# **PSAMMONALIA**

The Newsletter of the International Association of Meiobenthologists



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#### **Editorial**

Bom dia!

First of all I have to congratulate the Fourtimco local organizers on behalf of IAM members and participants of the conference for the great reception that during the Fourteenth we had International Meiofauna Conference. The organization was very impressive as was the kindness of the Belgian people. Thus, THANK YOU Magda, and all the staff, for a very successful Conference at Gent.

During Fourtimco we had about 200 communications by 180 scientists from 28 countries. Seventy-three Oral and 128 Poster presentations were hosted in six Sessions that for the first time (to my knowledge) since the first meeting, in Tunisia in 1969, included a Freshwater Meiofauna session.

Besides the photos you can see on the Fourtimco Conference website (http://www.fourtimco.ugent.be/index.asp) I have included a few more in the penultimate page of this issue.

This is the last Psammonalia that I edit during my 2008-2010 term as IAM Chairperson and I should acknowledge all the support I have received from all of you that contributed with the Psammonalia edition making it more interesting to all meiobenthologists. Special thanks are due Chairperson Keith Walters that gave support for the first issues I edited and to Jvotsna Sharma forher comments of each issue.

As I expressed in my first Editorial, since the request of the Executive Committee during Thirimco to present

new ways to "reanimate" IAM I have been proposing the use of Psammonalia as an instrument to achieve this. Below is a suggestion by David Thistle that I strongly support:

"I've been thinking how to make Psammonalia more useful to community; here is a possibility. One of that someone the things taxonomic work worries about is that someone else is working in the same area without his or her knowledge. There is a possibility of duplication of effort, or worse, the two authors could propose conflicting systematic schemes that will have to be laboriously harmonized subsequently.

Psammonalia could help avoid such problems if it contained a section in which people working on taxonomic studies of meiofauna could notify the community about their work. If these notices were carried in each issue until the author reported that the work was completed, Psammonalia would be the place that anyone contemplating a taxonomic study of meiofauna would check before he or she began."

So be aware of this new section - news can be sent from now on to Nikolaos Lampadariou (<u>nlamp@her.hcmr.gr</u>), the new IAM Chaiperson.

During our Fourtimco we had twentyone applications for IAM membership and more than 30 renewals. This, together with 127 references included in the Recent Literature section are certainly great news to commemorate and indicate that meiofauna studies are full steam ahead.

Cheers, Paulo

## Fourtimco Best Student Poster Prize

Many student posters presented high scientific and esthetical quality and herein we congratulate the three that were considered the better:

1-Benoit Mialet et al. Temporal dynamics of meiobenthos in the epilithon of the Garonne river (SW France);

2-Joey Martinez et al. Effects of cadmium on the fitness of, and interactions between, two bacterivorous nematode species;

3-Diana Wulfken et al. The mastax musculature of *Pleurotrocha petromyzon* and *Proales tillyensis*.

#### **Next Conference**

After a nice contest between Korea (proposal presented by Wonchoel Lee) and Tunisia (proposal presented by Naceur Essid) it was decided by the membership that the next International Meiofauna Conference, fifteenth in the long list, will be held in Korea during summer 2013.

## **Forthcoming Conferences**

The 11th International Conference on Copepoda will be held in 2011, in Merida, Mexico. For more information on the 11th ICOC, contact the Chairman of the Local Organizing Committee, Eduardo Suarez-Morales at esuarez@ecosur.mx

### Announcement

Dear colleagues,

We are writing to inform you that we intend to organize a special session on freshwater meiofauna at the next SEFS congress that will be held from 27th June - 1st July 2011 in Girona (Spain). The idea was originated during the last international meiofauna conference last summer in Gent (Belgium) where the special session on freshwater meiofauna was moderated by Lars Peters and Walter Traunspurger from Bielefeld University. Our main intention is to highlight the importance of meiofauna in the functional ecology of freshwater ecosystems and we think that the SEFS framework gives us a good chance to do this. In addition, several researchers with a good meiofauna background, like Margaret Palmer and Andrew Boulton, have confirmed their assistance as members of the scientific committee.

The deadline for a special session proposal is the 30th November, so we still have time to ask all of you if you or your students will be interested in attending that congress (general info at: http://www.sefs2011.com/inicio.asp?p=g eneral). If there will be enough speakers for this session, we can proceed to the formal proposal.

In case you could attend the conference and join us, please send an e-mail to: agaudes@ub.edu or lars.peters@unibielefeld.de indicating how many people from your lab would come.

Sincerely,

Dr. Lars Peters Dept. Animal Ecology, Bielefeld University, Germany

Ainhoa Gaudes

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Interest: Marine and freshwater nematodes

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Depto de Zoologia, CCB, Universidade Federal de Pernambuco, Av. Prof. Nelson Chaves, s/n, 50670-420 Recife, PE, Brazil Interest: diversity of marine harpacticoids

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## **Obituary**

## Prof Alasdair McIntyre

(17 November, 1926 - 15 April, 2010)

ALASDAIR McIntyre's distinguished scientific career spanned 40 years at the Aberdeen Marine Laboratory, the Scottish Office and, later, with the Scottish Executive.

There, he conducted and led research on marine ecology, fisheries and pollution. Such was his eminence he was also chairman of the United Nations Joint Group of Experts on Scientific Aspects of Marine Pollution and advised the International Council for the Exploration of the Sea on marine pollution.

He was a tireless campaigner on behalf the North-east and was often called to inquiries as an expert witness to improve and conserve the area.

At these, McIntyre gave his evidence, as he did when lecturing at the university, in a manner much admired by those he was addressing. As one colleague recalls: "Alasdair ensured everyone could follow his reasoning, however complicated the subject."

Professor Anastasios Eleftheriou, Emeritus Professor at the University of Crete and a former student and colleague of McIntyre, has said: "Alasdair stands out as an exceptional individual, part of a generation of British scientists whose expertise and interests ranged far, wide and deep.

"He was that rare and often undervalued individual: a real allrounder, scientist, researcher, administrator, academic, writer, wine connoisseur, gourmet and passionate reader."

Alasdair Duncan McIntyre was educated at Hermitage School, Helensburgh. He read zoology at Glasgow University, qualifying in 1948 and then gaining his doctorate from Glasgow.

He joined the marine laboratory in Aberdeen in 1951 and did much innovative research into the halibut.

He was to hold many important posts in the field of marine research, including senior principal scientific officer at the Marine Laboratory from 1973 with the Department of Agriculture and Fisheries, and from 1983-6 he was appointed professor of fisheries and oceanography at Aberdeen.

In the early 1960s, he and some colleagues, notably Prof Eleftheriou, carried out a far-reaching and lengthy project at Loch Ewe, researching into the habits of young plaice.

He was involved in another demanding field exercise which studied the sandy shores of the entire Scottish coastline – including the Hebrides. Both projects were arduous and physically demanding, but McIntyre entered into them with tremendous enthusiasm and brought great scholarship to the ensuing reports.

His knowledge was often in demand to advise committees on political and controversial issues. McIntyre kept in close contact — and enjoyed an excellent relationship with —the oil industry centered in Aberdeen.

In 2003, he advised the fishing industry and the government to find a compromise when the government proposed a "no fishing" zone off the north coast of Scotland.

As recently as 2008, McIntyre advised on offshore drilling mud that was being dumped at a landfill site near Aberdeen. He served on an independent committee the Royal Society set up by Edinburgh to examine the many problems facing the Scottish fishing industry in 2002. It sat at North Atlantic Fisheries in Shetland and investigated how technology affecting the industry and how it could adapt to the reduction in fishing opportunities.

Colleagues at Aberdeen recall that his advice on university matters was clear and to-the-point.

He also wrote extensively on fisheries and environmental subjects and was vice-president 1993 and in later president of the Scottish Association of Marine Scientists. He was also chairman of both the Atlantic Frontier Environmental Forum and the Falkland Islands Exploration Forum and, as well as serving on many environmental committees, was president of the Sir Alister Hardy Foundation for Ocean Science and chairman of the trustees, Buckland Foundation.

McIntyre was appointed CBE in 1994 and held honorary doctorates from both Edinburgh Napier and Stirling universities. He was also often to be seen at Pittodrie, home of Aberdeen FC, where he was an enthusiastic season ticket holder.

McIntyre was the foremost and much-respected authority in his field. As Prof Eleftheriou puts it: "For all those who had the good fortune to enjoy his friendship and his wisdom, we feel that they have been enriched by Alasdair's life."

Alasdair McIntyre is survived by his wife, Catherine, and their daughter

By Alasdair Steven

### **Recent Literature**

- Adhikari, BN; Wall, DH; Adams, BJ. 2010. Effect of slow desiccation and freezing on gene transcription and stress survival of an Antarctic nematode. Journal of Experimental Biology 213: 1803-1812
- Amorri, J; Veit-Kohler, G; Drewes, J, et al. 2010. *Apodopsyllus gabesensis* n. sp.: a new species of Paramesochridae (Copepoda: Harpacticoida) from the Gulf of GabSs (south-eastern Tunisia). Helgoland Marine Research 64: 191-203
- Andrassy, I. 2010. Two new species of *Aporcelaimellus* (Nematoda: Dorylaimida) from the Americas. Acta Zoologica Academiae Scientiarum Hungaricae 56: 1-8
- Andrassy, I. 2010. Two new species of Dorylaimida (Nematoda) from the Mediterranean region. Acta Zoologica Academiae Scientiarum Hungaricae 56: 201-210
- Ansari, ZA; Farshchi, P; Badesab, S. 2010. Response of meiofauna to petroleum hydrocarbon of three fuel oils. Proceedings of the National Academy of Sciences India Section B-Biological Sciences 80: 138-143
- Armenteros, M; Vincx, M; Decraemer, W. 2010. Guitartia tridentata n. gen., n. sp (Monhysterida: Xyalidae) and *Macrodontium gaspari* n. gen., n. sp (Chromadorida: Microlaimidae), free-living marine nematodes from the Caribbean Sea. Nematology 12: 417-427
- Back, J; Huys, R; Lee, W. 2010. A New Species of the Genus *Tegastes* (Copepoda: Harpacticoida: Tegastidae) from

- Hydrothermal Vents in the Okinawa Trough. Zoological Science 27: 678-688
- Back, J; Lee, W. 2010. A new species of the genus *Paramesochra* (Copepoda: Harpacticoida) from Korean waters. Proceedings of the Biological Society of Washington 123: 47-61
- Balsamo, M; Albertelli, G; Ceccherelli, VU, et al. 2010. Meiofauna of the Adriatic Sea: present knowledge and future perspectives. Chemistry and Ecology 26: 45-63
- Benke, AC; Huryn, AD. 2010. Benthic invertebrate production-facilitating answers to ecological riddles in freshwater ecosystems. Journal of the North American Benthological Society 29: 264-285
- Beyrem, H; Louati, H; Essid, N, et al. 2010. Effects of two lubricant oils on marine nematode assemblages in a laboratory microcosm experiment. Marine Environmental Research 69: 248-253
- Bhadury, P; Austen, MC. 2010. Barcoding marine nematodes: an improved set of nematode 18S rRNA primers to overcome eukaryotic co-interference. Hydrobiologia 641: 245-251
- Bianchelli, S; Gambi, C; Zeppilli, D, et al. 2010. Metazoan meiofauna in deep-sea canyons and adjacent open slopes: A large-scale comparison with focus on the rare taxa. Deep-Sea Research Part I-Oceanographic Research Papers 57: 420-433
- Billett, DSM; Bett, BJ; Reid, WDK, et al. 2010. Long-term change in the abyssal NE Atlantic: The 'Amperima Event' revisited. Deep-Sea Research Part II-Topical Studies in Oceanography 57: 1406-1417
- Bostrom, C; Tornroos, A; Bonsdorff, E. 2010. Invertebrate dispersal and habitat heterogeneity: Expression of biological traits in a seagrass landscape. Journal of

- Experimental Marine Biology and Ecology 390: 106-117
- Boxshall, GA; Danielopol, DL; Horne, DJ, et al. 2010. A critique of biramous interpretations of the crustacean antennules. Crustaceana 83: 153-167
- Brandao, SN. 2010. Macrocyprididae (Ostracoda) from the Southern Ocean: taxonomic revision, macroecological patterns, and biogeographical implications. Zoological Journal of the Linnean Society 159: 567-672
- Brandao, SN; Sauer, J; Schon, I. 2010. Circumantarctic distribution in Southern Ocean benthos? A genetic test using the genus *Macroscapha* (Crustacea, Ostracoda) as a model. Molecular Phylogenetics and Evolution 55: 1055-1069
- Brinke, M; Hoss, S; Fink, G, et al. 2010. Assessing effects of the pharmaceutical ivermectin on meiobenthic communities using freshwater microcosms. Aquatic Toxicology 99: 126-137
- Brochet, AL; Gauthier-Clerc, M; Guillemain, M, et al. 2010. Field evidence of dispersal of branchiopods, ostracods and bryozoans by teal (*Anas crecca*) in the Camargue (southern France). Hydrobiologia 637: 255-261
- Chavtur, VG; Keyser, D; Bashmanov, AG. 2010. First record and description of male of *Metavargula adinothrix* Kornicker, 1975 (Ostracoda: Myodocopina) from the Southern Ocean. Zootaxa 2434: 33-46
- Cho, KH; Kim, WS; Lee, W. 2010. A new species of the genus *Goniopsyllus* Brady (Copepoda, Harpacticoida, Clytemnestridae) from Korean waters. Proceedings of the Biological Society of Washington 123: 121-136
- Chullasorn, S. 2010. Two new species of Paramphiascella Lang (Copepoda: Harpacticoida: Miraciidae) from a brackish

- water pond in Thailand. Zootaxa 2634: 1-24
- Cohen, AC; Morin, JG 2010. Two new bioluminescent ostracod Genera, *Enewton* and *Photeros* (Myodocopida: Cypridinidae), with three new species from Jamaica. Journal of Crustacean Biology 30: 1-55
- Cordes, EE; Cunha, MR; Galeron, J, et al. 2010. The influence of geological, geochemical, and biogenic habitat heterogeneity on seep biodiversity. Marine Ecology-an Evolutionary Perspective 31: 51-65
- Corgosinho, PHC; Arbizu, PM. Ameiridae Boeck and Argestidae Por revisited. with establishment of Parameiropsidae, new family of a Harpacticoida (Crustacea, Copepoda) from deep-sea sediments. Helgoland Marine Research 64: 223-255
- Corgosinho, PHC; Arbizu, PM; Dos Santos-Silva, EM. 2010. Revision of *Brasilibathynellocaris* Jakobi, 1972 (Copepoda: Harpacticoida: Parastenocarididae) with redefinition of the genus. Zoological Journal of the Linnean Society 159: 527-566
- Cottarelli, V; Bruno, MC; Berera, R. 2010. First record of Parastenocarididae from Thailand and description of a new genus (Copepoda: Harpacticoida). Journal of Crustacean Biology 30: 478-494
- Danovaro, R; Company, JB; Corinaldesi, C, et al. 2010. Deep-Sea Biodiversity in the Mediterranean Sea: The Known, the Unknown, and the Unknowable. PLOS ONE 5: 8 Article Number: e11832
- Danovaro, R; Dell'Anno, A; Pusceddu, A, et al. 2010. The first metazoa living in permanently anoxic conditions. BMC Biology 8 N. 30

- Derycke, S; De Ley, P; De Ley, IT, et al. 2010. Linking DNA sequences to morphology: cryptic diversity and population genetic structure in the marine nematode *Thoracostoma trachygaster* (Nematoda, Leptosomatidae). Zoologica Scripta 39: 276-289
- d'Hondt, JL; Balsamo, M; Grilli, P. 2010.The type species of the genus *Heterolepidoderma* Remane (Gastrotricha, Chaetonotidae). Bulletin Mensuel de la Societe Linneenne de Lyon 7: 91-94
- Dupuy, C; Rossignol, L; Geslin, E, et al. 2010. Predation of mudflat meio-macrofaunal metazoans by a calcareous foraminifer, *Ammonia tepida* (Cushman, 1926). Journal of Foraminiferal Research 40: 305-312
- Ferrari, FD; Ivanenko, VN; Dahms, HU. 2010. Body architecture and relationships among basal copepods. Journal of Crustacean Biology 30: 465-477
- First, MR; Hollibaugh, JT. 2010. Diel depth distributions of microbenthos in tidal creek sediments: high resolution mapping in fluorescently labeled embedded cores. Hydrobiologia 655: 149-158
- Fleeger, JW; Johnson, DS; Carman, KR, et al. 2010. The response of nematodes to deepsea CO<sub>2</sub> sequestration: A quantile regression approach. Deep-Sea Research Part I-Oceanographic Research Papers 57: 696-707
- Florin, AB; Lavados, G. 2010. Feeding habits of juvenile flatfish in relation to habitat characteristics in the Baltic Sea. Estuarine Coastal and Shelf Science 86: 607-612
- Fonseca, G; Soltwedel, T; Vanreusel, A, et al. 2010. Variation in nematode assemblages over multiple spatial scales and environmental conditions in Arctic deep seas. Progress in Oceanography 84: 174-184

- Fontoura, P; Pilato, G; Lisi, O. 2010. First record of Tardigrada from Sao Tome (Gulf of Guinea, Western Equatorial Africa) and description of *Pseudechiniscus santomensis* sp nov (Heterotardigrada: Echiniscidae). Zootaxa 2564: 31-42
- Franco, MD; Vanaverbeke, J; Van Oevelen, D, et al. 2010. Respiration partitioning in contrasting subtidal sediments: seasonality and response to a spring phytoplankton deposition. Marine Ecology-an Evolutionary Perspective 31: 276-290
- Gagarin, VG; Nguyen, VT. 2010. Three new species of free-living marine nematodes of the order Desmodorida (Nematoda) from Vietnam. Zoologichesky Zhurnal 89: 398-406
- Garcia-Regueira, X; Tato, R; Moreira, J, et al. 2010. Temporal evolution of polychaete assemblages on intertidal hard substrata at two localities of the Galician coast after the 'Prestige' oil spill. Thalassas 26: 33-45
- Gingold, R; Mundo-Ocampo, M; Holovachov, O, et al. 2010. The role of habitat heterogeneity in structuring the community of intertidal free-living marine nematodes. Marine Biology 157: 1741-1753
- Gobin, JF. 2010. Free-living marine polychaetes (Annelida) inhabiting hard-bottom substrates in Trinidad and Tobago, West Indies. Revista de Biologia Tropical 58: 147-157
- Gollner, S; Riemer, B; Arbizu, PM, et al. 2010. Diversity of Meiofauna from the 9 degrees 50 ' N East Pacific Rise across a Gradient of Hydrothermal Fluid Emissions. PLOS ONE 5: 8 Article Number: e12321
- Goncalves, AMM; De Troch, M; Marques, SC, et al. 2010. Spatial and temporal distribution of harpacticoid copepods in Mondego estuary. Journal of the Marine Biological Association of the United Kingdom 90: 1279-1290

- Gradinger, R; Bluhm, B; Iken, K. 2010. Arctic sea-ice ridges-Safe heavens for sea-ice fauna during periods of extreme ice melt? Deep-Sea Research Part Ii-Topical Studies in Oceanography 57: 86-95
- Griffiths, HJ. 2010. Antarctic Marine Biodiversity - What Do We Know About the Distribution of Life in the Southern Ocean? PLOS ONE 5: 8 Article Number: e11683
- Handschumacher, L; Steinarsdottir, MB; Edmands, S, et al. 2010. Phylogeography of the rock-pool copepod *Tigriopus brevicornis* (Harpacticoida) in the northern North Atlantic, and its relationship to other species of the genus. Marine Biology 157: 1357-1366
- Hendricks, MGJ; Gibbons, MJ. 2010. Two new nematode species from Saldanha Bay, South Africa: *Perepsilonema benguelae* sp nov and *Leptepsilonema saldanhae* sp nov (Desmodorida, Epsilonematidae). Zootaxa 2504: 20-30
- Higuti, J; Declerck, SAJ; Lansac-Toha, FA, et al. 2010. Variation in ostracod (Crustacea, Ostracoda) communities in the alluvial valley of the upper Parana River (Brazil) in relation to substrate. Hydrobiologia 644: 261-278
- Homma, T; Yamaguchi, A. 2010. Vertical changes in abundance, biomass and community structure of copepods down to 3000 m in the southern Bering Sea. Deep-Sea Research Part I-Oceanographic Research Papers 57: 965-977
- Hua, E; Zhang, ZN; Yu, ZS, et al. 2010. Preliminary study on the immediate response of the nematode community to Typhoon Soudelor. Deep-Sea Research Part Ii-Topical Studies in Oceanography 57: 1064-1070
- Huang, Y; Wu, XQ. 2010. Two new freeliving marine nematode species of the

- genus *Vasostoma* (Comesomatidae) from the Yellow Sea, China. Cahiers de Biologie Marine 51: 19-27
- Huang, Y; Zhang, ZN. 2010. Three new species of *Dichromadora* (Nematoda: Chromadorida: Chromadoridae) from the Yellow Sea, China. Journal of Natural History 44: 545-558
- Huang, Y; Zhang, ZN. 2010. Two new species of Xyalidae (Nematoda) from the Yellow Sea, China. Journal of the Marine Biological Association of the United Kingdom 90: 391-397
- Hummon, WD. 2010.Marine Gastrotricha of the Caribbean Sea: a review and new descriptions. Bulletin of Marine Science 86: 661-708
- Hummon, WD; Todaro, MA. 2010. Analytic taxonomy and notes on marine, brackishwater and estuarine Gastrotricha. Zootaxa 2392: 1-32
- Huys, R; Kihara, TC. 2010. Systematics and phylogeny of Cristacoxidae (Copepoda, Harpacticoida): a review. Zootaxa 2568: 1-38
- Ingels, J; Van den Driessche, P; De Mesel, I, et al. 2010. Preferred use of bacteria over phytoplankton by deep-sea nematodes in polar regions. Marine Ecology-Progress Series 406: 121-133
- Jenner, RA. 2010. Higher-level crustacean phylogeny: Consensus and conflicting hypotheses. Arthropod Structure & Development 39: 143-153
- Jocque, M; Brendonck, L; Riddoch, BJ, et al. 2010. On *Amphibolocypris arida* sp.nov (Crustacea, Ostracoda), from rock pools in Botswana (southern Africa). Zootaxa 2408: 47-58
- Jorgensen, A; Faurby, S; Hansen, JG, et al. 2010. Molecular phylogeny of Arthrotardigrada (Tardigrada). Molecular

- Phylogenetics and Evolution 54: 1006-1015
- Kaji, T; Tsukagoshi, A. 2010. Homology and evolution of the antenna in podocopid ostracods from the perspective of aesthetascs. Zoological Science 27: 356-361
- Kalogeropoulou, V; Bett, BJ; Gooday, AJ, et al. 2010. Temporal changes (1989-1999) in deep-sea metazoan meiofaunal assemblages on the Porcupine Abyssal Plain, NE Atlantic. Deep-Sea Research Part II-Topical Studies in Oceanography 57: 1383-1395
- Kieneke, A. 2010. A new species of *Thaumastoderma* (Gastrotricha: Macrodasyida) from the Antarctic deep sea with a phylogenetic analysis of the whole genus. Journal of the Marine Biological Association of the United Kingdom 90: 575-584
- Kiko, R. 2010. Acquisition of freeze protection in a sea-ice crustacean through horizontal gene transfer? Polar Biology 33: 543-556
- Kornicker, LS; Harrison-Nelson, E; Coles, SL. 2010. Ostracoda (Myodocopina) of the Hawaiian Islands. Pacific Science 64: 233-283
- Kornicker, LS; Humphreys, WF; Danielopol, DL, et al. 2010. Ontogeny of an anchialine ostracod from Western Australia and comments on the origin and distribution of Halocyprididae. Crustaceana 83: 715-752
- Kouris, A; Limen, H; Stevens, CJ, et al. 2010.

  Blue mats: faunal composition and food web structure in colonial ciliate (Folliculinopsis sp.) mats at Northeast Pacific hydrothermal vents. Marine Ecology-Progress Series 412: 93-101
- Kristensen, RM; Michalczyk, L; Kaczmarek, L 2010. The first record of the genus Bryodelphax (Tardigrada:

- Heterotardigrada: Echiniscidae) from Easter Island, Rapa Nui (Pacific Ocean, Chile) with the description of a new species, *Bryodelphax aaseae*. Zootaxa 2343: 45-56
- Kuhnert, J; Veit-Kohler, G; Buntzow, M, et al. 2010. Sediment-mediated effects of lugworms on intertidal meiofauna. Journal of Experimental Marine Biology and Ecology 387: 36-43
- Lanfranchi, A; Melai, M. 2010. A new marine flatworm (Plathelminthes: Rhabditophora: Otoplanidae) from the Ligurian coast. Journal of the Marine Biological Association of the United Kingdom 90: 423-427
- Leasi, F; Fontaneto, D; Melone, G. 2010. Phylogenetic constraints in the muscular system of rotifer males: investigation on the musculature of males versus females of Brachionus manjavacas and Epiphanes senta (Rotifera, Monogononta). Journal of Zoology 282: 109-119
- Leasi, F; Todaro, MA. 2010. The gastrotrich community of a north Adriatic Sea site, with a redescription of *Musellifer profundus* (Chaetonotida: Muselliferidae). Journal of the Marine Biological Association of the United Kingdom 90: 645-653
- Leduc, D; Wharton, DA. 2010. New freeliving marine nematode species (Nematoda: Desmodoridae) from the coast of New Zealand. Zootaxa 2611: 45-57
- Lee, DJ; Lee, W. 2010. A new species of the genus *Bryocamptus* (Copepoda: Harpacticoida: Canthocamptidae) from Korea. Proceedings of the Biological Society of Washington 123: 204-219
- Lei, YL; Stumm, K; Volkenborn, N, et al. 2010. Impact of *Arenicola marina* (Polychaeta) on the microbial assemblages

- and meiobenthos in a marine intertidal flat. Marine Biology 157: 1271-1282
- Li, XZ; Liu, WG; Zhang, L, et al. 2010. Distribution of Recent ostracod species in the Lake Qinghai area in northwestern China and its ecological significance. Ecological Indicators 10: 880-890
- Martins, MJF; Namiotko, T; Cabral, MC, et al. 2010. Contribution to the knowledge of the freshwater Ostracoda fauna in continental Portugal, with an updated checklist of Recent and Quaternary species. Journal of Limnology 69: 160-173
- Maurin, LC; Himmel, D; Mansot, JL, et al. 2010. Raman microspectrometry as a powerful tool for a quick screening of thiotrophy: An application on mangrove swamp meiofauna of Guadeloupe (FWI). Marine Environmental Research 69: 382-389
- McDermott, MJ; Robertson, AL; Shaw, PJ, et al. 2010. The hyporheic assemblage of a recently formed stream following deglaciation in Glacier Bay, Alaska, USA. Canadian Journal of Fisheries and Aquatic Sciences 67: 304-313
- Merckx, B; Van Meirvenne, M; Steyaert, M, et al. 2010. Mapping nematode diversity in the Southern Bight of the North Sea. Marine Ecology-Progress Series 406: 135-145
- Morin, JG; Cohen, AC. 2010. It's all about sex: bioluminescent courtship displays, morphological variation and sexual selection in two new genera of Caribbean ostracodes. Journal of Crustacean Biology 30: 56-67
- Nanajkar, M; Ingole, B. 2010. Comparison of tropical nematode communities from three harbours, west coast of India. Cahiers de Biologie Marine 51: 9-18
- Nanajkar, M; Ingole, B. Impact of sewage disposal on a nematode community of a

- tropical sandy beach. Journal of Environmental Biology 31: 819-826
- Neidig, N; Jousset, A; Nunes, F, et al. 2010. Interference between bacterial feeding nematodes and amoebae relies on innate and inducible mutual toxicity. Functional Ecology 24: 1133-1138
- Omar, R; Faiz, NN. 2010. Distribution of Recent Ostracoda in Offshore Sediment Around Pulau Besar, Johor. Sains Malaysiana 39: 199-207
- Opalinski, KW; Maciejewska, K; Urban-Malinga, B, et al. 2010. The oxygen fluxes of sandy littoral areas: Quantifying primary and secondary producers in the Baltic Sea. Marine Pollution Bulletin 61: 211-214
- Pereira, TJ; Fonseca, G; Mundo-Ocampo, M, et al. 2010. Diversity of free-living marine nematodes (Enoplida) from Baja California assessed by integrative taxonomy. Marine Biology 157: 1665-1678
- Perez, L; Lorenschat, J; Brenner, M, et al. 2010. Extant freshwater ostracods (Crustacea: Ostracoda) from Lago Peten Itza, Guatemala. Revista de Biologia Tropical 58: 871-895
- Premke, K; Fischer, P; Hempel, M, et al. 2010. Ecological studies on the decomposition rate of fish carcasses by benthic organisms in the littoral zone of Lake Constance, Germany. Annales de Limnologie-International Journal of Limnology 46: 157-168
- Quintana, CO; Yoshinaga, MY; Sumida, PYG. 2010. Benthic responses to organic matter variation in a subtropical coastal area off SE Brazil. Marine Ecology-an Evolutionary Perspective 31: 457-472
- Raes, M; Rose, A; Vanreusel, A. 2010. Response of nematode communities after large-scale ice-shelf collapse events in the Antarctic Larsen area. Global Change Biology 16: 1618-1631

- Reddy, YR; Totakura, VR. 2010. A taxonomic revision of the genus *Habrobathynella* Schminke, 1973, with the description of four new species from southeastern India (Crustacea, Malacostraca, Bathynellacea). Zootaxa 2532: 1-54
- Reiss, J; Schmid-Araya, JM. 2010. Life history allometries and production of small fauna. Ecology 91: 497-507
- Rho, HS; Min, WG; Decraemer, W, et al. 2010. *Prochaetosoma dokdoense* sp nov (Nematoda: Draconematidae) from Dokdo, Korea: First record of the genus Prochaetosoma from a shallow subtidal zone in the northwest Pacific Ocean. Marine Biology Research 6: 172-188
- Riesgo, A; Perez-Portela, R; Arroyo, NL. 2010. Halacarid mites (Acari: Halacaridae) associated with a North Atlantic subtidal population of the kelp *Laminaria ochroleuca*. Journal of Natural History 44: 651-667
- Rothe, BH; Schmidt-Rhaesa, A. 2010. Structure of the nervous system in Tubiluchus troglodytes (Priapulida). Invertebrate Biology 129: 39-58
- Sajan, S; Joydas, TV; Damodaran, R. 2010. Depth-related patterns of meiofauna on the Indian continental shelf are conserved at reduced taxonomic resolution. Hydrobiologia 652: 39-47
- Sajan, S; Joydas, TV; Damodaran, R. 2010. Meiofauna of the western continental shelf of India, Arabian Sea. Estuarine Coastal and Shelf Science 86: 665-674
- Sandulli, R; De Leonardis, C; Vanaverbeke, J. 2010. Meiobenthic communities in the shallow subtidal of three Italian Marine Protected Areas. Italian Journal of Zoology 77: 186-196
- Santos, HF; Cury, JC; Carmo, FL, et al. 2010. 18S rDNA Sequences from Microeukaryotes Reveal Oil Indicators in

- Mangrove Sediment. PLOS ONE 5: 8 Article Number: e12437
- Schminke, HK. 2010. High-level phylogenetic relationships within Parastenocarididae (Copepoda, Harpacticoida). Crustaceana 83: 343-367
- Semprucci, F; Boi, P; Manti, A, et al. 2010. Benthic communities along a littoral of the Central Adriatic Sea (Italy). Helgoland Marine Research 64: 101-115
- Sorensen, MV; Rho, HS; Kim, D. 2010. A new species of the rare genus *Sphenoderes* (Cyclorhagida, Kinorhyncha), with differential notes on S. indicus Higgins, 1969. Marine Biology Research 6: 472-484
- Starek, D; Pipik, R; Hagarova, I. 2010. Meiofauna, trace metals, TOC, sedimentology, and oxygen availability in the Late Miocene sublittoral deposits of Lake Pannon. Facies 56: 369-384
- Steinarsdottir, MB; Ingolfsson, A; Olafsson, E. 2010. Field evidence of differential food utilization of phytal harpacticoids collected from *Fucus serratus* indicated by delta C-13 and delta N-15 stable isotopes. Estuarine Coastal and Shelf Science 88: 160-164
- Sundback, K; Alsterberg, C; Larson, F. 2010. Effects of multiple stressors on marine shallow-water sediments: Response of microalgae and meiofauna to nutrienttoxicant exposure. Journal of Experimental Marine Biology and Ecology 388: 39-50
- Svensson, CJ; Hyndes, GA; Lavery, PS. 2010. An efficient method for collecting large samples of live copepods free from detritus. Marine and Freshwater Research 61: 621-624
- Tanaka, H; Tsukagoshi, A. 2010. Two new interstitial species of the genus *Parapolycope* (Crustacea: Ostracoda) from central Japan. Zootaxa 2500: 39-57

- Thomas, JA; Welch, JJ; Lanfear, R, et al. 2010. A Generation Time Effect on the Rate of Molecular Evolution in Invertebrates. Molecular Biology and Evolution 27: 1173-1180
- Tolhurst, TJ; Defew, EC; Dye, A. 2010. Lack of correlation between surface macrofauna, meiofauna, erosion threshold and biogeochemical properties of sediments within an intertidal mudflat and mangrove forest. Hydrobiologia 652: 1-13
- Valanko, S; Norkko, A; Norkko, J. 2010. Strategies of post-larval dispersal in nontidal soft-sediment communities. Journal of Experimental Marine Biology and Ecology 384: 51-60
- Van Gaever, S; Raes, M; Pasotti, F, et al. 2010. Spatial scale and habitat-dependent diversity patterns in nematode communities in three seepage related sites along the Norwegian Sea margin. Marine Ecology-an Evolutionary Perspective 31: 66-77
- Vanreusel, A; De Groote, A; Gollner, S, et al. 2010. Ecology and Biogeography of Free-Living Nematodes Associated with Chemosynthetic Environments in the Deep Sea: A Review. PLOS ONE 5: 8 Article Number: e12449
- Vanreusel, A; Fonseca, G; Danovaro, R, et al. 2010. The contribution of deep-sea macrohabitat heterogeneity to global nematode diversity. Marine Ecology-an Evolutionary Perspective 31: 6-20
- Vasquez-Suarez, A; Gonzalez, M; Diaz, O, et al. 2010. Temporal variation in sedimentary meiofauna of the lacunae system "Laguna de Raya", Nueva Esparta State, Venezuela. Interciencia 35: 144-150
- Veiga, P; Besteiro, C; Rubal, M. 2010. Meiofauna communities in exposed sandy beaches on the Galician coast (NW Spain), six months after the Prestige oil spill: the

- role of polycyclic aromatic hydrocarbons (PAHs). Scientia Marina 74: 385-394
- Veiga, P; Besteiro, C; Rubal, M. 2010. The role of sediment type on the vertical distribution of meiofauna at two Galician rias (NW Iberian Peninsula). Cahiers de Biologie Marine 51: 249 263
- Veit-Kohler, G; De Troch, M; Grego, M, et al. 2010. Large-scale diversity and biogeography of benthic copepods in European waters. Marine Biology 157: 1819-1835
- Venekey, V; Fonseca-Genevois, VG; Santos, PJP. 2010. Biodiversity of free-living marine nematodes on the coast of Brazil: a review. Zootaxa 2568: 39-66
- Vidakovic, J; Palijan, G. 2010. Development and functional structure of epiphytic nematode communities on the submerged macrophyte Ceratophyllum demersum in Lake Sakadas, Kopacki Rit, Croatia. Nematology 12: 289-302
- Yamada, S; Tsukagoshi, A. 2010. Two new species of *Semicytherura* (Podocopa: Ostracoda) from Akkeshi Bay, Hokkaido, Japan, with comments on their speciation and related species. Zoological Science 27: 292-302
- Yamanaka, T; Raffaelli, D; White, PCL. 2010. Physical determinants of intertidal communities on dissipative beaches: Implications of sea-level rise. Estuarine Coastal and Shelf Science 88: 267-278
- Zhang, QT; Wang, XH; Hu, GK. 2010. Evaluation of estimation methods for meiofaunal biomass from a meiofaunal survey in Bohai Bay. Chinese Journal of Oceanology and Limnology 28: 82-87
- Zograf, JK. 2010. Ultrastructure of the male reproductive system of the free-living marine nematode *Paracyatholaimus* pugettensis Wieser & Hopper, 1967

(Chromadorida: Cyatholaimidae). Nematology 12: 255-268

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Ending the Swedmark raffle!



Visiting a brewery - Bruges!



"Meiofauna scientists supporting the globe."



Boarding the canal – Conference dinner



Meiobenthologists excursion causing "emboateillage" in the centre of Ghent

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The International Association of Meiobenthologists is a non-profit scientific society representing meiobenthologists in all aquatic disciplines. The Association is dedicated to the dissemination of information by publishing a quarterly newsletter and sponsoring a triennial International Conference. The newsletter, Psammonalia, is published midmonth in January and July. Membership is open to any person who actively is interested in the study of meiofauna. Annual membership dues are EU\$10 (US\$10) and payment for up to 3 years in advance is possible. New members will receive Psammonalia beginning with the January issue of the year joining. Additional contributions to the **Bertil Swedmark Fund**, used to support student attendance at the triennial conferences, is encouraged.

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