



SOUTHERN CALIFORNIA ASSOCIATION
OF
MARINE INVERTEBRATE TAXONOMISTS

June 1983

Vol. 2, No. 3

Next Meeting	July 11, 1983
Place	Marine Biological Consultants 947 Newhall Street Costa Mesa, California 92627
Specimen Exchange Group	Cumacea and Ostracoda
Topic Taxonomic Group	Eusiroidea (Eusiridae, Pleustidae, Bateidae, Paramphithoidae, Stillipedidae, Iphimedidae, Stegocephalidae)

MINUTES FROM JUNE 13, 1983

Membership Renewal: So far many members have renewed, but not all. For those who have not, fill out the enclosed form for your 1983-84 membership. This will be the last Newsletter you will receive without renewing.

Lumbrineriopsis and Lumbrineridae: Some people were having difficulty with the genera presented in the Orensanz key by Fauchald in the 1977 The Polychaete Worms (Natural History Museum of Los Angeles County, Science Series No. 28). Drawing from Leslie Harris' experience consensus was reached that (as mentioned in the text on page 109) Lumbrineriopsis and Lumbrineridae function as valid genera, but the other genera must be approached with caution.

Literature Committee: John Ljubenkov is working on simplifying Cnidarian literature list by organizing it by class. As soon as he finishes, it will be distributed.

New references that were mentioned are:

F.R. Bernard. Catalogue of the living bivalvia of the Eastern Pacific Ocean: Bering Strait to Cape Horn. Canadian Government Publishing Centre, Ottawa, Canada. (Order form enclosed.)

Steele, D.H. 1982. The genus Anonyx (Crustacea: Amphipoda) in the North Pacific and the Arctic Oceans: Anonyx nugax group. Can. J. Zoology 60 (7): 1754-1775.

Also enclosed in this Newsletter is a checklist of Arabellidae, Iphitimidae, Lysaretioae and Dorvilleidae compliments of Leslie Harris, SCCWRP, and descriptions of four provisional species of Dorvilleids compliments of Dave Montagne, Los Angeles County Sanitation.

Picnic: The date has been set, mark your calender, and get ready for fun. This is a great chance to visit with everyone and sample some good cooking. Featured will be John Ljubenkov's great cooking and assorted side dishes such as Dave Montagne and April Ford's Polychaete Cheese Log. What can you contribute? Fill out your RSVP for July 30th!!!

Helpful Hints: When dissecting Arabellids and Lumbrinerids, do the dissection dorsally to avoid destroying the mandibles.

For people who like to use methyl green, try mixing some using glycerol. This way you won't have to worry about your specimen drying out.

Note to Participating Members: A real problem developed during the meeting when it was discovered that some of the exchange specimens included not only different species, but different families. BE SURE THAT YOU PACKAGE UP THE SAME SPECIES FOR THE SPECIMEN EXCHANGE.

Also, to help track down specimen exchange errors, mark down which specimen you looked at, ex. OC 24 E.

List of June 13, 1983 Topic Species (with May 9, 1983 Cnidarians):

- | | |
|---|--|
| SCCWRP 19 <u>Pennatula phosphorea</u> var. <u>californica</u> | AHF 13 <u>Oenone fulgida</u> |
| OC 19 Order Ceriantharia | HYP 22 <u>Protodorvillea gracilis</u> |
| PL 21 Edwardsiidae, juvenile | PL 22, OC 23, <u>Orilonereis</u> sp. |
| SCCWRP 18 <u>Edwardsia</u> sp. A | PL 23 <u>Notocirrus californiensis</u> |
| LACO 13 <u>Isoedwardsia</u> sp. A | HYP 23 Dorvilleidae sp. B |
| OC 24 <u>Notocirrus californiensis</u> | HYP 24 Dorvilleidae sp. C |
| SCCWRP 21 <u>Arabella semimaculata</u> | |

Voucher sheets from June 13, 1983 specimens and a literature list will be in next month's Newsletter.

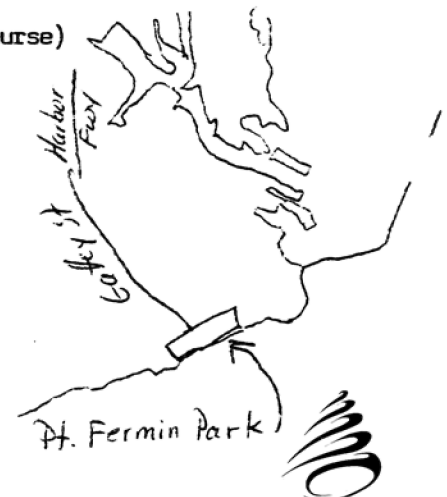
SCAMIT PICNIC RSVP

PLACE: Pt. Fermin Park, San Pedro, CA
 DATE: July 30, 1983
 TIME: 10:00 a.m.
 PRICE: \$2.50 per person, if you bring a side dish for 6 people with your group
 \$3.50 per person without
 (The charge will go toward the purchase of the main course)
 RSVP: Ann Martin
 Phone: days (714)540-2910 x 268
 eves (213)318-1837
 Mail to: 10844 Ellis Avenue
 Fountain Valley, CA 92708

NUMBER OF PEOPLE _____ X \$2.50 = _____

_____ X \$3.50 = _____

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APPLICATION FOR 1983-84 MEMBERSHIP

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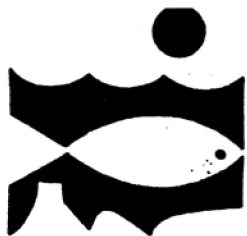
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MAIL TO:

Ann Martin
 10844 Ellis Avenue
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**MARINE
TECHNOLOGY
SOCIETY**

LOS ANGELES REGION SECTION

1818 West Central Avenue
Santa Ana, California 92704

***** MEETING ANNOUNCEMENT *****

PROGRAM: 1984 Olympic Sailing
DATE: Tuesday, June 28, 1983
PLACE: Long Beach Yacht Club
6201 East Appian Way
Long Beach, CA 90803
TIME: Dinner (optional) -- 6:30 pm
in main dining room,
2nd floor
Speaker (main floor)-- 8:00 pm



Mr. Charles Kober, an internationally known architect, will present a talk and slides on the Olympics. He is a member of the organizing committee of the 1984 Olympic sailing events, which will be held in Long Beach. Alamitos Bay Yacht Club, of which he is a past Commodore, and the Long Beach Yacht Club will be participating members.

Mr. Kober has had first-hand experience as an Olympic participant in sailing and has also attended a number of Olympics in many different countries. It should be a very enlightening and interesting evening.

Dinner will be available at the Long Beach Yacht Club. Selections from the menu range from \$8.00 to \$15.00.

Please make your reservations by JUNE 18, 1983. Mail \$1.00 for each registration and a self-addressed, stamped envelope to Francis Merchant for your registration card to gain admittance to the club. Send to:

Francis Merchant
448 Orleha Avenue
Long Beach, CA 90814
(213) 498-1749

Cut along dotted line

NAME _____ TELEPHONE _____

ADDRESS _____ CITY _____ ZIP _____

NUMBER OF RESERVATIONS: DINNER _____
MEETING _____

Please make checks payable to MTS.
RESERVATIONS ARE ABSOLUTELY NECESSARY FOR ADMITTANCE.

**Catalogue of the Living Bivalvia of the Eastern Pacific Ocean:
Bering Strait to Cape Horn**

F.R. BERNARD

This work consists of a systematic catalogue and primary bibliography of the living Bivalvia of the eastern Pacific Ocean from Bering Strait, Alaska (66°N) to Cape Horn, Tierra del Fuego (60°S). 1308 species from the high intertidal zone to deep waters extending approximately two thousand kilometers offshore are included, representing the total described fauna. Synonymies for each species and its distribution updated from the recent literature and museum and private collections, are given. Also presented are the thermal range and fossil occurrence in the region, abstracted from the literature and collections. The bibliography lists sources of primary descriptions and replacement names at the specific level only. New species are not proposed, though six replacement names and various changes of suprageneric categories are suggested.

La présente publication contient un catalogue systématique et une bibliographie de base des Bivalvia existants du Pacifique oriental, depuis le détroit de Béring, en Alaska (66°N), jusqu'au cap Horn, en Terre de Feu (60°S). Elle comprend 1 308 espèces réparties de la zone intertidale supérieure aux eaux profondes jusqu'à environ 2 000 km au large et représentant le total de la faune décrite à ce jour. On y donne, pour chaque espèce, les synonymes et la répartition mise à jour d'après les récentes publications et les collections de musées ou privées. Sont inclus également les extrêmes de température où se trouvent ces espèces, ainsi que l'incidence de fossiles dans la région, ici encore extraits de la littérature et des collections. Dans la bibliographie, on indique les sources de descriptions originelles et les noms de remplacement seulement au niveau spécifique. Aucune nouvelle espèce n'est proposée, bien six noms de remplacement et divers changements de catégories supragénériques soient suggérés.

102 pages

Canada: \$8.00

Other countries \$9.60

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Fisheries and Oceans / Pêches et Océans

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July

CHECKLIST OF WEST COAST ARABELLIDAE, IPHITIMIDAE,
LYSARETIDAE & DORVILLEIDAE (ANNELIDA:POLYCHAETA)
BY LESLIE HARRIS

SOUTHERN CALIFORNIA COASTAL WATER RESEARCH PROJECT
646 W. Pacific Coast Highway
Long Beach, CA 90806

F. Arabellidae Hartman, 1944

Arabella Grube, 1850

= Aracoda Schmarda, 1861

= Maclovia Grube, 1872

= Cenothrix Chamberlin, 1919

Arabella endonata Emerson, 1974

Parasitic in Diopatra ornata, off Port Hueneme,
California, 50-60 ft. (Emerson, 1974)

? Arabella geniculata (Claparede, 1868)

= Notocirrus geniculatus Claparede, 1868

Corono del Mar, intertidal in roots of Phyllospadix;
southern Europe, intertidal, in coralline zones
(Hartman, 1968).

Arabella iricolor (Montagu, 1804)

= Nereis iricolor Montagu, 1804

= Arabella laqunae Chamberlin, 1919

Western Canada to western Mexico, intertidal
and shelf depths, mixed sediments (Hartman, 1968).

Arabella mimetica Chamberlin, 1919

(? synonym of A. iricolor)

Laguna Beach, intertidal, in kelps (Hartman, 1968).

* Arabella mutans (Chamberlin, 1919)

= Cenothrix mutans Chamberlin, 1919

? western Mexico to Panama (Fauchald, 1970)

* Arabella pectinata Fauchald, 1970

El Descanso, Baja California, intertidal (Fauchald, 1970);
Santa Barbara Channel (Emerson, 1971).

Arabella semimaculata (Moore, 1911)

= Aracoda semimaculata Moore, 1911

= Arabella munda Chamberlin, 1919

= Arabella pacifica Treadwell, 1941

Central California to southern part of western Mexico,
shallow water (Fauchald, 1970)

Biorin Chamberlin, 1919

Biborin ecbola Chamberlin, 1919

Laguna Beach, in Phyllospadix, intertidal (Hartman, 1968)

Drilonereis Claparede, 1870

- = Labidognathus Caullery, 1914
 = Arabes Ehlers, 1920

Drilonereis falcata Moore, 1911

Central California to western Mexico, shallow subtidal (Fauchald, 1970)

Drilonereis filum (Claparede, 1868)

= Lumbriconereis filum Claparede, 1868

Southern California, in shelf depths, sandy mud;
 Mediterranean Sea (Hartman, 1968).

"D. filum is considered cosmopolitan;
 in view of the unsettled state of the taxonomy in this
 genus, the species is here considered known from the Mediterranean Sea
 from which it was originally described. It may be present in western
 Mexico" (Fauchald, 1970).

Drilonereis forcipes (Hartman, 1944)

= Labidognathus forcipes Hartman, 1944

Southern California and western Mexico, shelf depths, coarse gray
 sand (Hartman, 1968); known only from original record from Eunice
 ? antennata from Baja (Fauchald, 1970).

Drilonereis longa Webster, 1879

San Pedro channel and adjacent areas, intertidal and
 shelf depths, silt and sand; Virginia, intertidal in silt (Hartman, 1968).

Drilonereis "longa" of Montagne

This is an endoparasitic form found in Tharyx sp., from off
 Palos Verdes and Point Loma, and morphologically similar to east coast
 specimens of longa, differing only in its smaller size; identical
 to Hartman's 1968 description.

Drilonereis mexicana Fauchald, 1970 (pers. com., D. Montagne)

= Drilonereis nuda of Hartman, 1944, 1968, in part

Northern Pacific Baja (Fauchald, 1970); Santa Monica Bay,
 Orange County, San Diego (pers. records, LH).

Drilonereis nuda Moore, 1909

Central and southern California to Cedros Island,
 Baja, intertidal and shallow subtidal (Fauchald, 1970).

Notocirrus Schmarda, 1861Notocirrus attenuatus (Treadwell, 1906)

= Arabella attenuata Treadwell, 1906

Central and southern California, shelf depths (Hartman, 1968)

Notocirrus californiensis Hartman, 1944

Southern California, shelf and slope depths, mixed
 sediments (Hartman, 1968).

F. Iphitimidae Fauchald, 1970

Iphitime Marenzeller, 1902

Iphitime holobranchiata Pilger, 1971
Southern California, in branchial cavities of
Cancer antennarius (Stimpson) (Pilger, 1971).

Iphitime loxorhynchi Hartman, 1952
Southern California and near Cedros Island,
Baja, in branchial cavities of Loxorhynchus grandis
Stimpson (Fauchald, 1970).

F. Lysaretidae Kinberg, 1865

Oenone Savigny, 1818
= Aglaura Savigny, 1818
= Aglaurides Ehlers, 1868
= Andromache Kinberg, 1865

Oenone fulgida (Savigny, 1818)
= Aglaura fulgida Savigny, 1818
= Aglaurides fulgida (Savigny, 1818) Ehlers, 1868
= Oenone dyphillidia Rioja, 1941
Circumtropical and colder waters of Japan (Fauchald, 1970)

F. Dorvilleidae Chamberlin, 1919

Dorvillea Parfitt, 1866
= Staurocephalus Grube, 1855, preoccupied
= Teleonereis Verrill, 1900
= Stauroceps Verrill, 1900
= Papilliodorvillea Pettibone, 1961

Dorvillea batia Jumars, 1974
Coronado Sea Fan region of the San Diego Trough,
silty mud, 1223-1229m (Jumars, 1974); off Yaquina Bay,
central Oregon, 1600m. (Fauchald & Hancock, 1981).

Dorvillea cerasina (Ehlers, 1901)
= Staurocephalus cerasinus Ehlers, 1901
= Stauronereis cerasina Ehlers, 1901
= Dorvillea cerasina (Ehlers, 1901), in Hartman, 1944
Coronado Islands, Baja California, intertidal sponge;
western Mexico (Fauchald, 1970).

Dorvillea moniloceras (Moore, 1909)
= Stauronereis moniloceras Moore, 1909
Central and southern California, shelf depths, silty mud;
Hawaiian Islands, intertidal (Hartman, 1968); cited
without locality in British Columbia and Washington listing
(Banse & Hobson, 1974).

Dorvillea pseudorubrovittata Berkeley, 1927
Cited without locality in British Columbia and Washington listing
(Banse & Hobson, 1974).

Exallopus Jumars, 1974Exallopus cropion Jumars, 1974

Coronado Sea Fan region of the San Diego Trough, silty mud,
1224m (Jumars, 1974).

Meiodorvillea Jumars, 1974Meiodorvillea apalpata Jumars, 1974

Coronado Sea Fan region of the San Diego Trough, silty mud,
1223-1224m (Jumars, 1974).

Ophryotrocha Claparede & Meczniow, 1869

= Paractius Levinsen, 1879

= Eteonopsis Esmark, 1874

Ophryotrocha diadema Akesson, 1976

Los Angeles Harbor (Akesson, 1976)

Ophryotrocha labronica La Greca & Bacci, 1962

Los Angeles Harbor (Akesson, 1976)

? Ophryotrocha puerilis Claparede & Meczniow, 1869

Southern California, intertidal and contaminant in aquaria, in
detrital masses; cosmopolitan (Hartman, 1968)

"This species has been considered cosmopolitan in tropical and temperate
intertidal regimes (Day, 1967). In light of the experimental evidence by
Bacci and La Greca (1953) demonstrating the lack of successful interbreeding
in populations from as close as Naples and Plymouth, it is considered
unlikely that even more distantly separated populations are conspecific.
Furthermore, Banse (1963) has noted radical differences in the mating behaviors
in populations from western North America and Europe" (Jumars, 1974).

* Ophryotrocha vivipara Banse, 1963

Lopez Sound, west of Decatur Island, San Juan Archipelago,
Washington, 22m (Banse, 1963); cited without locality in British Columbia
and Washington listing (Banse & Hobson, 1974).

Dorvilleidae sp. A Montagne

Dorvilleidae sp. B Montagne

Dorvilleidae sp. C Montagne

* Dorvilleidae sp. D Montagne

Species A, B and C sympatrically occur in areas of high H₂S
concentrations; in southern California especially near the end of the
Los Angeles City (Hyperion) sludge line; further north (through British
Columbia) they occur in areas of pulp mill wastes. Species D occurs
in British Columbia, (Dave Montagne, pers. com.). Also in areas of pulp mill
wastes, along with sp. A. All occur with Solemya.

Pettiboneia Orensanz, 1973Pettiboneia sanmatiensis Orensanz, 1973

Tomales Bay, California, intertidal, sand-mud; Argentina;
British Columbia (Blake, 1979).

Protodorvillea Pettibone, 1961

Protodorvillea dibranchiata Armstrong & Jumars, 1978
Santa Catalina Basin, California, bathyal depths (Armstrong & Jumars, 1978).

Protodorvillea gracilis (Hartman, 1938) Pettibone, 1968

= Stauronereis gracilis Hartman, 1938

= Dorvillea kefersteini of Berkeley & Berkeley, 1960

(not Staurocephalus kefersteini McIntosh, 1869)

= Protodorvillea recuperata Banse & Nichols, 1968

Central and southern California, in intertidal and shelf depths, sand or muddy sand (Hartman, 1968); British Columbia, Washington, Oregon and California, intertidal zone and shelf depths (Hobson, 1971)

* Protodorvillea pugettensis Armstrong & Jumars, 1978

Seattle, Washington, intertidal, mixed sand-gravel-cobble substrates (Armstrong & Jumars, 1978).

Schistomeringos Jumars, 1974

= Stauronereis Verrill, 1900, invalid

= Prionognathus Keferstein, 1862, preoccupied

Schistomeringos annulata (Moore, 1906)

= Stauronereis annulatus Moore, 1906

= Stauronereis rudolphi of Pettibone, 1963, in part

Washington; two localities in western Mexico (Fauchald, 1970)

* Schistomeringos caeca (Webster & Benedict, 1884)

= Staurocephalus caecus Webster & Benedict, 1884

= Stauronereis caecus (Webster & Benedict, 1884) in Pettibone, 1963

= Dorvillea caeca (Webster & Benedict, 1884) in Banse & Hobson, 1974

Puget Sound, Washington, 15-40m (Hobson, 1971);

-Cited without locality in British Columbia-Washington listing (Banse & Hobson, 1974)

Schistomeringos japonica (Annenkova, 1937)

= Staurocephalus japonica Annenkova, 1937

= Stauronereis japonica (Annenkova, 1937) in Banse & Nichols, 1968;

= Dorvillea japonica (Annenkova, 1937) in Banse & Hobson, 1974

Southern Puget Sound, 10-21m, medium sand (Banse & Nichols, 1968); Cited

without locality in British Columbia-Washington listing (Banse & Hobson, 1974).

Schistomeringos longicornis (Ehlers, 1901)

= Stauronereis longicornis Ehlers, 1901

= Stauronereis articulatus Hartman, 1938

= Dorvillea articulata (Hartman, 1938)

= Dorvillea rudolphi of Berkeley & Berkeley, 1948

= Dorvillea rudolphi of Fauchald, 1970, in part

= Stauronereis rudolphi of Pettibone, 1963, in part

= Dorvillea atlantica of Hartman, 1963, 1968

Chile; Baja California to British Columbia, low tide mark to 575m (Jumars, 1974).

Schistomeringos mediofurca Jumars, 1974

Coronado Sea Fan region of the San Diego Trough, silty mud, 1224-1250m (Jumars, 1974).

T A B L E O F W E S T C O A S T D R I L O N E R E I S
 BY
 LESLIE HARRIS
 S C C W R P

Species	Maxilla ¹	Mandibles ²	Acicular Spines ³	Maxillary Formula ⁴	Pre and Post Setal Lobe Shape ⁵
<u>falcata</u>	dentate	present, large	projecting	4(7)=4(7)-6(9)+6(8)- 1(5)+1(5)-1(2)+1(2)- 0(1)+0(1)	pre-short, rounded post-thick, digitate
<u>filum</u>	smooth	present, large	projecting	orig. description: 0+0-5+5-3+3-1+1 no max. V ?filum Fauchild, 1970: 0+0-9+9-6+6- 3+3-1+1	pre-rounded post-digitate, 2x pre distinct notopodial rudiments
<u>forcipes</u>	smooth	absent	subcuticular	0+0-0+0-1+1-1+1 no max. V	pre-rounded
<u>longa</u>	dentate	present, inconspicuous or absent	projecting	3(5)+3(5)-6(8)+6(8)- 1(2)+1(2)-1+1 no max. V	pre-both prolonged in posterior post-both prolonged in posterior
<u>mexicana</u>	dentate	absent	projecting	5+5-4+4-2+2-1+1 no max. 5	pre-none post-short, button-shape
<u>nuda</u>	smooth	absent	projecting	0+0-5(6)+5(6)- 1(2)+1(2)-1+1- 0+0	pre-low, truncate post-digitate, 2x pre distinct notopodial rudiments

1. Maxilla I proximally dentate or smooth
2. Mandibles absent, present and large, or present and inconspicuous
3. Acicular spines projecting through skin or subcuticular
4. Maxillary formula
5. Shape of presetal and postsetal lobes in median and/or posterior segments.

FOUR PROVISIONAL SPECIES OF DORVILLEID POLYCHAETE
FROM THE NORTHEASTERN PACIFIC

David E. Montagne
Marine Biology Laboratory
Los Angeles County Sanitation Districts
24501 S. Figueroa St.
Carson, Ca. 90745
(213) 775-2351 ext. 396

The following are preliminary descriptions of four provisional species of dorvilleid polychaetes that are commonly taken in anoxic, hydrogen sulfide-rich sediments near marine outfalls discharging wastes with high organic loads. Their generic status is yet to be determined; they are most closely related to Ophryotrocha. A formal paper describing them, as well as providing discussion of their ecology, is in preparation. Any information on, or specimens of, these or similar species would be greatly appreciated.

dorvilleidae sp. A

A typical complete specimen has 34 setigers. It is 4.9 mm long and 0.8 mm wide excluding the parapodia. Segments are widest in the anterior and median regions and become narrower in posterior region, tapering evenly to the pygidium. All specimens examined are unpigmented.

The eyeless prostomium is shorter than wide and broadly rounded anteriorly. The prostomial tentacles are short, tumid cirri mounted on elevated bases located on the posterior half of the prostomium. The palps are articulated and insert ventro-laterally. The digitate palpostyle is short, approximately one-half the length of the palpophore. The peristomium is composed of two apodous rings.

Mandibles are well chitinized throughout and lie in contact with one another though they do not appear fused. Distally each mandible flares into a lateral wing. The anterior margin bears a strongly toothed ridge separated from a single, large medial tooth by a broad notch.

All setigerous segments bear well developed parapodia and large dorsal and ventral lateral lobes. These lobes are structures arising from the body wall rather than the parapodia and are here referred to as segmental lobes. The dorsal segmental lobes reach full development in the median segments. They are large, flat, disc-shaped structures, and in median segments, extend slightly beyond the origin of the dorsal cirri. The ventral segmental lobes are tumid, conical structures and are fully developed by the second or third setiger. They extend to one-half the length of the parapodia. A narrow ciliary band encircles each segment, including the segmental lobes and parapodia.

Parapodia are uniramous, two and one-half to three times as long as

wide. The distal end bears four well developed parapodial lobes; a dorsal cirrus, an acicular lobe, a setal lobe, and a ventral cirrus. Each parapodium has two acicula. One supports the parapodium itself ending in the acicular lobe; the other more slender aciculum supports the setal lobe and is drawn out into a fine point. As the setal lobe is often truncated as a result of damage, this slender aciculum may protrude beyond the end of the lobe appearing as an inferiorly placed capillary seta. The setal fascicle superior to the acicular lobe is composed of several long simple falcigers, very finely denticulate along one edge. Inferior to the the acicular lobe is a fascicle of heterogomph compound falcigers. The appendage is denticulate along one edge. The nature and appearance of the setae are the same in all setigers.

The pygidium is wider than long, with two digitiform anal cirri. A medial palpode is not evident.

DISTRIBUTION: Species A is known from two sites in Southern California, where it occurs sympatrically with spp. B and C in 60m depths around the termini of the Los Angeles County Sanitation Districts' Whites Point outfalls, and in 95m depths around the terminus of the city of Los Angeles' 7 mile sludge line, discharging at the head of Santa Monica Canyon. It has also been collected in Howe Sound, British Columbia at a site receiving pulp mill wastes in 20m of water where it co-occurs with species D.

dorvilleidae sp. B

A typical complete specimen has 41 setigers. It is 5.9 mm long and 0.7 mm wide, excluding parapodia. Segments are widest in the anterior and become increasingly narrow in the posterior end, tapering evenly to the pygidium. All specimens examined have been unpigmented.

The eyeless prostomium is short, broad with a truncated anterior margin. The prostomial tentacles are mounted on an elevated base running across the posterior half of the prostomium. The tentacles are cirriform, reaching back to the second apodous peristomial ring. The articulated palps are inserted ventro-laterally. The palpostyle is cirriform and the same length as the prostomial tentacles. The peristomium is composed of two apodous rings.

Mandibles are well chitinized and lie in contact with one another though they are not fused. The distal ends bow out, terminating in two blunt teeth. The distally flared ends are buttressed by laterally placed wings.

All setigerous segments bear well developed parapodia and dorsal and ventral lateral lobes. These lobes are structures arising from the body wall rather than the parapodia and are here referred to as segmental lobes. The dorsal segmental lobes are digitiform. In the median segments they develop a subdistal swelling with an acuminate tip. The ventral segmental lobes reach full development by the fifth or sixth setiger where they appear as flat discoid lappets overhanging the para-

podial bases. A narrow ciliary band encircles each segment, including the segmental lobes and parapodia.

Parapodia are uniramous, two and one-half to three times as long as wide. The distal end bears four well developed lobes; a dorsal cirrus, an acicular lobe, a setal lobe, and a ventral cirrus. Each parapodium has one large aciculum ending in the acicular lobe. The setal lobe is supported by a fine acicular seta which is drawn out into a fine slender point. This acicular seta may extend beyond the end of the lobe, appearing as an inferiorly placed capillary seta. The setal fascicle superior to the acicular lobe is composed of long, slender falcigers; finely denticulate along one edge. The inferior setal fascicle is composed of heterogomph compound falcigers. The appendage is denticulate along one edge. The nature and appearance of the setae are the same in all setigers.

The pygidium is wider than long, with two laterally inserted digitiform anal cirri and a medially inserted palpode.

DISTRIBUTION: Species B is known only from Southern California, where it occurs sympatrically with spp. A and C around L.A. County's and L.A. City's sewage outfalls.

dorvilleidae sp. C

A typical complete specimen has 33 setigers. It is 5.2 mm long and 0.9 mm wide excluding the parapodia. Segments are widest in the anterior and median regions and become narrower in posterior region, tapering evenly to the pygidium. All specimens examined are unpigmented.

The prostomium is broad, truncated, and without eyes. Both prostomial tentacles and palps are well developed. The prostomial tentacles are pseudo-articulated and mounted on an elevated base running across the posterior half of the prostomium. The tentacles equal or exceed the length of the prostomium. The articulated palps are inserted ventro-laterally. The palpophores are short and broad; the palpostyles are cirriform, approximately three times the length of the palpophore. The palps extend back to the anterior edge of the first setigerous segment. The peristomium is composed of two apodous rings.

The mandibles are drawn out into lateral wings distally. The anterior margin is without teeth except for a single medial tooth. The lateral wings appear more weakly chitinized than the shafts of the mandibles. Mandibles are fused medially for a short length just proximal to the anterior margin.

All setigers bear well developed parapodia and dorsal and ventral lateral lobes. These lobes are structures arising from the body wall rather than the parapodia and are here referred to as segmental lobes. The dorsal segmental lobes are poorly developed in the first few set-

igers reaching full development in median setigers where they are ovate in lateral view and one-quarter to one-third the length of the parapodia. The ventral segmental lobes reach full development by the fifth or sixth setiger. They are ovate in lateral view and approximately one-half the length of the parapodia. A narrow ciliary band encircles each segment, including the segmental lobes and parapodia.

Parapodia are uniramous, two and one-half to three times as long as wide. Each parapodium bears two acicula. One supports the parapodium itself; the other, more slender, aciculum supports a slender pointed setal lobe which extends beyond the end of the parapodium. The ventral cirrus is reduced to a short process not exceeding the end of the parapodium. There is no dorsal cirrus. The setal fascicle superior to the acicular lobe are long, simple falcigers, denticulate along one edge and terminating in a small falcate tooth. The inferior setal fascicle is composed of heterogomph compound falcigers. Both the basal shaft and appendage are denticulate along one edge. The appendage terminates in a small falcate tooth similar to that on the simple falcigers. The nature and appearance of the setae are the same in all setigers.

The pygidium is wider than long, with two laterally inserted cirriform anal cirri and a medially inserted palpode.

DISTRIBUTION: Species C is known only from Southern California, where it occurs sympatrically with spp. A and B around L.A. County's and L.A. City's sewage outfalls.

dorvilleidae sp. D

A typical complete specimen has 56 setigers. It is 4.0 mm long and 0.6 mm wide excluding the parapodia. Segments are widest in the anterior and median regions, becoming increasingly narrow in the posterior region, tapering evenly to the pygidium. All specimens examined are unpigmented.

The eyeless prostomium is shorter than wide and broadly rounded. The prostomial tentacles are mounted on a poorly defined elevation running across the posterior half of the prostomium. The tentacles are cirriform, reaching no further than the first apodous peristomial ring. The articulated palps are inserted ventro-laterally. The palpostyle is cirriform and slightly shorter than the prostomial tentacles. The peristomium is composed of two apodous rings.

The mandibles are drawn out into lateral wings distally. The anterior margin is without teeth, and runs at a right angle to the axis of the shafts. The lateral wings are more weakly chitinized than the shafts. The mandibles are fused medially for a short length just proximal to the anterior margin.

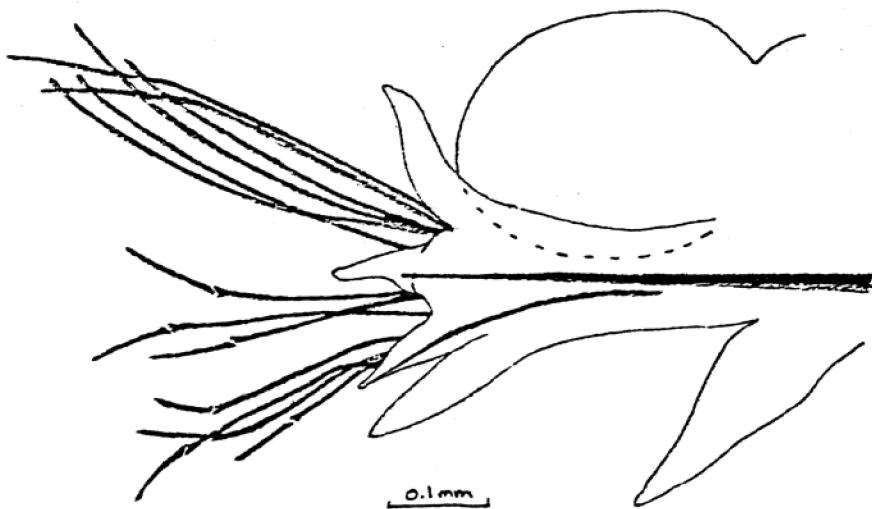
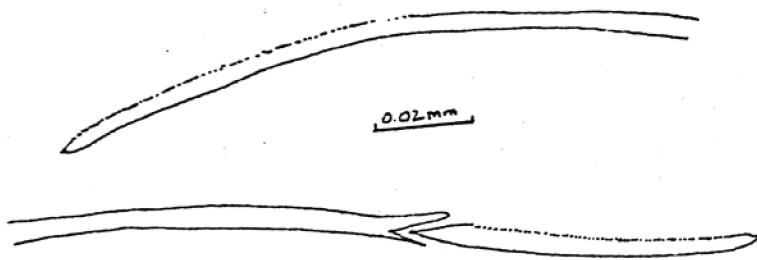
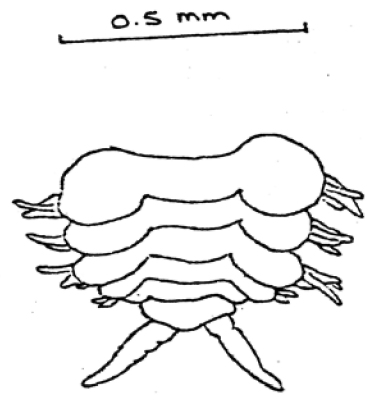
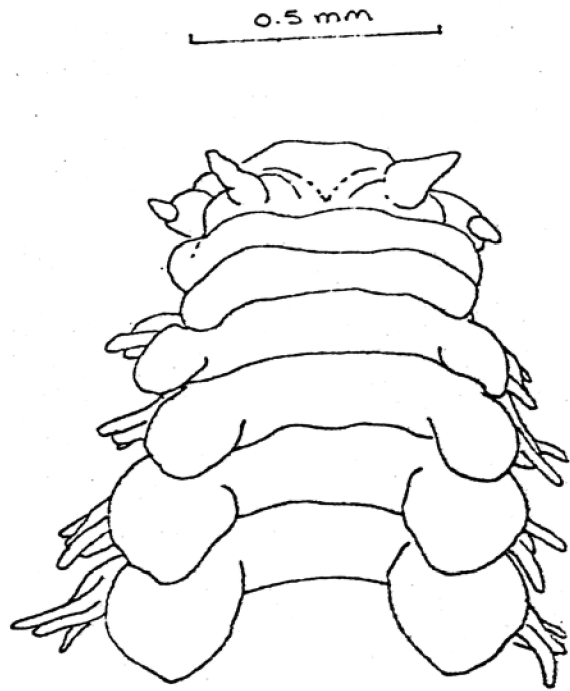
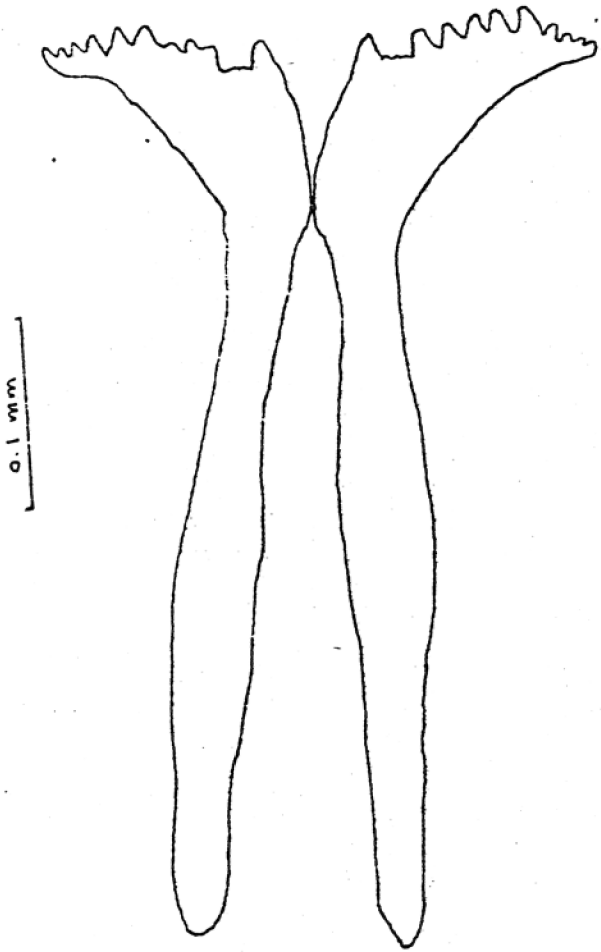
The setigerous segments are closely placed, each less than one-half

the length of the apodous peristomial rings. All the setigers bear well developed parapodia and dorsal and ventral lateral lobes. These lobes are structures arising from the body wall rather than the parapodia and are here referred to as segmental lobes. Both lobes are cone-shaped in lateral view, the ventral being slightly larger, extending approximately one-half the length of the parapodium. Both dorsal and ventral segmental lobes reach full development by the sixth setiger. A narrow ciliary band encircles each segment, including the segmental lobes and parapodia

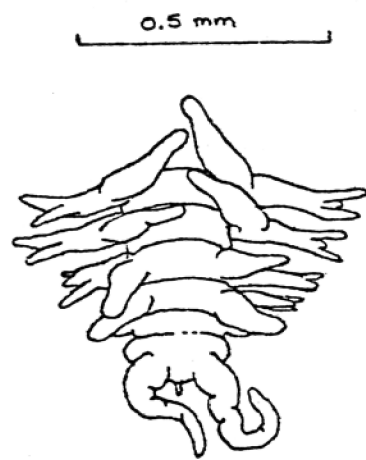
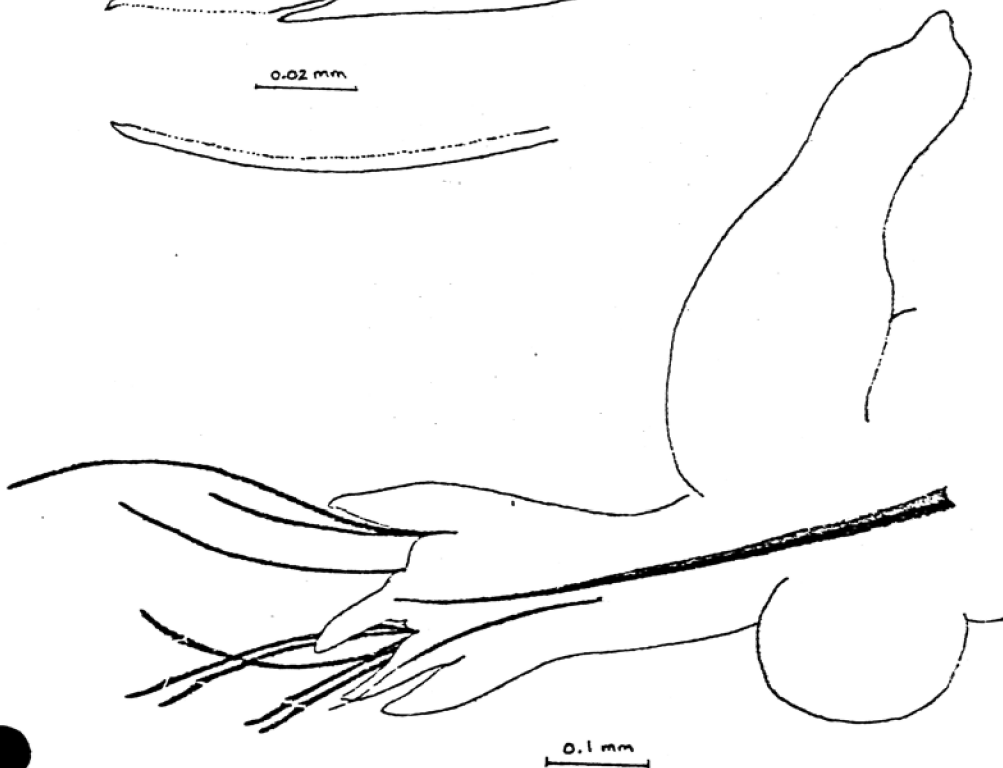
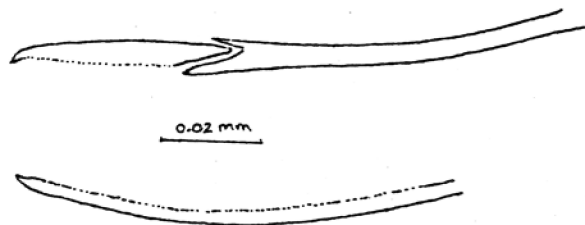
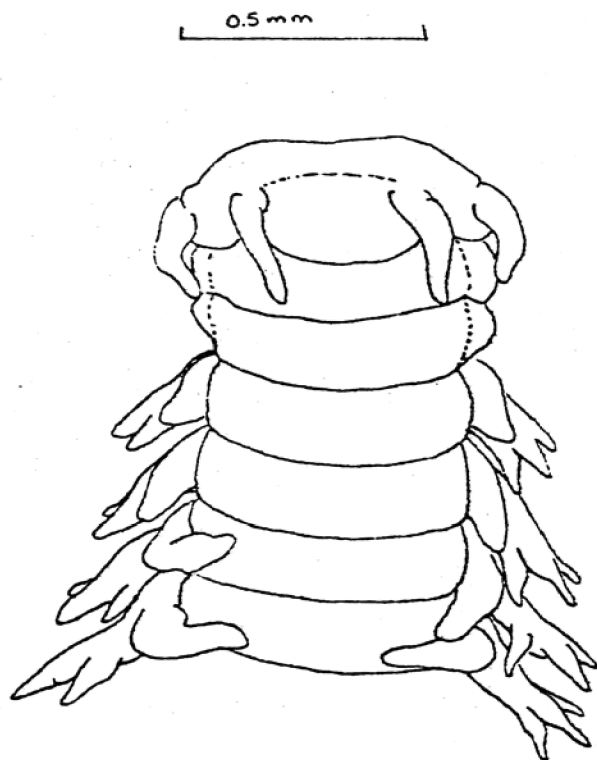
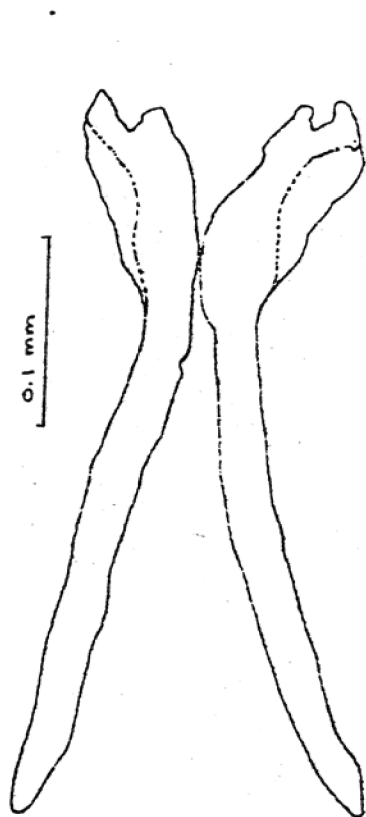
Parapodia are uniramous, two and one-half times as long as wide. Each parapodium bears two acicula. One supports the parapodium itself, ending in the acicular lobe; the other, more slender, aciculum supports a slender, pointed setal lobe which extends beyond the end of the parapodium. The dorsal cirrus is reduced to a short, truncated tubercle located one-third the length of the parapodium from the distal end. There is no ventral cirrus. The setal fascicle superior to the acicular lobe is composed of several long, simple falcigers, distally blunt and spatulate, and terminating in a small falcate tooth. Some setae appear to have an additional very small denticle surmounting the falcate tooth. The simple setae are denticulate along one edge of the spatulate blade. The inferior setal fascicle is composed of heterogomph compound falcigers. Both the basal shaft and appendage are denticulate along one edge. The appendage terminates in small falcate tooth similar to that on the simple spatulate setae. The nature and appearance of the setae are the same in all setigers.

The pygidium is wider than long, with two laterally inserted cirri-form anal cirri. A medial palpode is not evident.

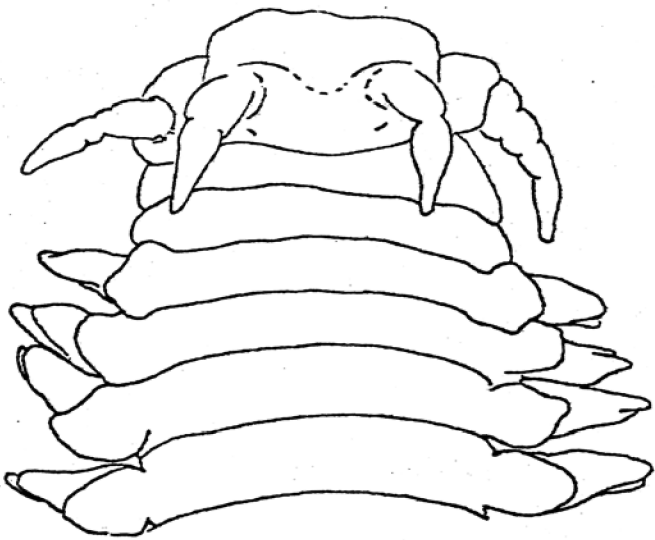
DISTRIBUTION: Species D is known only from Howe Sound, British Columbia, where it co-occurs with species A in 20m depth around a pulp mill discharge.



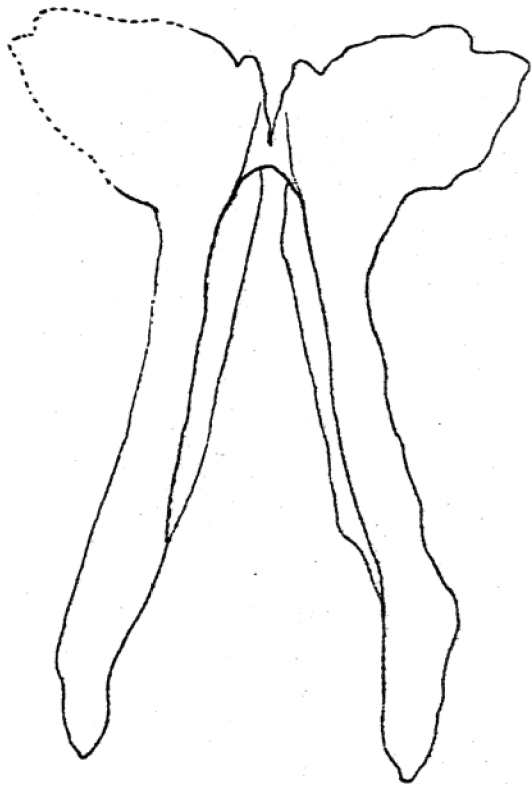
Isopoda - A



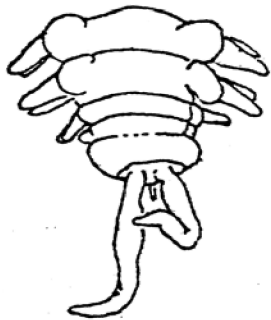
0.5 mm



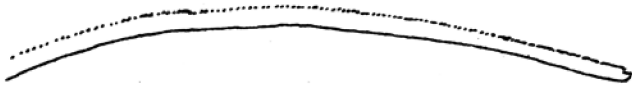
0.1 mm



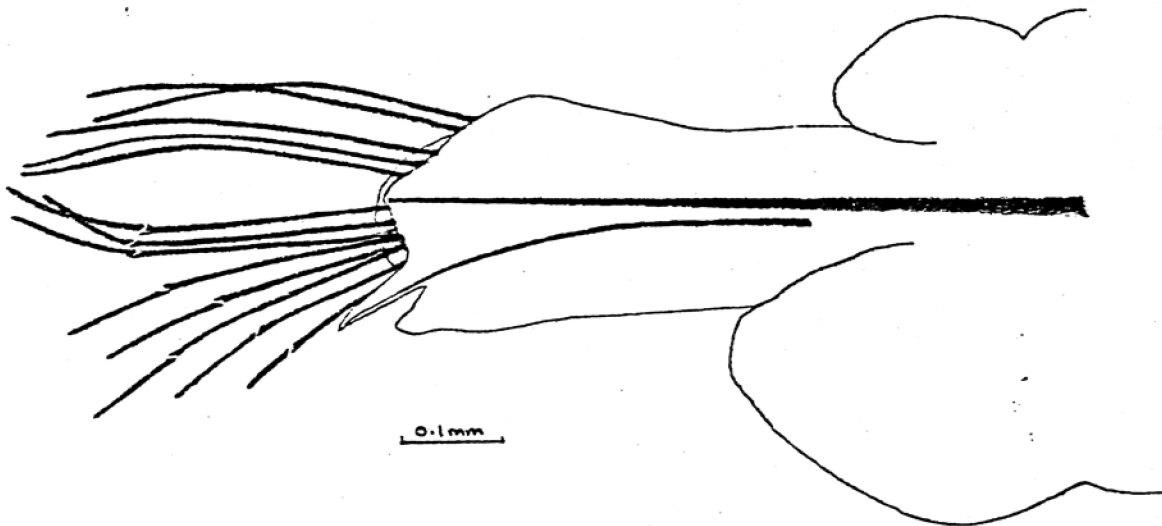
0.5 mm

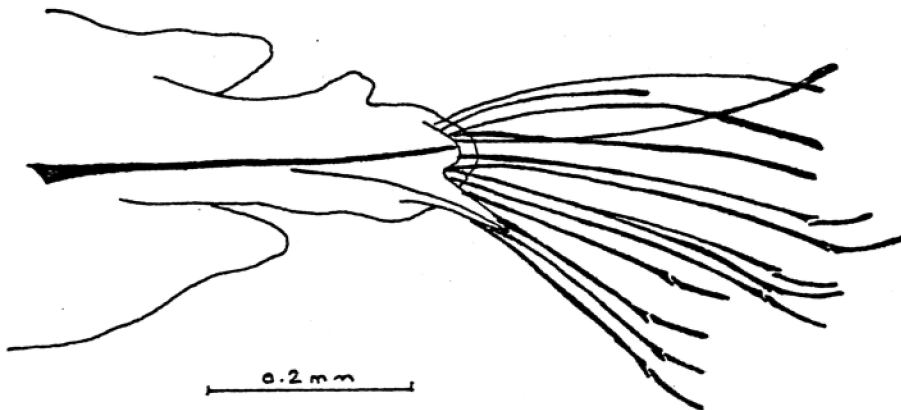
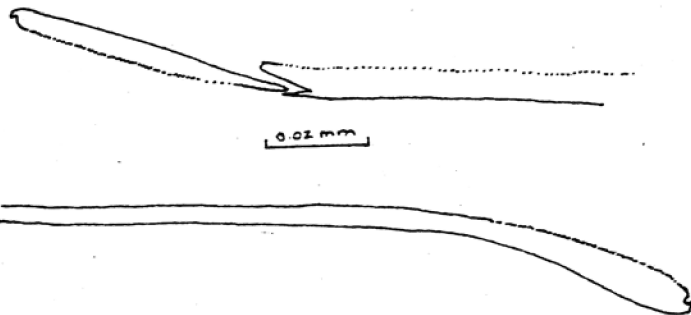
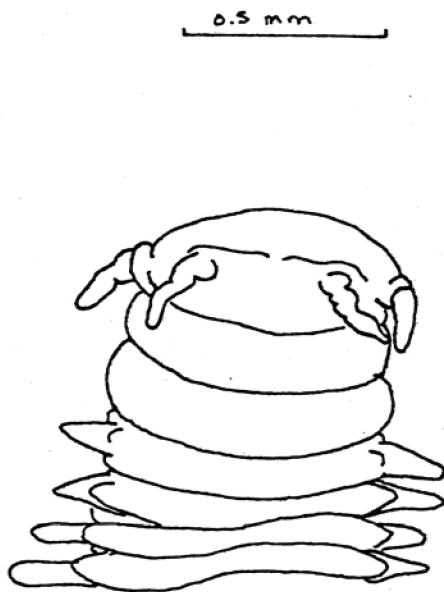
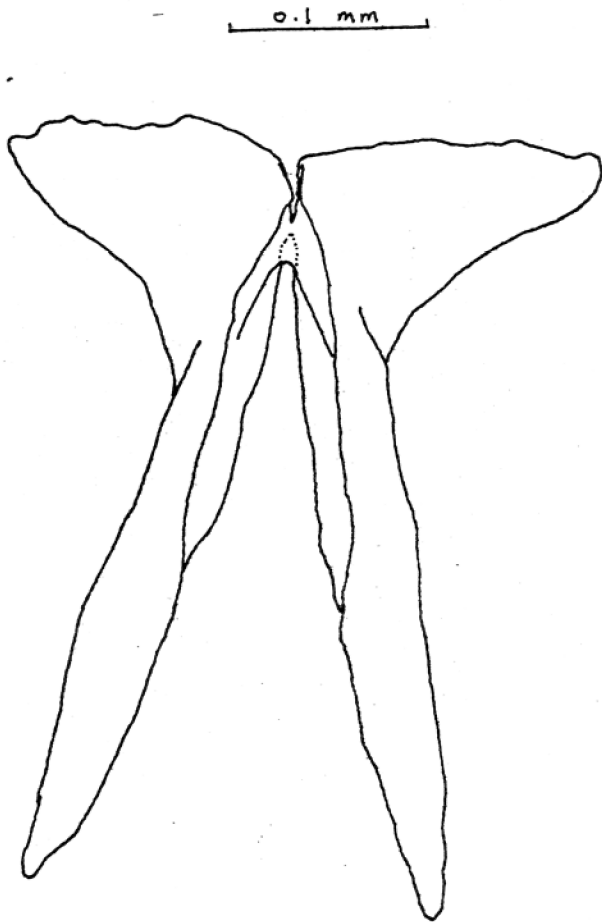


0.02 mm



0.1 mm





VOUCHER SHEET

Pennatula phosphorea var. californica

Pennatulidae

Specimen Code and Data Examined: SCCWRP 19, May 9, 1983

Keys Used: Kukenthal, W. 1915. Pennatularia. Dastierreich, Kukenthal, 1913, No. 43, I-XV: 1-132.

Other Texts Consulted: Kukenthal, W. 1913. Uber die Alcyonarien Fauna Californiens und Ihre Tiergeographischen Beziehungen. Zool. Jahrbuch. Abt. fur Syst., Geog., Biol., Tiere. 35:219-270, 2 pls.

Important Characters: (1) Leaves (which contain polyps) are fairly straight
(2) Spicules are bring red (3) lower slope, basin species.

Related Species and Character Differences: P. phosphorea is well known from deep water areas around the world.

Station Data: Probably all basins and deep water areas in California.

Comments: Common

VOUCHER SHEET

Isoedwardsia sp A

Edwardsiidae

Specimen Code and Date Examined: LACo 13, PL 20; May 9, 1983

Keys Used: O. Carlgren (1949). A Survey of the Pthchodactiaria, Corallimorpharia and Actiniaria. Kungl. Svenska Vetensk. Handl. F.S. Band 1 No. 1.

Other Texts Consulted: Stephenson (1928). The British Sea Anemones Vol. I Ray Soc. #113 for 1927, London.
Carlgren & Stephenson 1928. The British Edwardsiidae. J. Mr. Biol. Assoc. V.K., V. 25, Nr. 1.

Important Characters: Nemathybomes (nematocyst "blisters") scattered on upper column and present on physa. Physana rounded base, not a rosette and in general not tapering. Outer surface a distinct rusty-brown color, even after preservation.

Related Species and Character Differences: (1) Edwardsia (Edwardsiella) californica McMurrich 1913 - a bay and estuary form (Mission Bay, San Pedro back bay before harbor development) - possibly in very shallow open ocean e.g. off San Onofre); rarely encountered; (2) Edwardsia sp. A - see other sheets.

Variability: Color of ten grades to greyish in some specimens. Some specimens have a "cuticle" over the physal nemathybomes.

Common Synonyms: Often mistaken for a holothuroid.

Aids to Identification: 8 bands running length of body, (=mesenterial insertions) scattered nemathybomes; physa not delineated from body.

Station data: First occurs in deeper parts of harbors and bays, continues out to about 100 - 120 m.

Comments: The most common infaunal anemone on the shelf.

VOUCHER SHEET

Edwardsia sp. A

Edwardsiidae

Specimen Code and Date Examined: SCCWRP 18, May 9, 1983

Keys Used: Carlgren (1949). A Survey of the Pthchodactiaria, Corallimorpharia and Actiniaria. Kungl. Svenska Vetensk. Handl. F.S. Band 1 No. 1.

Important Characters: (1) Nemathybomes in rows, which give the animal a distinct octagonal appearance. (2) Physa, well delineated from column, forms an octagonal "rosette". (3) A "large" edwardsiid, darker body color.

Related Species and Character Differences: Isoedwarsia sp A - See other sheets.

Variability: Characters usually distinct.

Aids to Identification: The "rosette" physa is a dead give-away.

Station Data: Only below 400 m, usually at the base of slopes where organics tend to accumulate, low O₂ and 5-6% TOC.

VOUCHER SHEET

Order Ceriantharia

Specimen Code and Date Examined: OC 19, May 9, 1983

Keys Used: Very little literature that helps with our small cerianthid specimens.

Important Characters: (1) Red-brown dots at base of tentacles (which remain on margin even if marginal tentacles fall off). (2) Skin like a Nemertine-mottled purple, translucent.

Related Species and Character Differences: Cerianthids are poorly known and the number of species is indeterminable at the present time.

Variability: It is impossible to assess most cerianthids collected by boxcores, etc. - Large specimens may often have some characters if collected whole.

Aids to Identification: The tubes these animals manufacture can become entangled with everything else in the core. Many other phyla inhabit these tubes (amphipods, sipuncs, molluscs, etc.).

Station Data: Cerianthids of this size are frequently found in all benthic samples.

Comments: A poorly known group. Many new taxa occur in the borderlands and until someone can work them up they will continue to be one of the most confusing cnidarian groups.

VOUCHER SHEET

Isoedwardsia sp A

Edwardsiidae

Specimen Code and Date Examined: PL 21, May 9, 1983.

Keys Used: See Isoedwardsia sp A

Important Characters: 8-way symmetry small, few characters pill-shaped.

Related Species and Character Differences: Could be juveniles of
Isoedwardsia sp A.

Station Data: Shelf

Comments: Common



SOUTHERN CALIFORNIA ASSOCIATION
OF
MARINE INVERTEBRATE TAXONOMISTS

Vol. 2, No. 2

Next Scheduled Meeting: June 13, 1983

Place: Marine Biological Consultants
947 Newhall Street
Costa Mesa, CA 92627

Specimen Exchange Group: Eusiroides (Eusiridae, Pleustidae,
Bateidae, Paramphithoidae, Stillipedidae,
Iphimedidae, Stegocephalidae)

Topic Taxonomic Group: Arabellidae, Lysaretidae, Iphitimidae,
Dorvilleidae

MINUTES FROM MAY 11, 1983

Video System: We are slowly but surely progressing toward our goal of purchasing the microscope video viewing system by summer. Contributions from members have helped substantially. To date \$206.05 has been raised from members' contributions. The treasury can afford \$200.00 for the system. Thus only \$200.00 more is needed. Thank you for your support!

The video system is a camera that mounts onto a photo-tube of either a stereo or compound scope. The image is transferred to a TV which allows a group of people to see characters of organisms all at once. The video system will greatly enhance the topic taxonomic group discussions.

A suggestion from members from San Francisco Bureau of Water Pollution Control was quite intriguing and is being pursued. Their idea was to develop a video tape exchange of taxonomic groups. This would be very helpful for people who cannot regularly attend the meetings. Hopefully this idea will work out.

SCAMIT Mugs: In addition to the T-shirts, SCAMIT now has coffee mugs to sell. The mugs are white with the blue SCAMIT logo on front. Sale of these mugs will help fund the video system. The mugs are priced at \$6.00 apiece, \$22.00 for a set of four, and \$33.00 for a set of six. They will be available at the June meeting.



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Type of Membership: Participant [] Correspondent []

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Would you like to be on a free-lance list: Yes [] No []

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	COLOR				
	1st	2nd		Men's	Womens'
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Blue	[]	[]	Small	[]	[]
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Set of 6	33.00 []	Shipping	1.50

TOTAL ENCLOSED: \$ _____

MAIL TO:

Ann Martin
 10844 Ellis Avenue
 Fountain Valley, CA 92708



Partial list of
Literature Pertaining to the Identification
or taxonomic placement of N.E.P. holothuroids

- Clark, H. L. 1922(FEB). The holothurians of the genus Stichopus.
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- Clark, H.L. 1924(JUN). The holothurians of the Museum of Comparative
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- Clark, H.L. 1935(FEB). The holothurian genus Caudina. Annals and
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of the New England Zoological Club; 16, pp. 103-115
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Forening; 92, pp. 275-284.
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Museum und Institut; 60, pp. 57-80.
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Biological Association of the United Kingdom; 50, pp. 683-687.
- Rowe, F.W.E. & D.L. Pawson. 1967. A new genus in the holothurian
family Synaptidae, with a new species from Tasmania. Proceedings
of the Royal Society of Tasmania; 101, pp. 31-35.
- Yingst, J.Y. 1972. A new species of rock dwelling dendrochirote
holothurian from Catalina Island. Bulletin of the Southern
California Academy of Sciences; 71(3), pp. 145-150.

VOUCHER SHEET

Leptosynapta sp.

Synaptidae

Specimen Code and Date Examined: OC20, May 9, 1983

Keys Used: Heding, S.G. 1928. Synaptidae. No. 46 in papers from Th. Mortensen's Pacific Expedition, 1914-1916. Vidensk. Medd. fra Dansk Naturh. Foren. 85: 105-323.

Other Texts Consulted: Clark, H.L. 1907. The apodus holothurians. A monograph of the Synaptidae and Molpadiidae. Smithsonian Contributions to Knowledge 35: 1-231.

Important Characters: Spicules as anchors with a smooth vertex and anchor plates shown:



Related Species and Character Differences: Other genera have granules on the vertex of the anchor or anchor plates that are either reduced or more complicated than shown above.

VOUCHER SHEET

Chiridota sp.

Chiridotidae

Specimen Code and Date Examined: May 9, 1983

Keys Used: Clark, H.L. 1907. The apodus holothurians. A monograph of the Synaptidae and Molpadiidae. Smithsonian Contributions to Knowledge 35: 1-231.

Other Texts Consulted: Heding, S.G. 1928. Synaptidae. No. 46 in papers from Th. Mortensen's Pacific Expedition, 1914-1916. Vidensk. Medd. fra Dansk Naturh. Foren. 85: 105-323.

Important Characters: Spicules wheels with six spokes; no sigmoid or curved rods present; 10 to 14 tentacles.