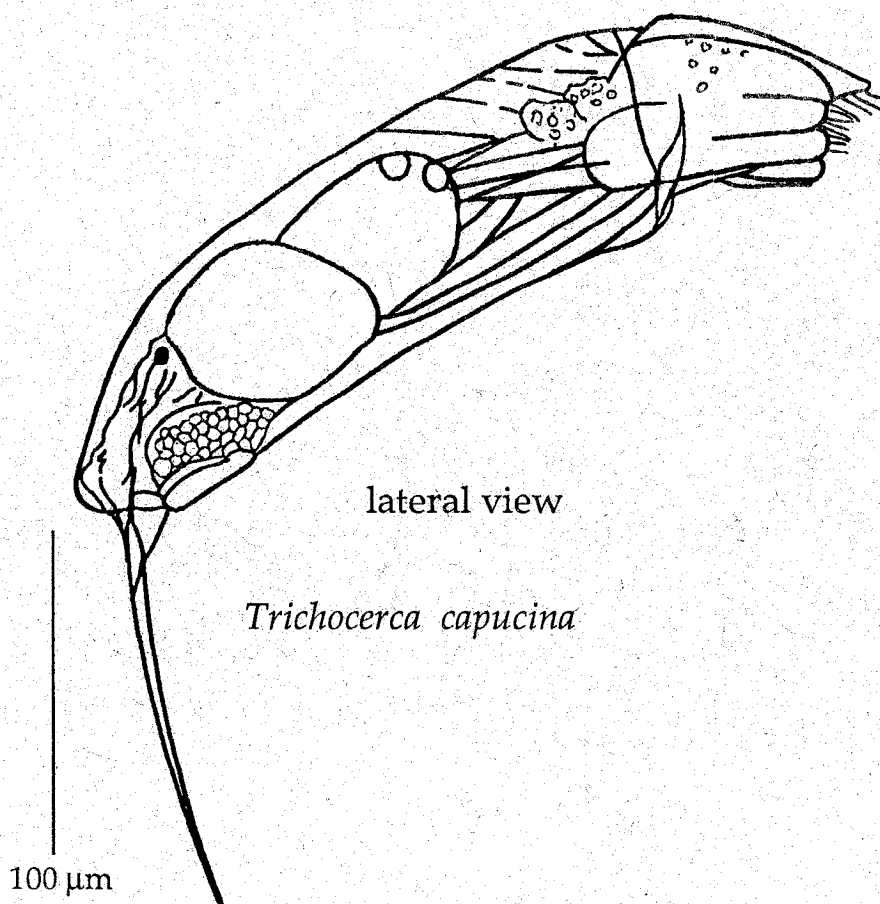


Rotifer News

a newsletter for rotiferologists throughout the world



Issue 18

Winter 1990

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ROTIFER NEWS

Issue 18, Winter 1990 [reformatted: 2010.02.03]

Editors: Robert Lee Wallace & Paul N. Turner

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Rotifer News is not part of the normal scientific literature (e.g., journals such as ECOLOGY, HYDROBIOLOGIA, LIMNOLOGY AND OCEANOGRAPHY, and VERH INTERNAT VEREIN LIMNOL); therefore, it should not be cited as such. ROTIFER NEWS is a newsletter that prints citations of recent literature, news, abstracts, and notes about work in progress or papers being submitted for publication in regular scientific journals as a service to professional and amateur investigators of the Rotifera. ROTIFER NEWS is printed once a year (as we can get it out) at Ripon College. Please send reprints and/or references, news, notes, requests to: Robert L. Wallace, Biology Department, Ripon College, 300 Seward Street, Ripon, WI USA 54971-0248. Internet = WALLACER@ACAD.RIPON.EDU

PLEASE BE SURE TO INFORM THE EDITORS CONCERNING OTHER INVESTIGATORS WHO MIGHT WISH TO RECEIVE ROTIFER NEWS.

A letter quality copy of ROTIFER NEWS is produced at Ripon College from text files using a Macintosh Plus® as a text editor. The editors encourage authors to send us reprints so that papers may be properly cited and annotated for the index. ROTIFER NEWS has a long standing policy of confirming all citations printed in ROTIFER NEWS. To do this the editors review all works either in the original journal or from reprints sent by the author(s). To help in this review, RLW sends letters or reprint request cards to authors requesting a reprint of their work(s) (if we do not have access to the journal in which the work was printed). Works that could not be confirmed in this way are not printed in ROTIFER NEWS. The only exception to this comes when author(s) send written information on their work.

NEWS, NOTES, AND REQUESTS

1. Most items received by either editor on or before (15 December 1989) have been included in this issue of

Rotifer News (No. 18), other items will be printed in issue No. 19.

2 The editors are sorry to inform our readers that we must continue to request support for the production of ROTIFER NEWS. As you are well aware, international and even domestic mailing costs are quite high. Production costs are also quite expensive. We are requesting, but do not require that the readers of ROTIFER NEWS support us in this valuable endeavor by making a contribution of the suggested amount of \$5.00 US dollars per year. Readers of ROTIFER NEWS who wish to may contributions beyond the suggested amount are encouraged to do so!!!! Make all checks payable to Rotifer News, Ripon College account # 352.01. Rotiferologists who cannot contribute may request to receive ROTIFER NEWS without making a contribution. Please do not request to receive ROTIFER NEWS beyond the year 1991: see below New Item Number 5.

3. The next instalment of the Rotifer Symposium has been published. This volume reports the papers given at the 5th International Rotifer Symposium held in Italy in 1988 is about 430 pages long & contains 52 different works. The papers were published in Hydrobiologia, & reprinted as a separate book. The editors of ROTIFER NEWS plan to print a complete list of the papers when the book form becomes available.

4. **John J. Gallagher, PhD** - Over his career, Dr. Gallagher carefully gathered more than 1,000 publications on rotifers, including original monographs, offprints, & edited works. His collection contained most of the older references on the phylum, including good coverage of the Russian literature. In addition to this large collection Dr. Gallagher also carefully recorded all species citations from all systematic works known to him. This collection has been computerized & the result is a unique index of species citations from the world literature cross-referenced to the bibliography & the species index. The final result will be a remarkably complete catalog to the literature with more than 13,000 taxonomic citations. Information in the **JOHN J. GALLAGHER COLLECTION** is available to all interested scientists. Please direct inquiries to:

Curator in Charge
JOHN J. GALLAGHER COLLECTION
Section of Invertebrate Zoology
The Carnegie Museum of Natural History
4440 Forbes Ave., Pittsburgh, PN 15213, USA.

In an effort to keep the collection current & active, all persons publishing research on rotifers are asked to send reprints of their work to the **JOHN J. GALLAGHER COLLECTION**.

5. **Change of Editorship:** At the 5th International Rotifer Symposium held in Italy in the fall of 1988 & in issue 16-17 of ROTIFER NEWS, I (RLW) discussed the idea of a change in editorship of ROTIFER NEWS.

ROTIFER NEWS came into being in the mid-70s in the laboratory of John Gilbert. Since that time most of the production has been done by John or his students: Jim Litton & Bob Wallace. I believe that it is time for a change, & I will turn over ROTIFER NEWS to a new editor at (or before) the next symposium. Paul Turner (co-editor) has informed me that he is unable to take over the job as editor. Fortunately, one worker has come forward to say that he **may** be able to take over ROTIFER NEWS, but that is not certain!

Whether or not a new Production Editor (PE) is located, I will CEASE production of ROTIFER NEWS with issue #19, currently scheduled for winter (ca. December) 1991. All funds in the Ripon College account for ROTIFER NEWS will be transferred to a similar account in the home institution of the new PE if one is forthcoming.

Please note that I believe that ROTIFER NEWS is a valuable part of our discipline. However, I also believe that my involvement with ROTIFER NEWS in 15 of 18 issues is more than enough of the call-to-duty. Thus my decision to stop my involvement as of 1991, is final. The choice of 1991 comes 3 years after my public announcement at the 5th Rotifer Symposium, 3 issues from first printing the announcement in ROTIFER NEWS (16-17), & about the time of the next symposium. If no new PE is located by the time I complete issue #19, I will begin to consider donating any funds remaining in the Ripon College account of ROTIFER NEWS to a non-profit educational institution. (NB: <\$500). However, I will not transfer those funds until after Rotifer Symposium 6. *I welcome any suggestions from the readership on these matters.*

6. Back issues of ROTIFER NEWS are still available! If you need a back issue of ROTIFER NEWS copies they are available from Bob Wallace for a suggested donation of \$3.00 per issue to cover mailing and reproduction. Your comments on any aspect of ROTIFER NEWS is requested by the editors!

7. Tony Saunders-Davies made the U.S. national cable news network this past summer! He was interviewed about his interest in various aspects of water sports-hobbies. At least I think so; Tony, what were you doing?

WORK IN PROGRESS

1. Dr. S.S.S. Sarma (Department of Animal Physiology, School of Biological Sciences, Madurai Kamaraj University, Madurai 625 021, INDIA) has compiled a bibliography of world rotifer literature under the title of "Global Bibliography on Rotifera (Rotatoria): A comprehensive compilation of rotifer references since 1696." This bibliographic information is currently in press. Workers interested in Dr. Sarma's contribution

to our field may make contact at the address given above.

2. The editors of Rotifer News wish to inform our readers of another newsletter that may be of interest to them: Artemia Newsletter. The editor of this newsletter is Partick Sorgeloos. His address is State University of Ghent, Faculty of Agriculture, Laboratory for Aquaculture and *Artemia* Reference Center, Rozier 44, B-9000, Ghent, BELGIUM. phone + 32-91-257571 extension 4219, telex 12754 rugent b (attn ARC tel 7-4219); FAX + 32-91-236406; bitnet "artemia@bgerug51". I (RLW) have been receiving *Artemia* Newsletter since 1986 and find it to be an excellent source of information on brine shrimp biology and cultivation.

DESCRIPTIONS OF NEW SPECIES

A new format, designed to conserve space, will be used for this section of ROTIFER NEWS. The following numbers refer to the access numbers used in the Recent Literature section: **34, 75, 77, 78, 104, 145**.

RECENT LITERATURE

We apologize for any incorrect citations which may follow! An attempt always is made to cite works completely and properly. We would like to be informed of any important errors in these citations; corrections will be printed in the next available issue. The editors encourage authors to send us reprints so that they can be properly cited and abstracted. These references have been indexed at the end of RECENT LITERATURE section by using such keywords as species names, taxonomy, salinity, biogeography, season, etc. Suggestions concerning the index are welcome.

A

1. Adalsteinsson, H. 1987. [The Veihvötn lakes.] *Náttúrufræðingurinn* 557(4): 185-204. <Summary: Glacial lakes in Iceland are described.> <Keywords: glacial lakes, Iceland, populations.>
2. Adamkiewicz-Chojnacka, B., Heerkloss, R., & Schnese, W. 1986. Aggregation analysis of the plankton rotifers in brackish waters of southern Baltic. *Oceanologia* 24: 63-73. <Keywords: marine, Baltic Sea, similarity indices, population dynamics.>
3. Alam, M.J., Bin Habib, M.,A., & Begun, M. 1989. Effect of water properties & dominant genera of phyto-plankton on the abundance of available genera of zooplankton. *Pak. J. Sci. ind. res.* 32(3): 194-200. <Keywords: physical limnology, chemical limnology, population dynamics, season, bluegreen algae, oxygen>
4. Arndt, H., et al. 1984. Diurnal changes in the matter flux of a shallow-water ecosystem in a baltic inlet. *Ophelia* (Suppl) 3: 1-9. <Keywords: marine, season, population dynamics.>

5. Arndt, H. 1985. Eine Zählkammer für die mikroskopische Auswertung von Zooplanktonproben. Wissenschaftliche Zeitschrift der Wilhelm-Pieck-Universität Rostock 6: 30-31. <Summary: A new counting chamber for the analysis of zooplankton is described.> <Keywords: counting-chamber>
6. Arndt, H. 1985. Zwei Methoden zur Bestimmung populationsdynamischer Parameter von Zooplankton unter Laborbedingungen mit ersten Ergebnissen an *Eurytemora affinis* (Copepoda, Calanoida) und *Synchaeta cecilia* (Rotatoria, Monogononta). Wissenschaftliche Zeitschrift der Wilhelm-Pieck-Universität Rostock 6: 17-21. <Keywords: food, population dynamics.>
7. Arndt, H., Heerkloss, R., & Schnese, W. 1984. Seasonal & spatial fluctuations of estuarine rotifers. Limnologica (Berlin) 15(2): 377-385. <Keywords: season, population dynamics, marine, estuarine.>

B

8. Balvay, G., & Laurent, M. 1989. [Impacts of trophic level changes in Lake Geneva on the characteristics of the planktonic rotifer biocenosis.] Arch Sci (Geneva) 42(2): 341-366. <Summary: Significant changes in the rotifer species, are reported for Lake Geneva.> <Keywords: season, Lake Geneva>
9. Barron, G.L. 1989. New species & new records of fungi that attack microscopic animals. Can J Bot 67(1): 267-271. <Summary: 3 species of fungi that attack microscopic animals (including bedelloid rotifers) are described. One is a parasite of the eggs of *Adineta* rotifers. Zoospores of the fungus encyst on the egg shell, penetrate, and transfer their contents into the egg to initiate infection.> <Keywords: fungi, parasites of rotifers>
10. Barron, G.L. 1989 Host range studies for *Haptoglossa* & *Haptoglossa intermedia*, new species. Can J Bot 67(6): 1645-1648. <Summary: New species of soil fungi endoparasite on rotifers.> <Keywords: fungi parasitic on rotifers>
11. Barron, G.L. 1987. The gun cell of *Haptoglossa mirabilis*. Mycologia 79(6): 877-883. <Summary: A description of a specialized cell of a fungal parasite of rotifers.> <Keywords: parasite, fungal parasite of rotifers.>
12. Bennett, W.N., & Boraas, M.E. 1988. Isolation of a fast-growing strain of the rotifer *Brachionus calyciflorus* Pallas using turbidostat culture. Aquaculture 73(1-4): 27-36. <Summary: *Brachionus calyciflorus* was grown in turbidostat culture, when

the population (a clone) was forced to grow at its maximum specific growth rate for a 14-month period. This procedure for increasing a population's maximum growth rate should be applicable to other rotifer & metazoan species, & be instrumental in increasing mass production of rotifers for aquacultural purposes.> <Keywords: culture, *Brachionus calyciflorus*, population, growth, production, aquaculture>

13. Bennett, W.N., & Borass, M.E. 1989. A demographic profile of the fastest growing metazoan: a strain of *Brachionus calyciflorus* (Rotifera). Oikos 55: 365-369. <Summary: Using *Brachionus calyciflorus*, the authors tested the hypothesis that trade-offs between growth, reproduction, & maintenance tend to maximize the maximum specific growth rate, μ_{max} , of a population for a given environment.> <Keywords: *Brachionus calyciflorus*, culture, growth, survivorship, fecundity, egg production, chemostat, egg size.>
14. Bennett, W.N., & Borass, M.E. 1989. An experimental test of the egg-ratio method with instantaneous birth rate as an independent variable. Limnology & Oceanography 34(6): 1120-1125. <Summary: Accuracy of 3 mathematical models that have been used to calculate b from the ratio of eggs to females (E) in a population was determined with steady state populations of *Brachionus calyciflorus*. Typically, b is calculated from E with these models, but the authors were able to choose b as an independent variable, by culturing the rotifers in a 2-stage steady state chemostat. Paloheimo's model gave the best fit to these steady state data when the calculated b & observed b were compared.> <Keywords: *Brachionus calyciflorus*, chemostat, culture, mathematical models, egg-ratio method, chemostat, population dynamics, life history.>
15. Bennett, W.N., & Borass, M.E. 1989. Comparison of population dynamics between slow- & fast-growing strains of the rotifer *Brachionus calyciflorus* Pallas in continuous culture. Oecologia (in press). <Summary: Population dynamics of slow- & fast-growing strains of *Brachionus calyciflorus* Pallas were compared.> <Keywords: population dynamics, culture, chemostat.>
16. Berzins, B., & Pejler, B. 1989. Rotifer occurrence in relation to temperature. Hydrobiologia 175(3): 223-232. <Summary: Information on the distribution of 225 species of planktic, periphytic & benthic rotifers from diverse waters in south & central Sweden was analyzed for temperature preference & tolerance.> <Keywords: biogeography, distribution, Sweden, temperature>

17. Bielanska-Grąjner, I., & Mordarska, I. 1988. [The associations of rotifers (Rotatoria) on Rekreacyjny reservoir (Dolina Trzech Stawów in Katowice).] *Pr Nauk Uniw Śląsk Katowicach* 988(0): 62-77. <Summary: in Polish with English summary; 68 species & forms of rotifers in the Rekreacyjny reservoir were examined.><Keywords: *Keratella cochlearis*, *Keratella cochlearis tecta*, *Keratella quadrata*, *Polyarthra remata*, eutrophication, pollution, water quality, *Polyarthra major*, *Polyarthra vulgaris*, *Pompholyx sulcata*, population dynamics>
 18. Bielanska-Grąjner, I., Pilarczyk, K., & Walus, B. 1988. [Zooplankton in the pond Łaka (Dolina Trzech Stawów, Katowice).] *Pr Nauk Uniw Śląsk Katowicach* 988(0): 78-92. <Summary: in Polish with English summary; 68 taxa of rotifers were present.><Keywords: *Keratella cochlearis*, *Keratella cochlearis tecta*, *Keratella quadrata*, *Polyarthra major*, population dynamics.>
 19. Bok, A.H. 1989. Rearing of artificially spawned southern mullet. *S Afr J Wildl Res* 19(1): 31-34. <Keywords: *Brachionus plicatilis*, embryology, rotifers as food for fish>
 20. Boltovskoy, D., & Mazzoni, H.E. 1988. The effects of sampling gear & environmental conditions on the abundance estimates of freshwater zooplankton. *Rev Hydrobiol Trop* 21: 21-34. <Summary: Rotifers (& others) were counted from ~100 samples collected mainly from a small reservoir. Sampling gear used were 2 different nets (push & tow), submersible centrifugal pump, & a water bottle. Results indicate that neither net size nor bridles have measurable effects on net yields. Disturbance of the upper layer during the day influence collection.> <Keywords: collection, net samplers, pump samplers>
 21. Boltovskoy, D., Pedrozo, F.L., Battistoni, P.A. 1984. The effects of wind & diel vertical migrations on the distribution of freshwater zooplankton. *Studies on Neotropical Fauna & Environment* 19(3): 137-154. <Summary: Diel vertical migrations of rotifers is discussed.> <Keywords: diel, vertical migration.>
 22. Bozovic, V., & Enesco, H.E. 1989. Cortisone extends life span in the rotifer *Asplanchna brightwelli*. *Arch Gerontol Geriatr* 9(1): 45-52. <Summary: Cortisone at concentrations of 100 and 200 uM significantly increased in life span & reproduction in the rotifer *Ab*. Possible mechanisms include: cortisone stabilization of lysosomal membranes & recognition of cortisone as a hormone capable of altering resource allocation by the rotifers.> <Keywords: reproduction, life span, survivorship, *Asplanchna brightwelli*, life table statistics.>
 23. Browman, H.I., Kruse, S., O'Brien, W.J. 1989. Foraging behavior of the predaceous cladoceran, *Leptodora kindtii*, & escape responses of their prey. *J. Plankton Res.* 11(5): 1075-1088. <Summary: *Leptodora* preys upon microcrustaceans & rotifers.> <Keywords: rotifers as food for *Leptodora*.>
- *C*
24. Cataudella, S., Massa, F., Rampacchi, M., & Crosetti, D. 1988. Artificial reproduction and larval rearing of the thick lipped mullet, *Chelon labrosus*. *J Appl Ichthyol* 4(3): 130-139. <Summary: Rotifers & brine shrimp nauplii were used to feed the larvae of this fish.> <Keywords: rotifers as food for fish>
 25. Coffell, R., Hudspeth, M.E.S., & Meganathan, R. 1989. Presence of glycogen in the rotifer-trapping fungus *Zoophagus insidians*. *Abstr Annu Meet Am Soc Microbiol* 89(0): 260. <Address: (Northern IL. University, DeKalb, IL, USA> <Summary: Abstract, work in progress.> <Keywords: rotifer trapping fungus, physiology>
 26. Colura, R.L., Matlock, G.C., & Maciorowski, A.F. 1987. Zooplankton abundance in unstocked mariculture ponds at three salinities. *Prog Fish-Cult* 49(4): 253-259. <Summary: Zooplankton population dynamics in unstocked saltwater fish culture ponds was studied. > <Keywords: rotifers as food for fish, population dynamics>
 27. Cruz, E.M., & James, C.M. 1989. The effects of feeding rotifers (*Brachionus plicatilis typicus*,) on the yield and growth of tilapia (*Oreochromis spilurus*) fry. *Aquaculture* 77(4): 353-362. <Summary: Effects of feeding *Brachionus plicatilis typicus* to tilapia fry during the early feeding stage were investigated.> <Keywords: *Brachionus plicatilis*, rotifers as food for fish>
- *D*
28. De Ridder, M. 1987. New data on the distribution of rotifers in Africa. *Biol Jaarb* 55(1): 57-68. <Summary: The distribution of rotifers in Kenya, Tanzania, Guinee-Conakry, Sao Migueal (Acores), La Digue & Praslin (Seychelles) was examined. 62 taxa were identified to species level; Biogeography of *Lepadella lindaui* is examined. > <Keywords: Africa, *Lepadella lindaui*, biogeography, periphyton, aufwuchs, benthos>
 29. De Ridder, M., Mertens, J., & Dumont, H.J. 1988. Crustacea & Rotatoria from Jebel Uweinat, Northeastern Sahara. *Biol Jaarb* 56(0): 111-114. <Summary: African rotifers are studied.> <Keywords: Africa, biogeography>

30. De Ridder, M. 1989. Rotifers from western Sudan. *Hydrobiologia* 179(3): 205-210. <Summary: 145 rotifer species were previously known from Sudan, mostly from the Nile valley & the NE of the country. In the present paper planktonic, periphytic & benthic samples from the Western provinces of Darfur & Kordofan are examined. 77 species, in 1 or different forms are noted, 67% were cosmopolitan, 15% thermophilic, 14% tropicopolitan, & 4% temperate-boreal. No new taxa were found, but 23 species & 1 subspecies are new to Sudan; 1 is new to Africa.> <Keywords: Sudan, biogeography, >
31. De Smet, W.H., Van Rompu, E.A., & Beyens, L. 1988. Contribution to the rotifers and aquatic Tardigrada of Edgeøya (Svalbard). *Fauna norv. Ser A* 9: 19-30. <Summary: 22 taxa of monogonont rotifers and aquatic tardigrades are reported. 6 rotifers are new to the region.> <Keywords: biogeography.>
32. De Smet, W.H. 1989. Rotifera uit de Galapagoseilanden. *Natuurwet. Tijdschr.* 69: 110-131. [Rotifera from the Galapagos Islands]. <Summary: 41 taxa were reported, 31 of which are identified to spp. level; most species reported were cosmopolitan. 2 species & 1 form are probably endemic.> <Keywords: island biogeography, biogeography, cosmopolitan, Galapagos Islands.>
33. De Smet, W.H., Van Rompu, E.A., & Beyens, L. 1987. Rotifera, Gastrotricha and Tardigrada from Shetland, the Faroes and Spitsbergen. *Natuurwet Tijdschr* 69(3): 81-102. <Summary: 34 taxa of Rotifera, were reported from the samples.> <Keywords: marine>
34. De Smet, W.H. 1988. Rotifers from Bjornoya (Svalbard) with the descriptions of *Cephalodella evabroedi*, n. sp. and *Synchaeta lakowitziana arctica*, n. subsp. *Fauna Norv Ser A* 9(0): 1-18. <Summary: 50 taxa of rotifers were collected from Bjornoya; 48 had not been previously noted. A new species of *Cephalodella* & subspecies of *Synchaeta* are described.> <Keywords: taxonomy, biogeography, *Cephalodella evabroedi* new species, *Synchaeta lakowitziana*>
35. De Smet, W.H. 1988. Contributions to the rotifer fauna of the lower Zaire: 1. The rotifers from some small ponds & a river. *Biol Jaarb* 56(0): 115-131. <Summary: 80 taxa were found; 78 are new for the region; 28 are new for Zaire.> <Keywords: taxonomy, biogeography, ponds, river>
36. De Smet, W.H., Van Rompu, E.A., & Beyens, L. 1988. Contribution to the rotifers & aquatic Tardigrada of Edgeøya, Svalbard. *Fauna Norv Ser A* 9(0): 19-30. <Summary: An account of the rotifers of Edgeøya, Norway, is presented. 22 taxa are reported.> <Keywords: Norway biogeography>
- *E*
37. Ejsmont-Karabin, J., & Weglenska, T. 1988. Spatial distribution of the zooplankton and its population features in two lakes of different heated-water through-flow. *Ekol Pol* 36(12): 203-230. <Summary: Zooplankton of 2 lakes heated by thermal discharges from power plants was studied.> <Keywords: species composition, temperature, heat, thermal pollution>
38. Ejsmont-Karabin, J., & Weglenska, T. 1988. Disturbances in zooplankton seasonality in Lake Goslawskie, Poland, affected by permanent heating & heavy fish stocking. *Ekol Pol* 36(12): 245-260. <Summary: Zooplankton were effected by fish & thermal discharge.> <Keywords: rotifers as food for fish, temperature, heat, thermal pollution>
39. Eloranta, P. 1988. *Kellicottia bostoniensis*, (Rousselet), a planktonic rotifer species new to Finland. *Ann Zool Fenn* 25(3): 249-252. <Summary: *Kellicottia bostoniensis* (Rousselet) is a typical planktonic rotifer species in N.A., which has been reported in Europe a few times; *Kellicottia bostoniensis bostoniensis* was found in phytoplankton samples from Lake Tarjannevesi in the summer of 1987. The highest density of species was 560 ind/L in the surface water (~1m). It was found in samples from 4 stations. The species has only 4 anterior spines and its total length is <410µm (mean = 381±23.7µm).> <Keywords: *Kellicottia bostoniensis*, population density, pollution, toxic agent, morphology, Lake Tarjannevesi, size, morphology, biogeography>
40. Enesco, H.E., Bozovic, V., & Anderson, P.D. 1989. The relationship between lifespan & reproduction in the rotifer *Asplanchna brightwelli*. *Mech Ageing Dev* 48(3): 281-290. <Summary: Lifespan is strongly correlated with the length of the reproductive period, but less with the number of offspring produced in the rotifer *Asplanchna brightwelli*. Findings do not support most of the reproduction theories, but support the concept that the end of the reproductive period signals the end of the lifespan.> <Keywords: aging, age, life span, reproduction, *Asplanchna brightwelli*>
41. Enesco, H.E., Wolanskyj, A., & Sawada, M. 1989. Effect of copper on lifespan and lipid peroxidation in rotifers. *Age (Omaha)* 12(1): 19-24. <Summary: *Asplanchna brightwelli* were exposed to CuSO₄ (60 ug/L); a significant (9%) decrease in lifespan was observed. Studies on enzymatic activity were undertaken. At concentrations of 90 & 180 ug/L) CuSO₄ was toxic.> <Keywords: *Asplanchna*

brightwelli, aging, age, toxic agent, environmental toxicology, pollution, aging theory: free radical>

42. Esparcia, A., & Serra, M. 1988. Efecto del alimento tratado térmicamente en el crecimiento poblacional de *Brachionus plicatilis* Müller, 1786. (Rotifera: Brachionidae). [Effect of thermally treated food on population growth of *Brachionus plicatilis*.] Invest Pesq 52(3): 345-354. <Summary: Effect of various feeding & culture conditions on the population growth of *Brachionus plicatilis* was studied: food type, food treatment, & illumination conditions.> <Keywords: culture, *Brachionus plicatilis*, population dynamics, growth, reproduction, food, temperature, treated food, light, growth rate>

F

43. Farris, R.A., & O'Leary, D.J. 1985. Application of videomicroscopy to the study of interstitial fauna. Int. Revue ges. Hydrobiol 70(6): 891-895. <Summary: Meiofauna are examined using videomicroscopy.> <Keywords: meiofauna, psammon, interstitial.>
44. Foissner, W. 1987. Soil Protozoa: fundamental problems, ecological significance, adaptations, in ciliates & testaceans, bioindicators, & guide to the literature. Progress in Protistology 2: 69-212. <Summary: This comprehensive work reviews the field of soil protozoology; it will be of interest to rotiferologists working with soil rotifers.> <Keywords: soil fauna.>
45. Forsyth, D.J., Dryden, S.J., James, M.R., & Vincent W.F. 1988. The Lake Okaro ecosystem: 1. Background limnology. N Z J Mar Freshwater Res 22(1): 17-28. <Summary: Zooplankton was dominated by rotifers in 1979-80, but became crustacean-dominated in 1982-1983. <Keywords: eutrophication, bluegreen bacteria.>
46. Francez, A.-J. 1988. [Rotifer communities in 2 peat-bog lakes in the Puy-de-Dôme(France).] Vie Milieu 38(34): 281-292. <Summary: The rotifer communities in the peat-bog lakes of Chambedaze & La Godivelle (French Massif Central) were studied. Bdelloids, & less frequently monogononts were found; in artificial pools & lake littoral zones, the reverse was observed.> <Keywords: bog, season, species composition, fen, oligotrophic>
47. Fulton, R., III. 1988. Grazing on filamentous algae by herbivorous zooplankton. Freshwater Biol 20(2): 263-272. <Summary: Filtering rates, including that of a rotifer, were examined. Results indicate that inhibitory effects of filamentous algae is due more to effects of chemicals than to a filamentous morphology.> <Keywords: feeding, bluegreen

bacteria, behavior, filtering rate, food, toxin, natural toxins>

48. Fulton, R.S., III., & Paerl, H.W. 1988. Zooplankton feeding selectivity for unicellular and colonial *Microcystis aeruginosa*. Bull Mar Sci 43(3): 500-508. Zooplankton Behavior Symposium, Savannah, Georgia, USA, April 13-16, 1987. <Keywords: *Brachionus calyciflorus*, food, feeding, behavior>

G

49. Geertz-Hansen, et al. 1987. Zooplankton consumption of bacteria in a eutrophic lake & in experimental enclosures. Arch. Hydrobiol. 1110(4): 553-563. <Keywords: grazing, feeding, food.>
50. Gilbert, J.J. 1988. Rotifera. In Adiyodi, K.G., & R.G. Adiyodi (eds.). Reproductive Biology of Invertebrates, Vol. II. Accessory sex glands. John Wiley & Sons, Somerset, NJ, USA. [ISBN 0-471-91466-5.] <Summary: A review of the accessory sex glands found in rotifers.> <Keywords: anatomy, morphology, female, sex, male, glands, ultrastructure, egg, mictic, amictic, nutrition, review>
51. Gilbert, J.J. 1988. Susceptibilities of 10 rotifer species to interference from *Daphnia pulex*. Ecology 69(6): 1826-1838. <Summary: 10 rotifers differed greatly in their susceptibilities to mechanical interference from *Daphnia pulex* inhalant feeding currents; well-protected species (1) were too large to enter *Daphnia's* branchial chamber (*Conochilus unicornis*), (2) regularly escaped from *Daphnia's* inhalant current (*Polyarthra remata*), or (3) were rejected from *Daphnia's* branchial chamber after very short residence times (<2s) (*Asplanchna priodonta*, *Keratella crassa*, *K. testudo*, *Synchaeta pectinata*).> <Keywords: *Conochilus unicornis*, *Polyarthra remata*, *Asplanchna priodonta*, *Keratella crassa*, *Keratella testudo*, *Synchaeta pectinata*, *Keratella cochlearis*, *Synchaeta oblongata*, *Ascomorpha ecaudis*, interference competition, survivorship, competition species composition, adaptive morphology, community composition>
52. Gilbert, J.J. 1988. Suppression of rotifer populations by *Daphnia*: A review of the evidence, the mechanisms, and the effects on zooplankton community structure. Limnology and Oceanography 33(6 Part 1): 1286-1303. <Summary: There is strong evidence that rotifers cannot become abundant members of freshwater zooplankton communities in the presence of large (>1.2 mm) *Daphnia*. Direct & indirect evidences for this are discussed. Rotifers seems to be much less inhibited by small (<1.2mm) cladocerans & often co-occur with them at high densities in natural communities in the absence of large *Daphnia*.> <Keywords: species composition,

size, competition, interference competition, exploitative competition, predator-prey>

53. Gilbert, J.J., & Kirk, K.L. 1988. Escape response of the rotifer *Keratella*: Description, stimulation, fluid dynamics, & ecological significance. *Limnology & Oceanography* 33(6 Part 2): 1440-1450. <Summary: *Keratella* spp. sometimes exhibited escape responses when being contacted or closely approached by the predatory rotifer *Asplanchna brightwelli*, when encountering the inhalant currents of the cladoceran competitor *Daphnia*, & when encountering a simple, calibrated, siphonal flow field mimicking that entering *Daphnia*. Escape responses in *Keratella cochlearis* and *Keratella testudo* were brief (~2s), orthokinetic increases in swimming speed. Escape responses in *K. cochlearis* & *K. testudo* to encounters with *Asplanchna* and *Daphnia* reduced the probability of the rotifers being captured, and hence eaten or damaged.> <Keywords: *Asplanchna brightwelli*, *Keratella cochlearis*, *Keratella testudo*, *Polyarthra* sp., behavior, swimming behavior, swimming, morphology>
54. Gilbert, J.J. 1989. The effect of *Daphnia* interference on a natural rotifer & ciliate community: Short-term bottle experiments. *Limnol & Oceanogr* 34(3): 606-617. <Summary: 2 bottle experiments were conducted using water from a small, eutrophic lake to assess the impact of *Daphnia* interference (encounter) competition on the dynamics of rotifer & ciliate populations dominating the zooplankton community. Introduction of *Daphnia pulex* (16/L) to *Cryptomonas*-enriched ($3-3.5 \times 10^4$ cells/ml) water for 2 d significantly suppressed numbers of the ciliate *Campanella* sp. & rotifers.> <Keywords: *Kellicottia bostoniensis*, *Keratella cochlearis*, *Keratella crassa*, *Polyarthra vulgaris*, *Synchaeta pectinata*, *Asplanchna girodi*, *Polyarthra euryptera*, *Trichocerca similis*, population dynamics, competition, interference competition>
55. Grainger, E.H. 1988. The influence of a river plume on the sea-ice meiofauna in southeastern Hudson Bay. *Estuarine Coastal Shelf Sci* 27(2): 131-142. <Summary: Fauna in a freshwater layer beneath winter ice cover & above water of higher salinity was examined. Some rotifers were present.> <Keywords: season, ice, food chain, marine, temperature>
56. Green, J., & Kramadibrata, H. 1988. A note on Lake Goang, an unusual acid lake in Flores, Indonesia. *Freshwater Biol* 20(2): 195-198. <Summary: This lake has a pH of 2.5; there are no fish; and the zooplankton consists of 1 rotifer and a stalked *Vorticella*.> <Keywords: chemistry, acid, pH, oil>
57. Habib, M.A.B., Mohsinuzzaman, M., & Rahman, M.S. 1988. Combined & linear effects of dominant genera of phytoplankton on abundance of 11 genera of zooplankton. *Bangladesh J Zool* 16(1): 31-38. <Summary: *Keratella*, *Brachionus*, *Polyarthra*, *Asplanchna*, & *Lepadella* were some rotifers studied.> <Keywords: *Keratella*, *Brachionus*, *Polyarthra*, *Asplanchna*, *Lepadella*, *Filinia*>
58. Hanazato, T. 1989. Interrelations between blue-green algae & zooplankton in eutrophic lakes: A review. *Jpn J Limnol* 50(1): 53-68. <Keywords: bluegreen bacteria, eutrophic, cultural eutrophication, review, environmental toxicology, food, feeding>
59. Hanazato, T., & Yasuno, M. 1987. Effects of carbamate insecticide, on the summer phyto- & zooplankton communities in ponds. *Environ. Pollu.* 48: 145-159. <Keywords: pollution, environmental toxicology, toxic agent>
60. Hanazato, T., & Yasuno, M. 1989. Effects of carbaryl on the spring zooplankton communities in ponds. *Environ. Pollu.* 56: 1-10. <Keywords: pollution, environmental toxicology, toxic agent>
61. Hanazato, T., Iwakuma, T., Yasuno, M., & Sakamoto, M. 1989. Effects of Temephos on zooplankton communities in enclosures in a shallow eutrophic lake. *Environmental Pollution* 59: 305-314. <Summary: The organophosphorus insecticide was used in this study; rotifers were the least affected of the micrometazoans studied.> <Keywords: environmental toxicology, toxic agent, pollution.>
62. Hanazato, T. & Yasuno, M. 1988. Impact of predation of *Neomysis intermedia* on a zooplankton community in Lake Kasumigaura. *Verh. Internat. Verein. Limnol.* 23: 2092-2098. <Summary: 6 species of rotifers were followed; predation on rotifers was probably less than on other micrometazoans.> <Keywords: rotifers as food for *Neomysis*.>
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culture, Daphnia culture, References, Conversion tables.

I

J

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K

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1987. <Keywords: *Polyarthra remata*, behavior, escape>

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76. Koste, W., & Böttger, K. 1989. Rotatorien aus Gewässern Ecuadors. Amazoniana 10(4): 407-438. <Summary: 195 taxa were identified from 18 samples collected in 12 different water bodies of Ecuador: 178 order Monogononta, 17 order Bdelloidea.> <Keywords: Ecuador>

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new species, *Trichotria pseudocurta* new species, *Lecane herzigii* new species, *Notommata tyleri* new species, taxonomy, biogeography, Tasmania.>

79. Koste, W., & Shiel, R.J. 1989. Rotifera from Australian inland waters: III. Euchlanidae, Mytilinidae & Trichotriidae, Rotifera: Monogononta. Trans R Soc S Aust 113(12): 85-114. <Summary: Diagnostic keys are given to the Australian representatives of the Rotifera: Monogononta in the families Euchlanidae, Mytilinidae, & Trichotriidae. Distribution data & ecological information are given.> <Keywords: *Manfredium*, *Diplois*, *Dipleuchlanis*, *Tripleuchlanis*, *Euchlanis*, *Mytilina*, *Lophocharis*, *Volga*, *Macrochaetus*, *Trichotria*, description, taxonomy, key>

80. Koste, W., & Shiel, R. 1989. Rotifera from Australian inland waters IV. Colurellidae (Rotifera: Monogononta). Transactions of the Royal Society of S. Aust. 113(3): 119-143. <Summary: Keys are given to the genera & species of the rotifer family Colurellidae (*Colurella*, *Squatinella*, *Lepadella*, *Heterolepadella*) recorded from Australian inland waters.> <Keywords: *Colurella*, *Squatinella*, *Lepadella*, *Heterolepadella*, Australia, taxonomy>

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84. Kühle, K., & Kleinow, W. 1989. Localization of hydrolytic enzyme activities within cellular fractions from *Brachionus plicatilis*, Rotatoria. Comp Biochem Physiol B Comp Biochem 93(3): 565-574. <Summary: Homogenates from *Brachionus plicatilis* were fractionated by combined differential & gradient centrifugations. The resulting fractions were assayed

for hydrolytic enzymes & characterized by electron microscopy. Hydrolytic enzymes show characteristic distributions among these fractions from which their cellular localizations & their possible involvement in digestive processes can be inferred. 3 categories of hydrolases were distinguished: (1) soluble enzymes (*a*-amylase and lysozyme), (2) lysosomal enzymes (*b*-galactosidase, acid phosphatase & RNase) & (3) membrane associated enzymes (*b*-glucosidase & leucine-aminopeptidase).> <Keywords: biochemistry, *Brachionus plicatilis*, enzymes, cellular biology>

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L

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88. Lawrence, S.G., MacIver, M., & Delbaere, I.L. 1984. Species composition & seasonal abundance of zooplankton in Lake 114, Experimental Lakes Area, Northwestern Ontario: before & during acidification 1970-1971, 1978-1983. Canadian Data Report of Fisheries & Aquatic Sciences No. 472. Western Region, Department of Fisheries & Oceans, Winnipeg, Manitoba R3T 2N6. <Keywords: ELA, acid deposition, pollution, environmental toxicology.>

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- *M*
91. May, L., & Jones, D.H. 1989. Does interference competition from *Daphnia* affect populations of *Keratella cochlearis* in Loch Leven, Scotland? *J Plankton Res* 11(3): 445-462. <Summary: A very marked inverse relationship between *Daphnia hyalina lacustris* & *Keratella cochlearis* population densities was observed in Loch Leven, Scotland. Death rates of rotifers were far lower than would have been expected in response to interference competition from *Daphnia*. *Keratella* birth rates fell, along with chlorophyll-*a* concentrations, when *Daphnia* filtration rates were high. Results indicate that, when *Daphnia* were abundant, direct competition for food was the most likely factor suppressing *Keratella* population growth.> <Keywords: food, interference competition, filtering rate, competition, population dynamics, life table statistics, growth, reproduction>
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96. Mallin, M.A. 1989. Pelagic and near-shore plankton communities of a North Carolina coastal plain reservoir. *Brimleyana* 0(15): 87-101. <Summary: Rotifers of this community were dominated by members of the Brachionidae.> <Keywords: Brachionidae, population density, biomass>
97. Mallin, M.A., Birchfield, L.J., & Warren-Hicks, W. 1985. Food habits & diet overlap of larval *Lepomis* spp. & Gizzard Shad in a piedmont reservoir. *Proc. Annu. Conf. Southeast. Assoc. Fish & Wildl.* 39: 146-155. <Keywords: rotifers as food for fish.>
98. Mamedov, R. 1988. Qualitative composition of rotifers of the Nakhichevan ASSR fauna. *IZV. Akad. Nauk. AZ. SSR* 0(6): 133-138.
99. Mantilacci, L., & Lorenzoni, M. 1987. Analysis of planktonic community from Trasimeno lake. *Riv Idrobiol* 26(1-3): 33-56. <Summary: Community structure & succession of plankton were studied. *Keratella cochlearis* & *Polyarthra vulgaris* were dominant.> <Keywords: *Keratella cochlearis*, *Polyarthra vulgaris*, species composition, pollution, environmental toxicology, Shannon index, season>
100. Matveeva, L. 1989. Community structure & density of planktonic rotifers determined using various methods of concentrating samples. *Zookolnyeknn (?) Xyphak (?)* : 234-289. <Summary: Filtration results in a distorted species structure of the rotifer community. Information on the vertical structure of the rotifer community is reported.> [in Russian, with English summary]
101. Murtaugh, P.A. 1989. Size & species composition of zooplankton in experimental ponds with & without fishes. *J Freshwater Ecol* 5(1): 27-38. <Summary: Comparative studies of artificial ponds with & without reproducing population of planktivorous fishes provided only qualified support for prevailing ideas on the effects of fish predation on communities of zooplankton. Size & species composition of the zooplankton community as a

whole were statistically indistinguishable between pond types. Only when rotifers & copepod nauplii were excluded from the analyses were distinct zooplankton assemblages apparent, with a preponderance of small-bodied forms.> <Keywords: community structure, population dynamics>

N

102. Niewolak, S. 1987. Mikrobiologiczne badania jeziora sztucznie destratyfikowanego. Roczniki Nauk Rolniczych 101 (1): 155-172. <Summary: bacteria populations levels were lower in strata where rotifers were abundant.> <Keywords: grazing, feeding, food.>
103. Nishioka, M., & Yamasaki, N. 1989. Multiplication of diatoms by interaction of human waste and soil. Environ Control Biol 27(2): 47-52. <Summary: Human waste is used as fertilizer. In seawater receiving human waste, green algae & rotifers multiplied dramatically.> <Keywords: pollution, fertilizer>
104. Nogrady, T., & Smol, J.P. 1989. Rotifers from five high arctic ponds, Cape Herschel, Ellesmere Island, Northwest Territories. Hydrobiologia 173(3): 231-242. <Summary: 5 small ponds on Cape Herschel, Ellesmere Island, N.W.T. were investigated, & their rotifer fauna discussed. Although number of individuals is very low, the rotifer assemblage is remarkably rich (33 spp). The ice-free season was only 6 weeks. The shallow ponds are all alkaline, & rotifer are either cosmopolitan, or very rare. *Proales kostei* new species is described.> <Keywords: *Proales kostei* new species, taxonomy, biogeography, species diversity, species composition>

O

105. Okauchi, M. 1988. [Studies on the mass culture of *Tetraselmis tetrathele* (West, G. S.) Butcher as a food organism.] Bull Natl Res Inst Aquacult 0(14): 1-124. <Summary: Food value of *Brachionus plicatilis* (etc.) & the food value of rotifers fed with the alga for some marine finfish larvae were examined.> <Keywords: *Brachionus plicatilis*, culture, mass culture, food, diet>
106. Opstad, I., Strand, B., Huse, I., & Garatun-Tjeldstø, O. 1989. Laboratory studies on the use of rotifers, *Brachionus plicatilis* O.F. Müller, as start-feed for cod larvae, (*Gadus morhua* L.). Aquaculture 79(1-4): 345-352. <Keywords: rotifers as food for fish>
107. Overstreet, R.M., Stuck, K.C., Krol, R.A., & Hawkins, W.E. 1988. Experimental infections with *Baculovirus penaei* in the white shrimp *Penaeus vannamei*, Crustacea: Decapoda, as a bioassay. J World Aquacult Soc 19(4): 175-187. <Summary:

Virus-contaminated material was feed to rotifers & then the rotifers were feed to shrimp.> <Keywords: rotifers as food for shrimp>

P

108. Paerl, H.W. 1988. Nuisance phytoplankton blooms in coastal, estuarine, and inland waters. Limnol Oceanogr 33(4 Part 2): 823-847. <Keywords: bluegreen bacteria, water quality, nutrients, heavy metal>
109. Persoone, G., Van De Vel, A., Van Steertegem, M., & De Nayer, B. 1989. Predictive value of laboratory tests with aquatic invertebrates: Influence of experimental conditions. Aquat Toxicol (AMST) 14(2): 149-168. <Summary: *Brachionus plicatilis*, among other microcrustaceans, were used for toxicity testing.> <Keywords: *Brachionus plicatilis*, environmental toxicity, pollution, toxic agents, temperature, salinity, marine, brackish water>
110. Pierre, J.-F. 1989. Évolution decennale de la microbiocénose du Rhin au niveau du site électronucléaire de fessenheim (Haut-Rhin). [Decennial evolution of the microbiotic community of the Rhine on the site of the nuclear plant power at Fessenheim, Haut-Rhin, France.] Cryptogam Algol 10(2): 117-128. <Summary: The microbiotic community of the canalised Rhine was studied from 1977-1987.> <Keywords: season, population dynamics, temperature>

111. Pinel-Alloul, B., Downing, J.A., Perusse, M., & Codin-Blumer, G. 1988. Spatial heterogeneity in freshwater zooplankton: variation with body size, depth, and scale. Ecology 69(5): 1393-1400. <Summary: Effects of body size, depth, & sampling scale of spatial heterogeneity were examined in the zooplankton community of a small lake. Small animals were more heterogeneous than large ones, and populations sampled on large spatial scales or at greater depths showed greatest spatial variability. These effects were stable over the season. Few taxa or life stages diverged significantly from these trends.> <Keywords: population dynamics, season, Lake Cromwell, community structure>

Q

R

112. Rainuzzo, J.R., Olsen, Y., & Rosenlund, G. 1989. The effect of enrichment diets on the fatty acid composition of the rotifer *Brachionus plicatilis*. Aquaculture 79: 157-161. <Keywords: diet, culture, *Brachionus plicatilis*.>
113. Rais, C. 1987. [Artificial production of white sea bream fry (*Diplodus sargus* L. 1758) using the extensive method and without plankton culture.] Bull Inst Natl Sci Tech Oceanogr Peche Salammbio 14:

- 5-14. <Summary: Rotifers were used as prey.>
<Keywords: rotifers as food for fish>
114. Rao, T.R., & Sarma, S.S.S. 1988. Effect of food and temperature on the cost of reproduction in *Brachionus patulus* (Rotifera). *Proc Indian Natl Sci Acad Part B Biol Sci* 54(6): 435-438. <Summary: Survivorship & fecundity of *Brachionus patulus* cultured at various food & temperature levels were used to determine correlations between reproduction, survival, & reproduction. Cost of reproduction was negatively correlated under stressful conditions. The reverse was the case under optimal conditions.> <Keywords: life table statistics, fecundity, reproduction, *Brachionus patulus*, survivorship, temperature, culture>
115. Rejic, M., & Toman, M. 1989. Planktonic rotifers in Lake Bled. *Z Abwasser- Forsch* 22(1): 24-28. <Summary: Information on rotifers in Lake Bled (Slovenia - Yugoslavia) is presented.> <Keywords: distribution, Slovenia, Yugoslavia>
116. Rey, J. 1988. [A comparative study of zooplankton in three high-altitude reservoirs and 1 natural lake in the Pyrenees.] *Ann Limnol* 24(2): 139-160. <Summary: Population dynamics & production of zooplankton, including *Polyarthra vulgaris*.> <Keywords: *Polyarthra vulgaris*, species composition, population dynamics, temperature>
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- population dynamics, species composition, *Brachionus calyciflorus*, predator prey dynamics.>
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 132. Snell, T.W., & Boyer, E.M. 1988. Thresholds for mictic female production in the rotifer *Brachionus plicatilis*, Muller. *Journal of Experimental Marine Biology & Ecology* 124(2): 73-86. <Summary: Food concentration, free NH₄, & population density thresholds for mictic female production were characterized for *Brachionus plicatilis*.> <Keywords: sex, sexuality, chemistry, culture, mictic, female, production, *Brachionus plicatilis*, food, population dynamics, population density>
 133. Snell, T.W., & Hoff, F.H. 1988. Recent advances in rotifer culture. *Aquaculture Mag.* 14: 41-45. <Keywords: culture, population, dynamics, growth, temperature.>
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- genotype and physiologically condition, test variability is greatly reduced. Toxicity of 6 compounds to *B. plicatilis* was examined with the following decreasing sensitivities: copper > NaPCP > SDS > free NH₃ > cadmium > malathion. For 3 of the 6 compounds tests, salinity increase from 15 to 30 ppt resulted in higher sensitivity, whereas for the other 3 compounds there was no effect. Repeatability of the rotifer test is 5-6X better than that reported for *Daphnia* tests and twice as good as the *Artemia* nauplii bioassay. Like the standard brine shrimp nauplii acute test, the cyst-based rotifer test is an important advance in acute toxicity testing since it eliminates stock cultures, is rapid, sensitive, highly repeatable, easy to execute and cost effective.> <Keywords: pollution, toxic agent, environmental toxicology, toxicity testing, bioassay, *Brachionus plicatilis*>
135. Snell, T.W., & Persoone, G. 1989. Acute toxicity bioassays using rotifers: II. A freshwater test with *Brachionus rubens*. *Aquat Toxicol (AMST)* 14(1): 81-92. <Address: Division of Science and Math, University of Tampa, Tampa, FL, 33606, USA> <Summary: A 24-h acute toxicity test for freshwater is described using the rotifer *Brachionus rubens* hatched from cysts. Hatchlings are used in a simple protocol that provides for LC₅₀ calculation and yields highly repeatable results. Hatching is initiated by transferring cysts to warmer temperatures and light. A reference test using sodium pentachlorophenate (NaPCP) yielded an LC₅₀ of 0.62 mg/L, with a coefficient of variation of 9.7%. Protocols for range-finding and definitive tests of unknown toxicants are also described. 6 compounds were assayed and had the following toxicity rankings: copper > NaPCP > cadmium > SDS > free NH₃ > malathion. *B. rubens* was at least 2X as sensitive as *Brachionus plicatilis* to all toxicants tested, except malathion. The precision of the *B. rubens* acute toxicity test is about 3X better than that of *Daphnia*. Like its marine counterpart with *B. plicatilis*, the *B. rubens* test for fresh water has a major advantage over current aquatic tests in that it eliminates culturing and maintenance of live stocks.> <Keywords: *Brachionus rubens*, resting egg, bioassay, toxic agent, pollution, environmental toxicology, toxicity testing>
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cochlearis, *Keratella cochlearis tecta*, *Keratella quadrata*, *Kellicottia longispina*, & *Polyarthra* spp. were collected. *Proalides tentaculatus* & *Liliferotrocha subtilis* were abundant in summer in hypereutrophic areas, constituting 80-90% of the rotifers observed. *Trichocerca pusilla* & *Synchaeta* spp. were characteristic for highly trophic waters; *Brachionus urceolaris sessilis*, *Collotheca balatonica*, & *Pompholyx* spp. were consistently found only in oligo-mesotrophic lake areas. This lake has changed significantly over the past 20 yrs.> <Keywords: *Keratella cochlearis*, *Keratella cochlearis tecta*, *Keratella quadrata*, *Kellicottia longispina*, *Polyarthra*., *Proalides tentaculatus*, *Liliferotrocha subtilis*, *Trichocerca pusilla*, *Brachionus urceolaris sessilis*, *Synchaeta*, *Collotheca balatonica*, *Pompholyx* , trophic status, season, eutrophic, cultural eutrophication, species composition, biogeography, oligotrophic, mesotrophic>

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