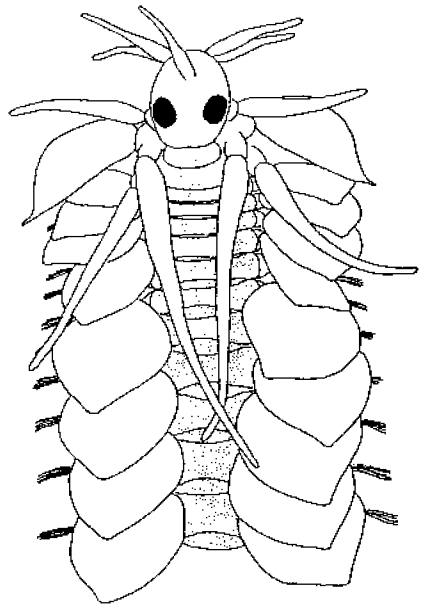
December, 1996 **SCAMIT Newsletter** Vol. 15, No.8

NEXT MEETING:	Application of the Computer Taxonomy Program Linnaeus to Polychaeta
GUEST SPEAKER:	Dr. Pleijel, Swedish Museum of Natural History
DATE:	Tuesday, January 14, 1997
TIME:	9:30am - 3:30pm
LOCATION:	Worm Lab, Natural History Museum of Los Angeles County, 900 Exposition Blvd., Los Angeles

JANUARY 14 MEETING

Dr. Fredrik Pleijel of the Swedish Museum of Natural History will be the guest speaker. He will be discussing the computer taxonomy program Linnaeus and his experiences in its application to polychaetes. Also, he is planning on field sampling with several local groups while he is in our area before the meeting. He is hoping to collect live polychaetes and may have some at the meeting for examination.



Pterocirrus nidarosiensis →
(from Pleijel 1993)

FUNDS FOR THIS PUBLICATION PROVIDED, IN PART, BY THE
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CHRISTMAS PARTY

SCAMIT held its annual Christmas Party on Saturday, December 7th at the Cabrillo Marine Aquarium. It was very well attended and everyone, especially the children had a great time. Of course, the food was superb. All the cooks outdid themselves. We even had a new polychaete species, *Phyllodoce xmasi*, illustrated on one of Leslie Harris' famous cakes. It had a very unusual red and green pigment pattern. Much to the children's delight (and the grown up children too) Santa John was able to attend complete with his bag of goodies. Many of us worked up an appetite Christmas shopping at the aquarium gift shop. We are grateful they stayed open late for us. The only thing missing was half of the SCAMIT orchestra. However, Ann Dalkey and Larry Lovell did their best to inspire us in song, and we thank them for their efforts, but most of us seem to have lost our voices for some reason. (Probably too much good food in our tummies.) For those of you who weren't able to attend we hope you can make it next year. We send a great big thank you to Cabrillo Marine Aquarium for the use of its facility. Being able to view the aquaria and the displays in a less crowded atmosphere is always a highlight.

EXECUTIVE COMMITTEE MEETING

On December 20th the four SCAMIT officers met at the County Sanitation District for an executive committee meeting. It being the end of the year seemed an appropriate time to discuss the future of SCAMIT. Several topics were discussed:

1) Meetings - (day-of- the-week, location, and frequency)

The subject was brought up to see if monthly meetings are still appropriate for SCAMIT's activities. The officers felt that they are, but if no guest speaker is available SCAMIT may skip a meeting. As for the day-of-the-week it was decided that the second Monday of the month was still fine with rescheduling appropriate for various holidays. SCAMIT will still try to schedule meetings in various locations to allow more members to attend meetings. However, the Natural History Museum is a good location due to the availability of the collections there. We will try to have at least one meeting in Santa Barbara and one meeting at Cabrillo Marine Aquarium this coming year.

2) SCAMIT Species List-

The officers decided to wait until February 1998 to produce a third edition. The reason being that the MMS Atlas volumes should all be out by then and we would be able to incorporate all the changes/additions produced by these last volumes into the list. Since this edition will also include synonymies the extra time will help with this process.

3) Reimbursement of expenses for guest speakers-

The officers decided that guidelines need to be written for SCAMIT to follow with regards to "per diem allowances" for out-of-the-area guest speakers. These will include a set dollar amount per day which speakers may use to cover expenses (travel, hotel, meals, etc.) however they choose. The guidelines will also state who will be eligible for these "allowances". These will be published in an upcoming newsletter.

4) Life Memberships-

SCAMIT at this time does not have a life membership that may be purchased. This is held as a honorarium. So far SCAMIT has only awarded this to Dr. J. Barnard.

5) Southern California Academy of Science Meeting-

Next years (1997) meeting will be held May 2-3 at Fullerton College. SCAMIT officers are planning on setting up a display table with information, brochures, mugs, etc. at the

meeting. Volunteers for manning the table will be solicited at a future meeting. For the 1998 SCAS meeting SCAMIT will try to arrange a symposium on a pertinent topic, like the SCBPP.

6) Copyright laws -

With the advent of more stringent copyright laws SCAMIT has become sensitive to the use of published illustrations in its newsletter. The officers will be investigating this issue as soon as possible so as to not cause any violations.

7) Electronic newsletter and website-

Most of the executive meeting was spent discussing this topic. SCCWRP has made SCAMIT a very generous offer of a website thru their agency. This would include the setup and weekly maintenance by a SCCWRP employee, all at no cost to SCAMIT. The advantages and disadvantages of an electronic newsletter and a website were discussed by the officers and a recommendation will be made by them to the membership in the very near future. Officers still need to meet with SCCWRP to discuss in depth the details.

MMS TAXONOMIC ATLAS

A recent conversation with Paul Scott (Santa Barbara Museum of Natural History), editor of the Atlas, provided an update on the status of the remaining volumes. Six of the 14 volumes are yet to appear including the cnidarian volume (Vol. 3); the final volume of Polychaeta (Vol. 7); a mollusk volume dealing with bivalves, scaphopods, chitons, aplacophores, and cephalopods (Vol. 8); an arthropod volume covering decapods, pycnogonids, and mysids (Vol. 10); a second arthropod volume covering isopods, tanaids, and cumaceans (Vol. 11); and the final volume of the series which will contain echinoderms, urochordates, enteropneusts, echiuroids etc. (Vol. 14).

The last of these will be the next to appear. It was being printed in early December, and should be in the hands of subscribers prior to this newsletter. It should be followed by Vol. 11, which currently has an expected release date of late January 1997. Volume 3 may appear in February 1997, with the release dates of the remaining three volumes still uncertain.

AMPHIPACIFICA PUBLICATION

An announcement from Dr. E. L. Bousfield included in recent correspondence indicated the journal Amphipacifica will adopt a looser publication schedule. Since Dr. Bousfield is sole or co-author of nearly all of the journal's contributions, as well as it's editor, dropping scheduled quarterly publication is a necessity. Subscribers will have their annual subscriptions stretched to follow the expanded schedule. Thus subscriptions are now per volume of four issues, rather than per annum. I, for one, still eagerly await the next issue - whenever it may arrive.

- Don Cadien

SCAMIT TAXONOMIC LIST ED. 3

We will be working on Edition 3 of the SCAMIT Taxonomic Listing of Benthic Invertebrates in 1997. It is time for members (or other interested parties) to submit corrections, additions, etc. for inclusion in the new edition. Many errors have already been detected and corrected, and many changes made in response to literature received in the past year. The new edition will also begin the process of including synonymies with the primary entries. Addition and documentation of synonymies is a long-term project, and will greatly benefit from wide participation. We anticipate a release of Edition 3, including synonymies, in early 1998.

NEW LITERATURE

The Eastern Pacific species of the sea-fan genus *Muricea* were reviewed by Hardee and Wicksten (1996) in the most recent issue of the Bulletin of

the Southern California Academy of Sciences. They based their review of the genus locally on a combination of field experience, freshly collected specimens observed in situ, and the types (where they could be located). One of the main items of interest for local field-id of these species is that *M. californica* can have polyps of either yellow-orange or white color. The field distinction between *M. californica* and *M. fruticosa* based on polyp color is not accurate, and must be dropped. Photographs of colony morphology are provided, as is a table summarizing the distinctions between the three valid species from our area.

As mentioned above Volume 14 of the Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and Western Santa Barbara Channel has been released. It contains sections on the Brachiopoda, the Sipuncula, the Echiura, the Echinodermata (Classes Crinoidea, Asteroidea, Ophiuroidea, Echinoidea, and Holothuroidea), the Enteropneusta, and the Urochordata. Several taxonomic innovations are presented, and we will need to hold at least one meeting (if not more) to consider the impact of the volume on SCAMIT usage. SCAMIT is represented by a number of present or past members including Dr. Mary Bergen, Dr. Gretchen Lambert, Dr. Gordon Hendler, Dr. Eric Hochberg, and Dr. Andy Lissner. As befits a volume with a number of different contributors, the coverage is a bit uneven, and only one of the chapters is a comprehensive view of the regional fauna. When you see this volume, it may look a bit familiar - the cover illustration is the same as on Volume 1; bringing us, I assume, full circle from the beginning to the end of the series.

Several of the individual chapters have been done for some time, often years, so the most recent taxonomic publications may not be included. This was the case, for instance, with the Sipuncula. The recent comprehensive review of the phylum by Cutler (1994) became available after the completion of the chapter.

REQUEST FOR SPECIMENS

In a recent letter to SCAMIT Dr. Mary Wicksten indicated she is forging ahead on description of one of the remaining undescribed pagurids from our coast, *Pagurus* sp. 2. This has been known by this name since the original keys produced by Dr. Janet Haig and Mary to preserved and living pagurids of our waters under the auspices of the SCCWRP Taxonomic Standardization Program. The species has recently been illustrated with a good color photograph in Jensen (1995 pg 67). Mary describes it as having "a peculiarly shaped, operculum-like major chela, often colored white and contrasting with the red-specked body." Specimens can be sent to her at:

Department of Biology
Texas A & M University,
College Station, Texas
77843-3258

You can reach her by telephone - 409)845-3388, by FAX at 409) 862-1977 or by e-mail at Wicksten@bio.tamu.edu

NOMENCLATURAL NICETIES

Tim Stebbins (CSDMWWD) recently sent me a copy of an E-mail exchange he had with Les Watling (Uni. Maine) concerning the ending of our local cumacean *Hemilamprops californicus*. Since I have been working on the new edition of the SCAMIT list I found their exchange most interesting. Tim had found both Watling's upcoming MMS Taxonomic Atlas section and the World List of Cumaceans he maintains on the World Wide Web had a different ending for the species than Ed. 2 of the SCAMIT list. He inquired of Les for clarification, and received the succinct answer *H. californicus* is right. Never one for succinct explanations (or succinct anything for that matter)I decided to examine the question myself.

Zimmer (1936) originally described this as *Hemilamprops* (?) *californica*, but that doesn't make his ending necessarily correct. The generic name *Hemilamprops* is a modification of *Lamprops*, which I believe is a compound of the Greek Lampros and Ops - "Shining eye" (or "Bright eyed" to Stebbing 1893 p. 308). According to Brown (1956, pg. 313) *ops* and *opos* are feminine forms and *ophthalmos* the male form of "eye" in Greek. Consequently, since the gender of the compound name is determined by it's ending, the generic name is feminine, and the specific epithet should end in -a. This has indeed been the practice in the genus *Lamprops*, where most species have been described as ending in -a. *Cyclops*, on the other hand, is not derived directly from eye, but from the name of the a one-eyed giant. It is masculine, as befits the name of a male character, and in consequence specific epithets associated with compound genera such as *Hemicyclops* should properly adopt the masculine ending -us (thus *Hemicyclops thysanotus*).

I was quite happy with the above explanation, since I thought I had discovered Les in an error (and vindicated existing SCAMIT usage). I also contacted George Davis (Crustacea, Natural History Museum of Los Angeles County) and asked him to check the current *ne plus ultra* of cumacean nomenclature, the Crustaceorum Catalogus.

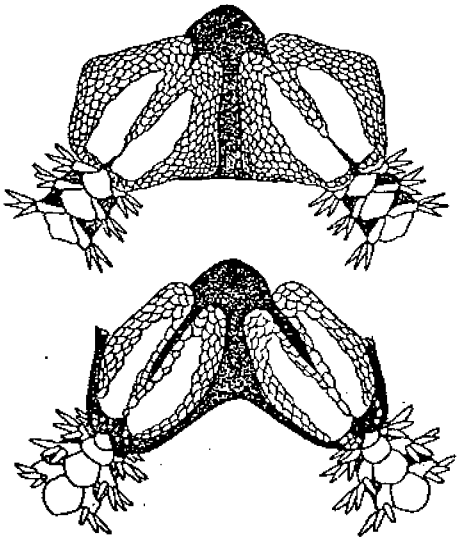
In the Crustaceorum Catalogus section on Cumacea Bacescu (1988 pp. 13-14) indicates the gender of *Lamprops* as masculine without giving the basis of such statement. Any compound name based on *Lamprops* (*Hemilamprops*, *Paralamprops*, etc.) would thus also be masculine. If Sars stipulated the gender in his 1863 establishment of *Lamprops*, then it would stand regardless of my etymological exegesis. If he did not, then the etymology would prevail, and the ending would properly be feminine, or so I thought. My house of cards promptly collapsed when I decided to check the ICZN code provisions on stipulation of gender by authors, and instead found Article 30(a)ii. This gem, which I had previously overlooked, reads as follows...

"A genus-group name ending in *-ops* is to be treated as masculine, regardless of its derivation or of its treatment by its author."

What had been an interesting question of the etymology of a name, and its treatment by Sars nearly 150 years ago now became the drab (if final) imposition of authority by ICZN. There must have been a number of cases where this ending lead to nomenclatural wrangling for the Commission to single it out for separate treatment. All is not lost, however, since the effort provides a basis for all of us to learn **why** our current usage is incorrect, not just **that** our current usage is incorrect. If we are ever to stop see-sawing back and forth on these questions we need to understand the whys of proper usage.

Case in point is the correct spelling of the ophiuroid *Amphiura arcystata* Clark 1911. This has gone back and forth from *A. arcystata* to *A. acrystata* over the years, following the latest publication with no understanding of the rationale for either choice. In Ed. 2 of the SCAMIT listing I thought we had finally gotten it correct by rejecting Maluf's use of *A. arcystata* (Maluf 1988, pg. 133). She indicated in a footnote that Downey (1969) maintained Clark's original spelling was correct [so if we go back to Clark and look, we will find the correct usage!]. Clark (1911 pg. 145) used *Amphiura acrystata* at the top of his original description. Just to double check, a look at usage in the Table of Contents, and List of Illustrations also yielded *A. acrystata* in each case. No typos here, and it's hard to argue with an original description. So in Ed. 2 we adopted what was believed to be the correct usage (at last!) of *A. acrystata*. The recent arrival of Gordon Hendler's ophiuroid section of the MMS Taxonomic Atlas (Vol. 14, Chapter 7) has again stirred the pot. He indicates (Hendler 1996, pg. 145) the correct spelling as *Amphiura arcystata*. In his synonymy he lists Clark's original usage of *acrystata* as a lapsus for *arcystata*. How can this be? The answer lies in Clark's etymological

footnote, where he indicates the meaning of the specific epithet is "*surrounded with nets*, in reference to the appearance of the radial shields".



Dorsal views of *A. arcystata* from Clark 1911

Referring to our etymological sourcebook (Brown 1956, pg. 556) we find net in Greek is *arkys,-yos*, feminine. It appears that the lapsus resides in Clark's having mixed up the spelling of the Greek stem during formulation of the name. What tangled *arkys* we taxonomists weave!

The above explanation is intended to provide a paper trail for the **why** of the correct usage, so that we can stop oscillating back and forth in at least this case. If some of the proposed modifications of the Code of Zoological Nomenclature are enacted in the new Code, we may be able to dispense with much of this nomenclatural uncertainty. It has been proposed that the original name given by the author of a taxon in the original description be conserved regardless of etymological correctness, regardless of gender match, regardless of later transfer to a genus of differing gender...regardless of nearly anything! How simple it might be. Once established, a name remains immutable. WOW! What a concept! Still, the above sort of sleuthing can be entertaining for taxonomists and list makers with nothing better to do, or those like myself who abhor the succinct. - ed.

UNDERSTANDING APPEARANCES

"A blot in thy scutechon to all futurity"
-Don Quixote
"a stain on one's escutcheon"- idiom

In the last newsletter the holotype specimen of *Aphelochaeta phillipsi* (and possibly other type specimens of recently described taxa) was restained. A different pattern was reported than the diagnostic stain provided in the original description. No explanation was provided for the discrepancy. This raises the concern that some stain pattern results are not reproducible. Distinctive stain patterns may provide an illusion of diagnosis. As no measurement of stain variability has been constructed, there is the danger of using the sometimes extraordinary appearance of stains as a magical solution for polychaete identifications. Clearly one method of avoiding being tricked is to stain and describe the patterns of holotype and paratype specimens. Careful work must avoid using stain patterns as diagnostic characters until (at least) the results can be reproduced by other workers. Differences in staining results demonstrate either unacceptable variation within the stain method or that a pattern is not diagnostic of the species under inspection.

-Tom Parker

ISOPOD CONFERENCE

First notice has been received of the Second International Isopod Conference and Workshop to be held at the Dauphin Island Marine Lab, Dauphin Island, Alabama just prior to the summer meeting of the Crustacean Society in Mobile, Alabama. The meeting is to be held in honor of the life and work of T. E. Bowman. The meeting will be held 18-21 May [the Crustacean Society meeting is 21-24 May]. The announcement and registration form are attached.

1997 SCAS MEETING

The call for papers for the 1997 Southern California Academy of Sciences Annual Meeting has been sent out. The meeting will be held on May 2-3 at Fullerton College. Details on submission of papers will be sent to members, and will be available at SCAMIT meetings. Abstract/Information forms on papers must be submitted by 1 March 1997.

VOUCHER SHEETS

Voucher sheets for the oedicerotid amphipod *Eochelidium sp A* [see NL 15(6)] and the isopod *Paracerceis sp A* [see NL 15(7)] are included with this issue.

VOUCHER SHEET ADDITION

In the SCAMIT newsletter vol. 15 (5) the voucher sheet on *Aricidea (Allia)* sp. A of SCAMIT 1996 is missing some information from one of its synonymies. *Allia ramosa* of SCAMIT was originally referenced in the SCAMIT voucher sheet from newsletter vol. 3 (2). *Allia ramosa* of SCAMIT will now appear as *Aricidea (Allia)* sp. A of SCAMIT in the upcoming edition 3 of the Taxonomic List.

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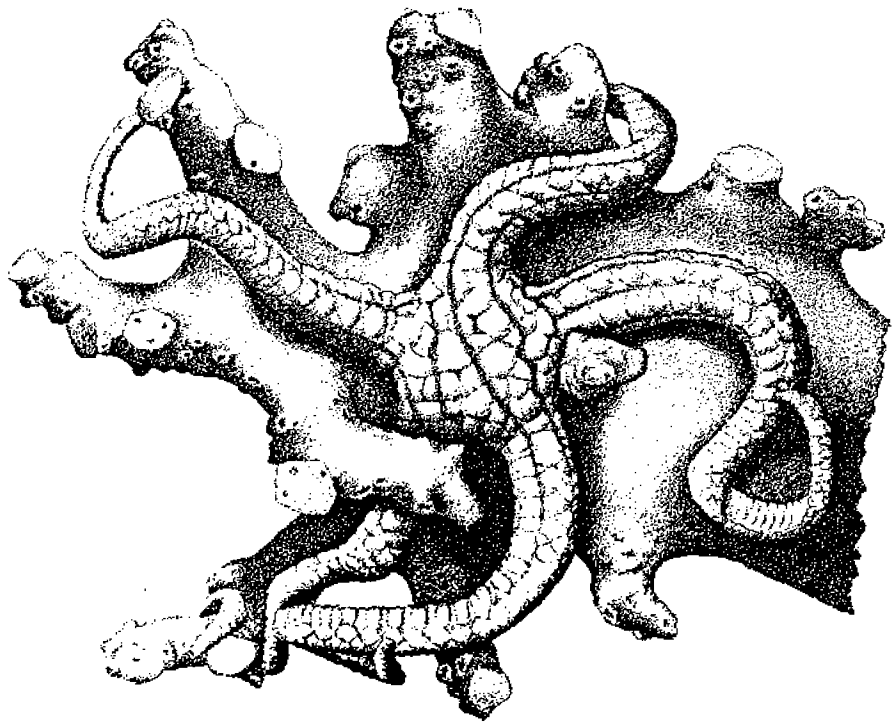

Sigsbeia lineata on a hydrocoral (from Lütken and Mortensen, 1899. Albatross Report XXV - The Ophiuridae. Memoirs of the Museum of Comparative Zoology, Harvard 23(2):97-208)

SCAMIT OFFICERS:

If you need any other information concerning SCAMIT please feel free to contact any of the officers.

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Treasurer	Ann Dalkey	(310)648-5544	cam@san.ci.la.ca.us

Back issues of the newsletter are available. Prices are as follows:

Volumes 1 - 4 (compilation)..... $ 30.00
Volumes 5 - 7 (compilation)..... $ 15.00
Volumes 8 - 14 ..... $ 20.00/vol.

Single back issues are also available at cost.

SECOND INTERNATIONAL ISOPOD CONFERENCE AND WORKSHOP
Honoring the Life and Work of Thomas E. Bowman

Organizers: Rick Brusca, Bob George, Brian Kensley

FIRST NOTICE

WHEN: 18-21 May 1997
Immediately preceding the Summer Meeting of the Crustacean Society in Mobile, Alabama

WHERE: Dauphin Island Sea Lab, Dauphin Island, Alabama, USA

REGISTRATION FEE: $190 (single room plus meals)
$150 (double room plus meals)

LODGING: Single or Double Dormitory-style rooms at Dauphin Island Lab.

Participants may also arrange their own accomodations at any of the four modestly-priced motels on Dauphin Island:

Gulf Breeze Motel: 1510 Cadillac Ave.	(334) 861-7344
	(334) 861-6616
Bayside Motel and Apartments: 510 Lemoyne Dr.	(334) 861-4994
Harbor Lights Inn: 1506 Cadillac Ave.	(334) 861-5534
Sand Castle Beach Front Condominiums: 50 Forney Johnston St.	(334) 861-6691

MEALS: All meals and coffee-breaks are included in the Registration Fee, and will be served at the lab. There are three cafes on the island, so dining out is possible.

SCHEDULE:

18 May Participants arrive at Mobile airport.
Shuttle van to Dauphin Is. Sea Lab.
Evening reception at local restaurant.
19 May Morning and afternoon, papers and discussion.
20 May Morning and afternoon, papers and discussions.
Evening banquet.
21 May Morning, papers and discussion.
Afternoon, depart for Mobile.
21-24 May Summer Meeting of the Crustacean Society, Mobile, Alabama

POSSIBLE TOPICS: Isopod Biodiversity and Biogeography.
Isopod phylogeny.
Isopod databases, keys.

TRANSPORT: A shuttle bus will be provided to carry participants from the Mobile airport to Dauphin Island, a 45 minute drive. Plan your arrival in Mobile for no later than 5:00 p.m. on May 18th. Inform Brian Kensley of your flight and time of arrival, so that you can be met at the airport.

REGISTRATION FORM

If you plan to attend the Second International Isopod Workshop and Conference at Dauphin Island, Alabama, please complete this form and return it to Brian Kensley, NHB-163, Smithsonian Institution, Washington, D.C. 20560 (Phone (202) 357-4666, Fax (202) 357-3043, E-Mail MNHIV019@SIVM.SI.EDU

1. Name (as you wish it to appear on your lapel badge).

   Postal Address: Telephone No.

   --- ---

   --- Fax No.

   --- ---

   E-Mail Address:

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2. I wish to reserve SINGLE DOUBLE accomodation at the Dauphin Island Sea Lab (circle one).

   or

   [] I will arrange my own accomodation on Dauphin Island.

3. Enclosed is a CHECK MONEY ORDER BANK ORDER for $190/$150 US, for the Registration Fee (circle one).

4. I plan to present a PAPER and/or a POSTER (circle one or both).

5. Title of my paper:_____

_____

_____

(Send a one-page Abstract to Brian Kensley no later than 31 March 1997. The Abstract page should have a one-inch margin all round, for easy copying.)

6. One T-shirt is included in the registration fee; additional T-shirts will be sold at minimum cost.

T-shirt size: SMALL MEDIUM LARGE X-LARGE (circle one or more).

SCAMIT CODE: None

Date Examined: 19 August 1996
Voucher By: Carol Paquette & Don Cadien

SYNONYMY: Synchelidium sp A of MBC [see SCAMIT NL 12(5)]

LITERATURE: Bousfield & Chevrier 1996; Hirayama 1987; Hirayama 1992; Imbach 1967; Jo 1990

DIAGNOSTIC CHARACTERS:

1. Head with a pronounced change in slope just beyond the eye; rostrum not exceeding article 1 of antenna 1 peduncle, strongly deflexed, ventrally keeled

2. Pereopods 3 and 4: dactyl long, subequal to the propodal length; carpus also subequal to propod length; hind margin of both carpus and propod proximally setose; basis expanded distally, especially on pereopod 3

3. Gnathopod 1: palm nearly transverse, defined by a spine and a sharp change in angle, equal in length to posterior margin

4. Gnathopod 2: propod elongate; dactyl relatively short, about 1/4 propod length

5. Coxa 3 with postero-ventral margin beveled; coxa 5 as long as wide

6. Pleonal epimeron 2 with posteroventral corner obtuse

7. Uropods 1 and 2: outer rami slightly shorter than inner; mesial margin of inner rami spined (two spines on U1, one on U2)

8. Telson truncate distally, bearing one pair of small curved setae

9. Strongly pigmented (retained in alcohol) with brown blotches in a pattern similar to that shown in Fig. 1

RELATED SPECIES AND CHARACTER DIFFERENCES:

1. Differs from *E. carinorostrum* in having a more deflexed, shorter rostrum which does not exceed article 1 of the antenna 1 peduncle; and in having a truncate not emarginate telson

2. Differs from *E. miraculum* in having articles 1 and 2 of the antenna 1 peduncle subequal, not article 2 50% longer; in having the posterior margin of coxa 3 beveled, not evenly rounded; in having the basis of pereopod 3 distally expanded; in bearing spines on the mesial margins of uropods 1 and 2; in having the telson truncate, not slightly emarginate; and in having a pair of curved setae dorsally on the telson

3. Differs from *E. nonrostrum* in lacking pleon ridging or carination dorsally

4. Differs from *E. bulytschevae* in having the carpus of pereopods 3 and 4 posteriorly setose

5. Differs from *E. nonmiraculum* in having the rami of uropods 1 and 2 unequal

6. Differs from *E. lenorostralum* in the hind corner of pleonal epimeron 2 being obtuse, not acute

7. Differs from *E. rostriospiculum* in having the propod of gnathopod 2 not slender, and in lacking spines posteriorly on the propod of pereopods 3 and 4

DEPTH RANGE: 7- 20 m

DISTRIBUTION: all specimens known to date have been taken in Long Beach Harbor, either in the inner portion of the Main Channel, in the Consolidated Slip, or in Queensway Bay in the outer harbor. It is assumed that the species is introduced from the Northwest Pacific, but no collections of it are known (to us) from that region.

REMARKS: As outlined by Bousfield and Chevrier (1996), both the genus *Eochelidium* and the closely related *Chitomandibulum* occur only in the Western Pacific. The current species is then almost certainly introduced from either Japanese or Korean waters, presumably in ships' ballast water. The species is most closely related to *E. carinorostrum* (Jo 1990 - to which it would key out in Bousfield and Chevrier's key) and *E. miraculum* from the South China Sea (Imbach 1967). It can be separated from all the local species of *Synchelidium* in being heavily pigmented rather than pure white, and in numerous fine details. The specimens taken by MBC were from 1993 and 1994 samples, and the species may not still be extant in the harbor. Although in nearly all respects it falls within the definition of the genus *Eochelidium*, it differs from other members of that genus in having the carpus and propod of pereopods 3 and 4 equally long.

Figure 1. Color pattern of *Eochelidium sp A* (based on preserved specimen from Long Beach Harbor)

SCAMIT CODE: None

Date Examined: 19 December 1996
Voucher By: Don Cadien

SYNONYMY: Paracerceis sp of Brusca 1980

LITERATURE: Brusca 1980; Richardson 1905

DIAGNOSTIC CHARACTERS:

1. In the male the terminal sinus bears two pair of teeth; the anterior pair long, flat medially, ending in sharp conical points; the posterior pair short, placed near the distal end of the sinus so the pleotelson appears notched

2. In the male the uropodal exopod is wider basally than the endopod, and its anteriodorsal margin is finely dentate

3. In the male the basal knob on the pleotelson bears a tall acute spine 4-5x its diameter in length

4. In the male the sinus broadens out basally into a round foramen which the basal knob overhangs

5. In the male the pleotelson bears two clear vesicles flanking the base of the median sinus

6. In the female the posterior medial margin of the uropodal exopods bears a series of sharp teeth

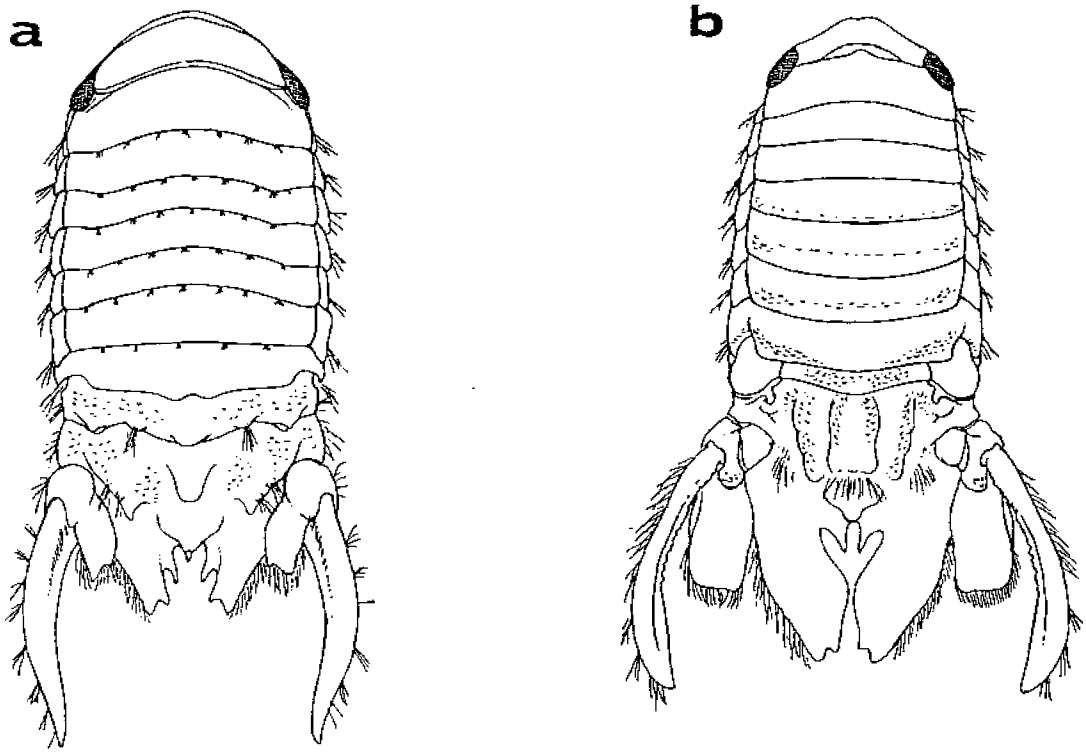
RELATED SPECIES AND CHARACTER DIFFERENCES:

1. Differs from the male of *P. sculpta* in having a tall acute spine on the basal knob of the pleotelson rather than a short acute spine (not much longer than its diameter); from the male of *P. cordata* in lacking ventrolateral spines on the uropodal exopod; and from *P. sculpta*, *P. cordata*, and *P. gilliana* males in having the base of the median sinus expanded into a round foramen; in having the median sinus narrowed distally; and in having the uropodal exopods wider basally than the endopods

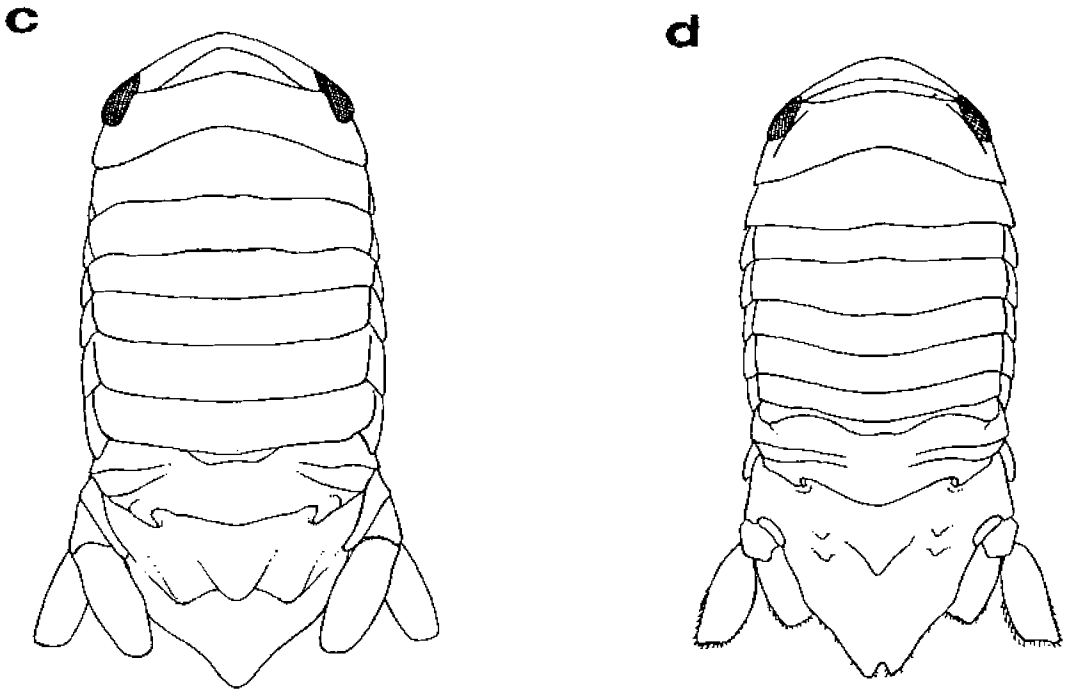
2. Differs from the females of *P. sculpta*, *P. cordata*, and *P. gilliana* in having the posterior medial margin of the uropodal exopods sharply toothed

DEPTH RANGE: intertidal - ?

DISTRIBUTION: islands of the central Gulf of California to La Jolla, California



Adult male of a) *Paracerceis sculpta* and b) *Paracerceis sp A*
(from Brusca, 1980. Common Intertidal Invertebrates
of the Gulf of California, 2nd Ed)



Adult female of c) *Paracerceis sculpta* and d) *Paracerceis sp A*
(from Brusca, 1980. Common Intertidal Invertebrates
of the Gulf of California, 2nd Ed)