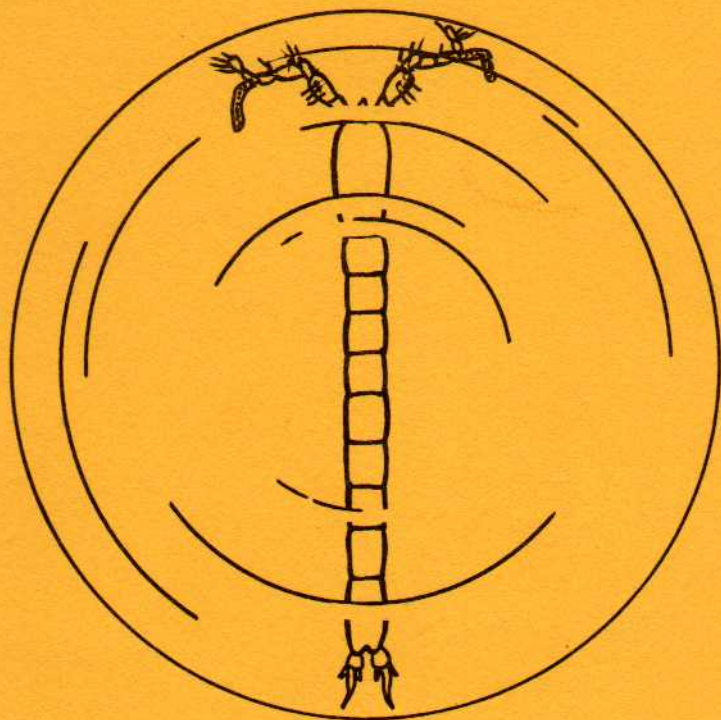


MONOCULUS

Copepod Newsletter



Nr. 6

May 1983



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Copepod Newsletter

Number 6

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not to be cited, abstracted or reprinted as a published docu-
ment.)

From PORCUPINE NEWSLETTER 2(4): 85 (1982):

The planktonic copepod Microsetella norvegica, common in "Por-
cupine " seas, was first named by Boeck in 1864. PN has recent-
ly received a translation of his description, which was written
in the archaic Norwegian of the last century. It runs: Setella
Dana. I have only observed one species of this genus in the vi-
cinity of Moss (Norway). It seemed to differ from S. messinen-
sis Claus by its less elongate form, but I had only drawn a
general sketch of it when it was accidentally lost. I have nam-
ed it Setella norvegica. It is clear transparent with a yellow
tint and short antennae. It was caught in the surface of the
water where it was swimming about by bending its body. And that
was all! The specific name still stands, on grounds of priority.

Deadline for the next issue of MONOCULUS: 15 September 1983

E d i t o r i a l

Copepodologists are a huge crowd. There are hundreds of them, probably more than of any other kind of carcinologists. Some even don't know that they are copepodologists and refuse to accept when you tell them, even though copepods are a regular item in their publications. We collect copepodologists just as other people collect stamps. Yet, our collection is far from being complete as you can see from the record at the end of this issue. The trouble is you can't swap copepodologists or buy them. You need other copepodologists to tell you. That is why we have designed a questionnaire this time to elicit a few more names and addresses from you.

Collecting is satisfactory only when you have something proper to file. Names and addresses are not enough. That is why we also collect publications of copepodologists. The trouble is you need copepodologists who send you the products of their ingenuity. We thought *MONOCULUS* might be attractive enough to stimulate copepodologists to send their reprints. Many do so by now, but quite a lot don't. Perhaps we haven't made clear enough yet that this collection is meant to be built up for the benefit of all, not just for our own satisfaction. That is why this issue is mainly about literature, a few other topics notwithstanding.

Nowadays we also try to collect voucher specimens because we were impressed by the usefulness of the idea of a *MONOCULUS*-Museum. The trouble is you need fellow copepodologists who cooperate and are willing to invest a little time and even work. Can you expect copepodologists to do that? Well, judging from the success of this idea so far we have our doubts. They are a weird crowd, these copepodologists, aren't they?

J. K. S. ————

J. S. S. ————

Business ssenisuB

1. Bibliography

Cooperation in this respect has diminished drastically. Only five more asterisks can be distributed although we still have plenty in stock: R.E. Cohen, Dumont, Nishida, Uma Devi, Vuorinen. As can be seen at the end of this issue *MONOCULUS* is distributed to 426 people at present, yet only 171 have sent their lists so far. We are a little at a loss about what to do to persuade the rest to cooperate as well. Perhaps we haven't made sufficiently clear so far what our plans are. Therefore we asked Jürgen Sieg from Vechta to contribute some lines about our joint venture of a computerized bibliography on Copepoda. Here is his report on the CRUSTACEA-database.

The CRUSTACEA-database

a. Introduction

The CRUSTACEA-database originated from the TANAIIDACEA-database which was started in 1979 and implemented on the TR440 of the University of Osnabrück. It now contains about 12.000 documents of which about 10.000 refer to Crustacea.

Complete bibliographies are so far available only for Tanaidacea, Spelaeogriphacea, and Mystacocarida. The bibliography of the latter is based on the list published by Zinn, D.J. et al. (1982). Bibliographies on Decapoda, Euphausiacea, and Syncarida are in an initial phase of realization and, since 1981, it is also planned to compile in cooperation with *MONOCULUS* a comprehensive bibliography of the literature on Copepoda which finally may contain as much as 35.000 documents altogether.

b. Structure of the CRUSTACEA-database

The database comprises two main parts, the thesaurus-area and the document-area. Both are subdivided, the thesaurus-area in thesaurus-file and inverted file, the document-area in document-file and direct file.

The references are forming the document-file, while the direct file contains the cross-references from the documents to the descriptors (keywords).

The thesaurus contains the descriptors and the semantic interconnections between them. The inverted file is formed by the cross-references from the descriptor to the documents. The thesaurus is grouped by categories of which the following ones are defined for the CRUSTACEA-database

author	AU (01)
reference number of journal	TI (02)
record date	EI (03)
year	JR (04)
editor	HG (06)
type of document	OT (07)

Descriptors belonging to categories are called "bound" , all others are called "free". The latter can additionally be structured using semantic interconnections such as

- synonyms (S)	(*CRUSTACEA CRUSTACEAN)
- antonyms (A)	(*BLACK WHITE)
- main subject (O)	(*MYSTACOCARIDA DEROCHEILOCARIS CTENOICHEILOCARIS)
- subordinate term (U)	(*DEROCHEILOCARIS MYSTACOCARIDA)
- semantic field (F)	(*MORPHOLOGY TAGMATA LEGS HEAD)
- homonyms (H)	(*STRONGYLURA PISCES TANAIDACEA)

c. The retrieval system

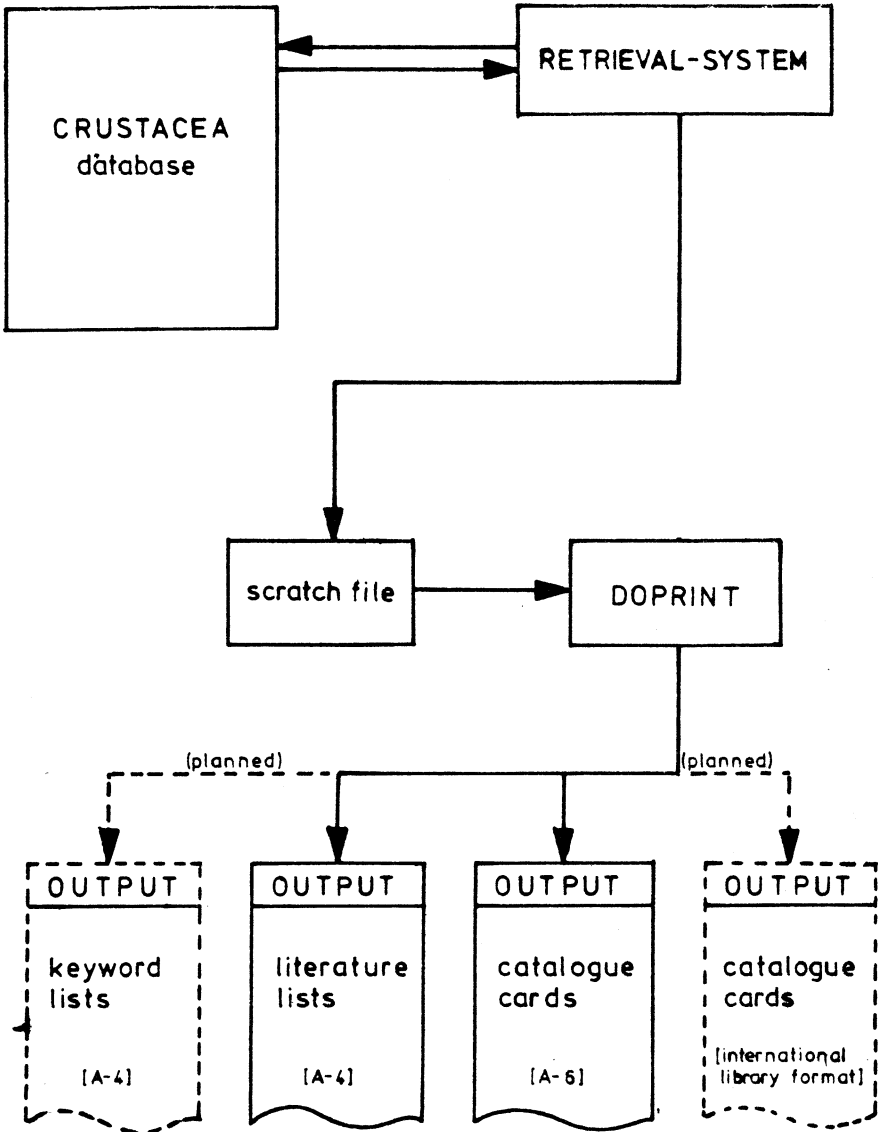
TELEFUNKEN has produced a retrieval system (TELDOK) for all databases created on the TR440. It allows "logical retrieval", "weighted retrieval", and truncations.

Within a logical retrieval the descriptors are combined by

- + for logical "AND"
- for logical "ANDNOT"
- / for logical "OR"

Within a weighted retrieval descriptors are separated by a comma and given a different value. This number (b) with $b \neq 0$ and -127 _ b _ +127 has to be placed in front of the descriptor.

Printing-routines for the CRUSTACEA database



Truncations normally are used to retrieve all documents belonging to descriptors which have the same stem (e.g. CUMAC. - CUMACE, CUMACEA, CUMACEAN, CUMACEANS, CUMACEEN, etc.).

d. Literature output

Documents of interest can be listed on the screen or transferred to a file by TELDOK. A printing routine which we have developed allows two kinds of output: literature lists and catalogue cards. In both cases the references can be sorted according to author (alphabetically) or year (chronologically).

e. Bibliography of Copepoda

Such a bibliography will take several steps to be completed. The first thing we do, is to register all publications sent to the *MONOCULUS*-Library by the authors themselves (reprints, lists of publications, etc.). From the titles of these publications keywords are taken automatically by a computer programme. Further keywords are added by us, especially the names of taxa mentioned in those publications. The result of this first step will eventually be published as a literature list by *MONOCULUS* to enable everyone to control whether his own publications have been listed without omissions. Missing titles should be brought to the attention of *MONOCULUS* to assure their subsequent storage in the database.

As a second step, we intend to register any literature on Copepoda published between 1758 and 1970 by using monographs, reference lists etc. As the BIOSIS-database is available in Germany there is no need for the time being to care systematically also for the literature published after 1970. Keywords will be extracted from the titles in the same way as mentioned above or added by ourselves. Finally a "Provisional Bibliography of Copepod Literature" will be published.

The final step will consist in going through all the publications carefully so that all aspects touched upon in these publications are represented by a keyword. At the same time publications will be added which may have been overlooked before. When nearly the whole literature on copepods will have been stored in the CRUSTACEA-database a "Bibliography of Copepod Literature" will finally appear, followed eventually, if we are lucky, by a thick volume entitled "Documentation of Copepod Literature".

f. What do we need?

It will be long, however, before these three steps will have been done. The process could be speeded up if copepodologists are willing to cooperate by either sending reprints continuously or their complete list of publications or preferably both. When sending us your list of publications, please, make sure that the following details are always apparent:

- full list of all co-authors in the sequence as published
- full title of journal or book
- number of volume, issue, pages and year
- if a paper is part of a book, editor and title of the book along with page numbers of the paper and the book as a whole

You may also add keywords to make things easier for us. In case of questions, please, don't hesitate to contact *MONOCULUS*.

Here ends Jürgen Sieg's report. To make our bibliography even more complete, it would be fine if also theses of all sorts (Ph.D., masters, Diplom, thèses de spécialité, thèses de 3ième cycle etc.) would be brought to our attention. There is a first chance of doing so by returning the questionnaire added to this issue.

2. MONOCULUS-Library

The library is the most successful of *MONOCULUS*' undertakings. Yet it could function even better. When going through "Aquatic Biology and Fisheries Abstracts" we came across the following titles published in 1980 of which the *MONOCULUS*-Library did not receive a copy although out of the 89 authors 31 receive *MONOCULUS* regularly. Would they have sent their reprints in return as their colleagues do 28 out of the following 66 titles would have come to the attention of *MONOCULUS* directly.

ALCARAZ, M.G., G.-A. PFAFFENHÖFER & J.R. STRICKLER - 1980: Catching the algae: a first account of visual observations on filter feeding calanoids. In: KERFOOT, W.C. (ed.), Evolution and ecology of zooplankton communities, Univ. Press of New England, Hanover (USA) 1980: 241-248

ARNAUD, J., M. BRUNET & J. MAZZA - 1980: Structure et ultrastructure comperées de l'intestin chez plusieurs espèces de Copépodes Calanoides (Crustacea). Zoomorphologie 95(3): 213-233

- ACHUTEANKUTTY, C.T., M. MADEUPRATAP, V.R. NAIR, S.R. NAIR & T.S. S. RAO - 1980: Zooplankton biomass & composition in the Western Bay of Bengal during late SW monsoon. *Indian J.Mar.Sci.* 9(3): 201-206
- AVDEEV, G.V. - 1980: Two new species of parasitic copepods of the family Nanaspidae (Cyclopoida) from the oesophagus of Pacific holothurians. *Zool.Zh.* 59(11): 1625-1633
- BAEZA, H. & R. CASTRO - 1980: 3 especies de Caligida nuevas para la fauna chilena. *Not.Mens.Mus.Nac.Hist.Nat. (Chile)* 24: 288-289
- BALLANTINE, J.A., J.C. ROBERTS & R.J. MORRIS - 1980: Marine sterols. 12. The sterols of some pelagic marine crustaceans. *J.exp.mar.Biol.Ecol.* 47(1): 25-33
- BAYLY, I.A.E. - 1980: Calamoecia australica Sars, 1880 and Calamoecia australis (Searle, 1911) (Crustacea, Copepoda): proposals to remove the confusion. *Bull.Zool.Nomencl.* 37(3): 165-166
- BEN HASSINE, O.K. & A. RAIBAUT - 1980: Sur la synonymie de Ergasilus lizae Kroeyer, 1863 et de Ergasilus nanus Van Beneden, 187C (Copepoda: Ergasilidae). *Bull.Off.Natl.Pêches (Tunisia)* 4(2): 209-213
- CHECKLEY, D.M. Jr. - 1980: The egg production of a marine planktonic copepod in relation to its food supply: laboratory studies. *Limnol.Oceanogr.* 25(3): 430-446
- CHISLENKO, L.L. - 1980: Three new marine harpacticoids (Copepoda Harpacticoida) from the Kuril Coast. In: SKARLATO, O.A. (ed.), *New taxa of marine invertebrates*. *Zool.Inst.An.SSR, Leningrad* 1980: 77-88
- COONEY, J.D. & C.W. GEHRS - 1980: Effects of varying food concentration on reproduction in Diaptomus clavipes Schacht. *Am. Midl.Nat.* 104(1): 63-69
- COONEY, J.D. & C.W. GEHRS - 1980: The relationship between egg size and naupliar size in the calanoid copepod Diaptomus clavipes. *Limnol.Oceanogr.* 25(3): 549-552
- COTTARELLI, V. & B. MAIOLINI - 1980: Parastenocaris veneris n. sp., nuovo arpacticoido interstiziale de lago di Vico (Crustacea, Copepoda). *Fragm.Entomol.* 15(2): 243-252
- COTTARELLI, V. & G. MURA - 1980: Klieonychocampoides arganoi n.sp., arpacticoido di acque interstiziali delle isole Maldive (Crustacea, Copepoda). *Cah.Biol.Mar.* 21(3) 355-361
- CZAIKA, S.C. - 1980: Identification of nauplii N1-N6 and copepodids CI-CVI of the Great Lakes calanoid and cyclopoid copepods (Calanoida, Cyclopoida, Copepoda) Publ. by: NYSUC, Buffalo N.Y. (USA), 67 pp.
- CZECZUGA, B. - 1980: a-Doradexanthin in fresh-water crustaceans. *Bull.Acad.Pol.Sci., Ser.Sci.Biol.* 28(1-2): 59-63
- DEXTER, B.L. - 1980: Setogenesis and molting in planktonic crustaceans. *J.Plankton Res.* 3(1): 1-13
- EINSLE, U. - 1980: Systematic problems and zoogeography in cyclopoids. In: KERFOOT, W.C. (ed.), *Evolution and ecology of zooplankton communities*. Univ. Press of New England, Hanover NH (USA) 1980: 679-684

- ELGMORK, K. - 1980: Evolutionary aspects of diapause in freshwater copepods. In: KERFOOT, W.C. (ed.), Evolution and ecology of zooplankton communities, Univ. Press of New England, Hanover NH (USA) 1980: 411-417
- ELGMORK, K. & A. LANGE LAND - 1980: Cyclops scutifer Sars - one and two year life cycles with diapause in the meromictic lake Blankvatn. Arch.Hydrobiol. 88(2): 178-201
- EPP, R.W. & W.M. LEWIS Jr. - 1980: The nature and ecological significance of metabolic changes during the life history of copepods. Ecology 61(2): 259-264
- FARMER, L. - 1980: Evidence of hyporegulation in the calanoid copepod, Acartia tonsa. Comp.Biochem.Physiol. 65A(3): 359-362
- FRIEDMANN, M.M. - 1980: Comparative morphology and functional significance of copepod receptors and oral structures. In: KERFOOT, W.C. (ed.), Evolution and ecology of zooplankton communities. Univ. Press of New England, Hanover NH (USA) 1980: 185-197
- FRYER, G. - 1980: Acidity and species diversity in freshwater crustacean faunas. Freshw.Biol. 10(1): 41-45
- GATTEN, R.R., J.R. SARGENT, T.E.V. FORSBERG, S.C.M. O'HARA & E. D.S. CORNER - 1980: On the nutrition and metabolism of zooplankton. 14. Utilization of lipid by Calanus helgolandicus during maturation and reproduction. J.Mar.Biol.Assoc.U.K. 60(2): 391-399
- GRYGIER, M.J. - 1980: Two new lamippid copepods parasitic on gorgonians from Hawaii and the Bahamas. Proc.Biol.Soc.Wash. 93(3): 662-673
- HAIRSTON, N.B. - 1980: On the diel variation of copepod pigmentation. Limnol.Oceanogr. 25(4): 742-747
- HAVEL, J.E. - 1980: Feeding differences between naupliar and cyclopoid copepods. Proc. Iowa Acad.Sci. 87(1): 23
- HENDERSON, R.J. & J.R. SARGENT - 1980: Biosynthesis of neutral lipids by Euchaeta norvegica. Mar.Biol. 56(1): 1-6
- HUMES, A.G. - 1980: A new taeniacanthid copepod from the esophagus of the sea urchin in Queensland. Mem.Queensl.Mus. 20(1): 171-179
- JAMIESON, C.D. - 1980: Observations on the effect of diet and temperature on rate of development of Mesocyclops leuckarti (Claus) (Copepoda, Cyclopoida). Crustaceana 38(2): 145-154
- LAI, H.C. & C.H. FERNANDO - 1980: Zoogeographical distribution of southeast Asian freshwater Calanoida. Hydrobiologia 74(1): 53-66
- LAI, H.C. & C.H. FERNANDO - 1980: The freshwater Calanoida (Crustacea: Copepoda) of Thailand. Hydrobiologia 76(1-2): 161-178
- LEE, S.S. - 1980: Distribution and abundance of copepods in the Gulf of Alaska and the Bering Sea in summer 1978. J.Oceanol. Soc.Korea 15(1): 17-53
- LINE, R.Ya. - 1980: Some observations on the development cycle of Temora longicornis and Centropages hamatus in the Baltic Sea. Rybokhoz.Issled.Bass.Balt.Morya 15: 71-75

- LOPEZ, G.W. - 1980: Description of the larval stages of Tisbe cucumaria (Copepoda: Harpacticoida) and comparative development within the genus Tisbe. Mar.Biol. 57(2): 61-71
- MARCUS, N.H. - 1980: Photoperiodic control of diapause in the marine calanoid copepod Labidocera aestiva. Biol.Bull.Mar. Biol.Lab.Woods Hole 159(2): 311-318
- MARKHASEVA, E.L. - 1980: Calanoida of the genus Jaschovia, nom. n. (Derjuginia Jaschov, nom. praeocc.) (Calanoida, Aetideidae). In: SKARLATO, O.A. (ed.), New taxa of marine invertebrates, Zool.Inst.An.SSR, Leningrad 1980: ?
- MILLER, C.B., D.M.NELSON, R.R.L. GUILLARD & B.L. WOODWARD - 1980: Effects of media with low silicic acid concentrations on tooth formation in Acartia tonsa Dana (Copepoda, Calanoida). Biol. Bull.Mar.Biol.Lab.Woods Hole 159(2): 349-363
- MONCHENKO, V.J. - 1980:Cyclopina parapsammophila (Crustacea, Copepoda), a new species from the Black Sea. Biol.Morya 6: 35-40
- MONTAGNA, P.A. -1980: Two new bathyal species of Pseudotachidius (Copepoda: Harpacticoida) from the Beaufort Sea (Alaska, U.S.A.) J.Nat.Hist. 14(4): 567-578
- MONTAGNA, P.A. - 1980: A new species and a new genus of Cerviniidae (Copepoda: Harpacticoida) from the Beaufort Sea, with a revision of the family. Proc.Biol.Soc.Wash. 93(4): 1204-1219
- MONTU, M. - 1980: Parasite copepods of southern Brazilian fishes. 1. Ergasilus europedesi n.sp. (Copepoda, Cyclopiidea). Iheringia, ser. Zool., 56: 53-62
- MURAVSKAYA, Z.A., E.V. PAVLOVA & G.E. SHULMAN - 1980: Oxygen consumption and nitrogen excretion in Calanus helgolandicus (Claus) and Pontella mediterranea Claus. Ekol.Morya 2: 33-40
- NILSSEN, J.P. - 1980: When and how to reproduce: a dilemma for cyclopoid copepods. In: KERFOOT, W.C. (ed.), Evolution and ecology of zooplankton communities, Univ.Press of New England, Hanover NH (USA) 1980: 418-426
- OOISHI, S. - 1980: The larval development of some copepods of the family Ascidiocolidae, subfamily Haplostominae, symbionts of compound ascidians. Publ.Seto Mar.Biol.Lab.Kyoto Univ. 25 (5-6): 253-292
- PAPINSKA, K. & J. PIJANOWSKA - 1980: Pelagic and near-bottom crustaceans in five Masurian lakes. Ekol.Pol. 28(2): 219-229
- PAPINSKA, K. & K. PREJS - 1980: Crustaceans of the near-bottom water and bottom sediments in 24 Masurian lakes with special consideration to cyclopoid copepods. Ekol.Pol. 27(4): 603-624
- PETKOVSKY, T.K. - 1980: Trogloaptomus sketi n.gen., n.sp., ein neuer Hoehlen-Calanoide vom Karstgelaende Istriens. Acta Mus. Maced.Sci.Nat. 15(7): 151-165
- PIRES DE GOUVEA, E. - 1980: Naupliar developmental stages of Notodiptomus conifer (Sars, 1901) (Copepoda, Calanoida). Cienc. Cult. 32(8): 1047-1059
- POLISHCHUK, L.N. - 1980: Size and mass characterization of hyponeuston copepods of the family Pontellidae (Copepoda) from different Black Sea water areas. Ekol.Morya 2: 21-28

- POULET, S.A. & P. MARSOT - 1980: Chemosensory feeding and food gathering by omnivorous marine copepods. In: KERFOOT, W.C. (ed.), Evolution and ecology of zooplankton communities, Univ.Press of New England, Hanover NH (USA), 1980: 198-218
- RINGELBERG, J. - 1980: Aspects of red pigmentation in zooplankton, especially copepods. In: KERFOOT, W.C. (ed.), Evolution and ecology of zooplankton communities, Univ.Press of New England, Hanover NH (USA), 1980: 91-97
- ROSENBERG, G.G. - 1980: Filmed observations of filter feeding in the marine planktonic copepod Acartia clausi. Limnol. Oceanogr. 25: 738-741
- ROUCH, R. - 1980: Le système karstique du Baget. 11. La communauté des Harpacticides. Sur l'évolution de la nomocénose épigée au sein de l'aquifère. Ann.Limnol. 16(3): 299-314
- RUNGE, J.A. -1980: Effects of hunger and season on the feeding behavior of Calanus pacificus. Limnol.Oceanogr. 25: 134-145
- SAZHINA, L.I. - 1980: Fecundity, growth rate and specific production of some Atlantic copepods. Biol.Morya 3: 56-61
- SAZHINA, L.I. - 1980: On the fecundity of planktonic copepods from the Atlantic Ocean. Ekol.Morya 4: 36-43
- SCHRAM, T.A. -1980: The parasitic copepods Clavella adunca (Strom), Haemobaphes cyclopterina (Fabricius) and Sphyrion limpi (Kroeyer) on Polar Cod, Boreogadus saida (Lepechin) from Spitsbergen. Sarsia 65(3-4): 273-286
- SMITH, S.L. & T.S.S. RAO - 1980: Transfer of radioactive carbon within the copepod Temora longicornis. Mar.Biol. 55(4): 277-286
- STAKER, R.D. - 1980: Zooplankton distribution and standing crops in Lake Mead (Colorado River). Elisha Mitchell Sci.Soc. 96(1): 4-11
- STEPHEN, R. & T.S.S. RAO -1980: Distribution of the bathypelagic family Arietellidae (Copepoda, Calanoida) in the upper 200 m in the Indian Ocean. J.Plankton Res. 2(4): 239-247
- STROM, A.R. - 1980: Biosynthesis of trimethylamine oxide in Calanus finmarchicus. Properties of a soluble trimethylamine monooxygenase. Comp.Biochem.Physiol. (B) 65(2): 243-249
- VIVES, F. -1980: Los copepodos de las aguas neriticas de las costas de Vizcaya, durante 1976. Invest.Pesq.(Barc.) 44(2): 313-330
- VOLKMAN, J.K., R.R. GATTEN & J.R. SARGENT - 1980: Composition and origin of milky water in the North Sea. J.Mar.Biol.Assoc. U.K. 60(3): 759-768
- WELLS, J.B.J. - 1980: A revision of the genus Longipedia Claus (Crustacea: Copepoda, Harpacticoida). Zool.J.Linn.Soc., Lond. 70(2): 103-189

Together with the titles published in the earlier issues of *MONOCULUS* these 66 publications add up to 211 titles altogether published on copepods in 1980. There are certainly even a few more which may have escaped our attention. But if everybody who

