Next Meeting:

April 14, 1986

Guest Speakers:

Cathy Crouch - Infauna of rocky intertidal surfgrasses from southern California.

Leslie Harris and John Dorsey - New syllidae (Polychaetous Annelids) from southern California.

Ann Martin - A new species of Lepidepecreum (Amphipoda: Lysianassidae) from southern California.

Dave Montagne - New dorvilleid polychaetes from hydrogen sulfide rich benthic environments.

Tony Phillips and Carol Paquette - The status of <u>Leptognathia</u> (Tanaidacea:Leptognathidae) from southern CA.

Specimen Exchange Group: Serpulidae

Serpulidae and Spirorbidae

Topic Taxonomic Group:

Sabellidae

MINUTES FROM:

March 10, 1986

Guest Speaker, Dr. Jack Anderson, Director of the Southern California Coastal Water Research Project, described new projects that SCCWRP presently is conducting or will be pursuing. The major emphasis will be in the following areas:

- Aromatic hydrocarbons in effluents and sediments
- Sediment and interstitial water effects studies
- Development of criteria for safe levels in sediments
- Development of meaningful monitoring approaches
- Increased understanding of currents and sediment transport in the southern California Bight
- Examination of the sea surface microlayer
- Coring for comparisons to historical concentrations
- Relationship between bioconcentration and effects
- Geochemical studies of multiple marine inputs

The major focus of these topics is on the concentrations and forms of toxic compounds associated with sediments, and ultimate affects on associated organisms. SCAMIT's role is

Funds for the publication provided in part by Chevron, U.S.A. Inc., Arco Foundation and Texaco, Inc.

important by helping to identify macrofauna in many benthic environments being studied by SCCWRP.

A Renewal of the Chevron grant has just been received by SCAMIT. A check for \$2,500 was accompanied by the following letter:

Dear SCAMIT Members:

In recognition of Chevron USA Inc's past and present support of the Southern California Association of Marine Invetebrate Taxonomists (SCAMIT), attached is a check for \$2,500 representing Chevron's donation to SCAMIT for 1986.

With this donation, Chevron wishes to assist SCAMIT in its continued service to the marine biological scientific community, private industry, and public agencies in Southern California.

- SCAMIT's special Amphipod workshop, with Dr. J. L. Barnard, is scheduled for April 21-23. Please start to formulate questions and topics that you would like to see included in this productive three day event. Last year's workshop was a great success, as Dr. Barnard's instructions were a great help to all who brought specimens and/or questions. Plan to attend this year too! As a special attraction, Dr. Barnard will lead an early morning (around 0700 hours) bird watching walk in the back bay of Newport on April 21st. A map is enclosed in this newsletter.
- The ballots for SCAMIT officers in 1986-87 have been mailed out to members. Please vote and return your ballots as soon as possible.
- An announcement for the production of an Isopod Newsletter appeared in the latest issue of the Journal of Crustacean Biology.

 This notice will be of interest to some SCAMIT members and reads as follows:

It has been the feeling for sometime among several isopod workers that an Isopod Newsletter is long overdue. Amphipod and tanaidacean colleagues already benefit from such informal newsletters. While isopod workers are a fairly small, but nevertheless select group, increased communication at the informal level can only enhance our discipline. Newcomers to the field would also benefit by having a source of information on specialists in particular taxonomic groups or other subdisciplines.

The first issue of the Isopod Newsletter includes the names and addresses of some isopod workers, along with a brief description of their specialties, areas of interest, and current projects. Other contents for future newsletters to be issued two or three times a year might well include reviews of isopod-related books and monographs, appeals for information and material, and perhaps a column for isopod papers that have recently appeared.

This first newsletter will be distributed to persons on a current mailing list. Suggestions for other names for the list, as well as on the format and contents of the newsletter, are welcome.

Send comments and suggestions to:

Dr. Brian Kensley NHB Stop 163 Smithsonian Institution Washington, DC 20560

The annual meeting of the Southern California Academy of Sciences will be held at California State University, San Bernardino on May 2-3, 1986. A contributed papers session for marine invertebrate taxonomy is being hosted by SCAMIT. SCAMIT members are encouraged to participate in this session.

A change for the 1986 SCAMIT agenda: Please make the following changes to your 1986 SCAMIT agenda (Vol. 4, No. 10)

AUG EXCHANGE/SEPT TOPIC Bryozoa
NOV EXCHANGE/DEC TOPIC Ascidiacea

List of Specimens from March 10, 1986

| HYP 55 | Ampelisca agassizi (Judd, 1896) |
|-----------|--|
| HYP 56 | Ampelisca sp A SCAMIT, 1986 |
| LACO 70 | Ampelisca milleri Barnard, 1954 |
| LACO 71 | Ampelisca sp. to be resolved at workshop |
| | Byblis veleronis Barnard, 1954 |
| | Ampelisca lobata Holmes, 1908 |
| | Ampelisca sp A SCAMIT, 1986 |
| | Ampelisca agassizi (Judd, 1896) |
| | Ampelisca cristata Holmes, 1908 |
| SCCWRP 67 | Ampelisca cristata Holmes, 1908 |

TRAVELS WITH OLGA

Gustafsson's Pensionat Sveavagen 108, 4re Stockholm, 21 Sept. '39

Dear Folks: I have been "mycket latt" (very lazy) regarding correspondence, but not because there has been nothing to write about. If writing came as easily as talking about something, you would have heard a great deal, because there has been so much to see and learn here.

Every morning (except Sunday) I take the bus to the Riks-museum in the country and return in the evening between 5 and 6. (I should have said 17 and 18, for we go almost entirely by the 24 hour clock). Usually in the evening, there is the Swedish paper (Tidningen) which takes me a long time to read. English papers are not at all obtainable now, since all air-service has been indefinitely discontinued. When it was still obtainable, I got the London Times, cost 55 ore (that is about 14 cents, hence quite expensive). In London it is two pennies (4 cents). London issues many penny papers, however (that is 2 cents).

Stockholm is now in the midst of "brytt-sommer" (that means the breaking summer). It corresponds to an American Indian summer and is very beautiful. Frost may not be far off, but snows are usually not expected before about November. It does seem chilly, however.

Seemingly a considerable number of Americans remain in Stockholm. They label themselves usually when they begin to speak. An American can never be confused with an Englishman by virtue of his speech. One can always be sure of coming across Americans by loitering along Strandvagen, or in the vicinity of the American catering hotels. I suppose most people like to maintain their living habits, no matter where they are; - and that is possible in most large cities of the world.

Stockholm is of such size that one can comprehend it easily enough in a few weeks (the same can certainly not be said of London). It is located, however, on many islands (13, by the way), so ramnified by water ways that one needs to consult charts to keep one's bearings. By far, the most interesting part of the city is the oldest part, the City between the Bridges or, as called in Swedish, "Staden mellan Broarna". It is a very small island connected to the "North City", and the "South City" by bridges, also to "Knight's Island (or Riddarholmen" on the west. On it lies the palace (Kungslslottet), the oldest church (Storkyrkan, sometimes called St. Nikolas) and many, very old buildings, some dating from the time of Birger Jarl, who founded Stockholm. Here the streets are in some instances too narrow for any but cart vehicles, and then even lack sidewalks. Or sidewalks may be only wide enough to walk single-file. Cobble stones are, of course, the surface. It is commonly said that the streets of European

cities are paved with cobbles, and the same applies to many of the sidewalks.

Most of the streets have names that sound strange to foreign ears. Where I live it is the corner of Sveavagen and Odengatan. There are others, such as Birger Jarl Gatan, Drottningatan (the Queen's Way). Skeppsbron (the ship's bridge), Wahallagatan, Stureplan, etc., etc. Most of which have special significance.

Words still confuse me. Thus, a key is a nyckel, an elevator a Hiss (when you press the button it says "hit"). A streetcar is a sparvagen. A child is a barn and women are kvinnor, but a married woman is a fru. An ar is a year, but ar is a form of to be. When I go to the post office for 20 ore stamps (finmarken) I usually get 10 ore because although I know the difference between tjugu (20) and tio (10), I am unable to pronounce them properly.

Matsedel (menus) still confound but interest me. Thus, tonight for dinner I had the following (though not at all unusual here) smor och brod (butter and breads), koktlamm med dillsas (lamb with dill sauce) and for dessert (efferratt), there was rabarber kompottet med gradde (rhubarb with milk), and coffee. More popular desserts are "appelsoppe", or "filmjolk". There is always considerable variety.

A few days ago I received a trans-Atlantic air letter from California that was 22 days enroute (hence longer than ordinary mail requires. It must have lain over in England, perhaps in a censorship office. Today I received a letter from London which was 8 days old. Service is obviously much crippled. No information is given out regarding time or route of sailing of various boats.

Work is progressing very profitably, and working conditions are extremely ideal. Professor Bock is very helpful and a great inspiration. He speaks English very fluently.

Please have no concern over my welfare, for I can assure you that Sweden is a very beautiful place (though it may be getting cold). And adjustments are easily made.

Enclosed a clipping that came to me from Los Angeles a few days ago, taken from the Los Angeles Times.

I expect to be here at least through October (if not later) unless unexpected events decree otherwise.

Greetings and best wishes.

Post Scriptum: The stamps are 10 ore denomination. There are 100 ore in a kronor. A kronor is about a quarter.



SCAMIT Code: PL 64

Date Examined: Feb. 10, 1986
Voucher by: Douglas Diener

Synonymy: Colurostylis occidentalis Calman 1912

Literature: Calman, W. T. 1912

Diagnostic Characters:

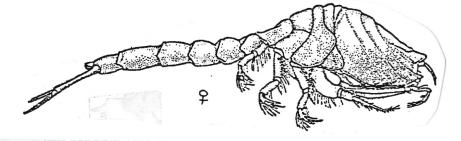
1. Telson short, sometimes difficult to see.

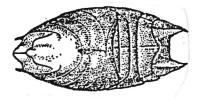
- 2. Carapace with 3 parallel oblique ridges.
- 3. Male with 2 small, ventrally projected, telsonic spines.

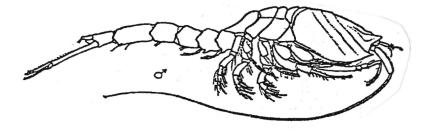
Related Species:

No other cumacean has telson and carapace characteristics in this configuration.

Distribution: Oregon to San Diego; 5-65 m; sand, silt bottoms, and within kelp beds.







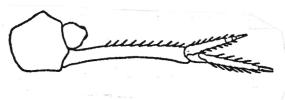


Figure 1. Female, lateral view (from Calman, 1912)

Figure 2. Female carapace, dorsal view (from Calman, 1912)

Figure 3. Male, lateral view (from MBC, unpublished)

Figure 4. Male, telson (from MBC, unpublished)

SCAMIT CODE: LACO 68 (in part) Date Examined: Feb. 10, 1986
Voucher by: Douglas Diener

Literature: Lomakina, N.B. 1958.

Diagnostic Characters:

- 1. Carapace with a single shallow lateral sulcus (check carapace sculpturing carefully with figure).
- 2. Pigment lines around sulcus are raised ridges.
- 3. Inner margin uropodal peduncle lacks spines but has short setae.

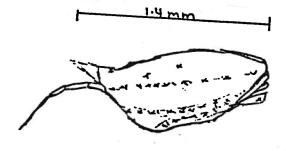
Related Species and Character Differences:

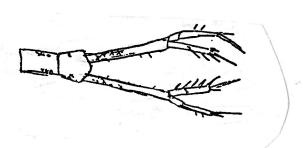
Campylaspis sp. B - anteriodorsal surface of carapace smooth, with shallow pits, unlike

Campylaspis nr. crispa which has small pustules (e.g. like C. rubromaculata); raised ridges around lateral sulcus are absent in Campylaspis sp. B.

Comments: C. nr. crispa differs from C. crispa Lomakina 1955 by having an antennal notch and pseudorostrum; uropods are more slender with rami approximately 2/3 the length of the peduncle; rostral notch shallow and defined at ventral edge by small spine; inner margin of uropod inner ramus with four long spines (communicated by Don Cadien, MBC).

Distribution: Pt. Estero to Coronado Canyon; 118-610 m.





- Figure 1. Male carapace (from Cadien, unpublished)
- Figure 2. Male telson (from Cadien, unpublished)
- Figure 3. Female telson; inner margin of uropod peduncle with 8 spines, inner margin of endopodite with 4 spines (from Phillips, unpublished).

SCAMIT Code: HYP 52

Date Examined: Feb. 10, 1986 Voucher by: Douglas Diener

Synonymy: <u>Campylaspis</u> sp. I Lie 1968

Literature: Lie, U. 1969

Diagnostic Characters:

- Carapace with unique sculpturing ridges show varying degree of development, but consistent with original description.
- 2. Some orange to red spotting along ridges, not to be confused with pigment pattern of <u>C</u>. <u>rubromaculata</u>.

Related Species and Character Differences:

The male of \underline{C} . $\underline{\text{hartae}}$ needs to be illustrated, some confusion with \underline{C} . $\underline{\text{rubromaculata}}$ is possible; compare ridge patterns on carapace carefully. Both male and female of \underline{C} . $\underline{\text{hartae}}$ the same pattern of anastomosing flat ridges elevated above general level of carapace.

Distribution: Puget Sound to Point Loma; 9-300 m.

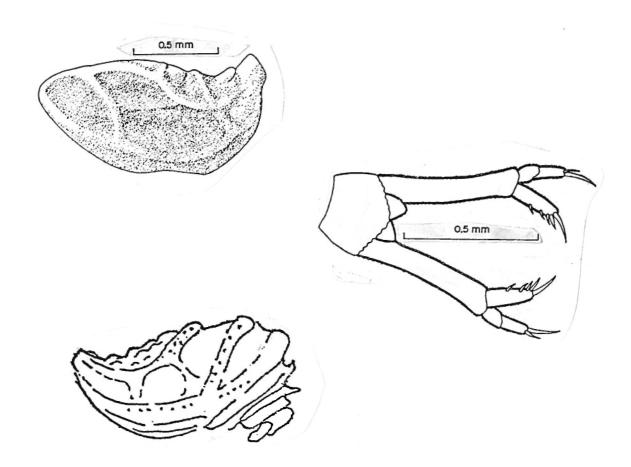


Figure 1. Carapace (from Lie, 1969)

Figure 2. Telson (from Lie, 1969)

Figure 3. Carapace (from MBC, unpublished)

SCAMIT Code: LACO 67 Date Examined: Feb. 10, 1986

Voucher by: Douglas Diener

Synonymy: <u>Campylaspis</u> (papillata) <u>lomikina</u> in Lie 1968

Campylaspis nodulosa Lie, 1969

Campylaspis rubromaculata Lie, 1971

Literature: Lie, U. 1968, 1969, 1971

Diagnostic Characters

- Generally heavily pigmented (orange to red).
- 2. Carapace with two complete and one partial lateral ridge (see figure).
- 3. Inner margin of uropodial peduncle with 4 to 6 small spines.

Related Species and Character Differences:

<u>Campylaspis</u> <u>rubromaculata</u> can be confused with <u>C. hartae</u>; compare the carapace sculpturing pattern carefully.

Distribution: Puget Sound to San Diego; sand, silt bottoms, kelp hold fast; 6-640 m.

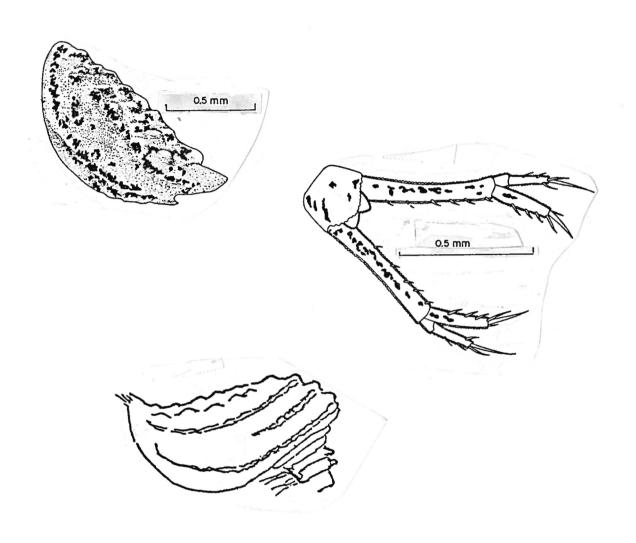


Figure 1. Carapace (from Lie, 1969)

Figure 2. Telson (from Lie, 1969)

Figure 3. Carapace (from MBC, unpublished)

SCAMIT Code: Hyp 53, LACO 68 Date Examined: Feb. 10, 1986
Voucher by: Douglas Diener

Synonymy: Campylaspis sp. B Myers & Benedict, unpublished

Diagnostic Characters:

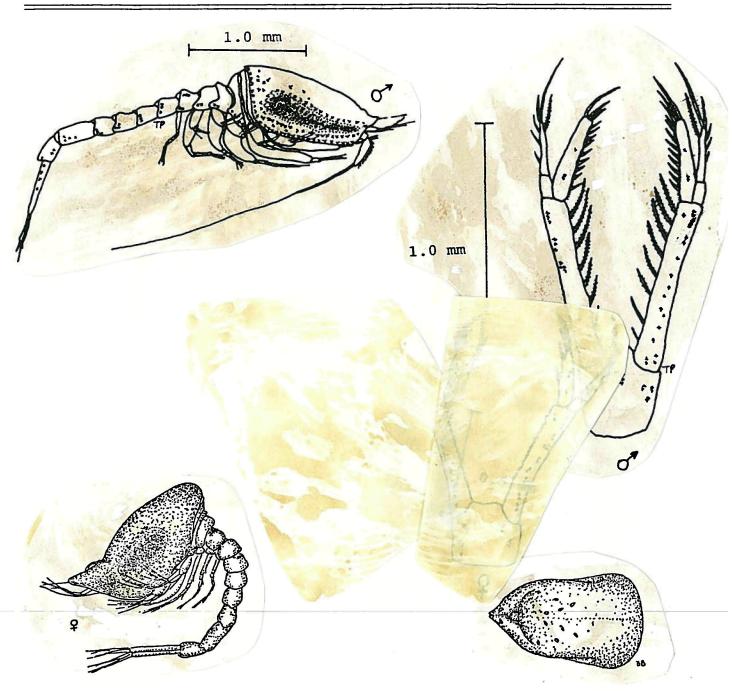
1. Carapace with single lateral sulcus.

- Top of carapace relatively flat, anterior with "S" shaped profile in female.
- 3. Carapace relatively smooth, some pitting along median center.

Related Species and Character Differences:

- 1. Other species with a single lateral sulcus include:
 - a. <u>Campylaspis canaliculata</u> with inflated and smooth carapace.
 - b. <u>Campylaspis</u> sp. E with paired knobs (projections) on posteriodorsal surface of carapace, thoracic segments 4/5, and on abdominal segments 1-4.
 - c. Campylaspis sp. H unknown, specimen lost.
 - d. <u>Procampylaspis</u> sp. A small tubercules surrounding sulcus, body surface with clinging detritus.

Distribution: Pismo Beach to Point Loma; 22-440 m.



- Female (from T. Phillips, unpublished)
 Female telson (from T. Phillips, unpublished)
 Male telson (from T. Phillips, unpublished)
 Female (from B. Benedict, unpublished)
 Female carapace-dorsal view (from B. Benedict, unpublished).

SCAMIT Code: MBC 42

Date Examined: Feb. 10, 1986

Voucher by: Douglas Diener

Literature: Zimmer, C. 1936

Diagnostic Characters:

Carapace with fine sculpturing, lacking teeth on anterodorsal portion.

- 2. Carapace profile distinct (see figure).
- 3. Usually with distinct pigment pattern particularly on carapace, brownish spots at subrostral angle and posterior mid-dorsum of carapace.

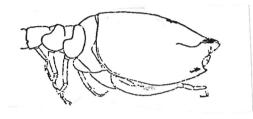
Related Species and Character Differences:

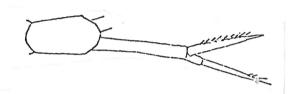
This species could be confused with males of Cyclaspis sp. C SCAMIT 1986 (see voucher for Cyclaspis sp. C, this newsletter, to compare carapace profiles).

Point Conception to San Diego; intertidal - 80 m.; Distribution:

generally less than 20 m. within kelp beds and

sand, silt bottoms.





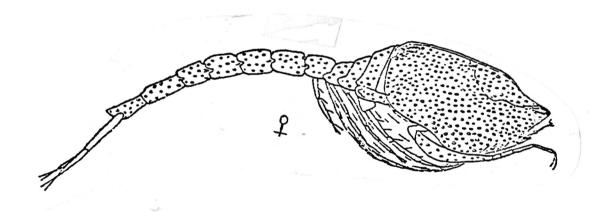


Figure 1. Adult female, x 15 (from Zimmer, 1936)

Figure 2. Telson area, adult female, x 34 (from Zimmer, 1936)

Figure 3. Adult female (from MBC, unpublished)

SCAMIT Code: MBC 41 Date Examined: Feb. 10, 1986
Voucher by: Douglas Diener

Synonymy: Cyclaspis a sp. n Given 1970

Cyclaspis sp. A Myers & Benedict, unpublished

Literature: Given, R. 1970

Diagnostic Characters:

1. Anterodorsal carapace with one to several teeth along the median carina, tooth development more pronounced in larger specimens.

 Carapace heavily calcified, often with a granular and pitted appearance.

Related Species and Character Differences:

This species resembles <u>Cyclaspis</u> <u>nubila</u> which lacks teeth on the anterodorsal carapace.

Comments:

Cyclaspis sp. A and species of the genus <u>Leucon</u> can be confused because the dorsal crests of both have one or more teeth. These taxa can be distinguished by examining the number of exopodites present on the pereopods. <u>Cyclaspis</u> has only 1 pair of exopodites on both the male and female, whereas <u>Leucon</u> has 4 pairs of exopodites on the male and 3 pairs on the female. Further, males of <u>Leucon</u> have 2 pleopods while male <u>Cyclaspis</u> have 5.

Distribution: Point Conception and Santa Cruz Island to San Diego County; intertidal - 48 m; mainly found in sand, silt bottoms, also within sediments of kelp beds.

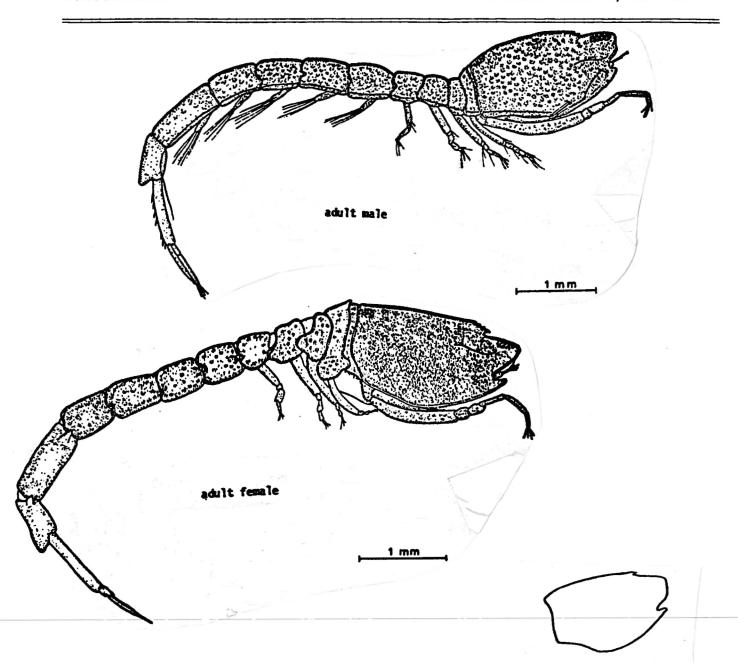


Figure 1. Adult male

Figure 2. Adult female

Figure 3. Outline of carapace of miniature individual with only a single spine.

(All figures from Given, 1970).

SCAMIT Code: HYP 54

Date Examined: Feb. 10, 1986 Voucher by: Douglas Diener

Synonymy: Cyclaspis C sp. N. Given, 1970

Cyclaspis sp. C. Myers and Benedict, unpublished

Literature: Given, R. 1970.

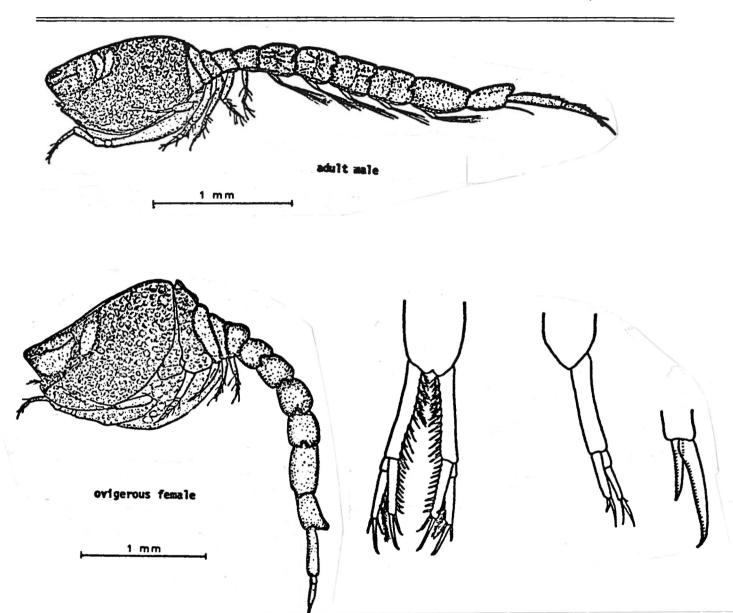
Diagnostic Characters:

- 1. Carapace of female with produced median carina, less produced in males; carina without teeth.
- Carapace heavily calcified, with sculpturing and small, shallow, irregular pits, unpatterned depressed area on anterodorsum of carapace.
- Second somite of female usually dorsally produced, with sculptured patterning.

Related Species and Character Differences:

A female <u>Cyclaspis</u> sp. C superficially resembles <u>Campylaspis</u>, but its carapace lacks a dorsal median carina. Male <u>Cyclaspis</u> sp. C can easily be confused with male <u>Cyclaspis</u> nubila, Zimmer 1936; refer to the voucher for that species (this newsletter) and note differences in carapace profile and depressed areas.

Distribution: Point Arguello and Santa Cruz Island to San Diego, intertidal - 30 m; mostly sand and sand-silt habitats, sediments within kelp beds.



(All figures from Given, 1970)

Figure 1. Adult male

Figure 2. Ovigerous female

Figure 3. Male uropods, x 100

Figure 4. Right uropod, female, x 100

Figure 5. Terminus of female uropodal endopod, enlarged to show terminal spine x 250

SCAMIT Code: LACO 69 Date Examined: Feb. 10, 1986

Voucher by: Douglas Diener

Synonymy: Diastylis a sp. n Given 1970

Diastylis sp. A Myers & Benedict, unpublished

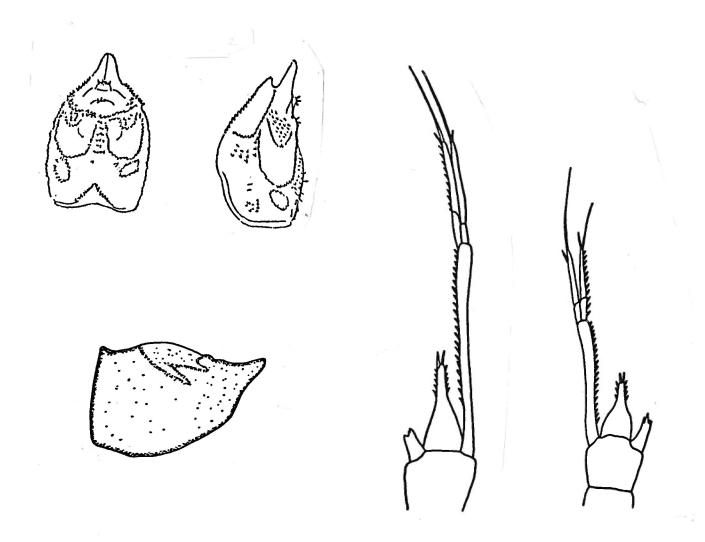
Literature: Given, R. 1970

Diagnostic Characters:

 Carapace spinose except for large depressed sculptured areas around the eye lobe, at top of head, and behind subrostral notch.

- 2. Telson approximately 1/2 length of uropodal peduncle.
- 3. Lateral spines of telson vary from 2-7 pairs.

Distribution: Cape Mendocino to San Diego; 25-190 m.; sand, silt bottoms.



Carapace, dorsal view (from MBC, unpublished)
Carapace, lateral view (from MBC, unpublished)
Carapace, lateral view (from Given, 1970). Figure 1. Figure 2.

Figure 3.

Telson, (from Given, 1970) Figure 4. Figure 5.

Telson (from Given, 1970)

SCAMIT Code: PL 65

Date Examined: Feb. 10, 1986 Voucher by: Douglas Diener

Literature: Zimmer, C. 1936

Barnard, J. L.

Given, R. R. 1961

Diagnostic Characters:

1. Female with one sternal spine on ventrum of fifth thoracic somite, none on first pleonal somite.

- 2. Carapace elongate and slender.
- Lateral telsonic spines variable in number, usually 2-3 pairs.

Related Species and Character Differences:

<u>Diastylopsis</u> <u>dawsoni</u>: female has 2 sternal spines on fifth thoracic segment and 1 ventral spine on first pleonal segment. Lateral telsonic spines 2-8 pairs (not a reliable character).

Distribution: Central California (2 records), San Francisco

Bay (1 record), Monterey Bay, but generally Point Conception to Baja California; intertidal-30 m. but usually less than 18 m. on sand bottoms.

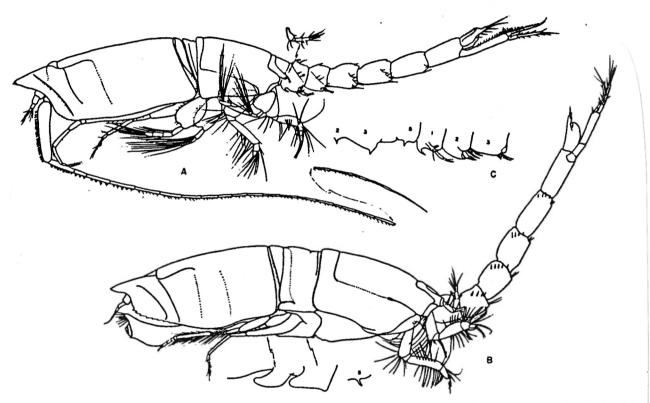


Fig. 1. Diastylopsis tenuis Zimmer. A, male, 6 mm, sta. 4870, lateral view of animal; C, lower armature of male thoracic segments 2-5 and abdominal segments 1-3; B, female, 8.5 mm, sta. 5043, lateral view of animal, with offset of developing brood plates below and the ventral spine of thoracic segment 5.

CUMACEAN LITERATURE

- Barnard, J.L. and R.R. Given. 1961. Morphology and ecology of some sublittoral cumacean crustacea of Southern California Pac. Nat., 2(3): 153-165.
- Calman, W.T. 1912. The Crustacea of the order Cumacea in the collection of the U.S. National Museum. Proc. U.S. Nat. Mus., 41 (1876): 603-676.
- Given, R.R. 1970. Cumacea (Crustacea Peracarida) of California: Systematics, ecology, and distribution. Ph.D. dissertation, U.S.C.
- Lie, U. 1968. A quantitative study of benthic infauna in Puget Sound. FISKERIDIREKTORATES. SKRIFTER, SERIE. HAVUNDERSOKELSER, 14(5): 229-556.
- Lie, U. 1969. Cumacea from Puget Sound and off the northwestern coast of Washington, with descriptions of two new species. Crustaceana, 17: 19-30.
- Lie, U. 1971. Additional Cumacea from Washington, U.S.A., with description of a new species. Crustaceana, 21(1): 33-36.
- Myers, B.L. and B.R. Benedict. 1973. Crustacea of the order Cumacea from the collection of Marine Biological Consultants, Inc. Unpublished.
- Zimmer, C. 1936. Calfiornia Crustacea of the order Cumacea. Proc. U.S. Nat. Mus., 83(2992): 423-439.