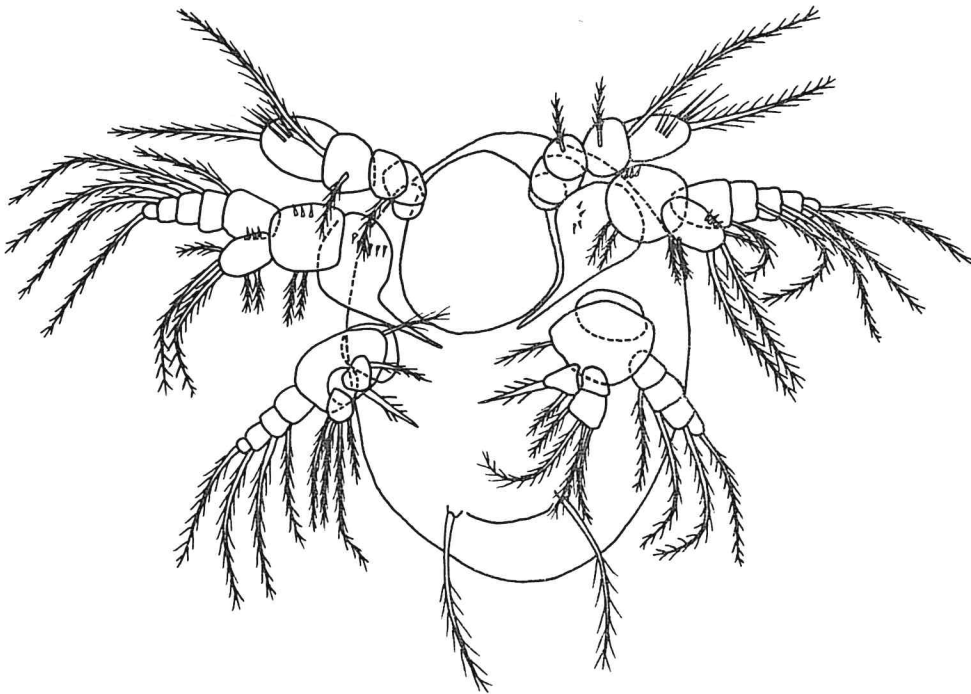


PSAMMUNIA

NEWSLETTER OF THE INTERNATIONAL ASSOCIATION
OF
MEIOBENTHOLOGISTS

COURRIER DE L'ASSOCIATION INTERNATIONALE
DES
MEIOBENTHOLOGISTES



n° 33

1976

PSAMMONALIA

Newsletter of the International Association of Meiobenthologists
Courrier de l'Association Internationale des Méiobenthologistes

Number 33

July, 1976

Editeur : Jeanne Renaud-Mornant
Muséum National d'Histoire Naturelle
Laboratoire de Zoologie (Vers)
43, rue Cuvier
75231 - Paris Cedex 05
France

Cover : Nauplius I of *Speocyclops racovitzai*, a subterranean Copepod, drawing by
F. Lescher-Moutoué.

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

Composed and printed at the Laboratoire Arago, 66650-Banyuls-sur-Mer, France.

INTERNATIONAL ASSOCIATION OF MEIOBENTHOLOGISTS
ASSOCIATION INTERNATIONALE DES MEIOBENTHOLOGISTES

COUNCIL MEMBERS - MEMBRES DU CONSEIL

Executive Committee

- Chairman : Jeanne RENAUD-MORNANT, Muséum National d'Histoire Naturelle,
Laboratoire de Zoologie-Vers, 43, rue Cuvier, 75231 - Paris Cedex 05, France.
- Treasurer : Jacques SOYER, Université Pierre et Marie Curie, Laboratoire Arago, 66650-
Banyuls-sur-Mer, France.

Committee Members

- Bruce C. COULL, Belle W. Baruch Institute for Marine Biology and Coastal
Research. University of South Carolina, Columbia, South Carolina 29208, USA.
- Ragnar ELMGREN, University of Stockholm, Box 6801, S-11386 Stockholm,
Sweden.
- Pierre LASSERRE, Institut de Biologie marine, Université de Bordeaux I,
2, rue du Professeur Jolyet, 33120 - Arcachon, France.
- Hjalmar THIEL, Institut für Hydrobiologie und Fischereiwissenschaft der
Universität Hamburg, 2 Hamburg 50, Palmaille 55, West-Germany.
- Richard M. WARWICK, IMER, 13/14 St. James Terrace, Citadel Road,
Plymouth PL1 3 AX, England.

Board of Correspondents

- Philippe BODIN, Laboratoire d'Océanographie biologique, Université de Bretagne
occidentale, 29283 - Brest Cedex, France.
- John S. GRAY, Wellcome Marine Laboratory, Robin Hood's Bay, Yorkshire
YO 22 4 SL, England.
- Eike HARTWIG, Zoologisches Institut u. Museum, Universität Hamburg,
D-2000 Hamburg 13, Martin-Luther-King Platz 3, West Germany.
- W. Dunae HOPE, Department of Invertebrate Zoology, National Museum of Na-
tural History, Smithsonian Institution, Washington D.C. 20560, USA.
- Lucien LAUBIER, Centre Océanologique de Bretagne, B.P. 337, 29273-Plouzané,
France.
- Jörg OTT, I. Zoologisches Institut der Universität Wien, Lehrkanzel für Meeres-
biologie und Abteilung für Ultrastrukturforschung, Währinger Strasse 17/VI,
A-1090 Wien, Austria.
- Chandrasekhara G. RAO, Zoological Survey of India, 27 Chowringhee Road,
Calcutta, 13, India.
- Franz RIEMANN, Institute für Meeresforschung, D-285 Bremerhaven, Am
Handelshafen 12, West Germany.
- Raymond ROUCH, Laboratoire souterrain du C.N.R.S., 09410-Moullis, France.
- Ryohei YAMANISHI, Kyoto University, Seto Marine Biological Laboratory,
Sirahama, Wakayama-Ken, Japan.
- Donald J. ZINN, P.O. Box 589, Falmouth, Massachusetts 02541, USA.

EDITORIAL

Our Association has to elect two new officers for the Council, before the end of the year. The members have the right to nominate the candidate of their choice in view of the election.

Please send in names of persons of your choice, and give due consideration to equitable representation of geographical distribution of membership of the Association.

To facilitate your nominating candidates, a form is enclosed on page 8 of this issue. Also enclosed in this issue of Psammonalia you will find a list of members along with their address as of July 1st 1976. If your listing is incorrect, please let me know so I may correct our records.

Jeanne Renaud-Mornant

CHANGE OF ADDRESS
CHANGEMENT D'ADRESSE

CLASING E.
2300 - Kiel
Zoologisches Institut
Hegewischstr. 3
West-Germany

VOLKMANN B.
Duke University
Marine Laboratory
Beaufort
N.C. 28516
U.S.A.

GRAY J.S.
Institut för Marin Biologi
Universitetet i Oslo
Postboks 1064
Blindern, Oslo 3
Norway

WATLING L.
Ira C. Darling Center
University of Maine
Walpole
Maine 04573
U.S.A.

ITO T.
Stazione Zoologica
Villa comunale
80121 - Napoli
Italie

WELLS J.B.J.
Department of Zoology
Victoria University of Wellington
Private Bag
Wellington
New Zealand

MESICK R.E.
Department of Biological Science
University of California, Santa Barbara
Santa Barbara
California 93106
U.S.A.

WOLFF W.J.
Netherlands Institute for Sea Research
P.O. Box 59
Texel
The Netherlands

SVENSSON R.
University of Göteborg
Department of Zoology
Fack
S - 400 33 Göteborg
Sweden

NEW MEMBERS
NOUVEAUX MEMBRES

ALADRO-LUBEL A.
Etna No 15-H
Col. Alpes
Mexico 20 D.F.
Mexico

BOU C.
La Fourestole
81000 - Cambon d'Albi
France

BROWN R.
193 Deepwater Road
Castle Cove
New South Wales 2069
Australia

DANIELOPOL D.
Osterreichische Akademie der Wissenschaften
Limnologisches Institut
A-1090 Wien
Berggasse 18/19
Austria

HANSEN M.
Universität Hamburg
Institut für Hydrobiologie und
Fischereiwissenschaft
2 Hamburg 50
Olbersweg 24
West Germany

MARTINEZ-MURILLO E.
Las Huertas n° 107-303
Col. del Valle
Mexico 12, D.F.
Mexico

NEWS FROM THE MEMBERS
NOUVELLES DES MEMBRES

R. Brown, Macquarie University, Sydney, Australia.

As an honours student at Macquarie University, Sydney, Australia, I am preparing my thesis on Annelid distribution and systematics, with special reference to Archannelids. I am collecting in the intertidal and subtidal regions of coastal and estuarine beaches in central New South Wales.

Drs C. and F. Monniot, Muséum National d'Histoire Naturelle, Laboratoire de Biologie des Invertébrés marins et Malacologie, 55, rue de Buffon, 75231 Paris, France.

A few years ago we shifted our interest from interstitial to abyssal Ascidi-ans. This fauna includes some of the group standard-sized specimens (approximately 1 cm) as well as numerous very small-sized forms ranging from 1 to 3 mm diameter, some of them not reaching 500 μm when adults. These forms are considered as regressed species but are to be found among the most highly evolved families. Therefore they are of great interest in the understanding of the evolution of the group.

Some essential adaptations of these Tunicates to the deep-sea have been established in studying their diet. Contrary to the littoral species which are microphageous filter-feeders, the abyssal mud-dweller Ascidi-ans have a more diversified diet and some are to be considered as carnivores. Evidence is given by the recently erected new Class, which includes the carnivorous Tunicates (Sorberacea).

Numerous species classified into various taxonomic levels have so far being collected during French and American oceanographic expeditions, and are reported now from every Atlantic deep sea basin.

Extensive sorting of the dredged and trawled samples collected by the N/O «Jean-Charcot» has been completed by the «Centre National de Tri d'Océanographie Biologique» (CENTOB) with great care and efficiency. The obtention of smaller specimens (down to 500 μm) has been of great help to us, in the achievement of our systematic survey as well as in our ecological approach towards the understanding of this deep-sea group.

Claude Poizat, Laboratoire de Biologie marine, Faculté des Sciences et Techniques de Saint-Jérôme, 13013 Marseille, France.

I have been working since 1970 on ecology and biology of Opisthobranch Gastropods living near or inside infralittoral and circalittoral sand areas, with emphasis on the meiobenthic species, especially Acochlidiacea and Philinoglossacea. My investigations have been carried out in several parts of the Western European coasts, Mediterranean sea, English Channel, Irish sea and North sea. Several extraction techniques have been used to separate the animals from their own sediment : Deterioration Technique, Elutriation Technique and Uhlig sea-water ice Technique. But the best one was found to be the Uhlig sea-water ice Technique which, after a few modifications (POIZAT, 1975, Cahiers de Biologie marine, 16 : 475-481) made it possible to operate with eight or ten liters of sand and to extract enough Opisthobranch Gastropods (up to 150 specimens) to allow statistical studies. The results were also highly satisfactory with most other principal meiobenthic groups : Copepoda (up to 10 000 specimens), Polychaeta (up to 3 500), Nematoda (2 000), Ostracoda (500), etc. In spite of their largeness it has been possible to drive the necessary devices to different laboratories : Kristineberg Zoological Station (Western coast of Sweden), Roscoff Marine Biology Station (North Finistère, France), Wellcome Marine Laboratory (Robin Hood's Bay, Yorkshire, United Kingdom) and the Queen's University Marine Biology Station (Portaferry, Co. Down, Northern Ireland). However, the Gulf of Marseilles has been my principal place of investigation : I have been studying here for five years, every months, weather permitting, several sandy stations differently exposed to the main winds of the provençal region, Mistral and East Wind. Semi quantitative studies have been carried out on the Opisthobranch Gastropods and on the other meiobenthic groups and also biometrical measures on the various species of Opisthobranch Gastropods. Chemical and physical analysis of the sea-water (temperature, salinity and oxygen concentration) and of the sediments (calcium carbonate content, grain size, mud content, organic detritus content) inside the different sand areas, and meteorological data explain all together the seasonal variations and the distribution of the Opisthobranch Gastropods and of the whole meiofauna.

G.C. Rao, Calcutta.

Very little is known about interstitial life and the ecological conditions prevailing in the intertidal sands on Indian west coast. Keeping this in view, I recently collected interstitial meiofauna at several localities along the north-west coast bordering Arabian Sea. Some ecological data were also collected on biotic and abiotic factors of the environment. Although, the coast offers a varied habitat, extensive sandy beaches are limited only to certain areas. Some of the areas investigated, however, indicated the presence of well developed interstitial fauna. The fauna proved rich both in quality and quantity. All the major invertebrate groups typical of the habitat are well represented in the collections. Quantitatively, the numbers varied greatly from beach to beach. The intertidal and vertical distribution of fauna in relation to diverse parameters of the environment, showed nearly the same pattern as reported earlier in other regions. Highest densities were obtained from detritus sands with sufficient coarse particle size at about 5 - 20 cm below surface towards the half-tide level, with optimum water saturation. A few groups of soft fauna were examined in living condition, while others were preserved for subsequent study. Preliminary observations indicated the presence of many a new species, in addition to the known ones. The faunal element, in general, is similar to that reported in other regions except for certain lower systematic categories. Harpacticoid Copepoda constituted bulk of the fauna collected and I shall be glad to collaborate on the group as a junior author, if any specialist could find it convenient to work out the material at an early date.

From the Editor : Psammonalia Nr 32 has been returned to us from Dr. Murray's address in Eilat (Israel). Any information about Dr. Murray's new address is welcome, we need it for further mailing of Psammonalia to him.

We also need the address of Dr. Husmann and the new address of Dr. Juario.

- SHMELEVA, A.A. & A.V. KOVALEV, 1974. Cycles biologiques des copépodes (Crustacea) de la mer Adriatique. *Boll. Pesca Piscic. Idrobiol.*, 29 : 49-70.
- SMITH, K., 1975. A method of collecting and processing nematode larvae for electron microscopy. *J. Microsc.*, 105 (2) : 229-232.
- STEPHENSON, W., SMITH, R.W., GREENE, C.S., SARASON, T.S. & HOTCHKISS, D.A., 1975. Soft bottom benthos from an area of heavy waste discharge : hierarchical classification of data. Southern Calif. Coastal Water Research Report TM 226.
- SUDHAUS, W., 1976. Nomenclatorial notes on species and genera of the subfamily Rhabditinae sensu lato (Rhabditidae, Nematoda). *Nematologica*, 22 (1) : 103-112.
- SWAIN, F. (Ed.), 1975. Biology and paleobiology of Ostracoda. Paleontol. Research Inst., Ithaca, N.Y., 687 p.
- TEUCHERT, G., 1976. Sensory devices in *Turbanella cornuta* Remane (Gastrotricha). *Zoomorphologie*, 83 (2) : 193-
- TEN HOVE, H.A., 1975. Serpulinae (Polychaeta) from the Caribbean. III. The genus *Pseudovermilia*. *Studies Fauna Curaçao other Caribb. Isl.*, 47 : 46-101.
- THOMASSIN, B.A., VIVIER, M.H. & VITIELLO, P., 1976. Distribution de la méiofaune et de la macrofaune des sables coralliens de la retenue d'eau épirécifale du grand récif de Tuléar (Madagascar). *J. exp. Mar. Biol. Ecol.*, 22 (1) : 31-53.
- THUM, A., 1975. An experimental approach to the distribution of a marine infauna. *S. Afr. J. Sci.*, 71 (6) : 129.
- TSALOLIKHIN, S.Ya., 1976. New species of nematodes of the order Enoplida in the Baikal Lake. *Zoologicheskii Zhurnal*, 60 (3) : 346-353.
- VELSEN, F.P.J., 1975. Constant-flow closing apparatus. *Fish. Res. Bd. Canada Tech. Rep.*, 508.
- VESPER, B., 1975. Ein Beitrag zur Ostracodenfauna Schleswig-Holsteins. *Mitt. Hamburg Zool. Mus. Inst.*, 72 : 97-108.
- WATLING, L., 1975. Analysis of structural variations in a shallow estuarine deposit-feeding community. *J. exp. mar. Biol. Ecol.*, 19 : 275-313.
- WORTHMANN, 1975. Die Makrobenthos- und Fischbesiedlung in verschiedenen Flachwassergebieten der Kieler Bucht (Westl. Ostsee). *Diplomarbeit Kiel*, 141 p.
- YEATES, G.W., 1975. Redescriptions of *Amphidelus tasmaniensis* (Allgen, 1929) and *A. papuanus* Andrassy, 1973 (Nematoda : Alaimidae). *N.Z. J. Zool.*, 2 (1) : 1-7.
- YEATMAN, H.C., 1976. Marine littoral copepods from Jamaica. *Crustaceana*, 30 (2) : 201-219.