vorbemerkungen und Karlingiinae nov. subfam. 1. Zool. Jb. Syst. 98: 236-314.
- RÖSSNER, J. 1971: Einfluss der Austrocknung des Bodens auf wandernde Wurzel-nematoden. Nematol., 17: 127-144.
- ROZSZAK, R. 1971. Metadasydytes quadrimaculatus g. n., sp. n. (Gastrotricha). Bull. Acad. pol. Sci., Sér. Sci. biol. 19: 65-66.
- SAIDOVA, Kh. M. 1971. On Foraminifera distribution near the Pacific coast of South America. Okeanologija (Mosk,) 11: 256-265.
- SHAPIRO, J., W.T. EDMONDSON & D.E. ALLISON. 1971: Changes in the chemical composition of sediments of Lake Washington, 1958-1970. Limnol. Oceanogr. 16: 437-452.

- SKAUEN, D.M., N.MARSHALL & R.J. FRAGALA. 1971: A liquid scintillation method for assaying  $^{14}\text{C}$ -labelled benthic microflora. J. Fish. Res. Bd. Canada, 28: 769-770.
- SOKOL'SKAYA, N. J. 1971: A new species of the genus Paranais (Olygochaeta, Naididae) from Kamchatka. (In Russian). Zool. Zh. 50: 930-933.
- SOROKIN, Y.J. 1970: Numbers, activity and production of bacteria in bottom sediments of the Central Pacific. Okeanologija (Mosk.) 10:1055-1065.
- SOUTHWARD, A.J., & E.C.SOUTHWARD 1971: Observations on the role of dissolved organic compounds in the Nutrition of benthic Invertebrates. II. Uptake by other animals living in the same habitat as Pogonophora, and by some littoral Polychaeta. Sarsia 48: 61-70.
- SUDZUKI, M. 1971: An analysis of colonization in freshwater microorganisms. I. Colonization at 17 stations along the 5 lakes of the Mt. Fuji (Japan). Zool. Magaz. (Dobutsugako Zasshi) 80: 191-201.
- SUDZUKI, M. 1971: Die das Kapillarwasser des Lückensystems bewohnenden Gastrotrichen Japans. Zool. Magaz. (Dobutsugako Zasshi) 80: 256-257.
- SUKUL, N.C. 1969. Cryptonchulus, a new genus of soil nematode allied to Cryptonchus from Andamans, India. Indian J. Helminthology 21: 23-26.
- SCHNEIDER, J. 1971: Niedere Pilze aus Bodenproben des Brack-und Meerwassers der englischen Westküste. Kieler Meeresf. 27: 94-101.
- SCHOCKAERT, E.R. 1971. Turbellaria from Somalia. I. Kalyptorhynchia (Part 1). Monitore zool. ital. (N.S.) Suppl. IV: 101-122.
- SCHOCKAERT, E.R., & M. BRUNET 1971: Turbellaries Polycystididae (Turbellaria, Kalyptorhynchia) from the Marseille-Area. II. Gallo-rhynchus simplex n.g., n.sp. and G. mediterraneus n.sp. Ann. Soc. Roy. Belg. 101:65-75.
- <sup>RR</sup> SCHOPF, T.J.M., A.FARMANFARMAIEN, & J.L. GOOCH. 1971: Oxygen consumption rates and their paleontological significance. J. Paleont. 45: 247-252.
- STERRER, W. 1971: Agnathiella beckeri nov. gen. nov. spec. from Southern Florida: the first Gnathostomulid without jaws. Int. Rev. ges. Hydrobiol., 56: 215-226.
- STRAARUP, B.J. 1970: On the ecology of turbellarians in a sheltered brackish-water bay. Ophelia 7: 185-216.

TAYLOR D.L. 1971: On the symbiosis between *Amphidinium klebsii* (Dinophyceae) and *Amphiscolops langerhansi* (Turbellaria: Acoela). J. mar. Biol. Ass. U.K. 51: 301-313.

THIEL, H. 1971: Häufigkeit und Verteilung der Meiofauna im Bereich des Island-Faröer-Rückens. Ber. Deutsch. Wiss. Kommission f. Meeresforschung 22: 99-128.

TIETJEN, J.H. 1971: Ecology and distribution of deep-sea meio-benthos of North Carolina. Deep. Sea. Res. 18: 941-957.

TIETJEN, J.H. 1971: Pennate Diatoms as ectocommensals of free-living marine nematodes. Oecologia (Berl.), 8: 135-138.

TOULEMONT, A. 1972: Influence de la nature granulométrique des sédiments sur les structures benthiques. Baies de Douarnenez et d'Andierne (Ouest-Finistère). Cah. Biol. Mar. 13: 91-136.

TOWNSHEND, J.L., & L.R. WEBBER. 1971: Movement of *Pratylenchus penetrans* and the moisture characteristics of three Ontario soils. Nematol. 17: 47-57.

TREBALLION, A. 1971: Studies on *Tellina tenuis* Da Costa III. Aspects of general biology and energy flow. J. exp. mar. Biol. Ecol., 7: 95-122.

VANGEROW, E. F. 1972.

Ökologische Beobachtungen an Foraminiferen des Brackwasserbereichs der Rhône-mündung (Südfrankreich). J. exp. mar. Biol. Ecol. 8: 145-165.

VITIELLO, P. 1971: Espèces nouvelles de Leptolaimidae (Nematoda) et description du genre *Leptolaimoides* n. gen. Cah. Biol. Mar. 12: 419-432.

VITIELLO, P. & G. BOUCHER. 1971: Nouvelles espèces de Chromadorida (Nematoda) des vases terrigènes méditerranéennes. Bull. Soc. zool. Fr., 96: 187-196.

VOLKMANN-ROCCO, B. 1971: Some critical remarks on the taxonomy of *Tisbe* (Copepoda, Harpacticoida). Crustaceana 21: 127-132.

VORONOVA, M.N. 1971: Observations on the life cycle of the Foraminiferan *Rosalina* sp. (In Russian). Vestn. Lenigr. Univ. 3: 19-27.

WARD, A.R. 1972: Two new species of *Xyala* (Nematoda, Monhysteroidea) from sublittoral sediments in Liverpool Bay. Mar. Biol. 13: 176-178.

WOLF, E.G., & C.E. CUSHING. 1971. An automated system for multiple recording of diurnal pH. Limnol. & Oceanogr. 16: 577-579.

ZUNARELLI-VANDINI, R. 1971. Observations on a population *Podarke pallida* (Polychaeta: Hesionidae) in heavily polluted waters. Boll. Zool. 38: 177-180.