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PSAMMONALIA is issued quarterly in February, May, August and November.

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28046 MADRID
Spain

I have prepared my thesis at the Aix-Marseille II University under the direction of Prof. P. Vitiello. The subject of my work is an ecological study of the meiobenthos from sediments of the Gulf of Aqaba (Red Sea) with special reference to the Nematoda (taxonomy and ecology).

I am presently studying the nematodes in other areas of the Red Sea.

I am a Spanish biologist working on freshwater interstitial fauna. I feel that freshwater and marine meiobenthology have a great deal in common, especially in those parts, where freshwater and marine interstitial waters mix. Here not only are the methods of study similar, but also poses the environment comparable problems to be solved by the organisms of the two media. Answers to the one can help to understand the other.

NEWS FROM THE MEMBERS

We seem to gradually get the feeling that it is of our common interest to inform each others via PSAMMONALIA about scientific projects, new fields of research or methodological questions etc. We are glad to receive a growing number of letters for publication, we welcome again everybody to write us and thank all those who already helped to give PSAMMONALIA a more 'personal touch'.

To get a more personal touch with colleagues is one of the good reasons to attend the triennial MEIOFAUNA CONFERENCES. Here is the news we received from Susan Bell about the next one:

6th INTERNATIONAL MEIOFAUNA CONFERENCE
Announcement

The Sixth International Meiofauna Conference will be held at the University of South Florida, Tampa, Fl. (USA) from July 14-19, 1986. Food and housing will be available in a convention village on campus. Details on the program, lodging, and a call for papers will be forthcoming. Any questions should be forwarded to:

Susan S. Bell
Department of Biology
University of South Florida
Tampa, Fl. 33620
U.S.A.

SPECIAL SESSIONS

We all know these guys at symposia -
They come when the sessions get cosier.
They never stay far
From the conference bar.
Their special field? Spirituosia!

Meiofauna Research at the University of Port Elizabeth (South Africa):
Neil MALAN and Anton McLACHLAN are studying the interstitial fauna of medium sands from high energy surf zones in Algoa Bay. This work is primarily aimed at estimating benthic metabolism and thereby the role of the interstitial system in the energetics of the beach - surf zone ecosystem. Perspex 'bell jars' with membrane tops to allow wave pumping are being used for this. In addition nutrient exchange is also being quantified. Deep cores (60 cm) have shown all components of the interstitial fauna to be abundant to this depth, a consequence of the intense oxygenation of these sands by wave action.

Reinhard RIEGER Univ. of North Carolina,
Chapel Hill, N.C., 27514, U.S.A.:

My present interest in meiobenthic research concentrates on developing easy to use culturing methods for macrostomid turbellaria. For two years I have been successfully culturing two closely related species of the Genus Macrostomum from marine sands in North Carolina. I intend to use these cultures for studying the genetics and the speciation of interstitial Turbellaria. Besides this, I will retain a general interest in the systematics, ecology and evolution of the meiobenthos as it relates to the question of metazoan phylogeny in general.

From Alexander FRICKE, National Research
Institute for Oceanology, PO Box 320,
Stellenbosch, 7600 Rep. South Africa:

Measurement of exchange processes between the
benthos and the immediately overlying water
column forms part of our work on meiofauna in
the inner Agulhas Bank. During a recent visit
to the University of Port Elizabeth, I had the
opportunity of trying out or rather partici-
pating in a field trial in the surf zone of
a benthic enclosure designed by a colleague,
Neil Malan. The apparatus is essentially a
perspex ring about 400 mm in diameter and 100
mm high, which is pushed into the substrate
by a diver up to a limiting PVC collar. The
ring is sealed at the top by means of swells
to act fairly unimpeded and thus to simulate
real field conditions. Ports in the ring per-
mit the withdrawal of water samples for ana-
lysis. Successful oxygen measurements were
made by Neil Malan so far. Secure attachment
in the turbulent surf zone is crucial, as we
found out by losing two of the devices
straight away. The enclosure must be well
fastened to the bottom anchor line, strung
out between two heavy lead weights. I intend
working on fine sediment in 20 m water depth,
and on very fine sediment, i.e. mud. Are six
litres a sufficient volume to obtain measure-
able changes within a reasonable period of
time? Time is a limit because we have to work
off a ship.

Has anyone got a good idea of a near-bottom
water sampler? We are in the progress of de-
signing a tube with ball valve ports and a
trigger to allow the sample to fill the cyl-
inder at preset intervals. The design must
be simple not only for financial reasons.

I shall be grateful for any tips.

PS. I am aware of the publication by BALZER
et al., 1983: Redox-turnover at the sedi-
ment/water interface studied in a large
jar bell system. *Oceanologica Acta*, 6(4),
337-344.

Alexander Fricke

Open Letter to North American Meibenthologists:

At the recent First International Congress
of Nematology held August 6-10, 1984 at Guelph
University in Guelph, Ontario, Canada, a state-
ment was made that the ecological studies in-
volving marine nematodes suffered from a lack
of taxonomic information of this group. In all
likelihood, from a North American point of view,
the statement is an accurate perception of real-
ity which probably reflects the paucity of indi-
viduals engaged in taxonomic studies of marine
nematodes on this continent.

Open Letter cont'd:

In North America the taxonomic study of
marine nematodes is virtually non-existent.
In fact only two persons, Drs. W.D. Hope
and J.H. Tietjen, are employed as marine
nematologists, the former, an exceptional
ultramorphologist and the latter, well-known
for his contributions to the culture of mar-
ine nematodes and their feeding habits and
ecology.

However, in order to accept the claim that
North America is in need of more assistance
in the identification of marine nematodes,
perhaps it would be well to compile a docu-
mentation of the situation. To this end, I
would like to request that readers of this
message contact me and express their view-
points on this matter. Is the study of meio-
faunal ecology in need of additional input
from marine nematode taxonomists? How many
persons (or programs) would benefit from an
enhanced capacity to deal more reliably with
marine nematodes? What really is needed, and
where are the resources to fill this need?

I would like to initiate a dialogue with
persons interested in this matter and would
use the information obtained in an attempt
to seek support for increased marine nema-
tode taxonomic services in North America.

Interested individuals are requested to
direct any comments to me at:

78 Melville Drive
Nepean, Ontario
Canada K2J 2E1

Bruce E. HOPPER

Information from A. ELEFThERIOU, Aberdeen:
ICES Benthos Working Group

In 1982 a Working Group was set up
under the auspices of the International Coun-
cil for the Exploration of the Sea (ICES) in
order to deal with the following points:

1) To examine and discuss existing field
and laboratory techniques and recommend
standard methods for the collection of
samples and analysis and processing of
data.

2) To review the state-of-the-art in ben-
thic studies (both macro- and meiofauna)
in the North Sea and adjacent areas.

3) To undertake a synthesis of data with
the aim of providing synoptic maps of
qualitative and quantitative aspects of
the benthic communities in the North Sea.

Since then in the intervening years an import-
ant part of the activities of the Working Group
has been concerned with the methodological/
technical aspects of benthic research both in
the field and in the laboratory. Intercalibra-

Information ELEFThERIOU cont'd:

tions and intercomparisons of different sampling gear is in progress and field and laboratory processing of samples for a more effective intercomparison of data is being examined.

A careful review of the state-of-the-art revealed important gaps in our knowledge of the benthos of the North Sea. To remedy this it has been recommended that a joint international survey covering the whole of the North Sea area should be initiated by the ICES member countries. Towards this, standardised field and laboratory methods have been worked out and the logistic support required for such a venture has been evaluated. A centralised data base for handling and processing the data generated from this survey has also been planned and it has been agreed among the members that the data will eventually become accessible to other institutions on request.

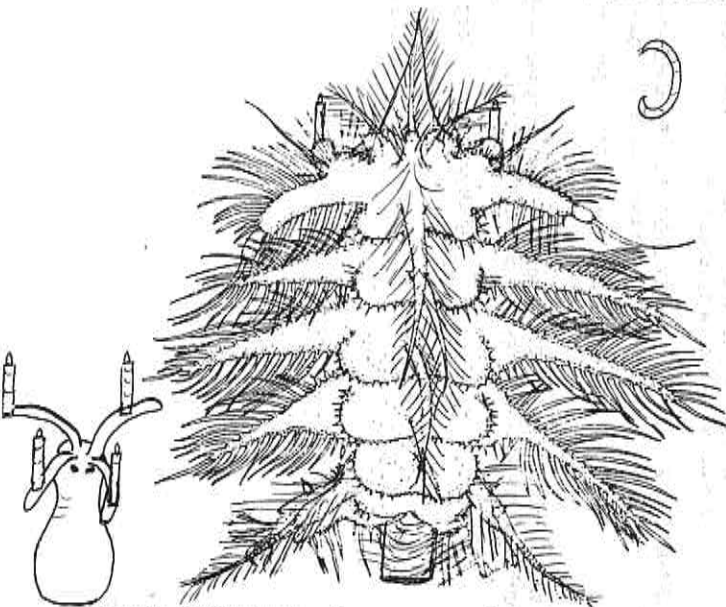
It is hoped that this survey will not only provide invaluable data but also promote national and international cooperation on ecological studies.

For further details please contact

Dr. A. ELEFThERIOU
Marine Laboratory
PO Box 101
Victoria Road
ABERDEEN AB9 8BD, UK

The Competition for the Best Meiofauna Christmas Card

has been clearly won by SUSANNA GRIMALDI DE ZIO and her colleagues. Who thought that a 150 μ m - tardigrade (*Neostygarctus acanthophorus*) can metamorphose into such a pretty spiny Christmas tree? The drawing, only slightly changed by us, is so beautiful that we preferred to publish the artistic document rather than the photograph:



HAPPY CHRISTMAS, Susanna, and let your tardi-

From Roberto BERTOLANI, Istituto di Zoologia,
Via Università 4, 41100 Modena, Italy

My principal activities in the last 15 years have focussed on the Tardigrada, and in particular on their reproductive and developmental biology, cytotaxonomy and taxonomy. At present my research investigates the incidence of hermaphroditism in this phylum and its significance.

I am studying natural populations by means of caryological techniques and scanning electron microscope observations. My research also concerns non-marine Tardigrades in various habitats.

I am an Associate Professor and hold a course of Zoology for biology students at the Natural Science Faculty, University of Modena.

From Maria BALSAMO, Istituto di Zoologia,
Via Università 4, 41100 Modena, Italy

My research interests are on fresh-water Gastrotricha. I have for several years performed faunistic and systematic studies and physiological investigations on this group.

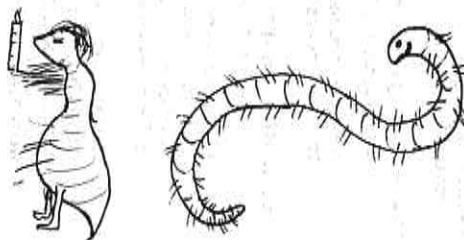
Recently I have begun a study on the reproductive biology of fresh-water Chaetonotoidea, and in particular on the presence and significance of hermaphroditic individuals in natural and laboratory reared parthenogenetic populations. Presently I have extended my studies to brackish water Chaetonotoidea.

I also collaborate with P. Tongiorgi, professor of Zoology at the University of Modena, on faunistic and systematic research on marine Gastrotricha.

I am Assistant of Zoology at the University of Modena.

Another TARDIGRADE METAMORPHOSIS

Did you hear of that new publication
On the tardigrades' macromutation?
Where the author declares:
"They descend from brown bears!"
Interstitally it's a sensation.



FIFTH INTERNATIONAL SYMPOSIUM ON AQUATIC NEMATODES

First Announcement

The 5th International Symposium on Aquatic Nematodes will be held at the Bio-Centre of the University of Vienna, Austria, from August 19-22, 1985. The Symposium will retain its open character giving room for both formal presentations (with ample time for discussion) as well as work-shop sessions, which should be opened with a contribution (reviewing, stimulating, provoking) by the chair person. From the wide field Aquatic Nematology encompasses we have decided to emphasize a number of topics, which were proposed in a circular and have been met with general approval:

- 1) MORPHOLOGY - SYSTEMATICS. - Have recent advances in morphology - especially ultra-structural research - brought new insights into nematode-systematics?
Keywords: higher taxa-systematics; weighing of characters; relationships to other groups of lower invertebrates.
- 2) BLINDMAN'S BUFF CONTINUED? - What do we know about how nematodes actually live and what can direct observations contribute?
Keywords: direct (field) - observations of the micro-environment, substrate structure, trophic interactions, symbiosis, reproductive behaviour, predation avoidance. Advances and ideas in methodology, design of experiments based on field observations.
- 3) THE IMPORTANCE OF NEMATODES IN ECOSYSTEMS. - Are we stuck with the analysis of the functional role of nematodes? What can microcosm-experiments on the one hand - lab-studies on the other hand - explain?
Keywords: Information gained by microcosm experiments, discussion of rate processes other than respiration rates (such as: excretion, ingestion, defecation, P/B-ratios, turnover).
- 4) ADAPTIVE ECOLOGY OF NEMATODES. - Do nematodes represent excellent tools for analysis of adaptive mechanisms in organisms?
Keywords: life-history patterns, storage capacities, physiological adaptations.

We are still open to further suggestions concerning the topics and are looking forward to welcoming as many colleagues as possible in Vienna.

The Organizers Dr. Jörg A. Ott
Dr. Fritz Schiemer
Rudolf Novak

APPLICATION FOR THE 5th INTERNATIONAL SYMPOSIUM ON AQUATIC NEMATODES
in Vienna, Austria from August 19-22, 1985.

I am interested in attending the Symposium and wish to receive further communications.

NAME

ADDRESS

presumably accompanied by persons.

The type of accommodation I would prefer is Hotel

Student-room

I would like to contribute

- a short presentation of my current research (up to 10 min. excluding discussion)
 - a poster-presentation
 - a more formal paper (up to 20 min. excluding discussion)
- (combination of oral contributions and posters are encouraged)

preliminary title of contribution(s):

.....
.....
.....
.....
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.....

I would like to lead a discussion group or workshop session and open it with a formal contribution. Suggested theme:

.....
.....
.....

Please return this form before February 1st, 1985 to R. Novak,

Institute for Zoology of the
University of Vienna
Dept. of Marine Biology
Althanstr. 14
A-1090 Vienna, Austria



IV th INTERNATIONAL SYMPOSIUM ON TARDIGRADA
SECOND ANNOUNCEMENT

Our Italian colleagues R. BERTOLANI and M. BALSAMO have asked me to publish the following information on the Tardigrade Symposium:

We will organize the IVth International Symposium on Tardigrada in Modena (Italy) on September 3 - 5, 1985. The symposium will also be open to all our gastrotrich colleagues for whom an ad hoc round table discussion can be arranged if there is a sufficient participation.

The site of the symposium will be the "Collegio S. Carlo", an antique institution in the centre of Modena. The facilities comprise single-bed rooms for 15,000 Italian Lire per night (at present 1 US \$ = 1,900 L.). In addition, a very limited number of mini-apartments is available for couples and families (max. 3 persons) at a prize of 5,000 L. per person and night. For those who prefer hotel accommodation, the typical prize (for 1984!) are listed below:

	single	double
1st class	40,000 - 75,000	50,000 - 110,000
2nd class	19,000 - 40,000	27,500 - 60,000
3rd class	15,000 - 25,000	29,000 - 40,000

Your prompt reply using the included form will allow us to make the required reservations and assure your comfort.

The tentative programme will be forwarded on request.

It was not yet possible to definitely decide which journal will publish the proceedings of the symposium.

We hope to see you all in Modena.

Sincerely yours

Maria Balsamo Roberto Bertolani

F O R M

Name and address

I intend to participate in the IV Int. Symposium on the Tardigrada Yes No

I confirm the title and the length of my paper
I intend to present a paper
title:

Accommodations: number of person _____
College
Hotel
mini-apartment*

(*) subject to availability

Send to:

R. Bertolani & M. Balsamo
Istituto di Zoologia dell'Università
Via Università, 4
41100 Modena (Italy)

telephone 59/225067
59/218302

The fee for subscription to the Symposium is 30.00 US \$ for each participant and 20.00 US \$ for accompanying persons.

The fee can be sent to:

Roberto Bertolani, Istituto di Zoologia, Via Università 4,
41100 Modena, Italy

by either international money order or Bank Note credited to account number 24289/97 R. Bertolani, Banca Popolare dell'Emilia, Sede di Modena, Via S. Carlo 8.

RECENT LITERATURE

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