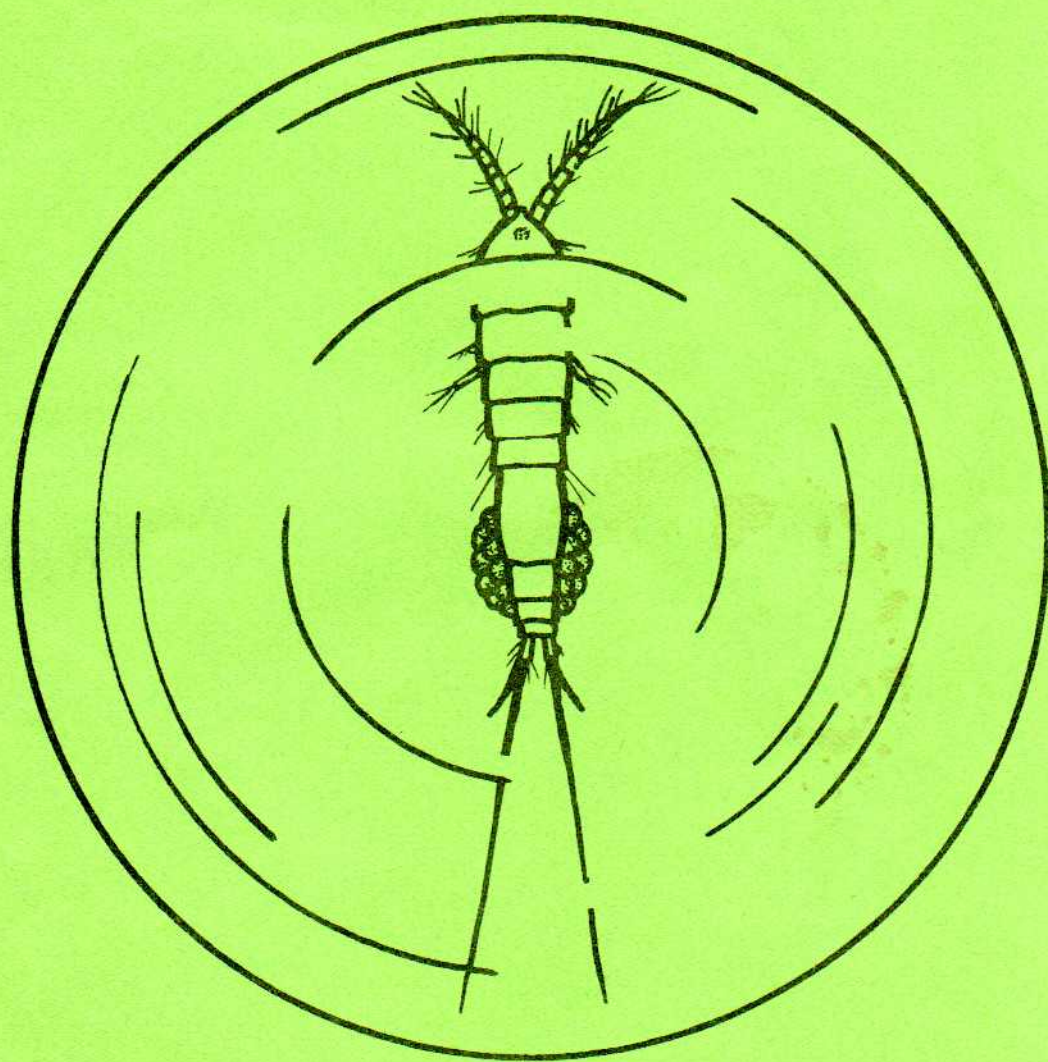


# **MONOCULUS**

**copepod Newsletter**



**Nr. 3**

**July 1981**



# MONOCULUS

Copepod Newsletter

Number 3

July 1981

Edited by: H. Kurt Schminke, Fachbereich Biologie, Universität Oldenburg, Postfach 2503, D-2900 Oldenburg, W.Germany

Produced by: Gerd Schriever, Zoologisches Museum der Universität Kiel, Hegewischstr. 3, D-2300 Kiel, W.Germany  
and for North America by: Chang-tai Shih, Division of Invertebrate Zoology, National Museum of Natural Sciences, Ottawa, Ontario, Canada K1A 0M8

Cover by: Georg Siebecke, Zoologisches Museum der Universität Kiel

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

- Typing error -

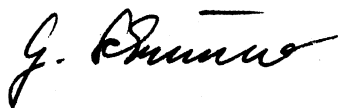
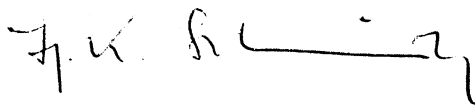
We have to deplore a rather awkward typing error. In *MONOCULUS* Nr. 2 we had a note in honour of Dr. Kunz where it should have read: "*His creative urge is to be highly esteemed....*" There have been many other errors which we didn't mind taking lightly but this one, we feel, is not of that sort and we are sorry. (Yet: honni soit qui mal y pense.)

## E d i t o r i a l

This is not a regular issue of *MONOCULUS*. Normally, we are to have two a year. However, since the date of the "First International Conference on Copepoda" in Amsterdam (24-28 August 1981) is approaching we decided to put out an extra issue to mark the event.

Also, you are dying to receive Nr. 3, aren't you? That is at least what we conclude from the response to Nr. 2. The number of postcards returned has shot up to 355. This is less than the number of entries in our mailing list, but more than we expected. It appears that this number represents the hard core of devoted copepodologists and it is to them alone that this issue will be distributed. Also, it is only their names which are to figure in the "Directory of Copepodologists" which is in preparation and will be on sale in Amsterdam.

We are looking forward to meeting many of you at the conference.



## Business ssenisuB

### 1. Bibliography

"Do I now qualify for an asterisk?" asked L. Hernroth from Kristineberg when sending a collection of his reprints. Of course, he does and so do too: Bowman, Boxshall, Bresciani, Briggs, Burns, Chandran, Deevey, Dinert, Dojiri, Dussart, Elmore, Fernando, Fleeger, Flößner, Fulton, Furuhashi, Gallo, Grabda, Grice, Grindley, Gyllenberg, Hammer, Hamond, G.C.H. Harding, Heron, Hirche, Infante, Ito, Kazachenko, Kiefer, Ktari, Lindley, Mauchline, Michel, Monniot, Parameswaran Pillai, Petkovski, Raibaut, Rao, Roberts, Robertson, Roe, Saraswathy, Scheibel, Serban, Thistle, Trinast, Turner, Urawa, Uye, Vader, Vyshkvartzeva, Watras, Watson, Williams, Wooldridge.

This brings us up to 127 people who have delivered their contribu-

tion to our plan of editing a "Bibliography of the works of living Copepodologists". This is just enough to compile something like a torso bibliography and all we can do for the time being is to renew our appeal for cooperation. When back from your summer holidays and full of fresh initiative don't forget, as one of your first activities, to post a list of your publications on copepods to Kurt Schminke and, please, also add any reprints that are still available for the *MONOCULUS*-library.

## 2. *MONOCULUS*-Museum

R. Hamond from Melbourne came up with the following suggestion:

*"Many workers put voucher specimens of their copepods in a museum; could not MONOCULUS persuade as many workers as possible to put voucher specimens also into MONOCULUS'S own museum, which would then act as a base for loans of material which might not be available from any other source? If MONOCULUS has not got the funds or the room(s) for a museum of its own, perhaps such a loan collection might be located in an established museum. I am not thinking here of types or paratypes, so much as of authenticated specimens of common species; if everybody did this from all over the world, this would form a base for zoogeographical studies."*

We did regard this as a very important suggestion and straight away asked the "Zoologisches Museum der Universität Kiel" which already houses an important collection of copepod specimens including several types and paratypes whether they would offer their facilities and accept the *MONOCULUS*-Museum as a subtenant. After a short time of hesitation we were given green light so that now we can propose to install Gerd Schriever as director of the *MONOCULUS*-Museum. Provided there are no objections from those who are to fill the shelves of the Museum with their specimens, he is ready to build up a collection of authenticated specimens from all over the world and to make it available to those who might rely on it for correct identification.

This implies that specimens are delivered separately for each species either in tubes or mounted on slides. A mixture of specimens of different species would be less valuable and should be sorted before delivery. Gerd Schriever will regularly keep you informed about the acquisitions of the *MONOCULUS*-Museum.

We shall come back to R. Hamond's letter next time because it con-

tains other valuable suggestions for the realization of which we haven't had the time to explore the prospects yet.

### 3. Mailing

Sending *MONOCULUS* surface mail to Ottawa and from there air mail to its ultimate destinations in North America turned out to be a very bad idea. It caused a long delay in the delivery of *MONOCULUS* Nr. 2. C. Shih from Ottawa therefore offered not only to distribute but also to duplicate *MONOCULUS* for the North American copepodologists. He therefore will receive the manuscript of this issue by air mail and produce the North American edition of it in Ottawa. We are very grateful for this cooperation.

### 4. Directory

For those not attending the conference in Amsterdam the "Directory of Copepodologists" will be available on request through Gerd Schriever. The price will be US \$ 5,00. The sum is meant to cover the costs for producing the directory and for the next (regular) issue of *MONOCULUS*. A limited number of copies will be available free of charge for colleagues from countries where foreign currency is a problem. The directory will be sent surface mail only since postage in Germany is to go up by 30% shortly. Please make cheques payable to "Zoologisches Museum der Universität Kiel" (when personal cheques are used, please add 10% for handling costs) on the following account: Deutsche Bank A.G. Kiel, No. 0449470, BLZ 210 700 20 at D-2300 Kiel, Fed. Rep. of Germany. Please note on the cheque "Monoculus Directory".

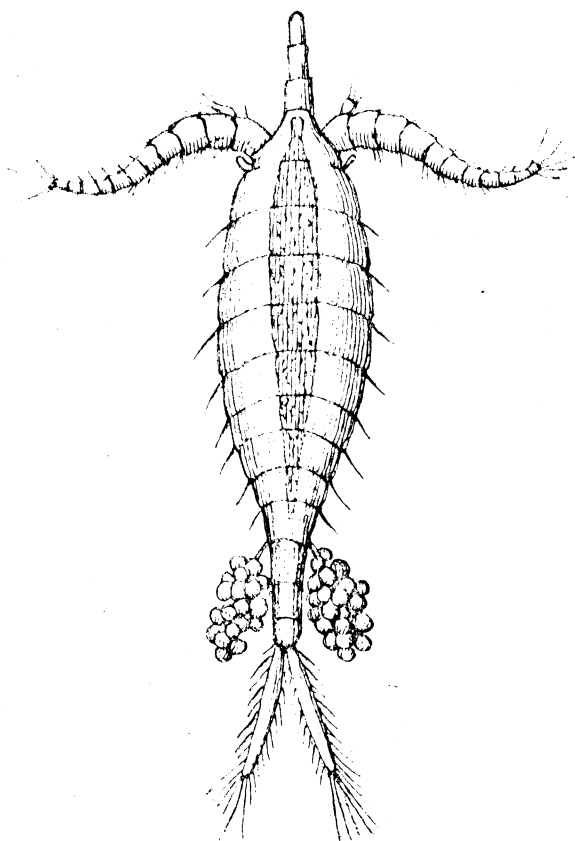
### The l e t t e r   b o x

V. Vader from Tromsø writes: *"Welcome to the suffering brotherhood of newsletter editors. (It is popular with my kids though, because of the stamps)."* Right he is.

K. Sherman from Narragansett tells us: *"I have posted copies of El Copepodo Euforico in the laboratory where they may even stimulate the formulation of an American counterpart based on a calanoid copepod motif rather than the cyclopoid used by the Facultad de H. y Ciencias, Uruguay."* We can't await it.

In the meantime B. Dussart from Les Eyzies entertains us with the

following illustration: "*Pour votre amusement, l'iconographie du premier Copépode (?) dessiné: un cycloptide sans doute, en 1754.*"



#### OFFERS AND REQUESTS

The following inventories of copepod material are available through the 'Zoologisches Museum der Universität Kiel, Hegewischstr. 3, D-2300 Kiel, W.Germany':

a. Provisional inventory of W. Giesbrecht's assets at Naples. Wilhelm Giesbrecht died in 1913. He left behind his scientific assets at Naples. R. Kölmel during a brief visit to Naples in 1979 has compiled a list of Giesbrecht's slides:

R. KÖLMEL, Provisional inventory of the dissected slide material of Wilhelm Giesbrecht held at the Stazione Zoologica in Naples. Zool.Mus.Univ.Kiel, Arbeitsblätter Nr. 1, Dez. 1980.

b. Two inventories of copepod material held at the Zoologisches

Museum der Universität Kiel:

R. KÖLMEL - 1980: Die Copepoden (Crustacea) von Wilhelm Giesbrecht im Zoologischen Museum Kiel. Mitt.Zool.Mus.Univ.Kiel I(5).

G. SCHRIEVER - 1980: Die Crustacea Copepoda-Sammlung des Dr. h.c. Walter Klie im Zoologischen Museum der Universität Kiel. Mitt. Zool.Mus.Univ.Kiel I(6).

CHEN, Qing-chao, South China Sea Institute of Oceanology, Academia Sinica, 58 Xin Gang Road, Kwangchow, People's Republic of China, is working at present on the zooplankton in the South China Sea and "*would be very happy to exchange reprints with our colleagues over the world in future.*"

KUKERT, Helmut, Borchershof 15, D-2800 Bremen 66, W.Germany, is investigating Cyclopidae of salt marshes and brackish water pools. Some specimens he found might be *Cyclops strenuus* or *C. furcifer*. In spite of measurements he is unable to determine these specimens exactly. Who could send him specimens of both species for comparison?

#### ANNOUNCEMENT

VII Simposio Latinoamericano sobre Oceanografia Biologica, del 15 al 19 de Noviembre de 1981, Acapulco, Guerrero, Mexico.

There will be sections on plankton and marine ecology. For information contact Samuel Gómez AGUIRRE, Instituto de Biologia, UNAM, Apdo. Postal 70-153, México 20, D.F. Mexico.

..... Interviewing copepodologists .....

==F.D.POR==

I am sitting in the 'Intercity' train from Frankfurt to Hannover wondering whether I might reach Hannover in time for the connecting train to Bremen and from there to Oldenburg. Trains used to be on time in Germany, punctual on the minute, until some time ago. Nowadays they are faster but notoriously late.

It is getting dark outside and my thoughts go back to the meeting of the organizing committee for the "First International Conference on Copepoda" yesterday. J.H. Stock and J.C. von Vaupel Klein had come by plane from Amsterdam and had to go back the same day

at night. F.D. Por did not arrive before late in the afternoon so that we had only a few hours left for our business meeting in the 'Senckenberg Museum'. The time was sufficient though to decide what had to be done and to determine the responsibilities.

After that we saw off J.H. Stock and J.C. von Vaupel Klein at the airport. Their plane had been on schedule. My train is now 15 minutes late and rushes through one of those small railway stations strewn all along its trail. A few people on the platform turn round having their hair raised by the wake of the train whistling past. I like such meetings when there is the prospect of relaxing in pleasant surroundings or an inspiring atmosphere after the work has been done. This time we did end up amidst a cheerful crowd in one of those famous Frankfurt cider restaurants down town where we were taken by Renate Haass from the Senckenberg Museum and her husband Gerd.

The cider was good and plentiful. There are different sorts and we were determined to try them all. I asked F.D. Por what it was that gave him the idea of starting his campaign to improve communication among copepodologists. *"This, in fact, is quite an old idea",* he said, *"which goes back as far as 1964 when on an expedition on 'Anton Bruun' in the Indian Ocean I met Richard 'Judge' Gooding. He had published a first list of copepodologists in 1962/63 and we thought it might be fine to bring all these people together. But somehow Richard dropped out of sight and with him disappeared the idea of a copepodologists' meeting. The idea arose again when in 1977 I met Tagea Björnberg in Brazil who has brought together several young people with a keen interest in copepodology. It struck me that here there was a group of remarkably active copepodologists of which I had been quite unaware and this prompted me to take the initiative to establish a copepod organization. You see, the idea had a gestation period of 13 years."*

The second mug of cider was served together with what one would call a typical German meal ("Rippchen and Sauerkraut"). The train has reached Göttingen. I was curious about F.D. Por's beginnings as a copepodologist and tried to find out what sparked his interest for this group of crustaceans. *In Rumania, I first started to work on dragonflies but soon realized that the prospects were rather limited because the fauna was already very well known. So I looked for an alternative and L. Botosaneanu introduced me to a professor who was*



*desperate with a young lady assistant working on copepods. She continued to work on another group and I took over the copepods."*

*"Do you still remember your first paper on copepods?" "I do very well, indeed, because the results made such a nice story. It dealt with the copepod fauna of two lakes. Both of them had been volcanic 'maare'. One was still a lake, the other turning into a peat bog. Some species were present in one locality, some in the other. I made a story of succession out of it. I am not sure whether this was correct but at that time I was convinced that it couldn't be otherwise."*

*We were now having our third mug of cider and I started to love the people around us while before their cheerfulness had given me the impression of pure noise. I now felt that somehow I must have been mistaken. "How many students did you interest in copepods?" I wanted to know from F.D. Por. "Just one," he said, and he became a successful diving photographer later. In this situation, what could I do? There was only one possibility: to marry a copepodologist. If you can't beat them, join them." "How much time a day do you spend at the microscope today?" "Annual average 5 minutes a day, I would say." I am not quite certain whether all the different kinds of cider had already been tested. The loudspeaker announces that we are about to arrive at the central station of Hannover. I hurry to write down the next question inquiring about the aspects of copepodology which F.D. Por intended to explore in the future. "What interests me for the future are studies of copepods with the SEM. I would like to investigate aspects of different types of sense organs in view of their morpho-functional significance." The train is starting to slow down and the pub resounds with songs and laughter by now. We get ready to leave. "What would be your message to the copepodologists?" I asked before we left the table and with a big smile in allusion to G. Orwell (and Moshe Dayan) F.D. Por gave the following answer: "One eye good, two eyes bad."*

*The train to Bremen was waiting on the other side of the platform. It was about 1 a.m. when I arrived in Oldenburg and it was about that time too when we left the cider restaurant. You cannot understand this interview if you have no idea of the kind of atmosphere there. It certainly was not an atmosphere for discussions of serious scientific standard, but it was good enough for a most enjoyable and memorable evening out.*

Melbourne Uni.Zoo.Dept., 9.4.1981

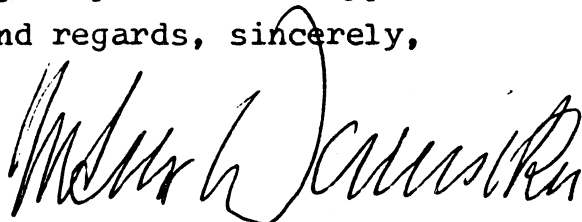
Dear

In case you are thinking of trying to borrow any of Brehm's types of Tasmanian copepods, look at this reply to my inquiry about his harpacticoids! very kindly answered by Dr. Peter Adamicka, Biologische Station Lunz, A-3293 Lunz-am-See, Austria (the lab where Brehm himself worked for many years).

Dear Dr. Hamond

Sorry that I must confess you that the late Dr. V. Brehm was a rather negligent descriptor of new species. He left no type material at all. From divers sources I know that his descriptions also are often doubtful. In our archives there are no type specimens of the species mentionned by you nor any others described by Brehm, and they are also nowhere else, to be sure. I think it was Brehm's opinion that his descriptions and drawings represent the types. With best wishes and kind regards, sincerely,

Lunz, 29 March 1981



I have also written to the Curator of Crustacea at the Vienna Museum, but so far have had no answer; do you know (or know anyone who does know) the present whereabouts of any of Brehm's Tasmanian (or other Australian) freshwater Crustacea?

All the best,

Dick Hamond.

- APOSTOLOV, A. & T. PETROVSKI - 1980: Copépodes Harpacticoides de la mer Adriatique (Région de Rovigne). - Acta Zool. Bulgar. 15: 24-35
- BOWMAN, T.E. - 1980: Notodiaptomus caperatus, a new calanoid copepod from phreatic groundwater in Barbuda (Crustacea: Diaptomidae). Bijdr. Dierk. 49(2): 219-226
- BOXSHALL, G.A. & A.R. GURNEY - 1980: Descriptions of two new and one poorly known species of the genus Caligus Müller, 1785 (Copepoda: Siphonostomatoida). Bull.Br. Mus.nat.Hist.(Zool.) 39 (3): 161-178
- & H.S.J. ROE - 1980: The life history and ecology of the aberrant bathypelagic genus Benthomisophria Sars, 1909 (Copepoda: Misophrioida). Bull.Br.Mus.nat.Hist. (Zool.) 38 (1): 9-41
- BURNS, C.W. - 1980: Occurrence of Aphanomyces ovidestruens, a fungus parasitic on copepods, in two eutrophic lakes. N.Z.J.Mar.Freshw.Res. 14(1): 23-29
- & S.F. MITCHELL - 1980: Seasonal succenssion and vertical distribution of zooplankton in Lake Hayes and Lake Johnson. N.Z.J.Mar.Freshw.Res. 14(2): 189-204
- CHANDRAN, A. & N. BALAKRISHNAN NAIR - 1980: Morphology of the copepodid stage of three marine lernaeopodids (Crustacea: Copepoda) from the South-West coast of India. Proc.Indian Acad.Sci. (Anim.Sci.) 89(2): 155-163.
- & -1980: Morphology of the male of Pseudocharopinus narcinae (Pillai) (Copepoda: Lernaeopodidae). Proc.Indian Acad.Sci.(Anim.Sci.) 89(5): 441-447.
- DEEVEY, E.S., G.B. DEEVEY & M. BRENNER - 1980: Structure of zooplankton communities in the Peten Lake District, Guatemala. In: KERFOOT, C. (ed.), Evolution and ecology of zooplankton communities (Am.Soc.Limnol.Oceanogr., Spec.Symp. 3) University Press of New England, Article 59: 669-678.
- DUSSART, B.H. - 1980: Les crustaces copepodes d'Afrique, catalogue et biogeographie. Hydrobiologia 72: 165-170
- 1980: Sur quelques Copépodes des Pyrénées espagnoles. Mem.Ist.ital.idrobiol. Palanza 37: 105-110
- 1980: Copépodes. In: La flore et la faune aquatiques de l'Afrique Sahélo-soudanienne. O.R.S.T.O.M., 1: 333-356
- ELMORE, J.L. - 1980: An experimental study of factors regulating the distribution of Diaptomus (Copepoda: Calanoida) in subtropical Florida. Ph.D. Thesis. University of South Florida, Tampa, 113 pp.
- 1980: The effects of food concentration and container volume on Diaptomus dorsalis (Copepoda: Calanoida). Abstract. Florida Scientist 43 (Suppl.): 19
- 1980: Factors regulating the distribution of Diaptomus (Copepoda) in central Florida. Abstract. Association of Southeastern Biologists Bulletin 27(2): 32
- FERNANDO, C.H. - 1980: The freshwater zooplankton of Sri Lanka, with a discussion of tropical freshwater zooplankton composition. Int.Revue ges.Hydrobiol. 65(1): 85-125
- 1980: The species and size composition of tropical freshwater zooplankton with special reference to the Oriental Region (South East Asia). Int.Revue ges. Hydrobiol. 65(3): 411-426

- FLEEEGER, J.W. - 1980: Morphological variation in Cletocamptus (Copepoda: Harpacticoida), with description of a new species from Louisiana salt marshes. Trans. Amer. Micros. Soc. 99(1): 25-31
- FRENZEL, P. - 1980: Die Populationsdynamik von Canthocamptus staphylinus (Jurine) (Copepoda, Harpacticoida) im Litoral des Bodensees. Crustaceana 39(3): 282-286
- 1980: Zönosen benthischer Copepoda im Bodensee. Verh. Ges. Ökol. (Freising-Weihenstephan 1979) 8: 291-294
- GRICE, G.D., R. HARRIS, M.R. REEVE, J.F. HEINBOKEL & C.O. Davis - 1980: Large scale enclosed water column ecosystems. An overview of FOODWEBI. The final CEPEX experiment. J. Mar. Biol. Ass. U.K. 60: 401-414
- GYLLENBERG, G. - 1980: Feeding of the copepod Eurytemora hirundoides (Crustacea) on differential algal cultures. Ann. Zool. Fennici 17: 181-184
- HALLBERG, E. & H.-J. HIRCHE - 1980 Differentiation of mid-gut in adults and overwintering copepodids of Calanus finmarchicus (Gunnerus) and C. helgolandicus Claus. J. exp. mar. Biol. Ecol. 48: 283-295
- HARDING, G.C.H., P. VASS & S. PEARRE - 1980: Seasonal abundance biomass lipid content, size composition and mean size of plankton. In: Physical oceanography, dissolved nutrients, phytoplankton, production, plankton biomass and sedimentation in St. Georges Bay, N.S., 1977. Canadian Technical Reports of Fisheries and Aquatic Sciences No. 934: 23-34, 49-51
- HIPEAU-JACQUOTTE, R. - 1980: La forme mâle atypique du copépode ascidicole Notodelphyidae Pachypygus gibber (Thorell, 1859): description et synonymie avec Agnathaner minutus Canu, 1891. Bull. Mus. nat. Hist. nat. (A) 2: 455-470
- HIRCHE, H.-J. - 1980: The cultivation of Calanoides carinatus Krøyer (Copepoda: Calanoida) under different temperature and food conditions - with a description of eggs and nauplii. J. Mar. Biol. Ass. U.K. 60: 115-125
- HUMES, A.G. & M. DOJIRI - 1980: A siphonostome copepod associated with a vestimentiferan from the Galapagos Rift and the East Pacific Rise. Proc. Biol. Soc. Wash. 93(3): 697-707
- KTARI, M.H. & A. ABDELMOULEH - 1980: Note sur la présence et les effets du Copépode Peroderma cylindricum Heller, 1868 parasite de la sardine Sardinia pilchardus (Walbaum, 1792) des côtes tunisiennes. Bull. Inst. natn. scient. techn. Océanogr. Pêche Salammbô 7: 103-112
- PESCE, G. & T. PETKOVSKI - 1980: Parapseudoleptomesochra italica n. sp., a new harpacticoid from subterranean waters of Italy (Crustacea, Copepoda, Ameiridae). Fragm. Balcan. Mus. Maced. Sci. Nat., Skopje 11(5): 33-42
- PETKOVSKI, T. - 1980: Fünf neue Elaphoidella-Arten (Copepoda, Harpacticoida) aus den subterranean Gewässern von Kuba. Acta Mus. Maced. Sci. Nat., Skopje 15(7): 151-165
- ROE, H.S.J., A. de C. BAKER, R.M. CARSON, R. WILD & D.M. Shale - 1980: Behaviour of the Institute of Oceanographic Science's rectangular midwater trawls: theoretical aspects and experimental observations. Mar. Biol. 56: 247-259
- & M.J. HARRIS - 1980: A new acoustically telemetering deep-sea photometer with some observations on underwater light in the northeast Atlantic. Deep-Sea Res. 27A: 181-195



- SARASWATHY, M. & J.M. BRADFORD - 1980: Integumental structures on the antennule of the copepod Guassia. N.Z.J.Mar.Freshw.Res.14(1): 79-82
- SMITH, K.E. & C.H. FERNANDO - 1980: Guia para los Copépodos (Calanoida y Cyclopoida) de las aguas dulces de Cuba. Editora de la Academia de Ciencias de Cuba, La Habana, pp. 1-28
- THISTLE, D. - 1980: The response of a harpacticoid copepod community to a small-scale natural disturbance. J.mar.Res. 38: 381-395
- 1980: Enhydrosoma (Copepoda, Harpacticoida): an update and two new species. Trans. Amer.Micros.Soc. 99: 384-397
- TURNER, J.T. & S.B. COLLARD - 1980: Winter distribution of pontellid copepods in the neuston of the eastern Gulf of Mexico continental shelf. Bull.Mar.Sci 30: 526-530
- URAWA, S., K. MUROGA & S. KASAHARA - 1980: Naupliar development of Neoergasilus japonicus (Copepoda: Ergasilidae). Bull.Jap.Soc.Scient.Fish. 46(8): 941-947
- & - & -1980: Studies on Neoergasilus japonicus (Copepoda: Ergasilidae), a parasite of freshwater fishes - II. Development in copepodid stage. J.Fac.Appl.Biol.Sci., Hiroshima Univ. 19: 21-38
- UYE, S. - 1980: Development of neritic copepods Acartia clausi and A. steueri I. Some environmental factors affecting egg development and the nature of resting eggs. Bull.Plankton Soc. Japan 27 (1): 1-9
- 1980: Development of neritic copepods Acartia clausi and A. steueri II. Isochronal larval development at various temperatures. Bull.Plankton Soc. Japan 27 (1): 11-18
- WATRAS, C.J. - 1980: Subitaneous and resting eggs of copepods: relative rates of clutch production by Diaptomus leptopus. Can.J.Fish.Aquat.Sci. 37: 1579-1581
- & J.F. NANEY - 1980: Oscillations in the reproductive condition of Diaptomus leptopus (Copepoda: Calanoida) and their relation to rates of egg-clutch production. Oecologia (Berl.) 45: 94-103
- WILLIAMS, R. & D.V.P CONWAY - 1980: Vertical distribution of Calanus finmarchicus and C. helgolandicus (Crustacea: Copepoda). Mar.Biol. 60: 57-61
- & J.A. LINDLEY - 1980: Plankton of the Fladen Ground during FLEX 76. I. Spring development of the plankton community. Mar.Biol. 57: 73-78
  - & - 1980: Plankton of the Fladen Ground during FLEX 76. III. Vertical distribution, population dynamics and production of Calanus finmarchicus (Crustacea: Copepoda). Mar.Biol. 60: 47-56
- WOOLDRIDGE, T.H. & T. ERASMUS - 1980: Utilization of tidal currents by estuarine zooplankton, Est. Coastl.mar.Sci. 11: 107-114

1981

- BAIRD, D., J.K.F. MARAIS & T.H. WOOLDRIDGE - 1981: The influence of a marina canal system on the ecology of the Kromme estuary. S.Afr.J.Zool. 16: 21-34
- FRYER, G. - 1981: The copepod Salmincola edwardsii as a parasite of Savelinus alpinus in Britain, and a consideration of the so-called relict fauna of Ennerdale Water. J.Zool., London 193: 253-268

- GALLO, J.-M. - 1981: Les Copépodes pélagiques néritiques de la Rochelle. *Annls.Soc. Sci.Nat.Charente-Maritime* 6(8): 847-850
- GEDDES, D.C. - 1981: On two interstitial marine harpacticoids (Crustacea: Copepoda) from Northern Norway: *Sarsia* 66: 19-24
- GRINDLEY, J.R. - 1981: Estuarine Plankton. In: DAY, J.H. (Ed.) Estuarine ecology with particular reference to Southern Africa. Balkema, Cape Town, Chapter 8: 117-146
- HO, J.S. - 1981. Ismaila occulta, a new species of poecilostomatoid copepod parasitic in a dendronotid nudibranch. *J.Crust.Biol.* 1(1): 130-136
- 1981: Parasitic Copepoda of gastropods from the Sea of Japan. *Ann.Rep.Sado Mar. Biol.Stat., Niigata Univ.* 11: 23-41
- ITO, T. & T. TAKASHIO - 1981: The larval development of Canthocamptus mirabilis Sterba (Copepoda, Harpacticoida), with reference to the bionomics. *J.Fac.Sci.Hokkaido Univ.* (6, Zool.) 22(3): 279-300
- KIEFER, F. & H. LEHN - 1981: 60 Jahre Seenforschung in Konstanz. *Konstanzer Almanach* 1981: 39-48
- KTARI, M.H. & A. ABDELMOULEH - 1981: The action of the Copépode (Peroderma cylindricum) on the sardine (Sardina pilchardus) in Tunisian waters. *Proc.Third Europ. Multicoll.Parasitology*, p. 71 (Abstract)
- RAVENEL, W.S. & D. THISTLE - 1981: The effect of sediment characteristics on the distribution of two subtidal harpacticoid copepod species. *J.exp.mar.Biol.Ecol.* 50: 289-301
- ROUSSET, V., F. COSTE, J.-F. MANIER & A. RAIBAUT - 1981: L'appareil génital male et la spermatogenèse d'un copépode cyclopoïde libre: Acanthocyclops (Megacyclops) viridis (Jurine, 1820) (Copepoda, Cyclopoida). *Crustaceana* 40 (1): 65-78
- VANDEN BERGHE, W. & M. BERGMANS - 1981: Differential food preferences in three co-occurring species of Tisbe (Copepoda, Harpacticoida). *Mar.Ecol.Prog.Ser.* 4: 213-219



First International Conference on Copepoda, Amsterdam  
August 24-28, 1981

Third (final) Circular

Dear Participant.

Over 130 scientists from 24 countries have registered as participant in the 1st International Conference on Copepoda, and more than half of them is presenting a lecture or a poster paper. The high number of participants and lectures made a very rigid schedule for the entire conference necessary, but the organizers feel that it will be most worthwhile to hear what our colleagues from all over the world have to tell about the most recent advances of their work. A preliminary program for the entire conference is enclosed. Please notice that one of the plenary sessions planned, viz. that on the Role of the Copepod in the Ecosystem, is cancelled, because all potential candidates approached by the Organizing Committee to lecture on this topic, were unable for various reasons to do so.

The Plenary session on the Macrosystematics of Copepods will start on Monday, August 24, at 13.30h. The Check-in desk (and late registration desk) are to be found in the main Conference hall, called Koningszaal (King's Hall), in the Zoological Gardens (logically known under the name of Artis). The address of the Koningszaal is Plantage Middenlaan, 41 A. The Koningszaal can be reached by the following public transportation lines:

tram line 7 and 9 (stop: Artis Zoo)  
tram line 6 and 10 (stop: Muiderpoort)  
subway (stop: Mr. Visser Plein)  
bus line 22 (stop: Tropical Institute).

At the check-in desk, each participant, who has paid his registration fee will receive a free transportation ticket, valid during the entire conference for unlimited travel on all public transportation facilities all over town.

Messages to the Conference Office, prior to the start of the Conference, should be addressed to the 1st International Conference on Copepoda, c/o ITZ, P.O. Box 20125, 1000 HC Amsterdam, phone 020/522.3435 or 522.3635. During the Conference, the postal address remains unchanged, but phone messages are recorded under 020/522.3410 (during service hours, 08.30 - 17.00h.) or 020/522.9111 (after service hours).

All participants who have paid their registration fee, have received a letter from the Conference's Travel Agency, Messrs. Cook/Wagons Lits (address: Rokin 9-15, 1012 KK Amsterdam; phone 020/ 241361 or 241362 or 235051), stating the hotel accommodation reserved for them. For those arriving outside office hours, etc., a hotel voucher at the value of f 50,- is included with the hotel reservation. The value of this voucher has to be paid back to the conference Office when checking in.

All other participants can arrange their hotel accommodation directly through Wagon Lits, or through their local travel agencies.

Amsterdam can be reached by air (Amsterdam International Airport bears the name Schiphol) or by train (Amsterdam Central Station). Participants arriving by car, can find sufficient, though unguarded, parking space at the back side (= N.E side) of the Zoological Gardens, on a deserted railway complex called Plantage Doklaan.

From the airport, take the bus to the Airport Bus Terminal (Museum Plein). From the Bus Terminal, tram lines 6, 7 or 10 can take you to the Conference's check-in desk. The Airport has also a railroad service to Amsterdam (Amsterdam South Station), but from this station no convenient connection with the conference hall exists.

From Amsterdam Central Station take tram line 9 to the Conference's check-in desk.



In the surroundings of the Conference hall (walking distance), participants can find banking and post office facilities. Lunch will be provided at reduced price at the restaurant of the Zoo (in the Conference hall). Many other small restaurants or drugstore-like facilities are available in the neighbourhood.

The Conference's badge will serve as free entrance ticket to the Zoo.

At the registration/check-in desk, participants will receive:

- a personal badge
- a list of participants, with full address
- a map of Amsterdam
- a plan of the city with all transportation lines
- free tram/bus/metro tickets
- lunch tickets for the Zoo's restaurant (price f 6.35 per meal, incl. coffee/tea).
- a plan of the Zoo, indicating the location of the five lecture rooms in use for the Conference.
- The summaries of all lectures
- in the hotel price, a free breakfast is usually included (to be served in your hotel).

The Plenary Session, on Monday August 24, will be held in the main hall ("Koningszaal"). On the next days, several parallel sections are planned in various rooms in the Zoo (see program and map of the Zoo). The parallel sessions are planned in such a way, that conflicting interests are avoided as much as possible. In order to allow the participants to move from one session to another, the chairpersons and the speakers are requested to stick closely to the time-schedule mentioned in the program. The various lecture rooms are within a few minutes walking distance from each other.

The Proceedings of the Conference will be published. Dr. Backhuys, who agreed to publish the Proceedings, has recently been appointed Director of Brill's Publishing Company Leiden: It is not sure yet which firm will issue the Proceedings, but at any rate participants are requested to present their manuscripts in final form at the beginning of the Conference. The credit balance of the Conference, if any, will be spend on the proceedings, allowing each (paying) participant to the Conference to obtain a copy of the proceedings at reduced costs.

One excursion will be offered to the participants free of costs (see program). Visits to other points of interest, or other institutions can be arranged through the Conference Office, through Wagons Lits agency, or any other travel agency.

The chairman of the  
Organizing Committee,  
J.H. Stock,  
c/o ITZ,  
P.O. Bóx 20125  
1000 HC Amsterdam