

Opisthobranch Newsletter

August, 1997, 23(8):29

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EDITOR'S NOTES

The ON note in June, Vol. 23(6):23, entitled "Parasitoid Nudibranchs" was sent by A. Kimo Morris, Department of Entomology Office, Oregon State University, Cordley Hall, 2046, Corvallis, OR 97331-2907. I left Kimo's name off the header by mistake.

PERSONAL NOTES

From Jim Cruise: I was given your address by Gilianne Brodie (JCU) as my interest and hobby is photographing Opisthobranchs. I have about 165 different species from the Great Barrier Reef region, including a number of new records and un-described species. Dr Richard Willan has been my primary source of identification and a lot of help.

I am a Marine Park Ranger based at Gladstone covering the Capricorn-Bunkers, Swains etc. Currently I have access to the web and e-mail thru work, but am not able to subscribe to individual sites, nor able to scan images to put on the net. All my photos are 35mm slides. I am however interested in sharing what I have. If you think it would be worthwhile I could send you a list of what I have, and people can contact me to obtain images, info etc. - 2/16 Kent St Gladstone QLD 4680.

From Wes Farmer: Jim Lance was unable to travel to Bahia San Quintin with me. As my Mazda B200 was newly overhauled and travel worthy I chose to go myself.

Found a few *Elysia* on a kind of green *Codium* alga. It was very windy and even sprinkled the next day along with 30 knot winds and blowing sand. Did manage to find a good fossil site. Made a few *Velvia* photographs while visiting the area. - 3591 Ruffin Rd. #226; San Diego, CA92123-2561

From Arie Janssen: Please note that from 20 July onward my address will change to: 12, Triq il-Hamrija, Xewkija VCT 110, Gozo, Malta. I will continue my activities on the subject of mainly fossil holoplanktonic molluscs. The complete collection, inclusive of the Recent material, that used to be housed in the National Natural History Museum at Leiden, is going to accompany me to Malta.

From Sandra Millen: I went to the WSM meetings in Santa Barbara and then to San Diego for a day. In San Diego I visited with Jim Lance and Dave Mulliner came over to join us for lunch. I also talked to Wes Farmer. The next day I went to Baja with Mike Miller and Hans Bertch for a week of branching. Two new records for the Gulf and one more specimen of an undescribed species, lots of fun and innumerable margaritas. Here is a short meeting report.

The joint AMU/WSM meetings were held in Santa Barbara, June 21-27 with the following Opisthobranch researchers in attendance: Rolland Anderson, Clay Carlson, Terry Gosliner, Patty Jo Hoff, Pat La Follette (pyramidellids),

Paula Mikkelsen, Sandra Millen, Katharina Noack, Jim Nybakken, Ned Strenth. Two talks and one poster were given.

Ned Strenth & John Beatty "A review of the sea hare *Aplysia donca* (Gastropoda: Opisthobranchia) from Mustang Island, Texas" Terry Gosliner & Rebecca Price "Phylogenetics and classification of the *Philine aperta* clade: traditional versus cladistic approaches" Katharina Noack "Phylogenetic relationships of flabellinid nudibranchs based on mitochondrial DNA sequences"

Next year WSM will leave the west coast and join AMU and UNITAS in Washington D.C., July 26-31 for a World Wide Malacological Congress - plan on being there. - Sandra Millen, President, W.S.M., Department of Zoology, University of British Columbia, Vancouver, B.C., Canada, V6T 1Z4

From Michael Miller: Philippine Islands, April 1997 dive trip. In the way of introduction, the group consisted of Terry Gosliner, Gary Williams, Dave Behrens representing the California Academy of Sciences, Jerry Allen, Bruce Bake, Jeff Holmes, from Tucson, Arizona, Marc Chamberlain and the Webmaster (Michael Miller) from the San Diego area, Roger Steene from Australia, and Clay Carlson from Guam. We were able to photograph/collect 216 species of opisthobranchs, thirty-eight (38) of which were new to our ongoing Philippine study, and twelve (12) were new (undescribed) period. Several are being featured as the "Branch of the Week". Scientific publication and description of the new species is being headed up by Terry Gosliner, and will be shared with you as the papers come out. In manuscript with Dave Behrens are five (5) new species of *Chromodoris*! Check it out at the Slug Site <http://www.atmnet.net/~mdmiller/trip/index.html>

READER FORUM

***Janolus chilensis* junior synonym of *J. rebecca* Schrödl, 1996.**

Juan Lucas Cervera

I have published (together with M.A. Fischer and J.A. Ortea) the new species of *Janolus*, *J. chilensis*, in the last issue of *The Veliger*, vol. 40, issue number 3, pages 234-239. However, I had very recently knowledge that this species had been published previously by Michael Schrödl in the German journal *Spixiana*, vol. 19, issue 3, pages 293-300, last November (1996).

The name given by this author to this species is *Janolus rebecca*. So, *J. chilensis* has to be considered as a junior synonym of *J. rebecca*. - Dpt. Biología Animal Vegetal y Ecología, Univ. Cadiz, 11510 Puerto Real (Cadiz) Spain

***Roboastra* and *Tambja* feeding habits.**

Juan Lucas Cervera

I have read in Carte and Faulkner's paper, published in the *Journal of Chemical Ecology* in 1986, that these authors stated *Roboastra tigris*, along with *Tambja eliora* and *T. abdere*, feeds on other smaller nudibranchs, although it seems to prefer to prey on *T. eliora* and *T. abdere*. This fact was communicated to these authors by personal communication by Jim Lance. Could he tell me which are those "smaller nudibranchs" upon which *Roboastra tigris* also may prey? - Dept. Biología Animal, Vegetal y Ecología, Universidad de Cadiz, Pol. Rio San Pedro s/n, Apdo. 40, 11510 Puerto Real (Cadiz), SPAIN

Potential Prey of *Roboastra tigris*.

James R. Lance

In response to the inquiry of Juan L. Cervera (above) re opisthobranch prey species of the carnivorous Panamic predator *Roboastra tigris* other than its observed

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preference for *Tambja eliora* and *Tambja abdere* in nature, I provide the following list. This is a summary of species offered as potential prey to a number of *R. tigris* captured in the Sea of Cortez (Gulf of California) and maintained at Scripps Institution of Oceanography during 1975-1985.

Consumed

1. *Hemissenda crassicornis* C & P
2. *Aeolidiella chromosoma* C & P
3. *Aeolidiella oliviae* C
4. *Facellina stearnsi* C
5. *Eubranchus rustys* C
6. *Janolus barbarensis* C & P
7. *Doto lancei* C & P
8. *Dendronotus frondosus* C
9. *Tritonia festiva* C
10. *Polycera hedgpethi* C & P
11. *Trapania velox* C
12. *Ancula pacifica* C
13. *Aplysia californica* (26mm) C

Not Consumed

1. *Thordisa bimaculata* C
2. *Diaulula sandiegensis* C
3. *Sclerodoris tanya* C & P
4. *Rostanga pulchra* C & P
5. *Chromodoris macfarlandi* C & P
6. *Cadlina flavomaculata* C & P
7. *Laila cockerelli* C & P
8. *Aegires albopunctatus* C & P
9. *Doridella steinbergae* C
10. *Stiliger fuscovittatus* C & P
11. *Berthellina engeli* C & P
12. *Elysia hedgpethi* C & P
13. *Navanax inermis* C & P
14. *Acteocina inculata* C & P (?)

C = species occur in the California Marine Faunal Province

C = offered prey collected from CMFP

P = Panamic Marine Faunal Province

P = offered prey collected from PMFP

The above data are ancillary to the work of Brad Carté and his advisor John Faulkner at Scripps. Details of the biochemistry and biology will be found in: **Carté, Brad Kevin 1984.** Cytotoxic metabolites from marine organisms. Ph.D. Thesis, University of California, San Diego, CA92093.

Additional information may be obtained from James R.

LanCÉ. - 746 Agate St., San Diego, CA 92109

Locality data; *Cylichna alba* (Brown, 1827).

David W. Behrens

This little-known species has been observed recently in Boundary Bay, Vancouver, British Columbia on the estuary's mud flat, hidden in drying mats of drift eel grass (Bill Merilees, pers. commun.). This species has been found in the guts of Western Sand Pipers by Canadian Wildlife Service researchers - 35 Versailles Court, Danville, CA94506

Locality data; *Polycera fujitai* (Baba, 1937)

Michael C. Miller: Last year our collector, David Todd, was gathering specimens for the University's 'Open Day', now an annual event. He brought in some kelp (*Ecklonia radiata*) plants from the Westhaven marina, Auckland City. The

fronds of these plants carried a dense and quite diverse cover of epiphytes. Amongst these were 3 specimens (2 collected on 11 July, 1996, 1 on 17 July) of a polycerid nudibranch which I identified, casually and by naked eye, as *Polycera melanosticta* Miller, 1996, though I must say I had misgivings about this. A later, closer look confirmed that it was indeed another sp. which I recognized as *P. fujitai* Baba, quickly too (remember I'd reviewed recently those *Polycera* spp. closest to *P. melanosticta*. David found some more specimens this year (April), and those laid spawn in the aquarium. This is the first record for New Zealand, and possibly for elsewhere outside of Japan. The largest specimen measured 25mm when crawling. In captivity *P. fujitai* ate the erect bryozoan *Tricellaria occidentalis*, consuming one of its epizooites as well, the bryozoan *Bowerbankia* (2 spp.). - The University of Auckland, Private Bag 92019, Auckland, New Zealand

INFORMATION WANTED:

From Roberto Cipriani: I am currently working on my Ph.D. dissertation at the The Field Museum and the University of Chicago. My research involves the study of the biology and evolution of the pyramidellids. This marine parasitic gastropod family is distributed worldwide and inhabits from littoral environments down to several thousand meters. Their shells tend to be turreted, have a plicate columnela and - frequently, internally lirated outer lips. Their size varies from 4cm in length, measured on the axis of the columnela, down to few millimeters. They have a buccal stylet that is used to infringe tissue damage on their hosts, producing wounds from where they remove body fluids by means of a buccal pump. Pyramidellids are usual parasites of bivalves, gastropods and polychaetes although have also been reported on cnidarians, sipunculids, chitons, hemichordates and tunicates.

Very little seems to be known (or has been reported) about the real effect of their parasitism on mariculture enterprises (see e.g. Cumming, R. and R. Alford. 1994. "Population dynamics of *Turbonilla* sp. [Pyramidellidae, Opisthobranchia], an ectoparasite of giant clams in mariculture". Journal of Experimental Marine Biology and Ecology, 183: 91-111). Allow me to ask: have you had experience with this type of parasites on experimental and/or commercial mariculture facilities?

I think that clarifying the phylogenetic relationships among the representatives of this family is fundamental for the understanding of their biology. I am aiming to reconstruct a phylogeny of this family using anatomical characters and potentially using mitochondrial DNA. I would like also to observe the animals alive, in their own "habitat". I would immensely appreciate if anyone interested could answer me the following questions:

- a) Would be feasible to send me specific samples of pyramidellids? I am interested in samples from anywhere.
- b) Could I visit your work site, in order to make observations and to collect samples?

Please, send further information or questions to my e-mail address. If answers concerning damages caused by Pyramidellids are received, I will e-mail later a digest version of them to the list. - Cipriani, Roberto: Field Museum, Division of Invertebrates, Roosevelt Road at Lake Shore Drive, Chicago, Illinois 60605

From Aaren Freeman: I am doing a Masters at Northeastern University on an invasive algae, *Codium fragile* ssp. *tomentosoides*. I have recently found what I believe is *Hermea dendricata*, a Sacoglossan Opisthobranch, grazing on *Codium*, in Massachusetts. I have become aware of a

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Pacific species, *Placida dendritica*, which also grazes specifically on *Codium* species. Can anyone tell me if *P. dendritica* and *H. dendritica* are in fact the same species? I have looked for this on the seaslug web page but cannot find the references necessary to really clear up my confusion.

[Editor: I listed *Hermaea dendritica* under *Placida dendritica* at the same time with listing *Hermaea ornata* and *Placida ornata* as junior synonyms (Long 1969, *Tabulata*) of *Placida dendritica* (Alder & Hancock, 1843).]

From Aaren Freeman: Thank you very much for your prompt reply, it helped me quickly figure out that I have, in fact, been seeing *Placida dendritica* at Marblehead and here at Nahant. I am trying to figure out the abundance and range of this critter. Do you know much about its abundance? Is it actually introduced? Or, can you direct me to someone who might know more about this species on the east coast? - Northeastern University, Marine Science Center, East Point, Nahant, MA 01908

From Albert Koulman: Does anyone know of opisthobranchs who prey on *Aplysina* sponges in the Caribbean? I have read an article on the seaslug *Tyrodina perversa*, which lives in the Mediterranean (and East Atlantic) on the sponge *Aplysina aerophoba*. I have also heard about a *Tyrodina* species in the Pacific, which also eats *Aplysina* sponges, but I have no information about species form the Caribbean. Has somebody found or know of opisthobranchs on *Aplysina* sponges or any *Tyrodina* species in the Caribbean?

This information would be a great help for me. I'm currently working on a research proposal on the ecological role of biological active compounds from *Aplysina* sponges. The interaction with opisthobranchs could be very interesting. - Dept. Pharmaceutical Biology, University of Groningen, A. Deusinglaan 1, 9713 AV Groningen, The Netherlands,

From Juan Lucas Cervera: I'm trying to perform experiments in aquaria with some species of aeolids to demonstrate if its coloration could be considered or not as aposomatic -- seeing if fishes are able to learn to relate a color pattern with a defense.

We (I and other collaborators) have done some experiments in the field, but to support the results and the conclusions with a statistical basis we need to do different kinds of experiments in the laboratory. And it is here where the methodological problems arise. We are using fishes of the species *Fundulus heteroclitus* that lives in very shallow waters and in habitats in which it will never find the aeolids that we are using. So, the fishes have no experience meeting the aeolids and we can prepare different experiments to see their response.

However, although the fishes were kept in the aquaria from more than two months, controlling temperature, oxygen, salinity and with a good level of feeding -- when we start the experiments and we take some fishes to put in another aquarium they become stressed even after many days (they show even a slight color change), and they can even jump out of the aquaria.

We have no found information about experiments in laboratory with nudibranchs focused to this field research because we were only able to run 1 or 2 isolated experiments -- not a sufficient number of times to be valid statistically.

Can help us somebody in this matter or direct us to other similar experiments? - Dept. Biología Animal, Vegetal y Ecología, Universidad de Cadiz, Pol. Río San Pedro s/n, Apdo. 40, 11510 Puerto Real (Cadiz), SPAIN

From Barbara F. Seavy: I am a graduate student at Western Washington University, Bellingham, Washington (Pacific Northwest) working on my Master's project. I am conducting feeding preference experiments with *Aeolidia papillosa* and its prey, the anemone *Anthopleura elegantissima* which is symbiotic with two different unicellular algae. My major professor is Dr. Gisele Muller-Parker.

My problem: My aeolids have begun to die. I have lost 3 in the last 2 days. It is my belief that this is the end of their life cycle. I have been collecting during this July and they have been mating and laying eggs like crazy in the lab. These animals are large--ranging from 6.5 cm to 12.0 cm. They have been very hard to find -- it has taken all of July to find 10 animals. I have collected them in the Anacortes, WA area.

My needs: 1) Any information on *A. papillosa*'s life cycle and possible culturing; 2) other collection sites and individual collectors; 3) the best time of year to collect; 4) any other info you might have that will help. - n9441922@henson.cc.wvu.edu

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