

# Opisthobranch Newsletter

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**Subscription:** c/o Steven J. Long; 20220 21st Ave. NW, Shoreline, WA 98177; 206-546-5977; 1-800-793-6188; e-mail <miranda@oz.net>. Individual subscriptions \$15.00 (US) per volume. Institutional subscriptions are \$30.00 US per year anywhere. Outside US add \$5.00 per year for postage. The Opisthobranch Web Site is: <<http://www.oz.net/~miranda>>

## Editor's Notes:

Oh, the joys of electronic publishing. The June ON on the Internet has the Schroedl illustration but the hardcopy does not. Also, the hardcopy had the wrong e-mail and web site address for me. The two addresses above are correct. On the positive side, I should be able to start using illustrations.

The suggestion was made that we add an entry page so that you could enter information via internet and I could combine them into the major files. If you are interested in this application, let me know. Who knows -- perhaps this can become very interactive.

Mark at Home Grown Systems, has offered to provide some very good searching capabilities for the web site and a Reader Forum page where you can enter corrections to the ON, additional citations or additions to citations, comments and questions. Reader Forum is not part of the ON. It is to be considered "Personal Communication" and not "published."

The search engine should be up and running within a few hours. It will allow you to use single words or link words with an "and" sign and will return every paragraph where the combination exists.

Thanks to those of you who have sent reprints of your papers. Thanks especially to Gary McDonald for the major searches from the abstracting services.

I need help with the non-nudibranch species. Can someone out there keep me up on them? I was just looking at a Paula Mikkelsen paper and very few of the references are in the bibliography. Is someone willing to take on the lamellarians and the pyramidellids?

Gary mails the searches to himself and then copies me via e-mail. This avoids any necessity to reenter. You may copy me with your searches and I will correlate them with the major files to avoid duplication. Also, if you type a large bibliography on computer for a paper, simply copy it into your e-mail file and send it to me. This would be especially useful with annotated bibliographies. The more of this material I can compile, the more useful the site will be.

As soon as Mark gets the search engine going on my web site you will be able to search on species and subject (or species plus subject). I want to be able to add taxons and subjects after citations to make them show up on your search when the name is not part of the title. If you can add them on Reader Forum I will get them into the big file.

Several people have written to say they use the Internet files a lot and experience problems with the large files. I hope that the search engine will avoid that problem and make it so that everyone can use the files more fully.

## Current Events:

The Western Society of Malacologists Annual Meetings are over by now but some of the branchers are down in Bahia de Los Angeles, Baja California, Mexico -- Collecting and diving. I believe that Sandra Millen, Hans Bertsch and Mike Miller are some of the participants. Hope to have a report from them upon their return. The American Malacological Union Annual Meetings are under way as I am writing this. They always have some good opisthobranch material.

## Personal Notes:

I have moved to Chicago (temporarily). Its a nice place to visit, but. I expect to be here 1-2 years unless something equally lucrative comes up somewhere else. The area appears lacking in gastropods of any type, including terrestrial. If you are attending the malacological Congress in Chicago end of June I could meet you at the conference. How's things otherwise? Regards, Chris Garvie.

Marc Chamberlain is still around San Diego and taking great photos according to the photographic society. I haven't heard from him -- does anyone have an e-mail address?

I am getting out on the water but doing no collecting as of late. I hope that branchers coming through the Seattle area will stop and say hello on their travels. Sally & I both work for RE/MAX Sno-King Realty in Mountlake Terrace now and have a lot of flexibility with our schedules although we seem to be working from early to late working with people from all over the country. - Steve Long

## Information Exchange:

I am a graduate student at San Francisco State University, studying developmental differences between the externally similar California nudibranch species *Doriopsilla albopunctata* / *Dendrodoris fulva* and *Baptodoris mimetica*. These are yellow dorids with white spots (common name: salted dorid). I would appreciate information on good collecting sites for these throughout California, both subtidally and intertidally. Please indicate which collecting method is appropriate at which sites. I would also like any information on *Doriopsilla* sp. 1 collecting locations (identified by a yellow instead of white branchial plume). Please only list sites with fairly high abundances, so that my collecting a couple of dozen will not decimate that local population. Please send any information to me at: Maria\_Schaefer@qmgates.affymax.com.

## Upcoming Events:

**June 29 - July 3 1996** American Malacological Union meetings, Chicago, IL.  
**November 19-21 1996** Molluscan Conservation, Cardiff, U.K.  
**February 1-4 1997** Molluscs 97. Symposium, Rottneest, W. Australia.  
**June 22-27 1997** AMU/WSM Joint Meeting, Santa Barbara, California.  
**1997** International Congress on Palaearctic Mollusca, Munich, Germany.  
Contact Philippe Bouchet <bouchet@cimrsl.mnhn.fr>.

## Branches on the Internet

**From Mike Miller:** The following have been added to The Slug Site <<http://electriciti.com/mdmiller>>: *Nembrotha lineolata*, *Thuridilla lineolata*, *Pteraeolidia* sp., *Plocamopherus tilesii*, *Platydoris scabra*, *Plakobranthus ocellata*, *Phyllodesmium cryptica*, *Orodoris miamirina*, *Noumea varians*, *Mordilla brocki*, *Hypselodoris maculosa*, *Gymnodoris rubropapillosa*, *Asteronotus* sp. 2, *Chromodoris decora*, *Chromodoris quadracolor*, *Elysia ornata*, *Glossodris hikuensis*, *Melibe mirifica*, *Phyllodesmium magnum*, *Cuthona lagunae*, *Fiona pinnata*.

**From Conxita Avila:** Some of you may have seen a review on opisthobranch natural products recently published in Oceanogr. Mar. Biol. Ann. Rev. vol. 33 (1995):487-559. There is a page missing (490) on it. I just received the copies of the corrected page from the publisher and I will be happy to supply it to all of you who may need it.

**From: "Wesley M. Farmer":** Hi! My entire field collection of numbered Opisthobranchs, along with tissue sections,

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radulae preparations, EM preparations, field notes and related items have been transferred (26 June, 1996)/is being transferred to Dr. Terry Gosliner of California Academy of Sciences. The Kodachrome slides will be added to the collection at a future time. The reason: financial. and it is time for someone else to look after that collection. It does not mean that my interest in Opisthobranchs has changed all that much.

**Credibility of faunal lists:** This is a very important topic which may, perhaps, have a more general solution. I am a marine ecologist and face this problem every time I look at community studies with long lists of species, but with no mention of a voucher reference collection. Sometimes I have the opportunity to talk personally to the authors of those studies and hear that the material was "dried and/or ashed" for biomass measurements (including studies in which I've participated, unfortunately). On one hand, ecological studies can provide very important information on species distribution to biogeographers and phylogeneticists. On the other, taxonomists are faced with species names identified by ecologists, most of the times, without the help of those experts, which are less reliable.

How can we ecologists add credibility to our species lists and make them useful to other biologists? Is the taxonomist prepared to be bombarded with an avalanche of samples from all parts of the world to be identified ASAP (because everybody has deadlines)? Do you have money to send 200 species to different experts all over the world to be identified?

A great start would be always citing in our papers the taxonomic keys used (which everybody consults but few mention). In addition, keeping vouchers of the biological material in a reference collection would be the easiest solution (if not the best). Any possible interested worker would be able to access a collection, as long as it is deposited in a public museum, where curators will, hopefully, look after it well. If this is adopted by ecologists, the material from one study could also be utilized in other studies where material is not destroyed (taxonomy, morphology, etc.) besides being accessible for species ID confirmation. The result would be not only a work of credibility but also of multi-use (more value for money). -- Alex Soares

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## Bibliography:

- Abran, d.; Ancil, M.; Ali, M.A. 1994.** Melatonin Activity Rhythms in Eyes and Cerebral Ganglia of *Aplysia californica*. Gen. & Comp. Endocrinol. 96(2):215-222.
- Avila, C.; Durfort, M. 1996.** Histology of Epithelia and Mantle Glands of Selected Species of Doridacean Mollusks with Chemical Defensive Strategies. Veliger 39(2):148-163. [*Hypselodoris cantabrica*, *Hypselodoris webbi*, *Hypselodoris villafranca*, *Hypselodoris orsini*, *Chromodoris britoi*, *Doris verrucosa*, *Peltdoris atromaculata*, *Doriopsilla areolata*, *Dendrodoris limbata*].
- Baba, K. 1994.** Anatomy of *Dendrodoris elongata* Baba, 1936 (Mollusca: Nudibranchia: Dendrodorididae) from Sado, Japan. Rep. Sado Mar. Biol. Station Niigata Univ. 1994(24):23-27.
- Baba, K. 1995.** Descriptions of Four New, Rare, or Unrecorded Species of *Hypselodoris* (Nudibranchia: Chromodorididae) from Japan. Venus 53(3):175-187. [*Hypselodoris kaname* n.sp.; *Hypselodoris mouaci*; *Hypselodoris maculosa*: *Hypselodoris shimodaensis* n.sp.]
- Baba, K. 1995.** Anatomical and Taxonomical Review of Four Blue Patterned Species of *Hypselodoris* (Nudibranchia: Chromodorididae) from Japan. Venus 54(1):1-15. [*Hypselodoris festiva*, *Hypselodoris maritima*, *Hypselodoris placida*, *Hypselodoris sagamiensis*].
- Baranets, O.N. 1993.** [The Primitive Nudibranchiate Mollusc: *Bathydoris violacea* sp. n. (Gastropoda, Nudibranchia)]. Vestnik Sankt-Peterburgskogo Universiteta Seriya 3 Biologiya 1993(3):13-18. [in Russian; *Bathydoris argentina*; *Bathydoris obliquata*]
- Baranets, O.N.; Minichev, Yu S. 1994.** [The Evolution of the Mantle Complex in Nudibranchiate Molluscs (Gastropoda, Nudibranchia)]. Zoologicheskii Zhurnal 73(11):29-35.
- Barash, A.; Zenziper, Z. 1994 Apr./Jun.** Notes on Opisthobranchia from the Red Sea. La Conchiglia (271):57-61.
- Bebbington, A. 1995.** Irish *Aplysia* (Gastropoda: Opisthobranchia) Collected by the Late Dr. Henning Lemche with a Note on the Distribution of the Species Around the British Isles. Irish Naturalists' J. 25(1):20-26. [*Aplysia depilans*, *Aplysia fasciata*, *Aplysia punctata*, *Aplysia parvula*]
- Berry, A.J. 1994.** Inter-Year Contrast in Numbers and Annual Production of the Cephalaspidean Opisthobranch *Retusa obtusa* (Montagu) and the Possible Influence of Wind-Speed. J. Moll. Stud. 60(4):387-391.
- Berry, A.J.; Purvis, J.; Radhakrishnan, K.V.** Reproductive System and Spermatogenesis in the Opisthobranch Gastropod *Retusa obtusa* (Montagu). J. Moll. Stud. 58(Nov.):357-365.
- Brown, G.D. 1994.** Heterostimic Enhancement of a Not So Fixed Action Pattern. Netherlands J. Zool. 44(3-4):184-199. [*Tritonia diomedea*].
- Carballeira, N.M.; Anastacio, E.; Salva, J.; Ortega, M.J. 1992 Dec.** Identification of the New 10, 15-eicosadienoic Acid and Related Acids in the Opisthobranch *Haminaea templadoi*. J. Natural Products - Lloydia 55(12):1783-1786.
- Carlini, D.B.; Regan, J.D. 1995.** Photolyase Activities of *Elysia tuca*, *Bursatella leachii*, and *Haminaea antillarum* (Mollusca: Opisthobranchia). J. Exper. Mar. Biol. & Ecol. 189(1-2):219-232.
- Carlson, C.H.; Hoff, P.J. 1993 Jan 4.** Three New *Halgerda* Species (Doridoidea, Nudibranchia, Opisthobranchia) from Guam. Veliger 36(1):16-26.
- Cattaneo-Viatti, R. 1995.** Mineral Composition of Nudibranch Spicules. J. Moll. Stud. 61(3):331-337.
- Cattaneo-Viatti, R.; Angelini, S.; Gaggero, L.; Lucchetti, G. 1995.** Mineral Composition of Nudibranch Spicules. J. Moll. Stud. 61(3):331-337.
- Chester, C.M. 1993.** Comparative Feeding Biology of *Acteocina canaliculata* (Say, 1826) and *Haminaea solitaria* (Say, 1822) (Opisthobranchia, Cephalaspidea). Amer. Malac. Bull. 10(1):93-101.
- Cimino, G.A.; Crispino, A.; Gavagnin, M.; Trivellone, E.; Zubia, E.; Martinez, E.; Ortea, J.A. 1993.** Archidorin -- a New Ichthyotoxic Diacylglycerol from the Atlantic Dorid Nudibranch *Archidoris tuberculata*. J. Natural Products, Lloydia 56(9):1642-1646.
- Cohen, C.S.; Strathman, R.R. 1996.** Embryos at the Edge of Tolerance: Effects of Environment and Structure of Egg Masses on Supply of Oxygen to Embryos. Biol. Bull. 190(1):8-15. [*Haminaea vesicula*].
- Coles, S.L.; Ruddy, L. 1995.** Comparison of Water Quality and Reef Coral Mortality and Growth in Southeastern Kane'ohe Bay, O'ahu, Hawaii, 1990 to 1992, with Conditions Before Sewage Diversion. Pacif. Sci. 49(3):247-265. [*Phestilla sibogae*].
- Costello, M.J.; Emblow, C.S.; Picton, B.E. 1996.** Long Term Trends in the Discovery of Marine Species New to Science Which Occur in Britain and Ireland. J. Mar. Biol. Assoc. U.K. 76(1):255-257. (nudibranch).
- Cronin, G.; Hay, M.E.; Fenical, W.; Lindquist, N. 1995.** Distribution, Density, and Sequestration of Host Chemical Defenses by the Specialist Nudibranch *Tritonia hamnerorum* Found at High Densities on the Sea Fan *Gorgonia ventalina*. Mar. Ecol. Prog. Ser. 119(1-3):177-189.
- Crow, T. 1996.** Time-Dependent Increase in Protein Phosphorylation Following One-Trial Enhancement in *Hermisenda*. J. Neurochem. 66(4):1736-1741.

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- Cumming, R.L. 1993 Mar.** Reproduction and Variable Larval Development of an Ectoparasitic Snail, *Turbonilla* sp. (Pyramidellidae, Opisthobranchia), on Cultured Giant Clams. *Bull. Mar. Sci.* 52(2):760-771.
- Cumming, R.L.; Alford, R.A. 1994.** Population Dynamics of *Turbonilla* sp. (Pyramidellidae, Opisthobranchia), an Ectoparasite of Giant Clams in Mariculture. *J. Exper. Mar. Biol. & Ecol.* 183(1):91-111.
- Fontana, A.; Gimenez, F.; Marin, A.; Mollo, E.; Cimino, G. 1994.** Transfer of Secondary Metabolites from the Sponges *Dysidea fragilis* and *Pleraplysilla spinifera* to the Mantle Dermal Formations (MDFs) of the Nudibranch *Hypselodoris webbi*. *Experientia* 50(5):510-516.
- Frost, W.N.; Brown, G.D.; Getting, P.A. 1996.** Parametric Features of Habituation of Swim Cycle Number in the Marine Mollusc *Tritonia diomedea*. *Neurobiol. of Learning & Memory* 65(2):125-134.
- Gasca, Rebecca; Suarez Morales, Eduardo 1994.** An Illustrated Record of *Phylliroe bucephala* Peron and Lesueur (Gastropoda: Nudibranchia) in the Gulf of Mexico. *Investigaciones Marinas CICIMAR* 9(2):109-111.
- Gavagnin, M.; Trivellone, E.; Castelluccio, F.; Cimino, G.; Cattaneo-Vietti, R. 1995.** Glyceryl Ester of a New Halimane Diterpenoid Acid from the Skin of the Antarctic Nudibranch *Austrodoris kerguelensis*. *Tetrahedron Letters* 36(40):7319-7322.
- Gibson, G.D.; Chia, F.-S.** A Metamorphic Inducer in the Opisthobranch *Haminaea callidegenita*: Partial Purification and Biological Activity. *Biol. Bull. (Woods Hole)* 187(2):133-142.
- Gibson, G.D.; Chia, F.-S. 1995.** Developmental Variability in the Poecilogonous Opisthobranch *Haminaea callidegenita*: Life-History Traits and Effects of Environmental Parameters. *Mar. Ecol. Prog. Ser.* 121(1-3):139-155.
- Gosliner, T.M. 1994.** The Role of Color in the Evolution of the Opisthobranchia. X Congreso Nacional de Malacología, Barcelona 13 al 16 de Septiembre de 1994, Libro de Resúmenes, pp. 29-30.
- Gosliner, T.M. 1994.** New Species of *Chromodoris* and *Noumea* (Nudibranchia: Chromodorididae) from the Western Indian Ocean and Southern Africa. *Proc. Cal. Acad. Sci.* 48(12):239-252. [*Chromodoris lekker* sp. nov.; *Chromodoris pruna* sp. nov.; *Chromodoris kitae* sp. nov.; *Chromodoris heatherae* sp. nov.; *Noumea protea* sp. nov.]
- Gosliner, T.M. 1995.** Introduction and Spread of *Philine auriformis* (Gastropoda: Opisthobranchia) from New Zealand to San Francisco Bay Bodega Harbor. *Mar. Biol. (Berlin)* 122(2):249-255.
- Gosliner, T.M. 1996.** Phylogeny of *Ceratosoma* (Nudibranchia: Chromodorididae), with Descriptions of Two New Species. *Proc. Cal. Acad. Sci.* 49(3):115-126. [*Ceratosoma ingozi* n. sp., *Ceratosoma alleni* n. sp., *Ceratosoma moloch* n. sp.]
- Graziani, E.I.; Allen, T.M.; Andersen, R.J. 1995.** Lovenone, a Cytotoxic Degraded Triterpenoid Isolated from Skin Extracts of the North Sea Dorid Nudibranch *Adalaria loventi*.
- Graziani, E.E.; Andersen, R.J.; Krug, P.J.; Faulkner, D.J. 1996 May 13.** Stable Isotope Incorporation Evidence for the De Novo Biosynthesis of Terpenoid Acid Glycerides by Dorid Nudibranchs. *Tetrahedron* 52(20):6869-6878.
- Griebel, R. 1993.** Fine Structure of the 3 Cell Types Found in the Digestive Gland of *Elysia viridis* (Opisthobranchia, Sacoglossa). *Veliger* 36(2):107-114.
- Guangyu, L. 1992.** Three New Species of Opisthobranchia from Hong Kong, pp. 181-186. *In: Brian Morton [Ed.], The Marine Flora and Fauna of Hong Kong and Southern China III: Introduction, Taxonomy and Ecology, Vol. 1; Proceedings of the Fourth International Marine Biological Workshop: The Marine Flora and Fauna of Hong Kong and Southern China, Hong Kong, April 11-29, 1989, i:xxx, 1-526.* Hong Kong University Press.
- Hamatani, I. 1995.** Two Species of Chromodorididae (Nudibranchia), One Newly Recorded and One Newly Established, from Middle Japan. *Venus* 54(2):101-107. [*Glossodoris pallida*, *Hypselodoris purpureomaculosa*].
- Hamatani, I. 1995.** A New Record on *Analogium striatum* (Eliot, 1908) (Opisthobranchia: Nudibranchia: Gymnodorididae) from Southwestern Japan. *Venus* 54(3):179-183.
- Harris, L.G.; Rudman, W.B. 1993.** Has Visual Predation Inhibited the Coevolution of Nudibranchs with Scleractinian Corals? *Amer. Zool.* 33(5):21A. [*Embletonia gracilis*]
- Ilan, M. 1995.** Reproductive Biology, Taxonomy, and Aspects of Chemical Ecology of Latrunculiidae (Porifera). *Biol. Bull.* 188(3):306-312. [*Chromodoris quadricolor*].
- Jensen, K.R. 1993 Feb.** Morphological Adaptations and Plasticity of Radular Teeth of the Sacoglossa (=Ascoglossa) (Mollusca, Opisthobranchia) in Relation to their Food Plants. *Biol. J. Linn. Soc.* 48(2):135-155.
- Jensen, K.R. 1996.** Phylogenetic Systematics and Classification of the Sacoglossa (Mollusca, Gastropoda, Opisthobranchia). *Phil. Traas. Roy. Soc. London B Biol. Sci.* 351(1335):91-122. [95 species].
- Jing, J.; Gillette, R. 1995.** Neuronal Elements that Mediate Escape Swimming and Suppress Feeding Behavior in the Predatory Sea Slug *Pleurobranchaea*. *J. Neurophysiol.* 74(5):1900-1910. [*Pleurobranchaea californica*].
- Katz, P. S.; Frost, W. N. 1996.** Intrinsic neuromodulation: altering neuronal circuits from within. *Trends in Neurosciences* 19(2):54-61.
- Kempf, S.C. 1993.** Energetic, Biochemical and Respiratory Aspects of the Symbiosis Between the Nudibranch *Berghia verrucicornis* and a Zooxanthella. *Amer. Zool.* 33(5):22A.
- Khalsa, S.B.S.; Michel, S.; Block, G.D. 1995.** The Anesthetic Agents Pentobarbital and Chloralose Block Shifts of a Neuronal in vitro Circadian Pacemaker. *Neurosci. Letters*, 187(1):41-44. [*Bulla gouldiana*]
- Koenig, G.M.; Wright, A.D.; Sticher, O.; Angerhofer, C.K.; Pezzuto, J.M. 1994.** Biological Activities of Selected Marine Natural Products. *Planta Medica* 60(6):532-537. [nudibranchs].
- Koie, M. 1995.** The Life-Cycle and Biology of *Hemiurus communis* Odhner, 1905 (Digenea, Hemiuridae). *Parasite* 2(2 Suppl.):195-202. [*Retusa truncatula*]
- Kress, A.; Schmekel, L.; Nott, J.A. 1994.** Ultrastructure of the Digestive Gland in the Opisthobranch Mollusc, *Runcina*. *Veliger* 37(4):358-373. [*Runcina coronata*, *Runcina ferruginea*]
- Krug, P.J.; Boyd, K.G.; Faulkner, D.J. 1995.** Isolation and Synthesis of Tanyolides A and B, Metabolites of the Nudibranch *Sclerodoris tanya*. *Tetrahedron* 51(41):11063-11074.
- Lafuente, I. 1996.** Seasonal Variation in the Offspring Development of *Onchidoris bilamellata* (Gastropoda, Nudibranchia). *J. Mar. Biol. Assoc. U.K.* 76(1):243-246.
- Lalli, C.M.; Gilmer, R.W., 1989.** Pelagic Snails. The Biology of Holoplanktonic Gastropods. Stanford University Press, xvi + 259pp.
- Lambert, W.J. 1994.** Evidence for a Water-Borne Cue Inducing Metamorphosis in the Dorid Nudibranch Mollusc *Adalaria proxima* (Gastropoda: Nudibranchia). *Mar. Biol. (Berlin)* 120(2):265-271.
- Leonard, Janet L. 1991.** Sexual Conflict and the Mating Systems of Simultaneously Hermaphroditic Gastropods. *Amer. Malacol. Bull.* 9(1):45-58.
- Leonard, J.L. 1992.** Patterns of Neural and Behavioral Activity in Freely-Moving *Navanax inermis* (Mollusca, Opisthobranchia). *Acta Biologica Hungarica* 43(1-4):329-342.
- Martynov, A.V. 1992 Dec.** [A New Species of Nudibranchiate Molluscs from the Sea of Japan, with Notes on the Genus *Cuthonella* (Gastropoda, Opisthobranchia).] *Zoologicheskii Zhurnal* 71(12):18-24. [in Russian]
- Martynov, A.V. 1994.** [Materials for the Revision of Nudibranchiate Molluscs of the Family Corambidae (Gastropoda, Opisthobranchia) Taxonomy. Communication 1]. *Zoologicheskii Zhurnal* 73(10):3-15. [In Russian: *Loy meyni* n.g., n.sp.; *Proloy millenae* n.g., n.sp.; *Psammodoris thompsoni* n.g., n.comb.; *Suhinia* n.sg.; *Quasicorambe testudinaria* n.g., n.comb.; *Gulbinia* n.sg.; *Corambella steinbergae*; *Corambella*; *Corambe pacifica*; *Loyinae* n.sfam.]
- Martynov, A.V. 1994.** [Materials for Revision of Nudibranch Molluscs of the Family Corambidae (Gastropoda, Opisthobranchia). Part 2. The Origin. *Zoologicheskii Zhurnal* 73(11):36-43. [In Russian].
- McClintock, J.B.; Baker, B.J.; Slattery, M.; Heine, J.N.; Bryan, P.J.; Yoshida, W.; Davies-Coleman, M.T.; Faulkner, D.J. 1994.** Chemical Defense of Common Antarctic Shallow-Water Nudibranch *Tritoniella belli* Eliot (Mollusca: Tritoniidae) and its Prey, *Clavularia frankliniana* Rouel (Cnidaria: Octocorallia). *J. Chem. Ecol.* 20(12):3361-3372.
- Mikkelsen, Paula M. 1995.** Cephalaspid Opisthobranchs of the Azores. *Acroana, Suppl.*:193-215. [46 species included with 13 spp. discussed.]
- Mikkelsen, P.M. 1996.** The Evolutionary Relationships of Cephalaspidea S.L. (Gastropoda: Opisthobranchia): A Phylogenetic Analysis. *Malacologia* 37(2):375-442, figs. 1-47, tpls. 1-3, append. 1. [*Acteon*, *Gegania*, *Hydatina*, *Ringicula*, *Cylindrobulla*, *Ascobulia*, *Volvatella*, *Aplysia*, *Akera*, *Bulla*, *Haminoea*, *Smaragdinella*, *Cylichna*, *Akera*, *Acteocina*, *Scaphander*, *Philine*].
- Mikkelsen, Paula M.; Mikkelsen, Paul S.; Karlen, David J. 1995.** Molluscan Biodiversity in the Indian River Lagoon, Florida. *Bull. Mar. Sci.* 57(1):94-127, fig. 1, tpls. 1-6; Appendix 1. [*Lamellaria perspicua*, 22 pyramidellids, 84 opisthobranchs].
- Millen, S.V. 1994.** A New Species of *Okenia* (Nudibranchia: Doridacea) from the Peruvian Fauna Province. *Veliger* 37(3):312-318. [*Okenia luna* n. sp.]
- Miller, M.C. 1995.** New Species of the Dorid Nudibranch Genus *Parodoris* Bergh, 1884 (Gastropoda: Opisthobranchia) from New Zealand. *J. Nat. Hist.* 29(4):901-908. [*Parodoris leuca* n.sp.: *Discodoris*].
- Mills, C.E. 1994.** Seasonal Swimming of Sexually Mature Benthic Opisthobranch Molluscs (*Melibe leonina* and *Gastropteran pacificum*) May Augment Population Dispersal. *Book, Conference Paper*, p. 313-319.
- Moroz, L.L.; Chen, D.; Gillette, M.U.; Gillette, R. 1995.** Synthesis, Distribution and Functional Effects of Nitric Oxide Synthase (NOS) in the Predatory Opisthobranch Mollusc *Pleurobranchaea californica*. *Soc. Neurosci. Abstracts* 21(1-3):630.
- Moroz, L.; Gillette, R. 1996.** NADPH-diaphorase Localization in the CNS and Peripheral Tissues of the Predatory Sea-Slug *Pleurobranchaea californica*. *J. Compar. Neurol.* 367(4):607-622. [*Tritonia*].
- Munoz, M.A.; Valdes, A.; Ortea, J. 1995 [1996].** The Genus *Okenia* Menke, 1830 (Nudibranchia: Goniodorididae) in Chile. *Haliotis* 25:101-106; figs. 1-2. [*Okenia angelensis*, *Okenia luna*; mentions 14 spp.]

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- Nakashima, Y. 1995.** Mucous Trail Following in 2 Intertidal Nudibranchs. *J. Ethology* 13(1):125-128. [*Dendrodoris nigromaculata*].
- Nunn, J. 1993.** *Aeolidiella alderi* (Cocks, 1852) (Mollusca, Opisthobranchia) in Ireland. *Irish Naturalists J.* 24(6):258-260.
- Ohsuga, K.; Kuwasawa, R. 1994.** Development of Histamine-Like Immunoreactive Neurons in the Opisthobranch Mollusc *Pleurobranchaea japonica*. *Zool. Sci. (Tokyo)* 11(Suppl.):107.
- Ortea, J. A. 1990.** El genero *Geitodoris* Bergh, 1891 (Mollusca, Nudibranchia) en las islas Canarias. *Revista de la Academia Canaria de Ciencias* 2:99-120. [In Spanish]
- Ortea, J. A. 1995.** Estudio de las especies atlánticas de *Paradoris* Bergh, 1884 (Mollusca: Nudibranchia: Discodorididae) recolectadas en las Islas Canarias. *Avicennia* 3:5-27. [In Spanish]
- Ortea, J. A.; Valdes, A. 1995.** Una nueva especie de *Thordisa* Bergh, 1877 (Mollusca: Nudibranchia: Discodorididae) de las costas Angola. *Avicennia* 3:35-41.
- Ortea, J.A.; Valdes, A.; Espinosa, J. 1994.** North Atlantic Nudibranchs of the *Chromodoris clenchi* Colour Group (Opisthobranchia: Chromodorididae). *J. Moll. Stud.* 60(3):237-248. [*Chromodoris neona*, *Chromodoris binza*, *Chromodoris britoi*]
- Osumi, D.; Yamasu, T. 1994.** The Nudibranch, *Gymnodoris nigricolor* Baba, Parasitic with Marine Gobies. *Zoological Science (Tokyo)* 11(Suppl.):54.
- Page, L.R. 1994.** The Ancestral Gastropod Larval Form is Best Approximated by Hatching-Stage Opisthobranch Larvae: Evidence from Comparative Developmental Studies. Book, Conference paper p.206-223.
- Page, L.R. 1995.** Similarities in Form and Developmental Sequence for Three Larval Shell Muscles in Nudibranch Gastropods. *Acta Zool.* 76(3):177-191.
- Pechenik, J.A.; Hadfield, M.G.; Eyster, L.S. 1995.** Assessing Whether Larvae of the Opisthobranch Gastropod *Phestilla sibogae* Bergh Become Responsive to Three Chemical Cues at the Same Age. *J. Exper. Mar. Biol. Ecol.* 191(1):1-17.
- Peel, O. 1993 Oct.** Pteropods (Cavoliniidae). *Strandloper* (236):4-5, 15 ill. [*Cavolinia gibbosa*, *Cavolinia longirostris*, *Cavolinia tridentata*, *Cavolinia inflexa*, *Cavolinia globulosa*, *Cavolinia uncinata*, *Diacra trispinosa*, *Diacra quadridentata*, *Creseis acicula*, *Creseis virgula conica*, *Creseis virgula virgula*, *Cuvierina columnella*, *Clio lanceolata*, *Clio andreae*, *Clio pyramidata*, *Clio australis*, *Clio cuspidata*, *Clio capensis*, *Clio chaptalii*, *Styliola subula*, *Hyalocyllis striata*].
- Pennings, S.C.; Carefoot, T.H. 1995.** Post-Ingestive Consequences of Consuming Secondary Metabolites in Sea Hares (Gastropoda: Opisthobranchia). *Comp. Biochem. & Physiol. C. Pharmacol. Toxicol. & Endocrinol.* 111(2):249-256. [*Aplysia juliana*, *Aplysia kuroda*]
- Perrin, A.S. 1995.** Una specie di nudibranchi del genere *Cuthona* Alder & Hancock 1855 nuova per il Mediterraneo: *Cuthona perca* (Marcus, 1958) (Opisthobranchia: Nudibranchia). *Bollettino Malacologico* 31(1-4):28-36. [In Italian - A nudibranch species from the genus *Cuthona* Alder and Hancock, 1855 new for the Mediterranean Sea: *Cuthona perca* (Marcus, 1958) (Opisthobranchia: Nudibranchia)].
- Pika, J.; Faulkner, D.J. 1995.** Unusual Chlorinated Homo-Diterpenes from the South African Nudibranch *Chromodoris hamiltoni*. *Tetrahedron* 51(30):8189-8198.
- Price, D.A. 1994.** Comparative Aspects of FMRamide Gene Organization in Molluscs. *Netherlands J. Zool.* 44(3-4):421-431. [*Aplysia*]
- Proksch, P. 1994.** Defensive Role for Secondary Metabolites from Marine Sponges and Sponge-Feeding Nudibranchs. *Toxicon* 32(6):639-655.
- Quinn, R.H. 1992 Dec.** The Ionic Basis of the Hypo-Osmotic Depolarization in Neurons from the Opisthobranch Mollusc *Elysia chlorotica*. *J. Exper. Biol.* 173:U1-U1. [? vol. 163:169]
- Roginskaya, I.S. 1988.** The Predator/Prey Interaction Between the White Sea Actinarian *Bunodactis stella* (Verrill) and the Nudibranchiate Molluscs, pp. 80-94, 123. In: **A.P. Kuznetsov & M.N. Sokolova [Eds.]**. Structure and Functional Researches of the Marine Benthos. *Acad. Sci. USSR, P.P. Shirshov Inst. Oceanology*, 126pp. [In Russian].
- Roginskaya, I.S. 1990.** Data of Feeding, Distribution and Synonymy of *Coryphella trophina* (Bergh, 1894) (Nudibranchia: Gastropoda), pp. 47-57, 151-152, 156. In: **A.P. Kuznetsov, [Ed.]**, Feeding and Bioenergetics of Marine Bottom Invertebrates. *Acad. Sci. USSR, P.P. Shirshov Inst. Oceanology, Moscow*, 162p. [In Russian].
- Roginskaya, I.S. 1990.** Additional Data on the Food and Feeding of *Dendronotus robustus* Verrill, 1879 (Nudibranchia: Dendronotidae) from Dvinsky Bay of the White Sea, pp. 93-110, 158. In: *Acad. Sci. USSR, P.P. Shirshov Inst. Oceanology, Moscow*, 162p. [In Russian].
- Roginskaya, I.S. 1995.** On the Reproduction and Dispersion of the New Immigrant *Doridella obscura* (Gastropoda, Opisthobranchia, Corambidae) in the Black Sea.
- Roller, R.A.; Bianchi, T.S. 1995.** HPLC Analysis of Chloroplast Pigments from the Marine Ascoglossan *Tridachia crispata* (Morch, 1863) (Mollusca: Opisthobranchia). *Amer. Malac. Bull.* 11(2):139-143.
- Rumpho, M.E.; Mujer, C.V.; Andrews, D.L.; Manhart, J.R.; Piecre, S.K. 1994.** Extraction of DNA from Mucilaginous Tissues of a Sea Slug (*Elysia chlorotica*). *Biotechniques* 17(6):1097-1101.
- Spinella, A.; Alvarez, L.A.; Avita, C.; Cimino, G. 1994.** New Acetoxy-ent-Pallescensin-A Sesquiterpenoids from the Skin of the Porostome Nudibranch *Doriopsilla areolata*. *Tetrahedron Letters* 35(46):8665-8668.
- Stamm, M. 1995.** [Feeding Behaviour of *Retusa obtusa* (Montagu, 1803) in the Tidal-Flat Area of the Jade Bay (Gastropoda: Opisthobranchia). *Senckenbergiana Maritima* 25(4-6):137-145. [In German]
- Stanley-Samuelson, D.W. 1994.** The Biological Significance of Prostaglandins and Related Eicosanoids in Invertebrates. *Amer. Zool.* 34(6):589-598.
- Strathmann, R.R. 1995.** Oxygen Supply and Limits on Aggregation of Embryos. *J. Mar. Biol. Assoc. U.K.* 75(2):413-428. [3 opisthobranch spp.]
- Strenth, N.E.; Littleton, T.G. 1994.** First Record of *Aplysia cervina* (Dall and Simpson) (Gastropoda: Opisthobranchia) from the Texas Coast. *Texas J. Sci.* 46(4):361-364.
- Tarr, Rob 1994 Jun.** The Umbrella Shell. *Strandloper* (238):1-2, 1 col. ill. [*Umbraculum*].
- Tillier, S.; Masselot, M.; Guerdoux, J.; Tillier, A. 1994.** Monophyly of Major Gastropod Taxa Tested from Partial 28S rRNA Sequences, with Emphasis on euthyneura and Hot-Vent Limpets Peltospiroidea. *Nautilus* 108(Suppl. 2):122-140. [Anaspeida, 3 non-anaspeidan Opisthobranchia]
- Trowbridge, Cynthia D. 1995.** Establishment of the Green Alga *Codium fragile* ssp. *tomentosoides* on New Zealand Rocky Shores: Current Distribution and Invertebrate Grazers. *J. Ecology* 83:949-965. [*Elysia maoria*, *Placidia dendritica*].
- Tsubokawa, R.; Miyazaki, J. 1993 Jul. 1.** Application of a Two-Dimensional Electrophoresis Method to the Systematic Study of Notaspidea (Mollusca, Opisthobranchia). *Veliger* 36(3):209-214.
- Tullrot, A. 1994.** [Nudibranch Molluscs are Beautiful but Inedible.] *Fauna Och Flora (Stockholm)* 89(6):21-25. [In Swedish; *Dendronotus frondosus*, *Polycera quadrilineata*].
- Valdes, A.; Ortea, J.A. 1995.** Revised Taxonomy of Some Species of the Genus *Okenia* Menke, 1830 (Mollusca: Nudibranchia) from the Atlantic Ocean, with the Description of a New Species. *Veliger* 38(3):223-234. [*Okenia quadricornis*, *Okenia mediterranea*, *Okenia zoobotryon*, *Okenia impexa*, *Okenia cupella*; *Okenia hispanica* n.sp.]
- Valdes, A.; Ortea, J.A.; Avila, Conxita; Ballesteros, Manuel 1996.** Review of the Genus *Dendrodoris* Ehrenberg, 1831 (Gastropoda: Nudibranchia) in the Atlantic Ocean. *J. Moll. Stud.* 62(1):1-31. [*Dendrodoris libata*, *Dendrodoris grandiflora*, *Dendrodoris nigra*, *Dendrodoris krebsii*, *Dendrodoris senegalensis*, *Dendrodoris warta*, *Dendrodoris racemosa*, *Dendrodoris minima*, *Doriopsilla*, *Dendrodoris angolensis* n.sp., *Dendrodoris guineana*, n.sp., *Dendrodoris herytra* n.sp.].
- Van Aartsen, J.J. 1994.** Turbonilla coomansi, a New Name for *Turbonilla pusilla* (C.B. Adams, 1850) non *T. pusilla* (Philippi, 1844) (Gastropoda, Opisthobranchia, Pyramidellidae). *Basteria* 58(5-6):198. [*Chemnitzia pusilla*].
- Van der Linden, J. 1994.** *Philine intricata* Monterosato, 1884, an Overlooked Species from the North-East Atlantic and the Mediterranean Sea (Gastropoda, Opisthobranchia: Philinidae). *Basteria* 58(1-2):41-48. [*Philine catena*, *Philine angulata*]
- Van der Linden, J. 1995.** Philinidae Dredged by the CANCAP Expeditions (Gastropoda, Opisthobranchia). *Basteria* 59(1-3):65-83. [*Philine alternans* n.sp.; *Philine araneosa* n. sp.; *Philine calva* n. sp.; *Philine condensata* n. sp.; *Philine gelida* n. sp.; *Philine intricata* + others listed]
- Van der Linden, J.; Janssen, A.W. 1996.** *Philine aquila* sp. nov. from the Miocene of Winterswijk (Miste) (Gastropoda, Opisthobranchia). *Basteria* 59(4-6):97-104.
- Wagele, H. 1995.** The Morphology and Taxonomy of the Antarctic Species of *Tritonia* Cuvier, 1797 (Nudibranchia: Dendronotoidea). *Zool. J. Linn. Soc.* 113(1):21-46. [*Tritonia vorax*, *Tritonia antarctica*, *Tritonia appendiculata*, *Tritonia challengeriana*, *Marionia cucullata*].
- Wagele, H. 1995.** Redescription of *Charcotia granulosa* Vayssiere, 1906 (Nudibranchia: Arminoidea: Charcotiidae) from Signy Island, Antarctica. *J. Moll. Stud.* 61(2):197-207.
- Whitehead, Thora 1995 Mar.** Mrs. Thora Whitehead, a Society Member of Many Years Standing, Writes from Australia on *Umbraculum*: *Strandloper* (241):9. [*Umbraculum umbraculum*].
- Wiens, B.L.; Brownell, P.H. 1994.** Neuroendocrine Control of Egg-Laying Behavior in the Nudibranch, *Archidoris montereyensis*. *J. Comp. Neurol.* 344(4):619-625. [*Aplysia*].
- Wiens, B.L.; Brownell, P.H. 1995.** Neurotransmitter Regulation of the Heart in the Nudibranch *Archidoris montereyensis*. *J. Neurophysiol.* 74(4):1639-1651.
- Wirtz, P. 1994 [1996].** Three Shrimps, Five Nudibranchs, and Two Tunicates New for the Marine Fauna of Madeira. *Bol. Do Museu Municipal Do Funchal.* 1994(46):167-172. [*Chromodoris purpurea*, *Chromodoris britoi*, *Hypselodoris webbi*, *Discodoris atromaculata*, *Platydorid argo*].