



Southern California Association of
Marine Invertebrate Taxonomists

3720 Stephen White Drive
San Pedro, California 90731

January, 1992

Vol. 10, No. 9

NEXT MEETING: Ophiuroids

GUEST SPEAKER: Dr. Gordon Hendler
Los Angeles County Museum of Natural
History

DATE: February 10, 1992
9:30am - 3:00pm

LOCATION: Times Mirror Room of the Los Angeles County
Museum of Natural History
Los Angeles, California

FEBRUARY 10 MEETING: Remember to bring any problem Ophiuroids with you to meeting. Don't forget to bring examples of what you are calling Amphiodia urtica and A. digitata, as well as other species that you report.

MINUTES FROM MEETING ON JANUARY 6:

Ron Velarde discussed a note he received from Tom Parker on a possible unknown/new species of Rhynchonellidium (Onuphidae: Polychaeta). It has been included in the newsletter.

Included in the newsletter is a letter to AAZN members received by Tom and forwarded to Ron.

Ron also announced a number of articles of interest to SCAMIT members.

FUNDS FOR THIS PUBLICATION PROVIDED IN PART BY THE ARCO FOUNDATION,
CHEVRON USA, AND TEXACO INC.

SCAMIT newsletter is not deemed to be a valid publication for
formal taxonomic purposes.

- Dojiri, M & R. A. Brantley. 1991. Lepeophtheirus spatha, A New Species of Copepod (Siphonostomatoida: Caligidae) Parasitic on the California Halibut from Santa Monica Bay, California. Proceedings of the Biological Society of Washington. 104(4): 727-735.
- Watling, L. 1991 Rediagnosis and Revision of the Some Nannastacidae (Crustacea: Cumacea). Proceedings of the Biological Society of Washington. 104(4): 751-757.
- Ormsby, B. 1991 Synisoma wetzeriae, a New Species and the First record of Synisoma from the New World (Crustacea: Isopoda: Valvifera: Idoteidae). Proceedings of the Biological Society of Washington. 104(4): 758-763.
- Manning, R. B. & D. L. Felder. 1991 Revision of the American Callianassidae (Crustacea: Decapoda: Thalassinidae). Proceedings of the Biological Society of Washington. 104(4): 764-792.
- Wicksten, M. K. 1991 Pandalus gurneyi Stimpson Synonymized With Pandalus danae Stimpson (Decapoda: Pandalidae). Proceedings of the Biological Society of Washington. 104(4): 812-815.

Larry Lovell announced the publication of the proceedings of the EPA Symposium, "Biological Criteria: Research and Regulation." Larry represented SCAMIT at the Symposia in December, 1990 where he presented a poster entitled "Regional Standardization of Taxonomy." Copies of the proceedings are available from:

George R. Gibson Jr.
Biological Criteria Program (WH-586)
U.S. EPA, Office of Water
401 M Street sw
Washington, D.C. 20460
(202)260-7580

Reprints of SCAMIT contribution No. 5, "Regional Standardization of Taxonomy." Published in the Proceedings by the EPA are available from the secretary. The address is:

Kelvin Barwick
4077 N. Harbor Dr. MS - 45A
San Diego, CA 92101

Mysid Workshop: Ron has prepared a list of Mysids reported from California. Illustrations of the southern California species has also been assembled. These have been included in the newsletter. A key to southern California species is being prepared and will be available in the near future.

December 30, 1991

A short worm note for the newsletter:

Only a few specimens of *Rhamphobranchium* (Onuphidae : Polychaeta) have been collected by LACSD in benthic samples. Some have been listed as *sp.*, others as *R. longisetosum*. Close examination of the parapodia of these specimens revealed three acicular conditions unaccounted for in the published literature. In the anterior pre-branchial setigers, a single stout aciculum emerges from the body wall and quickly tapers to a slightly twisted and bent sharp point (sketch #1). Just posterior to this region, where branchial are single filaments, the single aciculum is seen barely emerging from the body wall and possesses a distinct and long flagellum like tip (sketch #2). In mid-body regions where the branchia have many filaments there are at least two stout acicula. One of these is twisted and bent at the tip much like the one in the pre-branchial segment, while the other is distinctively more prolonged into a fine filament (sketch #3).

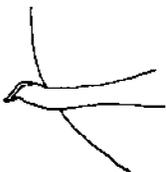
Photographs and a brief description were sent to Dr. Hannelore Paxton for possible clarification. The following was recently received from her:

"I do not remember seeing a bulbous acicular tip in this genus as in you prebranchial parapodium. New aciculae usually have a distal filiform extension (referred to by you as flagella). This structure may help the acicula to penetrate the cuticle. As they wear, they become shorter, as in your multiple branchial segment, and disappear usually completely, leaving a rounded tip.

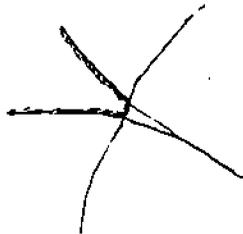
The bulbous anterior setiger aciculae may have some diagnostic value, but the others are similar to most *Rhamphobranchium* species."

The most current published record for this groups appears to be:

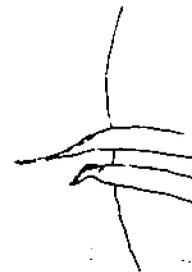
Paxton, H. 1986. Revision of the *Rhamphobranchium* Complex (Polychaeta: Onuphidae). Records of the Australian Museum. (38) 75-104.



sketch #1



sketch #2



sketch #3

A stylized, handwritten signature or set of initials in the bottom right corner of the page.

SCAMIT OFFICERS ELECTIONS:

Nominations are now open for SCAMIT officers for the 1992-93 year. Nominations will be entertained from now up to and including the February meeting. Send your nominations to the Vice President, Larry Lovell. Ballots will be mailed out with the February newsletter.

1992-93 Schedule: Larry is still "looking for a few good topics" for the upcoming year. He would appreciate ANY input you might have. You can write him at:

Larry Lovell
1036 Buena Vista
Vista, CA 92083

FUTURE MEETINGS:

The meeting on March 9, 1992 will be chaired by Leslie Harris of the Allan Hancock Foundation. The subject will be abranchiata-Amphitritinae-Terebellids. It will be held in room 30, the "worm lab," at the Allan Hancock Foundation building, University of Southern California, Los Angeles, California. Send any specimens to Leslie at the lab.

The April 13 meeting will be lead by Don Cadien of the Los Angeles County Sanitation District. The subject will be Thalassinoid shrimp. It will be held at the Cabrillo Marine Museum, San Pedro, California.

SCAMIT OFFICERS:

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

President	Ron Velarde	(619)226-0164
Vice-President	Larry Lovell	(619)945-1608
Secretary	Kelvin Barwick	(619)226-8175
Treasurer	Ann Martin	(213)648-5317

American Association for Zoological Nomenclature
c/o National Museum of Natural History - MRC 543
Smithsonian Institution
Washington, DC 20560

December 17, 1991

Dear Member of AAZN,

This abbreviated newsletter is to introduce to you the current officers of AAZN, to inform you of some recent developments related to nomenclature, and to request comments or contributions from the membership for inclusion in a newsletter to be mailed out February 15th.

You may already be aware that Ray Manning resigned as Secretary/Treasurer of the AAZN. Its principal mover and shaker since AAZN's inception, he earned and received high praise for his efforts from the AAZN membership and the International Trust for Zoological Nomenclature. I naively accepted the "honor" of replacing him and have finally found the starting gate. We need to make up some lost ground in the next two months and I hope that you will help me by at least getting dues paid. N.B.: The enclosed dues notice denotes your dues status; your 1992 contribution is now due (before May 1, 1992 please). If you are a "90" or earlier please do not shirk on your Past Dues - it is vital that we maintain our level of support to the ICZN. Of course, a contribution of a more philanthropic nature gives great personal satisfaction and will be welcomed warmly.

The current officers of AAZN are: President, Austin B. Williams; President-Elect, Storrs L. Olson; Secretary/Treasurer, Jon L. Norenburg; Councilors, Douglas Erwin, Wayne N. Mathis, and Michael Vecchione.

The AAZN contributed \$10,000 this year to the International Trust for Zoological Nomenclature to support work of the International Commission on Zoological Nomenclature. This was accompanied by a strong letter expressing concern about the way the secretariat of the Trust has been functioning. One concern is the length of time to publication of Applications to the Commission. The Secretary, PK Tubbs, responded at the Annual Meeting of the Trust. He noted that the number of Applications published in the last four volumes of BZN had dropped, due in part to a temporary reduction in staffing and in part to the time-consuming processing of major and long-delayed cases; the number of Opinions and total number of pages had not decreased. We would like to hear about continuing problems.

A second, more controversial concern is the Commission's role in proposed changes in the Code of Zoological Nomenclature - particularly the concept and application of priority (see: JM Savage - 1990, *Syst. Zool.* 39: 424-425; PKL Ng - 1991, *Bull. zool. Nomencl.* 48: 87-91). This generated spirited debate and some pungent commentary at our last general meeting of the AAZN. Can we and how do we, the AAZN, debate this issue so that the opinions of the AAZN membership are fairly conveyed to the Commission? The AAZN Newsletter is one mechanism for developing the debate - a response to Savage's view by Storrs Olson is enclosed with this missive. If you wish to submit a commentary of a different outlook please do so - but, try to restrict it to one, single-spaced printed page. One or two commentaries, if they are

significantly different from each other, can be included in the next newsletter. If members are aware of position statements produced within their own specialist societies, we would appreciate the opportunity to share them with the AAZN membership. In the meantime the AAZN executive committee will attempt to develop an unbiased questionnaire to sample the membership's opinions or suggestions on the proposed changes. Feel free to offer suggestions for constructing this questionnaire.

Bulletin of Zoological Nomenclature

The ITZN, at its Annual General Meeting, discussed an AAZN proposition to introduce a greatly reduced subscription to the BZN for individual subscribers. There was strong concern that this would result in cancellations of institutional subscriptions. The proposal was tabled because there does not seem to be a groundswell of demand for such a reduced rate. For instance, only a handful of subscribers are currently taking advantage of a trial program whereby one may receive (for a fee) offprints of all Applications, Comments and Opinions in the BZN related to either the Crustacea or Mollusca (see front pages of recent BZN).

From The ASC Washington Initiative [Nov. 1991, 5(10)]:
Systematics Agenda 2000

The Association of Systematics Collections is attempting "to produce a consensus document on future directions for systematics research as well as the importance of systematics." This effort is supported in part by NSF and is well in progress; the steering committee and advisory committee members met Nov. 9-10, 1991. *Systematics Agenda 2000* "is charged with (1) identifying important research trends and questions and with establishing priorities among them, (2) assessing the status of current infrastructures supporting systematics research and evaluating future needs, (3) documenting the broad role that systematics plays in human affairs and evaluating its future contributions and needs in those endeavors" (ASC Newsletter, Oct. 1991, 19: 57). For additional details contact the ASC office (202-347-2850) or Joel Cracraft (312-996-4955).

I would be glad to hear from you by any of the following mechanisms:

Jon L. Norenburg
Secretary-Treasurer, AAZN
National Museum of Natural History
MRC 534
Smithsonian Institution
Washington, DC 20560

Tel: 301-238-3508
Fax: 301-238-3667
Bitnet: soss001@sivm

PLEASE -
RECRUIT A NEW MEMBER
and
ENCOURAGE YOUR PROFESSIONAL SOCIETY TO BECOME AN INSTITUTIONAL MEMBER

HAPPY HOLIDAYS AND BEST WISHES FOR THE NEW YEAR!

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The Executive Secretary
International Commission on
Zoological Nomenclature
c/o The Natural History Museum
Cromwell Road
London SW7 5BD, ENGLAND

Sir,

The rapturous announcement by commissioner Jay M. Savage (1990, *Systematic Zoology*, 39: 424-425) of proposed unprecedented changes in the Code of Zoological Nomenclature, deserves a concerted negative response from all thoughtful and knowledgeable systematists. Because the more drastic of these proposals are so obviously unworkable, and will doubtless elicit much other comment, I would prefer to raise some related issues, rather than addressing the lack of merit of individual suggested reforms.

First of all, because these proposed changes emanate from a meeting consisting of fewer (12) than half of the members of the International Commission of Zoological Nomenclature, it should be asked to what extent this minority, which I would hope was not unanimous, represents the views of the entire Commission. More importantly, however, it must further be asked to what extent the Commission itself really represents the viewpoints of practicing systematists (not the "user community" involved in developing "stable biodiversity data bases," but genuine taxonomists who are familiar with, and use, the Code itself, rather than just the names generated through the Code).

Historically there have long been two factions at the heart of nomenclatural controversy---one advocating priority and the other "current usage." It is my perception, and that of many of my colleagues, that the Commission, which is composed in part of non-systematists, has for quite some time been "stacked" in favor of advocates of current usage. The major result of this so far has been the creation of a tremendous and unnecessary literature dealing almost exclusively with circumventing the Commission's own

stated rules. Regardless, the Commission has the appearance of a closed, self-perpetuating body purposely organized to exclude, or at least to mute, contrary views within its ranks. If this perception has any validity, then it is high time to challenge the legitimacy of the International Commission to represent the needs of the systematic community as a whole.

As I have already taken pains to show, there continues to be great inherent instability in the nomenclature of North American birds, one of the best-known groups of organisms on the planet, but priority and other purely nomenclatural procedures play an insignificant role in this instability (Olson, 1987, *Auk* 104: 538-542). Although my analysis was sent to all members then on the Commission, it seemingly had no influence on a cabal foreordained to abolish its ancient nemesis. Instead, like a dog returning to its vomit, the Commission now wants to go back to the loathsome "50 year rule." Yet at no time has the Commission ever shown that such reforms as it is now propounding are actually necessary, or are in fact capable of achieving their desired effect. Until truly cogent and well documented arguments for such sweeping changes are forthcoming, the subject will hardly merit the verbiage that it is certain to engender.

Universal stability in zoological nomenclature is an impossible, Utopian ideal. Procrustean efforts to force an artificial semblance of stability into nomenclature can only have a deleterious effect on the advancement of new information and on the assimilation and appreciation of past knowledge, from which latter Savage wishes to be freed. (Because we are all born with no knowledge of the past, liberation from it should involve no more than the perpetuation of ignorance).

The third edition of the Code, except for those parts necessitating decisions by the Commission, is a sound, scholarly document that has evolved over many years through painstaking thought and compromise. In attempting to overthrow this document, the present

Commission is not only proposing a drastically modified fourth edition, but is also attempting to establish itself in an entirely new role---that of providing lists of "approved" taxa. Such activity far exceeds the mandate of the Commission.

The situation has now gone beyond the point of argumentation. The changes proposed in Savage's notice are simply not acceptable. If the Commission succeeds in executing these changes, I, for one, will reject them unequivocally and continue to use the basic framework provided by the third edition of the Code. I will not be alone. It is my privilege to work as a member of one the largest surviving aggregations of zoological systematists in the world. The reactions I have heard from my colleagues to the Commission's new proposals range mostly from disgust to profound antipathy, with the latter being more typical. The Commission should therefore ponder the effects on nomenclature of having two codes operating simultaneously, for that will surely be the result of its proposed actions.

Storrs L. Olson, *Department of
Vertebrate Zoology,
National Museum of Natural History,
Smithsonian Institution
Washington, D. C. 20560*

AMERICAN ASSOCIATION FOR ZOOLOGICAL NOMENCLATURE
1992 MEMBERSHIP RENEWAL

Please correct any errors on label:

NB: According to our records you have paid dues through 1990.

I am enclosing dues for ___1991 ___1992 as follows:

Sustaining (\$100) Regular (\$20) Student (\$10)
 _____ (create your own category above the minimum)

TOTAL _____

Please return this form with your contribution to:

AAZN
c/o Jon L. Norenburg
MRC 534
Smithsonian Institution
Washington, DC 20560

TAXONOMIC LIST OF MYSIDS REPORTED FROM CALIFORNIA

Ronald G. Velarde, Marine Biology Laboratory, City of San Diego
4077 N. Harbor Dr. MS 45A, San Diego, CA 92101
January 1992

Order Mysidacea

Suborder Lophogastrida

Family Lophogastridae

Gnathophausia Willemoes-Suhm, 1873

*Gnathophausia gigas Willemoes-Suhm, 1875

*Gnathophausia ingens (Dohrn, 1870)

Family Eucopiidae

Eucopia Dana, 1852

*Eucopia australis Dana, 1852

*Eucopia grimaldii Nouvel, 1942

*Eucopia sculpticauda Faxon, 1873

*Eucopia unquiculata (Willemoes-Suhm, 1875)

Suborder Mysida

Family Petalophthalmidae

Petalophthalmus Willemoes-Suhm, 1875

*Petalophthalmus armiger Willemoes-Suhm, 1875

Family Mysidae

Subfamily Boreomysinae

Boreomysis G.O. Sars, 1869

*Boreomysis californica Ortman, 1894

*Boreomysis inermis (Willemoes-Suhm, 1874)

Subfamily Siriellinae

Sirielllla Dana, 1850

Siriella pacifica Holmes, 1900

Subfamily Gastrosaccinae

Archaeomysis Czerniavsky, 1882

Archaeomysis grebnitzkii Czerniavsky, 1882

[=Archaeomysis maculata (Holmes, 1894)]

Bowmaniella Bacescu, 1968

Bowmaniella banneri Bacescu, 1968

[?=Archaeomysis maculata W.M. Tattersall, 1932, 1951]

* These species are found in the open ocean and are omitted from the key. Information on these species can be found in Kathman et al., 1986.

Family Mysidae (cont.)

Subfamily Mysinae

Tribe Erythropini

Amathimysis Brattegard, 1969

Amathimysis triqibba Murano and Chess, 1987

Caesaromysis Ortmann, 1893

*Caesaromysis hispida Ortmann, 1893

[=Caesaromysis vanclavei Banner, 1947]

Holmesiella Ortmann, 1908

Holmesiella anomala Ortmann, 1908

Pseudomma G.O. Sars, 1870

Pseudomma berkeleyi W.M. Tattersall, 1933

Pseudomma californica Bacescu and Gleye, 1979

Tribe Leptomysini

Cubanomysis Bacescu, 1968

Cubanomysis misteriosa Gleye, 1982

Metamysidopsis W.M. Tattersall, 1951

Metamysidopsis elongata (Holmes, 1900)

Mysidopsis G.O. Sars, 1864

Mysidopsis brattegardii Bacescu and Gleye, 1979

Mysidopsis californica W.M. Tattersall, 1932

Mysidopsis cathengelae Gleye, 1982

Mysidopsis intii Holmquist, 1957

Mysidopsis onofrensis Bacescu and Gleye, 1979

?Mysidopsis sp. A of Phillips

Tribe Mysini

Acanthomysis Czerniavsky, 1882

Acanthomysis brunnea Murano and Chess, 1987

Acanthomysis californica Murano and Chess, 1987

"Acanthomysis" columbiae (W.M. Tattersall, 1933)

Alienacanthomysis Holmquist, 1981

Alienacanthomysis macropsis (W.M. Tattersall, 1932)

Exacanthomysis Holmquist, 1981

Exacanthomysis davisii (Banner, 1948)

[=Acanthomysis costata of W.M. Tattersall, 1932, 1951]

Hippacanthomysis Murano and Chess, 1987

Hippacanthomysis platypoda Murano and Chess, 1987

Holmesimysis Holmquist, 1979

Holmesimysis costata (Holmes, 1900)

[=Acanthomysis sculpta W.M. Tattersall, 1951 part]

Tribe Mysini (cont.)

Inusitatomysis Ii, 1940

Inusitatomysis californica Bacescu and Gleye, 1979

Neomysis Czerniavsky, 1882

Neomysis kadiakensis Ortmann, 1908

Neomysis mercedis Holmes, 1897

Neomysis rayi (Murdock, 1885)

Pacifacanthomysis Holmquist, 1981

Pacifacanthomysis nephrophthalma (Banner, 1948)

Proneomysis W.M. Tattersall, 1933

Proneomysis walesi W.M. Tattersall, 1933

Tribe Heteromysini

Heteromysis S.I. Smith, 1873

Heteromysis odontops Walker, 1898

Subfamily Mysidellinae

Mysidella G.O. Sars, 1872

Mysidella americana Banner, 1948

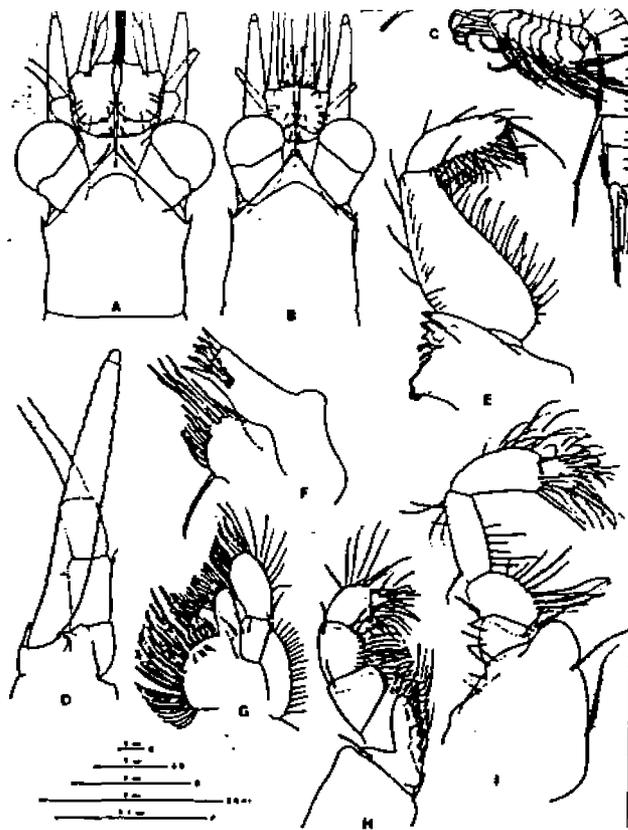


Fig. 5. *Acanthomysis brunnea*, new species. A, anterior end of adult male; B, anterior end of adult female; C, adult male (16.1 mm) in lateral view; D, antenna (♂); E, mandible (♂); F, maxillule (♂); G, maxilla (♂); H, endopod of first thoracic limb (♂); I, endopod of second thoracic limb (♂).

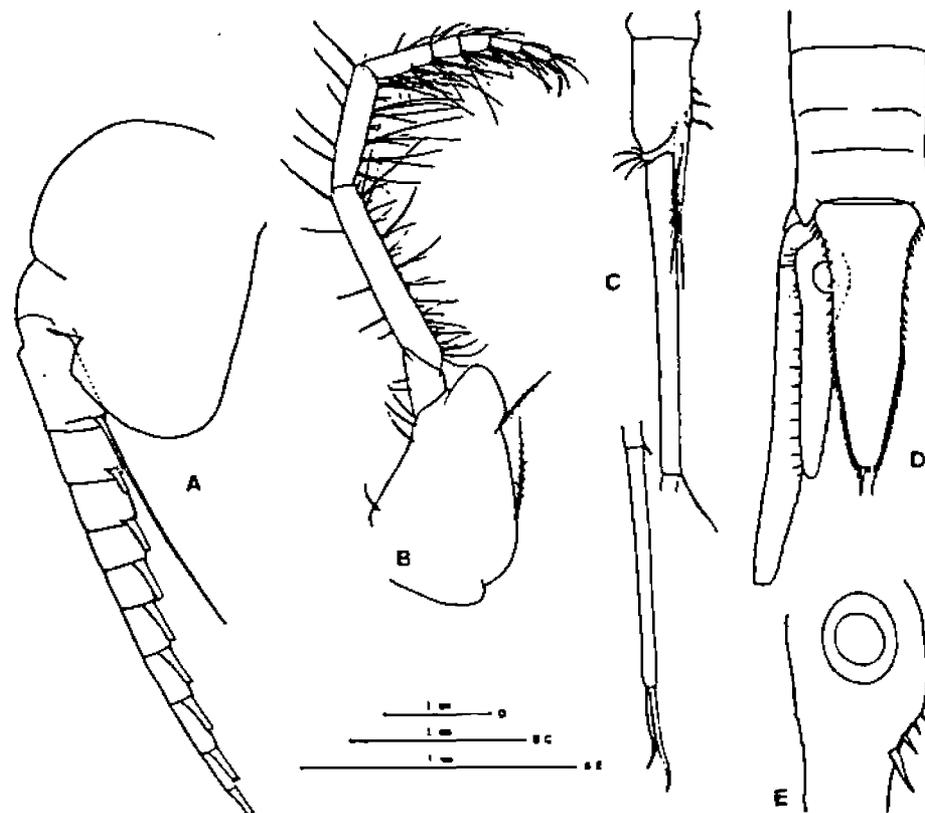


Fig. 6. *Acanthomysis brunnea*, new species. A, exopod of second thoracic limb (♂); B, endopod of third thoracic limb (♂); C, fourth pleopod (♂); D, posterior end of adult male; E, proximal part of endopod of uropod (♂).

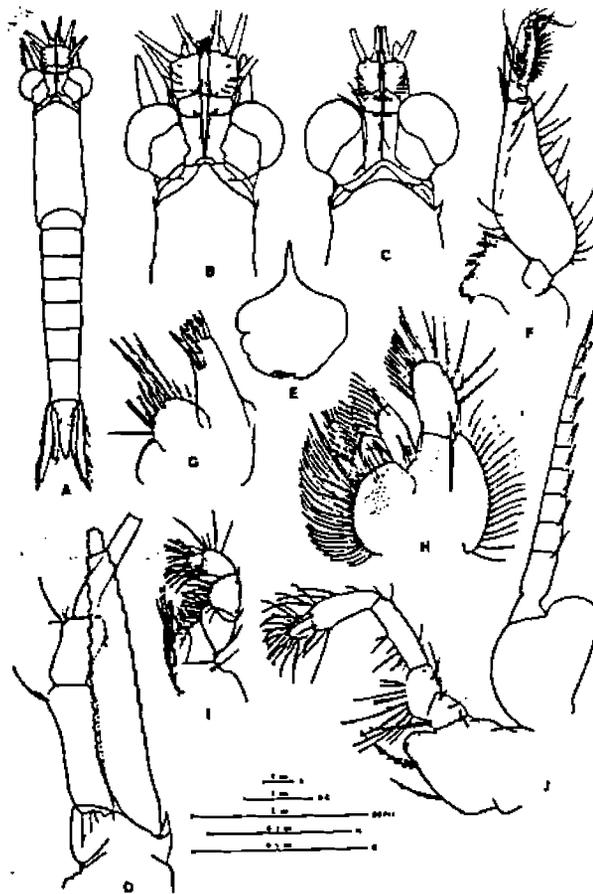


Fig. 3. *Acanthomysis californica*, new species. A, adult male (11.3 mm) in dorsal view; B, anterior end of adult male; C, anterior end of adult female; D, antenna (♂); E, labrum (♀); F, mandible (♂); G, maxillule (♂); H, maxilla (♂); I, endopod of first thoracic limb (♂); J, second thoracic limb (♂).

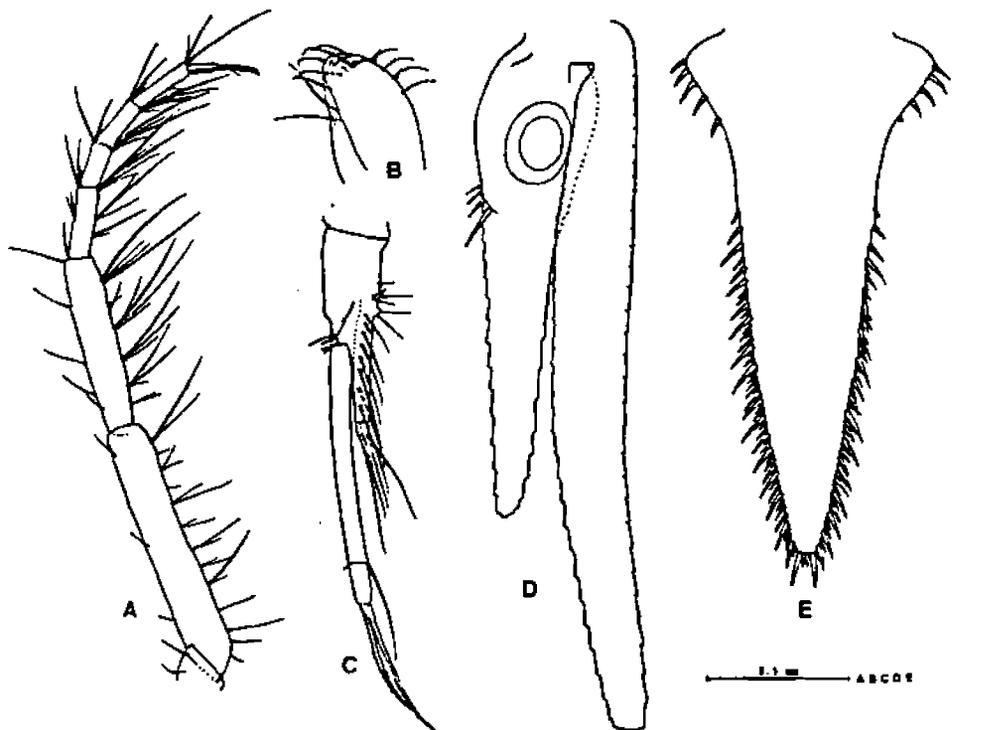
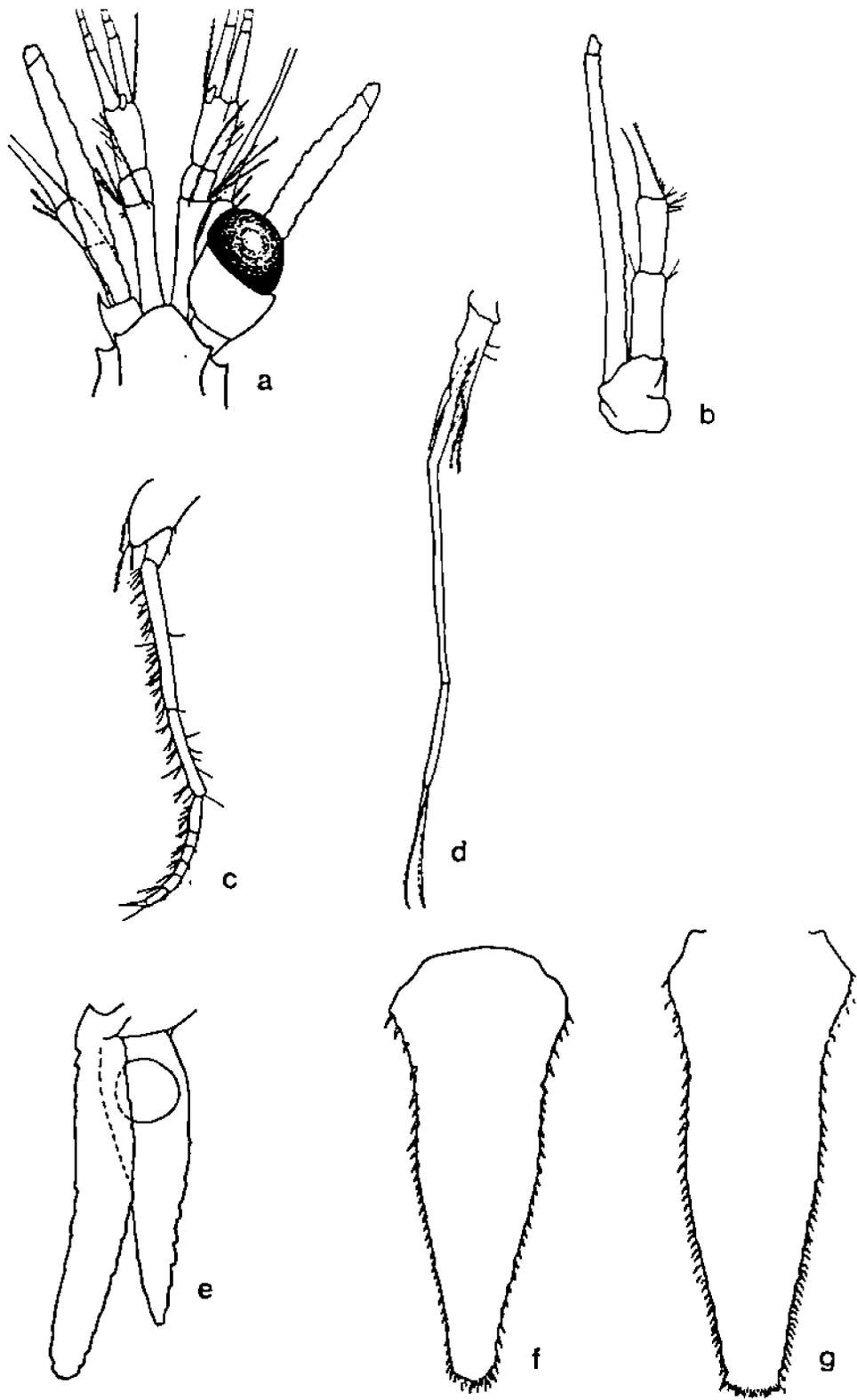


Fig. 4. *Acanthomysis californica*, new species. A, one of anterior thoracic endopods (♂); B, penis; C, fourth pleopod (♂); D, uropod (♂); E, telson (♂).

Figure 2. *Acanthomysis californica* Murano and Chess, 1987



"Acanthomysis" columbiae

Figure. a. dorsal view anterior end, male (3); b. antennal scale (1); c. 5th thoracopod (3); d. 4th pleopod, male (3); e. uropod (4); f. telson, California specimen (3); g. telson, British Columbia specimen (1).

Figure 3. "Acanthomysis" columbiae (W.M. Tattersall, 1933)
(from Kathman et al., 1986)

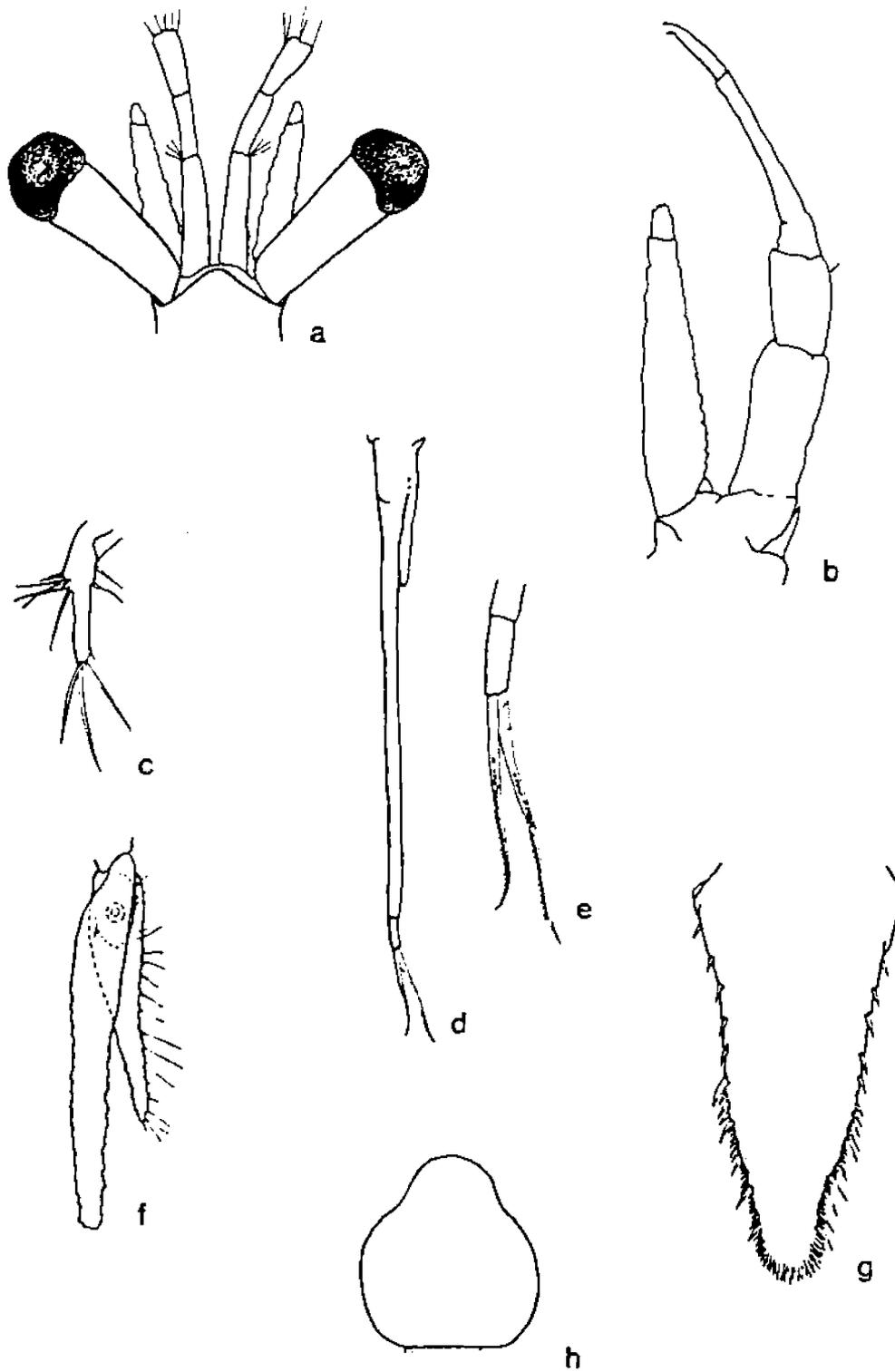


Figure. a. dorsal view, anterior end (1); b. antenna (7); c. 3rd male pleopod (1); d. 4th male pleopod (7); e. 4th male pleopod, distal end (7); f. uropod (1); g. telson (7); h. labrum (original).

Alienacanthomysis macropsis

Figure 4. *Alienacanthomysis macropsis* (W.M. Tattersall, 1932)
(from Kathman et al., 1986)

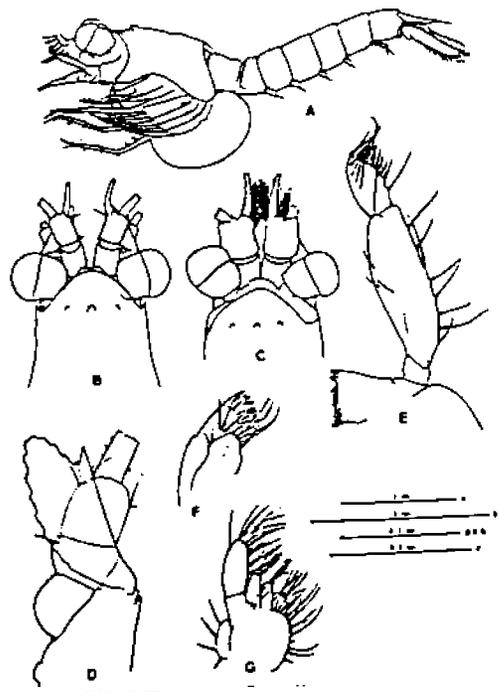


Fig. 1. *Amathimysis trigibba*, new species. A, adult female (2.9 mm) in lateral view; B, anterior end of adult female; C, anterior end of adult male; D, antenna (♀); E, mandible (♀); F, maxillule (♀); G, maxilla (♀).

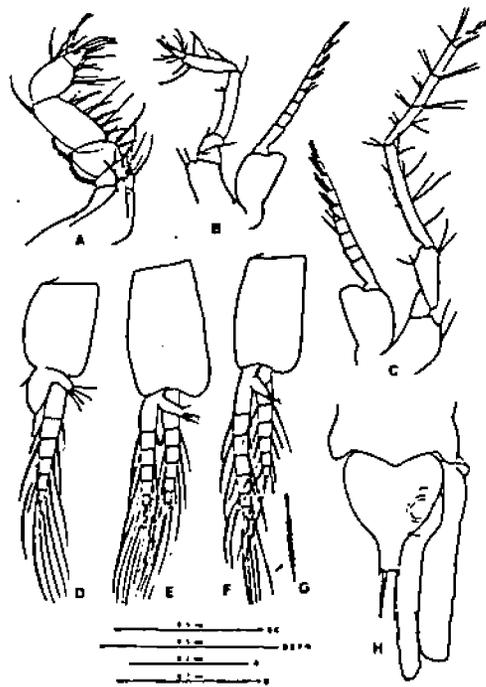
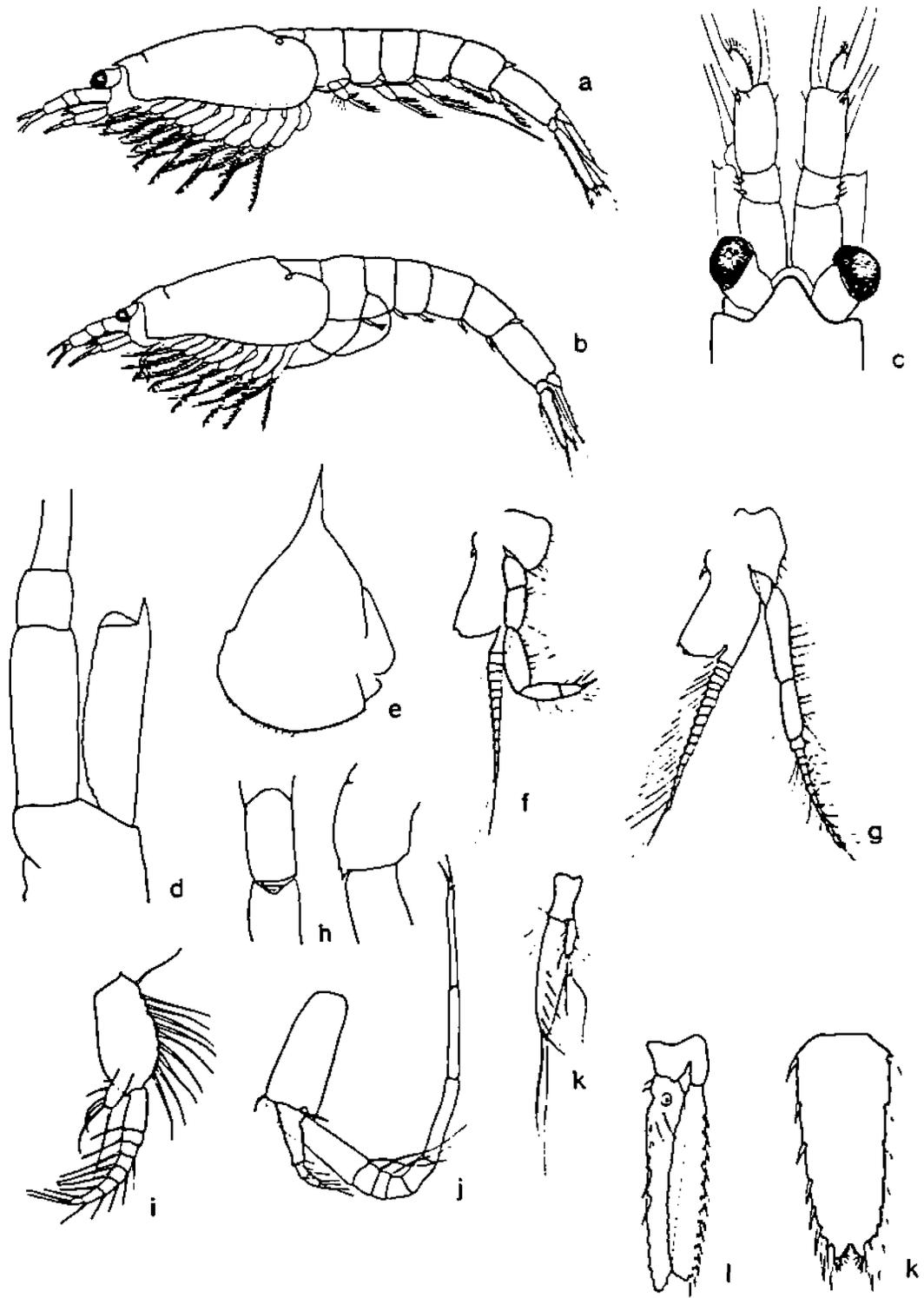


Fig. 2. *Amathimysis trigibba*, new species. A, endopod of first thoracic limb (♀); B, second thoracic limb (♀); C, fifth thoracic limb (♀); D, first pleopod (♂); E, fourth pleopod (♂); F, fifth pleopod (♂); G, distal part of modified seta on fifth segment of endopod of fifth pleopod (♂); H, telson and uropod (♀).

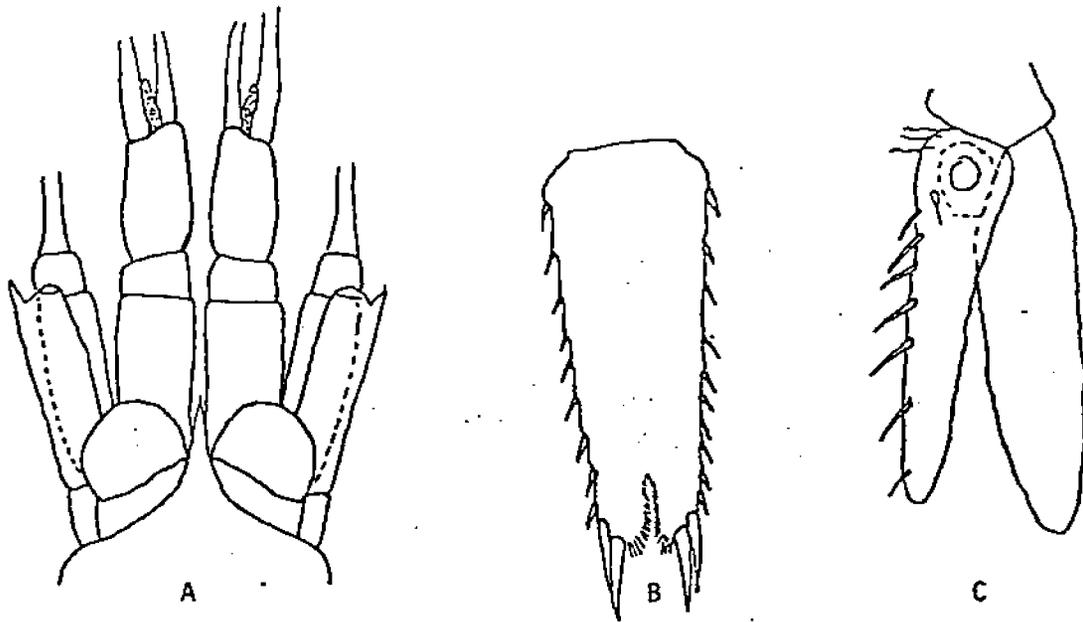
Figure 5. Amathimysis trigibba Murano and Chess, 1987



Archaeomysis grebnitzkii

Figure. a. lateral view, male (5); b. lateral view, female (5); c. dorsal view, anterior end (5); d. antenna (5); e. labrum (3); f. 2nd thoracopod (5); g. 7th thoracopod (5); h. dorsal and lateral views, 5th abdominal segment (3); i. 1st male pleopod (9); j. 3rd male pleopod (9); k. 3rd female pleopod (9); l. uropod (9); m. telson (9).

Figure 6. Archaeomysis grebnitzkii Czerniavsky, 1882
(from Kathman et al., 1986)



Archaeomysis maculata (Holmes). Fig A. Anterior end of young male showing rostral plate, eyes, antennal scale and peduncle, and antennular peduncle with developing masculine lobe (x78); B. Telson (x78); C. Uropod (x78). (Fig A-C after Tattersall.)

Diagnosis: Large (12mm) stocky "tanklike", on first glance it is hard to believe this animal is a mysid. Eyes dark, medium sized outer margin of antennal scale naked, terminating in a heavy spine. Male with well developed abdominal pleopods. Abdomen narrows noticeably distally. Telson cleft, cleft armed with serrations, lateral margins armed with 9 or 10 spines, each lobe of the apex with 2 heavy, long spines.

SEJARAH ABGIMEN
W/ SEGMENTAL "mark"
HELANIPURUS

Note: All the specimens I have seen are A. maculata, A. grebnitzkii is also reported from California and is similar in appearance. A. grebnitzkii has 6+2 spines on the lateral margin of the telson.

Occurrence: Found in samples taken very close to shore, it is considered a surf zone species.

Reference: Tattersall, 1951.

Figure 7. Bowmaniella banneri Bacescu, 1968

[= Archaeomysis maculata W.M. Tattersall 1932, 1951]

(from Gleye, unpub.)

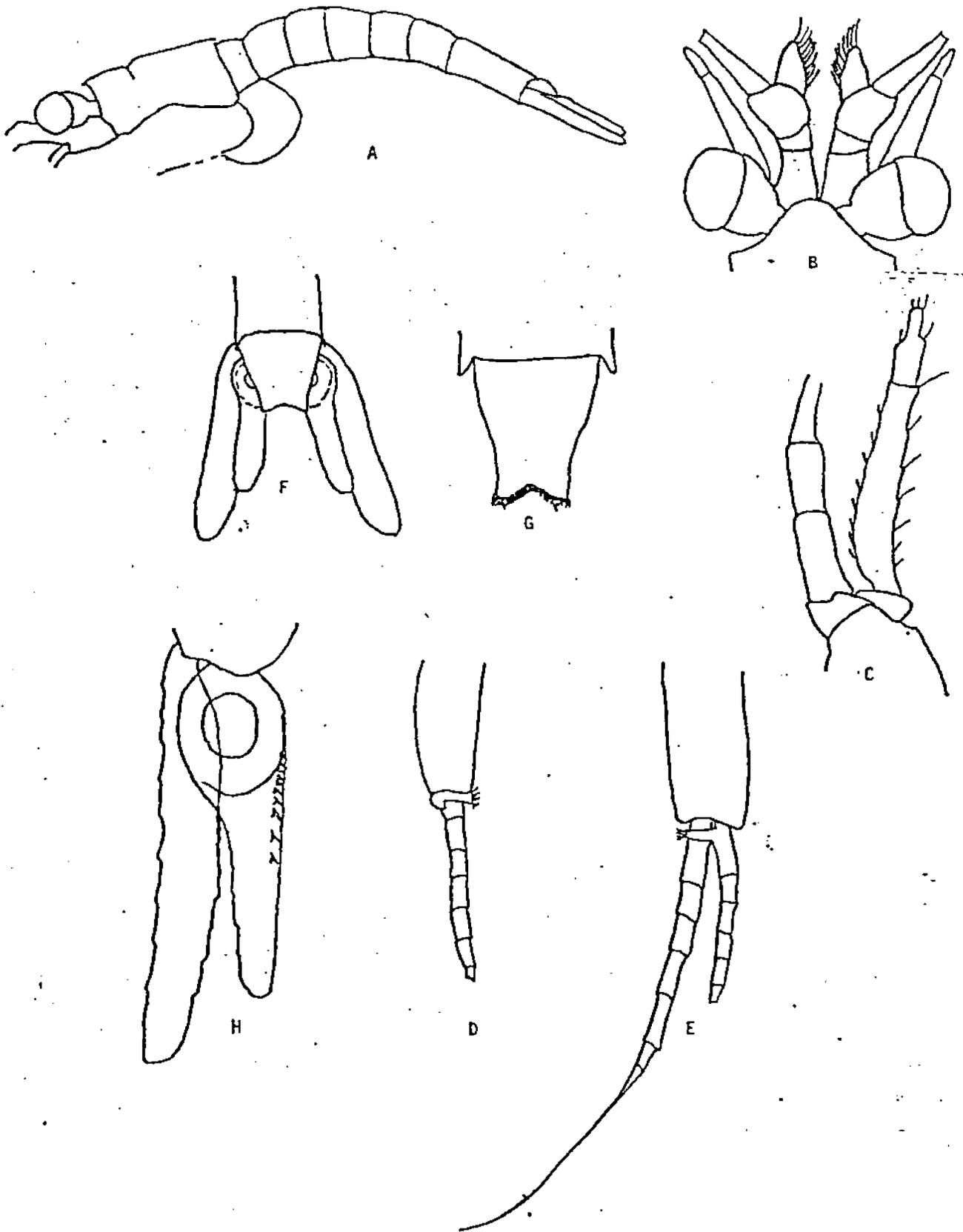
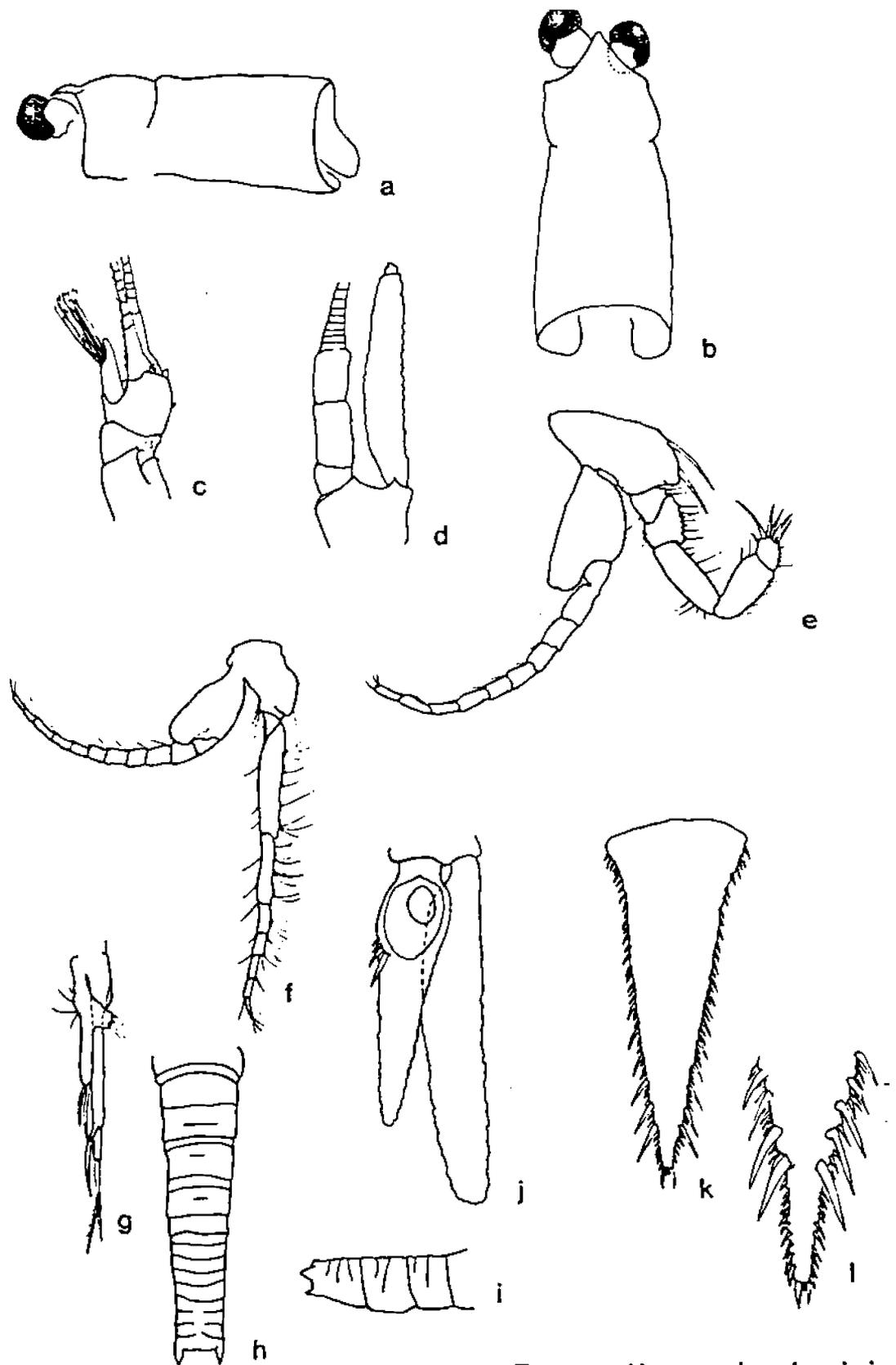


Fig. 1. *Cubanomysis mysteriosa* (sp. n.). A. Adult female lateral view (x25); B. Anterior end of adult male (x50); C. Antennal scale and peduncle (x100); D. First pleopod of adult male (x100); E. Fourth pleopod of adult male (x100); F. Posterior end of adult (x50); G. Telson (x100); H. Uropod (x100).

Figure 8. *Cubanomysis mysteriosa* Gleye, 1982

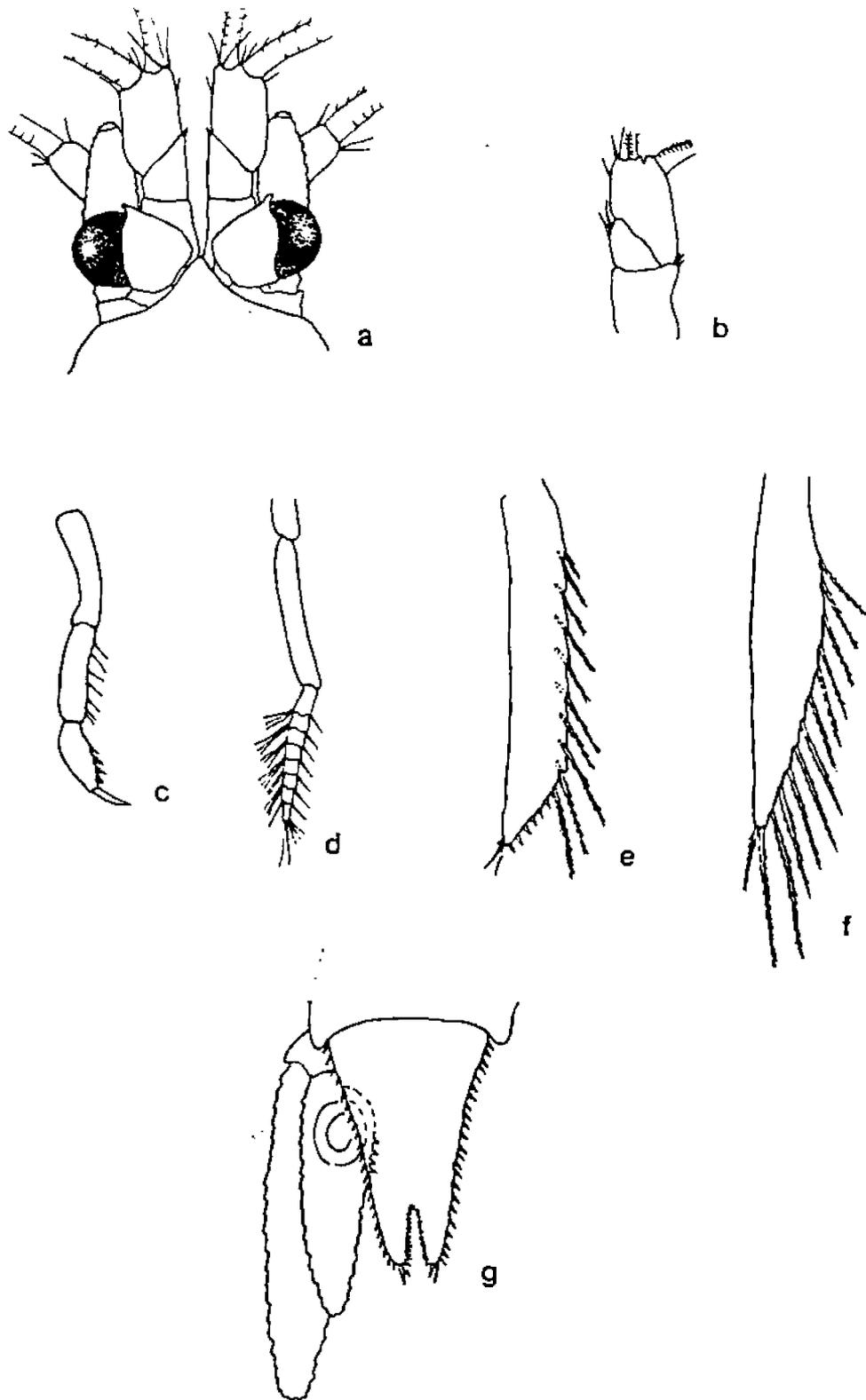


Exacanthomysis davis

Figure. a. lateral view, anterior end (3); b. dorsal view, anterior end (3); c. lateral view, antennular peduncle (1); d. antenna (1); e. 2nd thoracopod (7); f. 3rd thoracopod (7); g. 4th male pleopod (7); h. dorsal view, abdomen (4); i. lateral view, abdomen (4); j. uropod (7); k. telson (7); l. telson apex (4).

Figure 9. Exacanthomysis davis (Banner, 1948)

(from Kathman et al., 1986)



Heteromysis odontops

Figure. a. dorsal view, anterior end (3); b. antennular peduncle (1); c. endopod of 3rd thoracopod (1); d. endopod of 8th thoracopod (1); e. 3rd male pleopod (3); f. 5th male pleopod (3); g. uropod and telson (3).

Figure 10. Heteromysis odontops Walker, 1898
 (from Kathman et al., 1986)

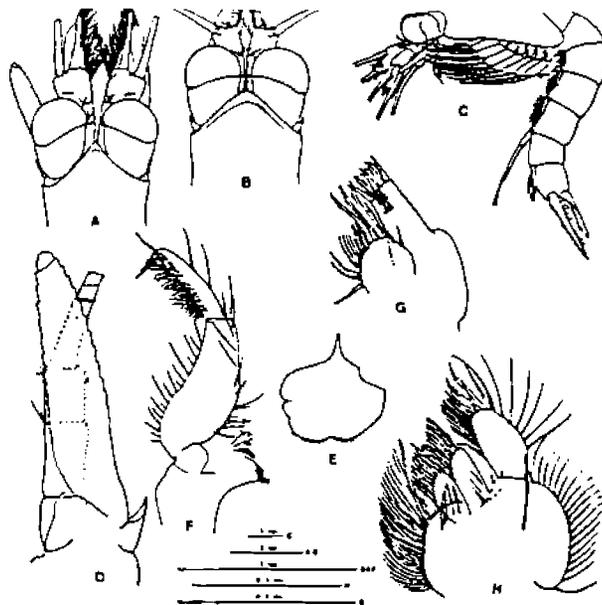


Fig. 7. *Hippacanthomysis platypoda*, new genus, new species. A, anterior end of adult male; B, anterior end of adult female; C, adult male (10.6 mm) in lateral view; D, antenna (♂); E, labrum (♂); F, mandible (♂); G, maxillule (♂); H, maxilla (♂).

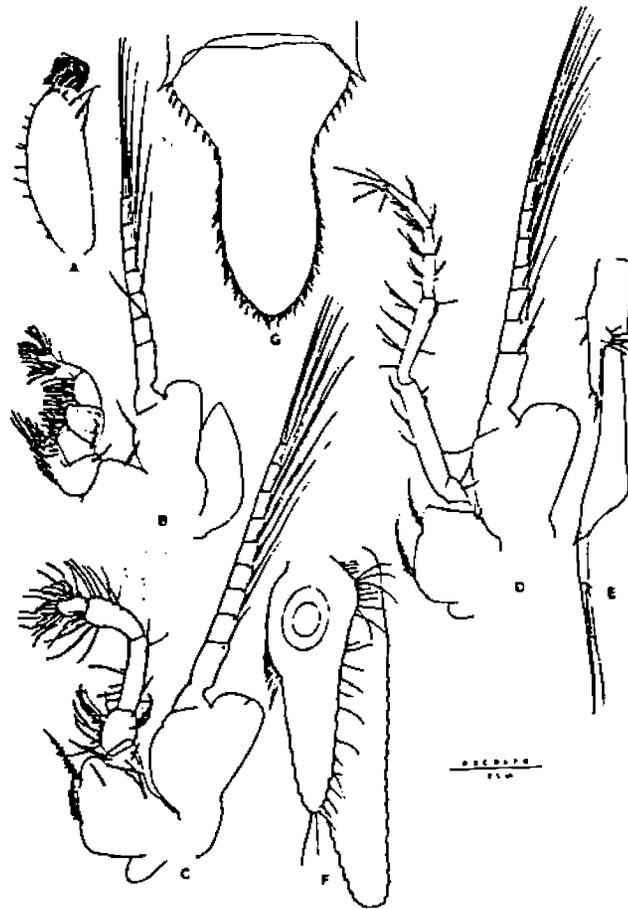
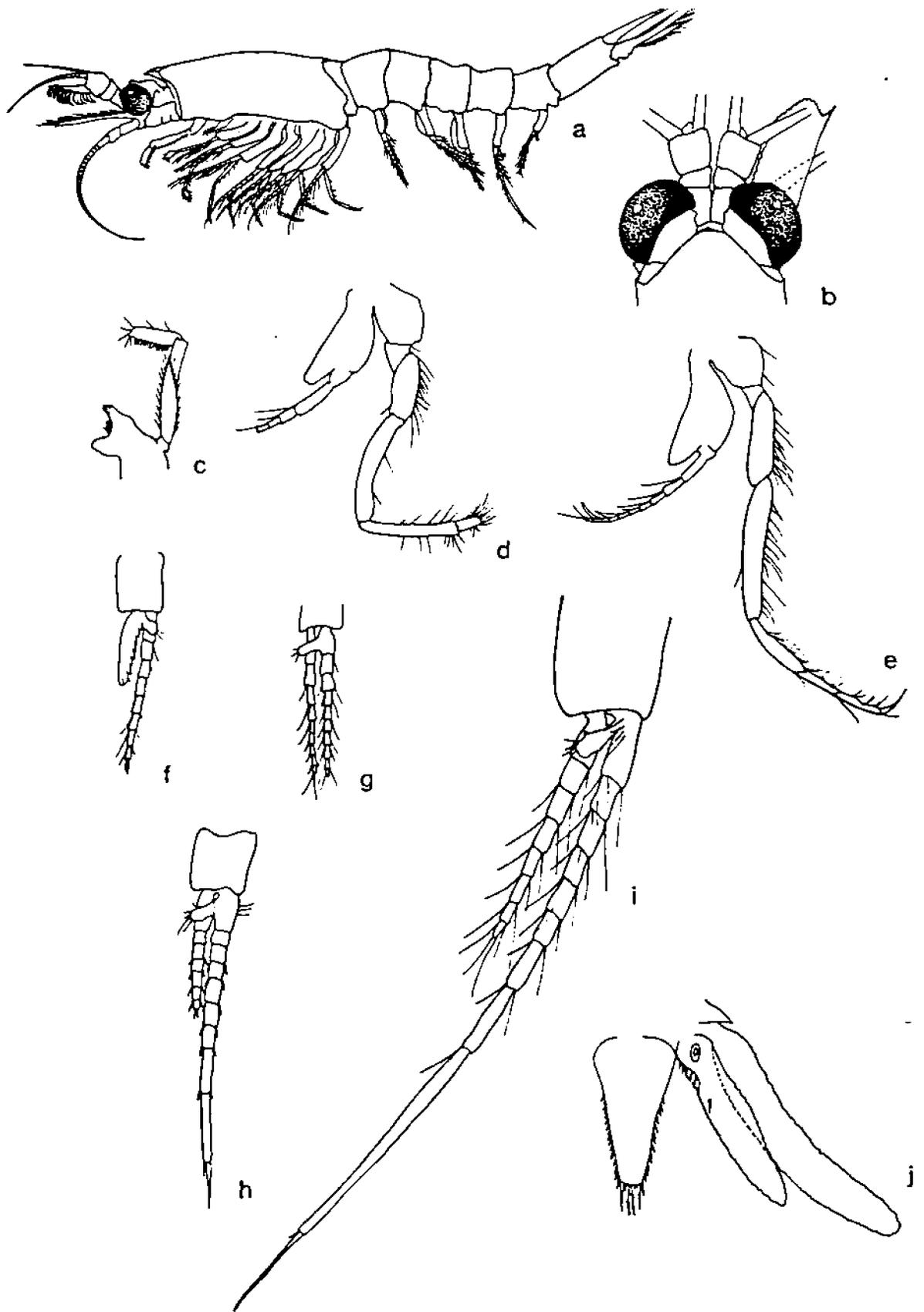


Fig. 8. *Hippacanthomysis platypoda*, new genus, new species. A, penis; B, first thoracic limb (♂); C, second thoracic limb (♂); D, eighth thoracic limb (♂); E, fourth pleopod (♂); F, uropod (♀); G, telson (♂).

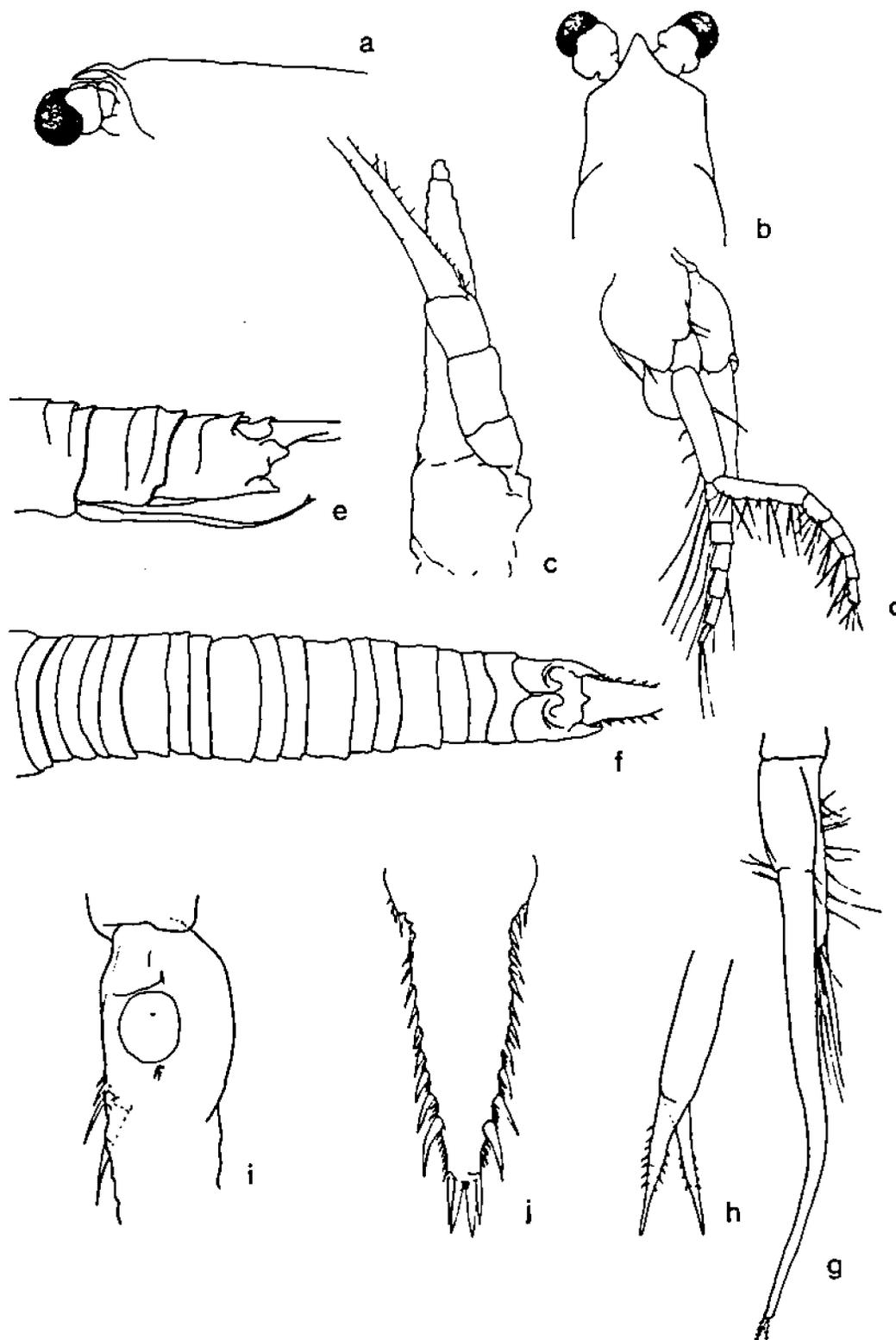


Holmesiella anomala

Figure. a. lateral view, female (original); b. dorsal view, anterior end, young male (7); c. mandible (1); d. 2nd thoracopod (1); e. 4th thoracopod (1); f. 1st male pleopod (1); g. 3rd male pleopod (1); h. 4th immature male pleopod (9); i. 4th mature male pleopod (9); j. uropod and telson (original + 1, 7).

Figure 12. Holmesiella anomala Ortmann, 1908

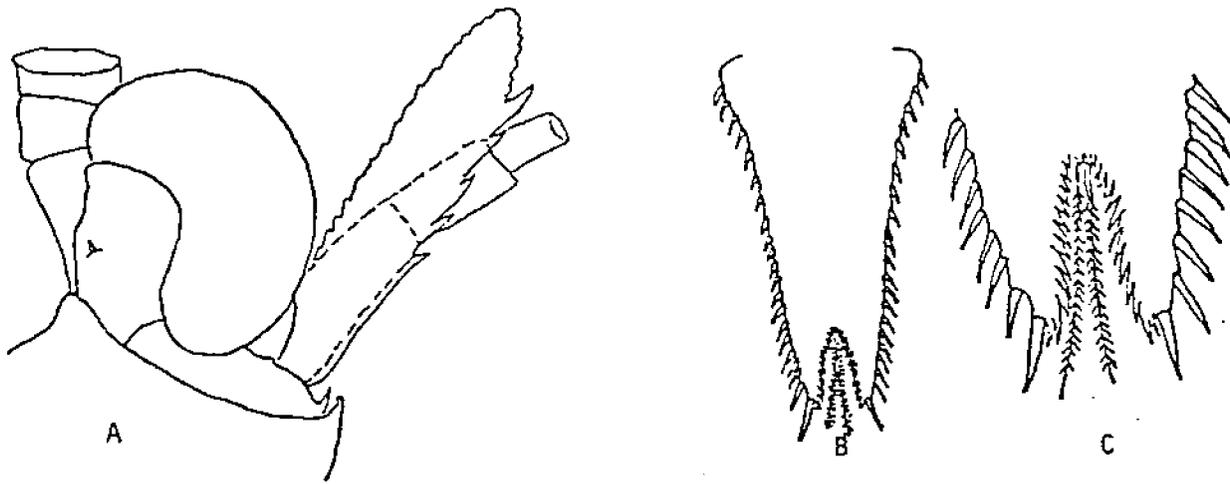
(from Kathman et al., 1986)



Holmesimysis costata

Figure. a. lateral view, anterior end (1); b. dorsal view, anterior end (1); c. antenna (2); d. 7th thoracopod (1); e. lateral view, abdomen (1); f. dorsal view, abdomen (1); g. 4th male pleopod (1); h. 4th male pleopod, terminal segment (1); i. uropod (1); j. telson (1).

Figure 13. Holmesimysis costata (Holmes, 1900)
 (from Kathman et al., 1986)



Inusitatomysis californica (Bacescu & Gleye). Fig. A. Anterior end to show rostral plate, eye, antennal scale and peduncle, x 35; B. Telson x 35; C. Its tip, magnified x 70. (After Bacescu & Gleye).

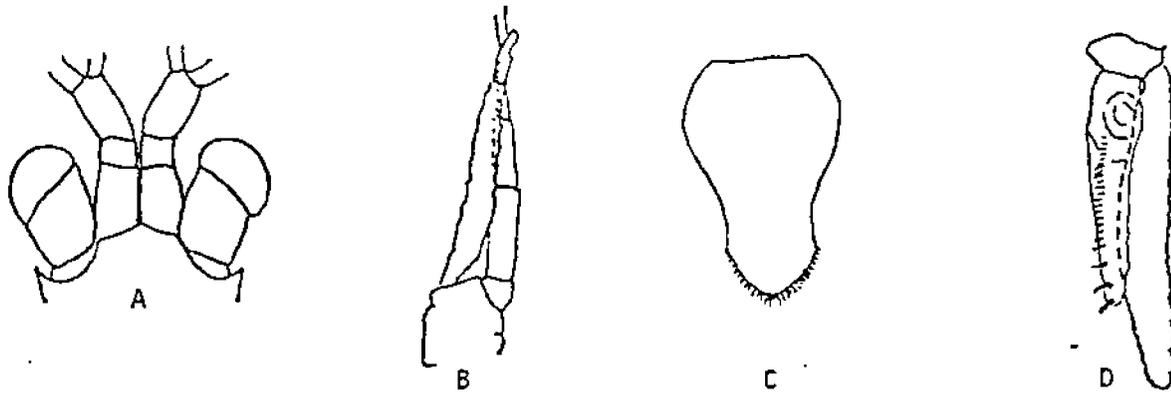
Diagnosis: Medium sized (7-8.5 mm ♂, 8-11 mm ♀) mysid with short eyes, very large cornea. Antennal scale narrow with 5 (rarely 6) teeth on the outer margin. Fourth pleopod of adult male extends beyond the statocyst. Telson triangular with deep cleft. Lateral margins bearing 18-21 (21-23 in ♂) large spines. Cleft with 12-15 teeth on each side, two pennate setae inserted at the base of the cleft. Single spine on the statocyst.

Note: The pennate setae in the cleft are quite delicate, easily lost in capture and difficult to see when present.

Occurrence: Southern California - Oceanside to Dana Point 75-100 meters.

Reference: Bacescu & Gleye. 1979

Figure 14. Inusitatomysis californica Bacescu and Gleye, 1979
(from Gleye, unpub.)



Metamysidopsis elongata (Holmes). Fig. A. Anterior end to show rostral plate, eye, and antennular peduncle, x 25; B. antennal scale and peduncle, x 78; C. Telson, x 100; D. Uropod, x78. (Fig. B-D after Tattersall).

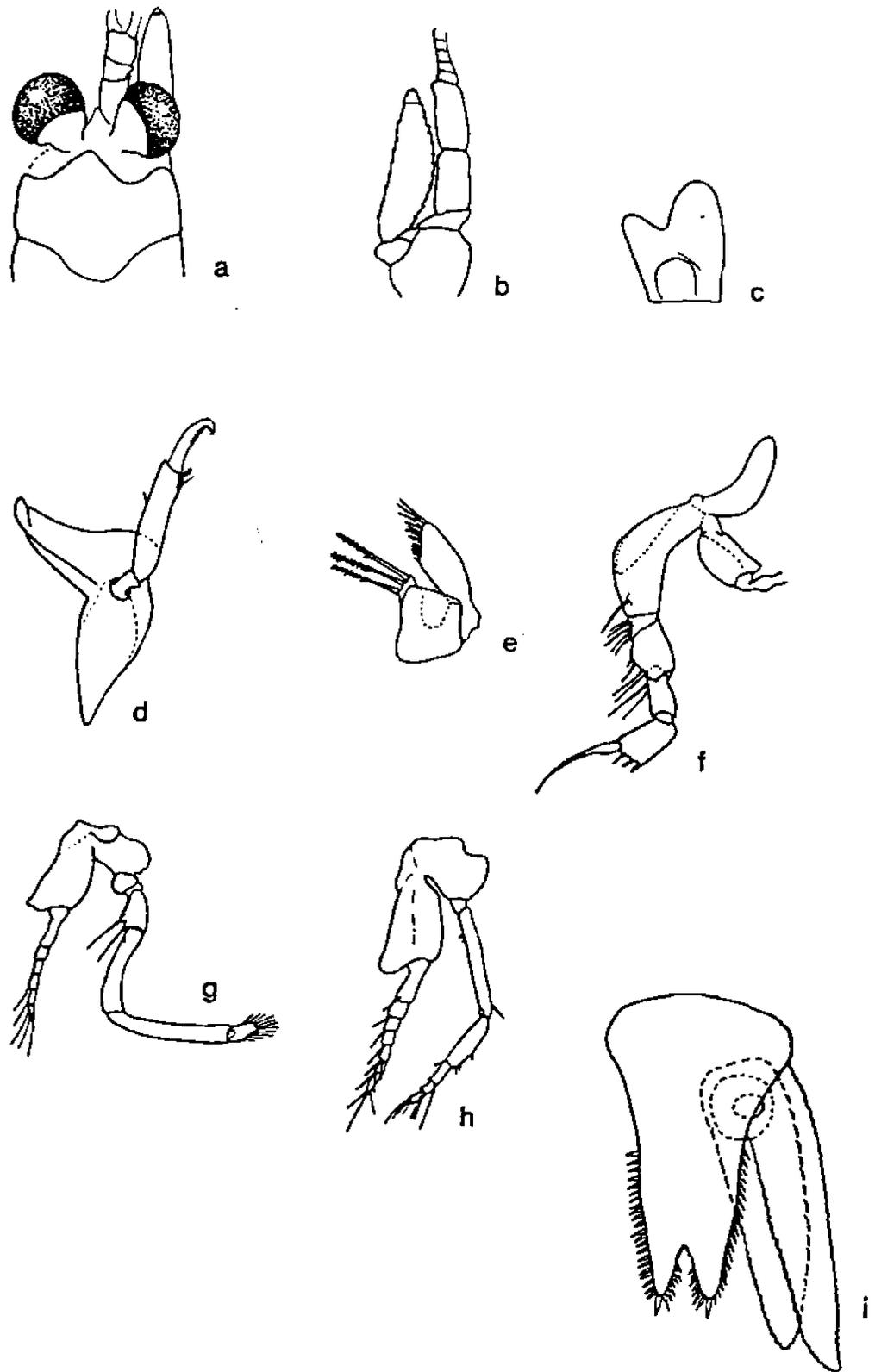
Diagnosis: Small (6-7 mm) slender mysid with large eyes, cornea occupying less than half of the whole eye. Antennal scale medium length, slender, with a distal suture. Male pleopods well developed. Telson short, linguiform with the distal half much narrower than the proximal half; apex rounded, armed with many short spines, lateral margins terminating in a spine but otherwise unarmed. Inner uropod with a row of spines from the statocyst to the tip; distal three spines large and widely separated.

Occurrence: Southern California - Imperial Beach to Dana Point to 37 meters depth. Los Angeles - L. A. Harbor (12 meters), Alamitos Bay (4 meters), Long Beach Harbor (22 meters).

Reference: Tattersall.

B-2[⊙] 7-12-83 (6)
 B-2[⊙] 10-4-83 (2)

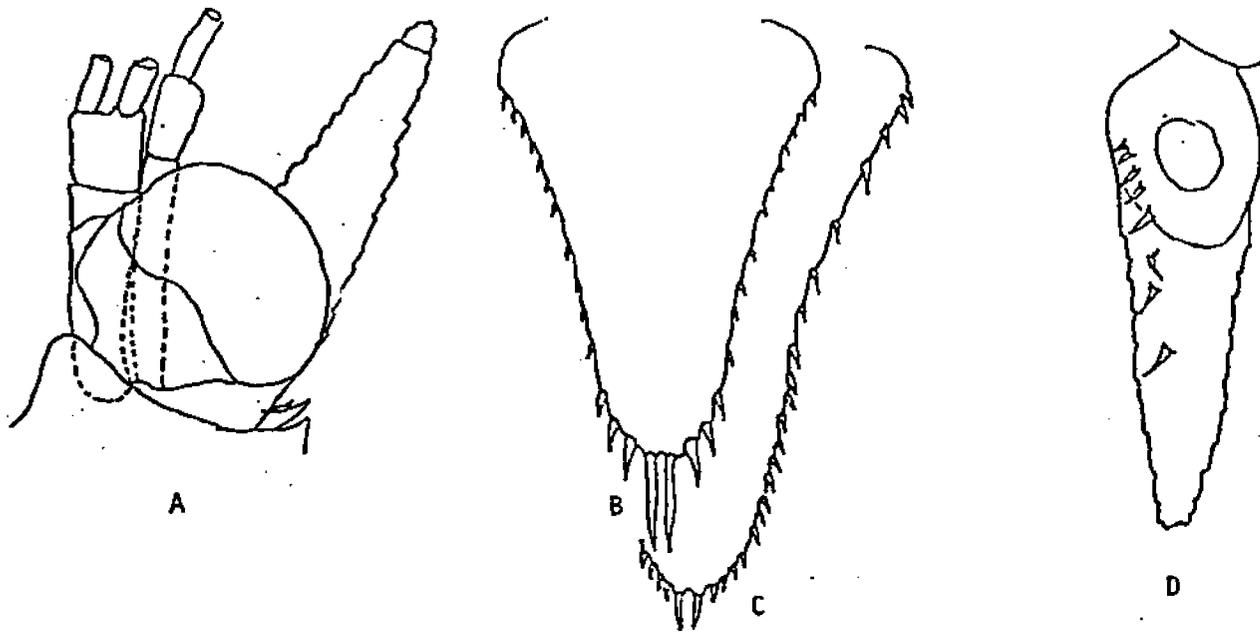
Figure 15. Metamysidopsis elongata (Holmes, 1900)
 (from Gleye, unpub.)



Mysidella americana

Figure. a. dorsal view, anterior end; b. antenna (2); c. labrum (1); d. mandible and palp (1); e. maxillule (1); f. 1st thoracopod (1); g. 2nd thoracopod (1); h. 6th thoracopod; i. uropod and telson (2).

Figure 16. *Mysidella americana* Banner, 1948
(from Kathman et al., 1986)



Mysidopsis brattegardii (Bacescu & Gleye). Fig. A. Anterior end to show rostral plate, eye, antenular peduncle, and antennal scale and peduncle (x44); B. Telson (x80); C. Margin of another telson. (x90); D. Endopod of uropod (x90). (Fig A-D after Bacescu & Gleye).

Diagnosis: Small (6-6.5 mm) mysids. Eyes large, cornea oval in lateral view. Antennal scale short, setose all around with a distal suture. Pleopods of adult male well developed. Telson linguiform, usually with 13-14 minute lateral spines and 2 strong apical spines. Seven to eight spines on the inner uropod, 4-5 on the statocyst the remaining ones occurring distally. Uropods fine, twice as long as the telson.

Note: Some specimens with aberrant telson spination have occurred.

Occurrence: Oceanside to Dana Point 75-100 meters.

Reference: Bacescu & Gleye.

Figure 17. Mysidopsis brattegardii Bacescu and Gleye, 1979
(from Gleye, unpub.)

Species: Mysidopsis californica

Museum Number: _____

Describer: Tattersall Date: 1932 Family: Mysidae

Tattersall, 1951. A review of the mysidacea of the U.S.N.M.

Source: _____

Synonymy: _____ Location: _____

Distinguishing Characteristics:

- 1. Pleopods of male well developed
- 2. Antennal scale extending one third length beyond the antennular peduncle
- 3. Telson one and three quarters as long as broad at the base, lateral margins armed with about 25 spines extending throughout margin

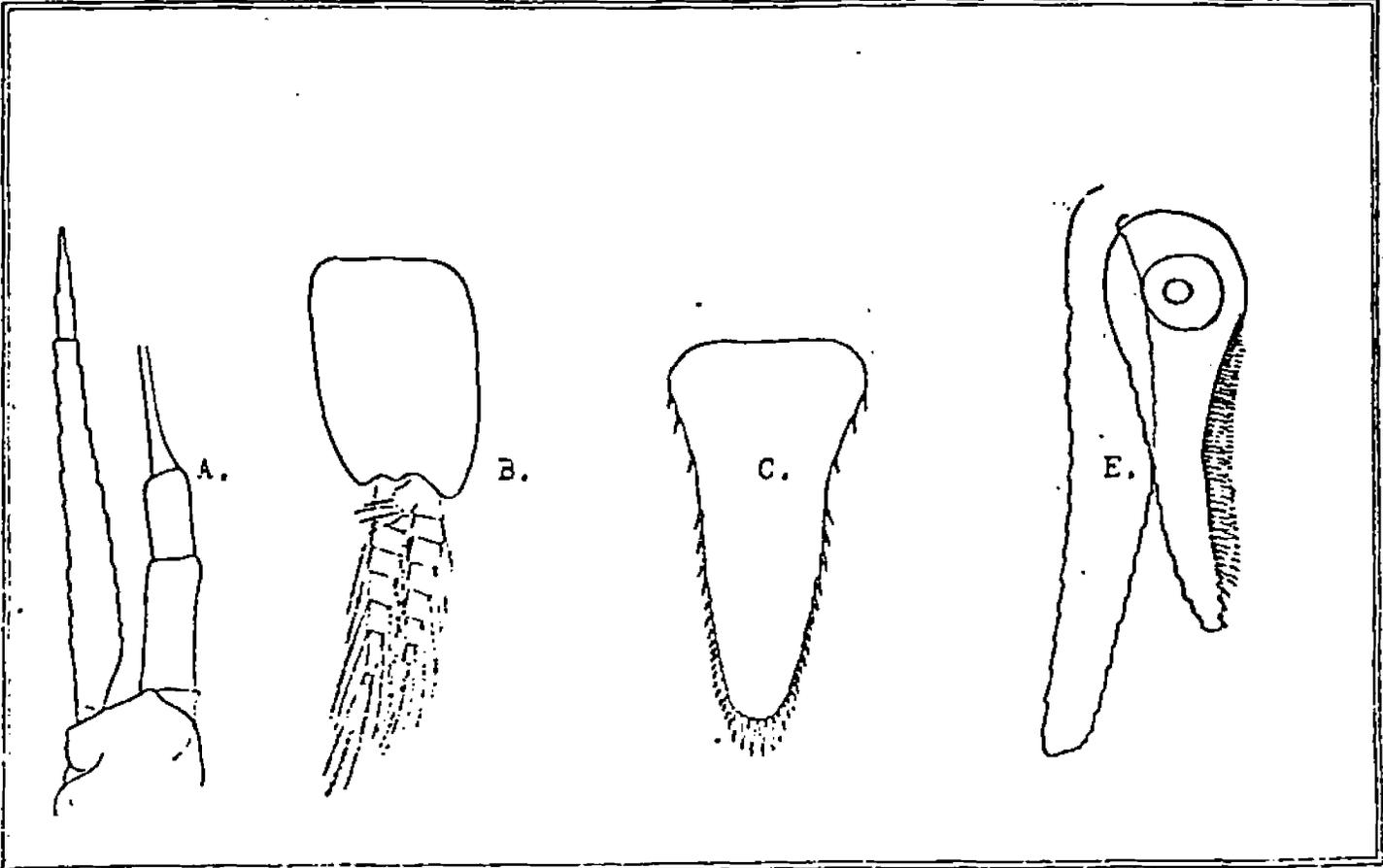


Figure 18. Mysidopsis californica W.M. Tattersall, 1932
(from MBC, unpub.)

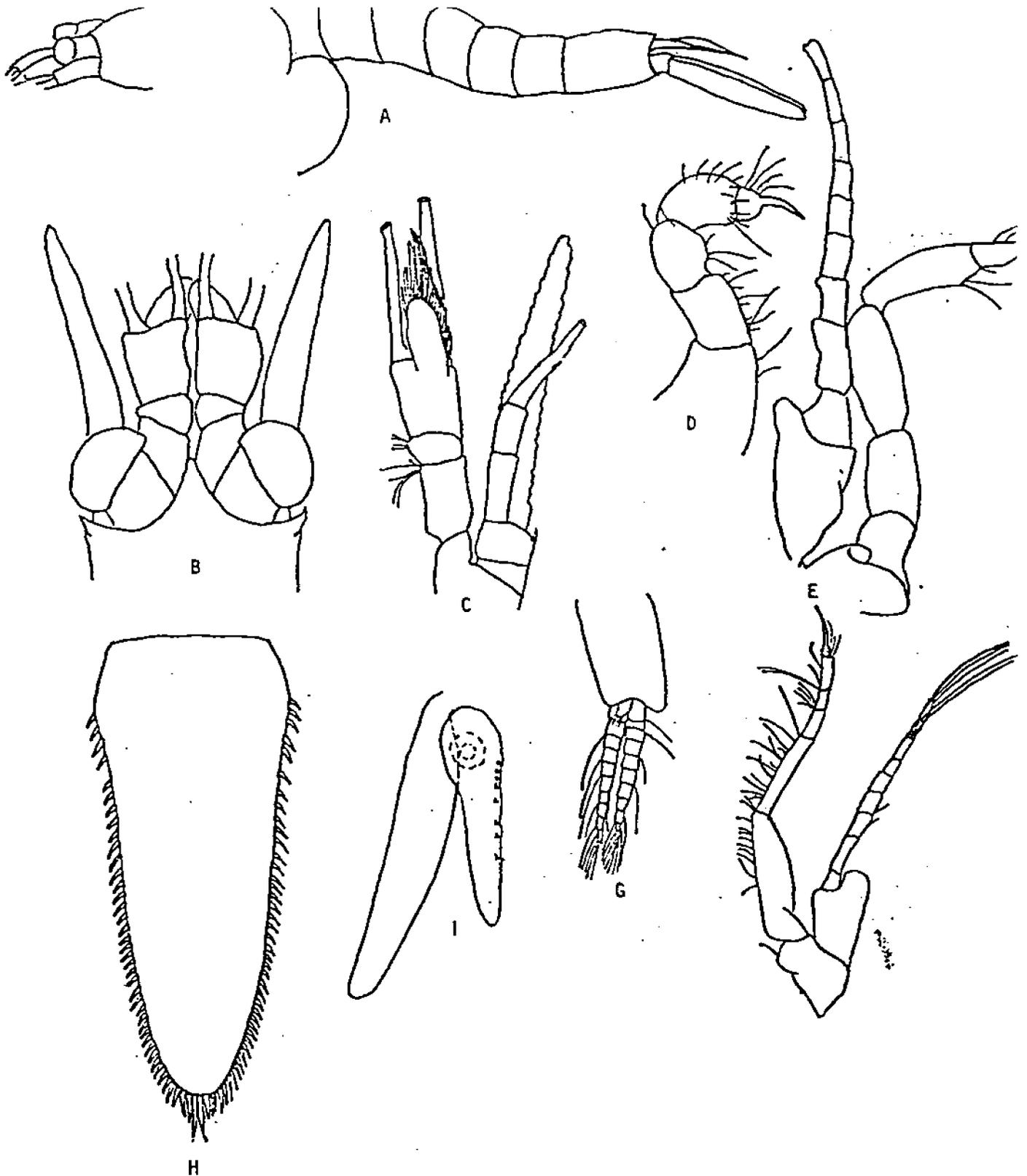
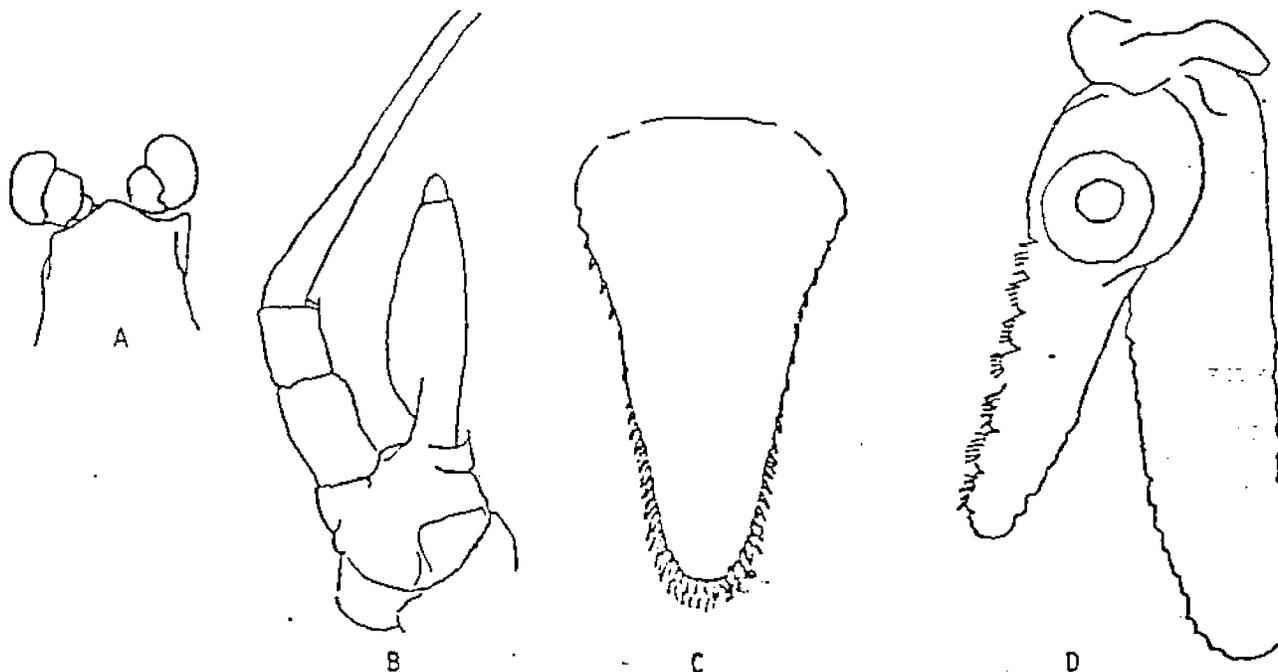


Fig. 2. *Mysidopsis cathengelae* (sp. n). A. Adult female lateral view (x12); B. Anterior end of adult male (x25); C. Antennal scale and peduncle and antennular scale with masculine lobe of adult male (x25); D. Endopod of first thoracic limb (x50); E. Endopod of second thoracic limb (x50); F. Endopod of third thoracic limb (x25); G. Fourth pleopod of adult male (x25); H. Telson (x50); I. Uropod (x25).

Figure 19. *Mysidopsis cathengelae* Gleye, 1982



Mysidopsis intii (Holmquist). Fig. A. Anterior end to show rostral plate and eyes; B. Antennal scale and peduncle; C. Telson; D. Uropod. (Fig. A-D after Holmquist, no magnification scale offered).

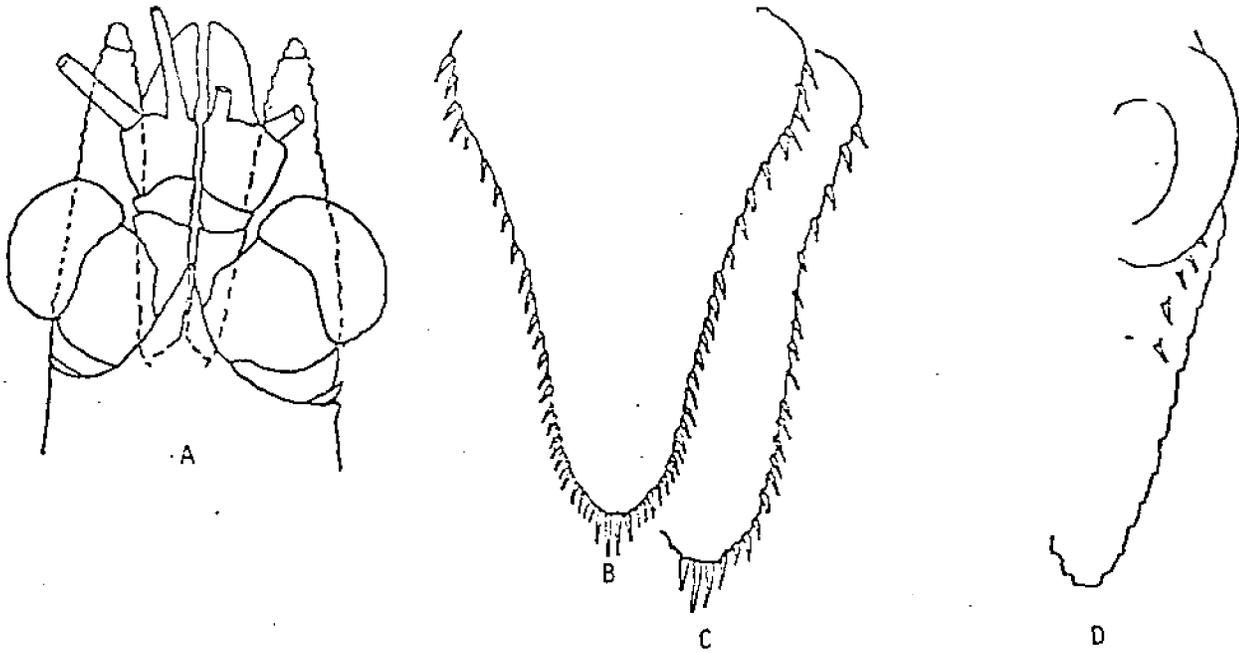
Diagnosis: Small (5 mm) stocky mysid. Eyes large, kidney shaped. Antennal scale short; setose all around, with a distal suture. Male abdominal pleopods well developed. Telson linguiform with small, sparsely spaced spines proximally. Spines increase in size and become close set distally. Apex densely armed with short heavy spines equal in length. Spines on inner uropod grouped in scallops extending from statocyst to tip.

Note: This species was originally described from samples taken along the Peruvian coast. Its appearance off Southern California brings up some interesting biogeographical questions.

Occurrence: Southern California between La Jolla and Dana Point out to 28 meters depth. Also reported in Los Angeles Harbor and Alamitos Bay.

Reference: Holmquist (1957)

Figure 20. Mysidopsis intii Holmquist, 1957
(from Gleye, unpub.)



Mysidopsis onofrensis (Bacescu & Gleye). Fig. A. Anterior end of adult male to show rostral plate, eyes, antennal scale and antennular peduncle (x35); B. Telson (♀) (x87); C. Right margin of telson (♂) (x87). D. Endopod of uropod, inside margin (x87). (Fig. A-D after Bacescu & Gleye.)

Diagnosis: Small (5.5-6.4 mm ♂♂, 4.6-6 mm ♀♀) compact mysid. Eyes cylindrical. Antennal scale short, setose all around with a distal suture. Male abdominal pleopods well developed. Uropods short, rounded; inner uropod broad with 5 spines, the first 2-3 on the stratocyst. Outer uropod only slightly longer than the inner. Telson linguiform, with small spines, slightly increasing in size distally; on the apex, 2 spines twice as large as the 2 sub apical spines (which are twice the length of the preceding lateral spines.) The number of spines on the telson differs with sex and age.

Note: The relatively short broad inner uropod is an easy clue to the identification of this species.

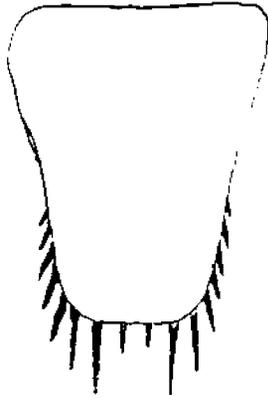
Occurrence: Oceanside to Dana Point 15 meters depth. Occurrence sporatic.

Reference: Bacescu & Gleye.

Figure 21. Mysidopsis onofrensis Bacescu and Gleye, 1979
(from Gleye, unpub.)

?Mysidopsis sp. A Phillips

Family Mysidae



telson

1. Telson short, broadly linguiform, armed with three pair apical spines, median pair short, two outer pairs about twice as long as median pair, lateral margins with 5-6 spines on the distal third of telson, length of lateral spines increases distally along margin.
2. Antennal scale with setae on both margins.
3. Eyes with well developed ommatidia.
4. Both rami of uropods with long setae along both margins.

Figure 22. ?Mysidopsis sp. A Phillips

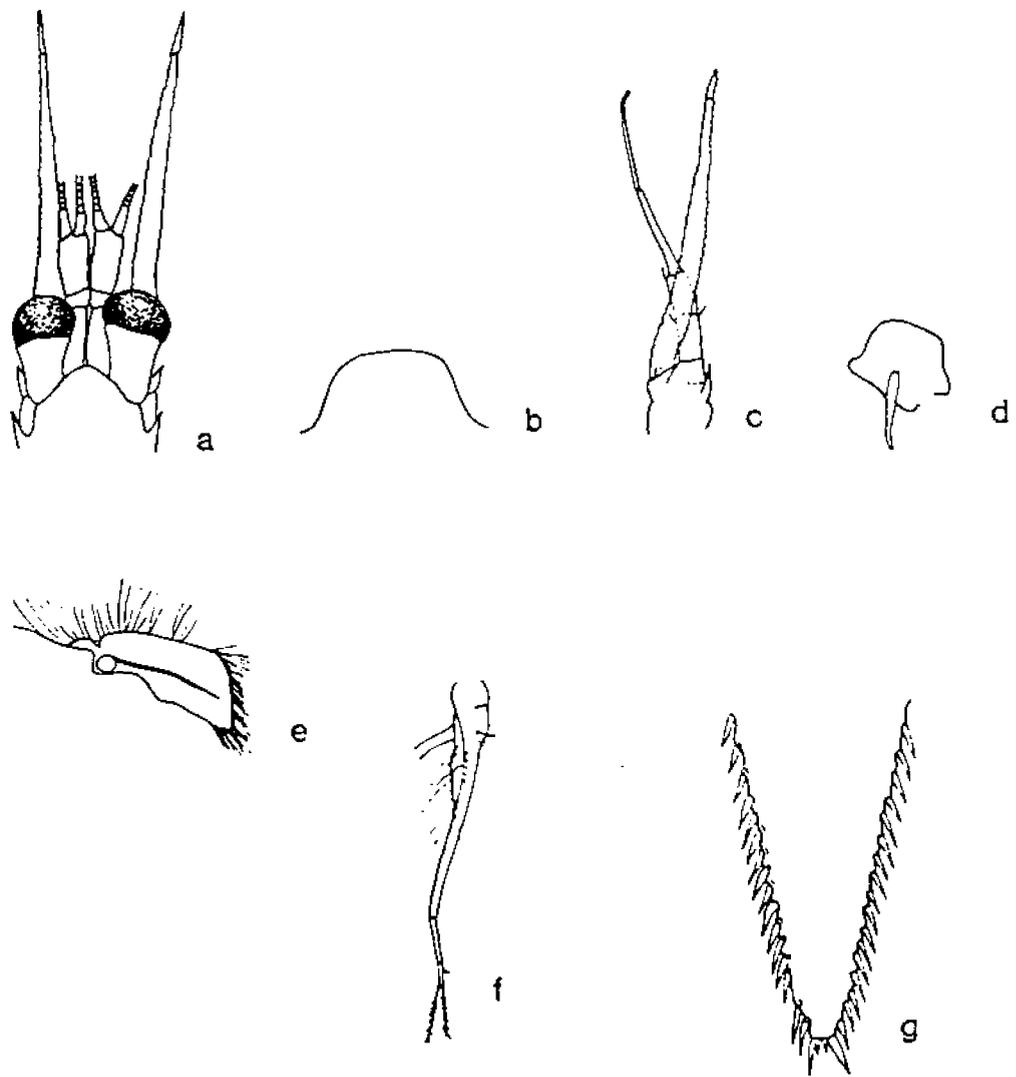


Figure. a. dorsal view, anterior end (2); b. rostrum (5); c. antenna (5); d. fingerlike process on thoracic sternum (5); e. anterior oostegite with baler (posterior lobe) (5); f. 4th male pleopod (5); g. distal half of telson (4).

Neomysis kadiakensis

Figure 23. *Neomysis kadiakensis* Ortmann, 1908

(from Kathman et al., 1986)

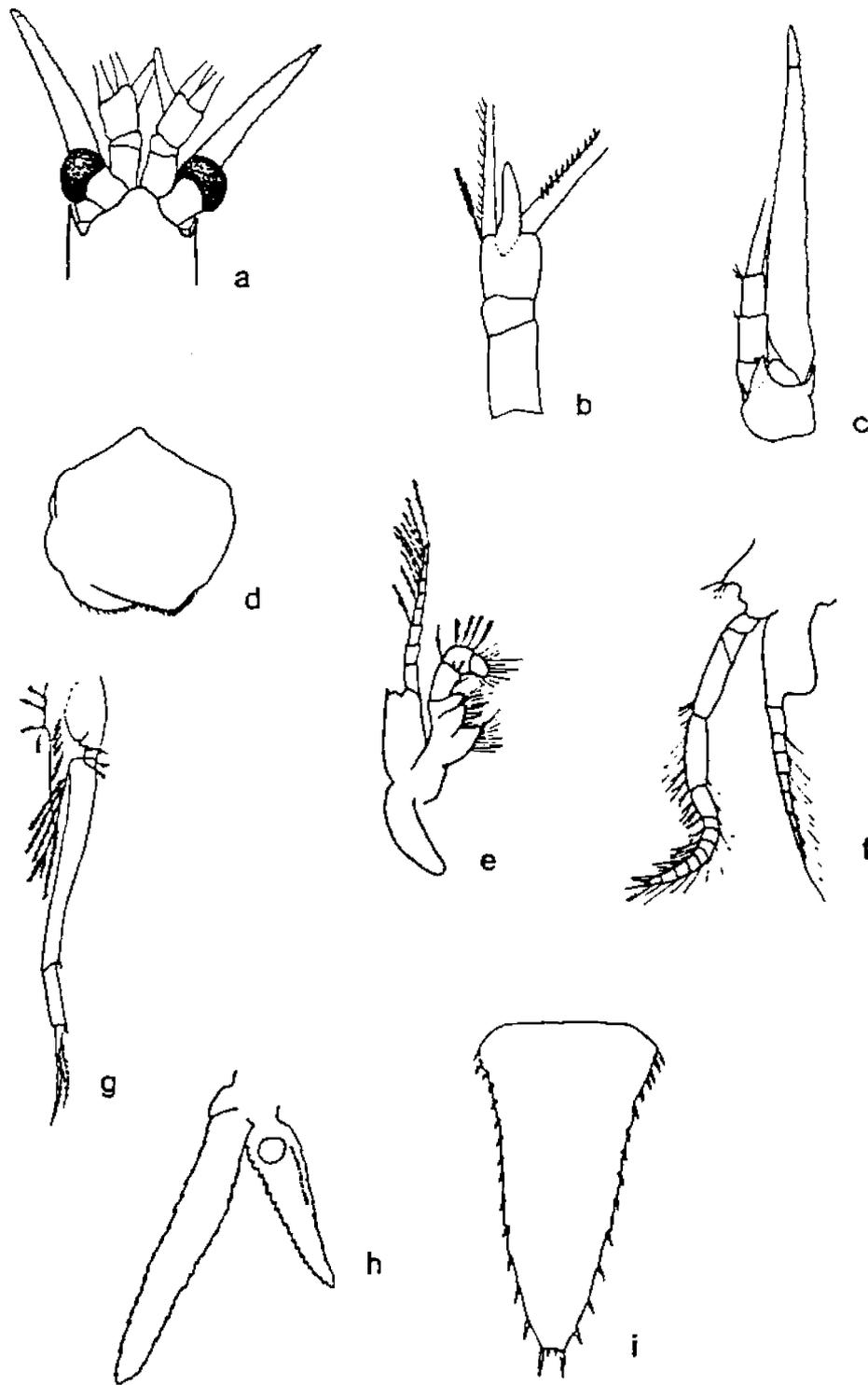
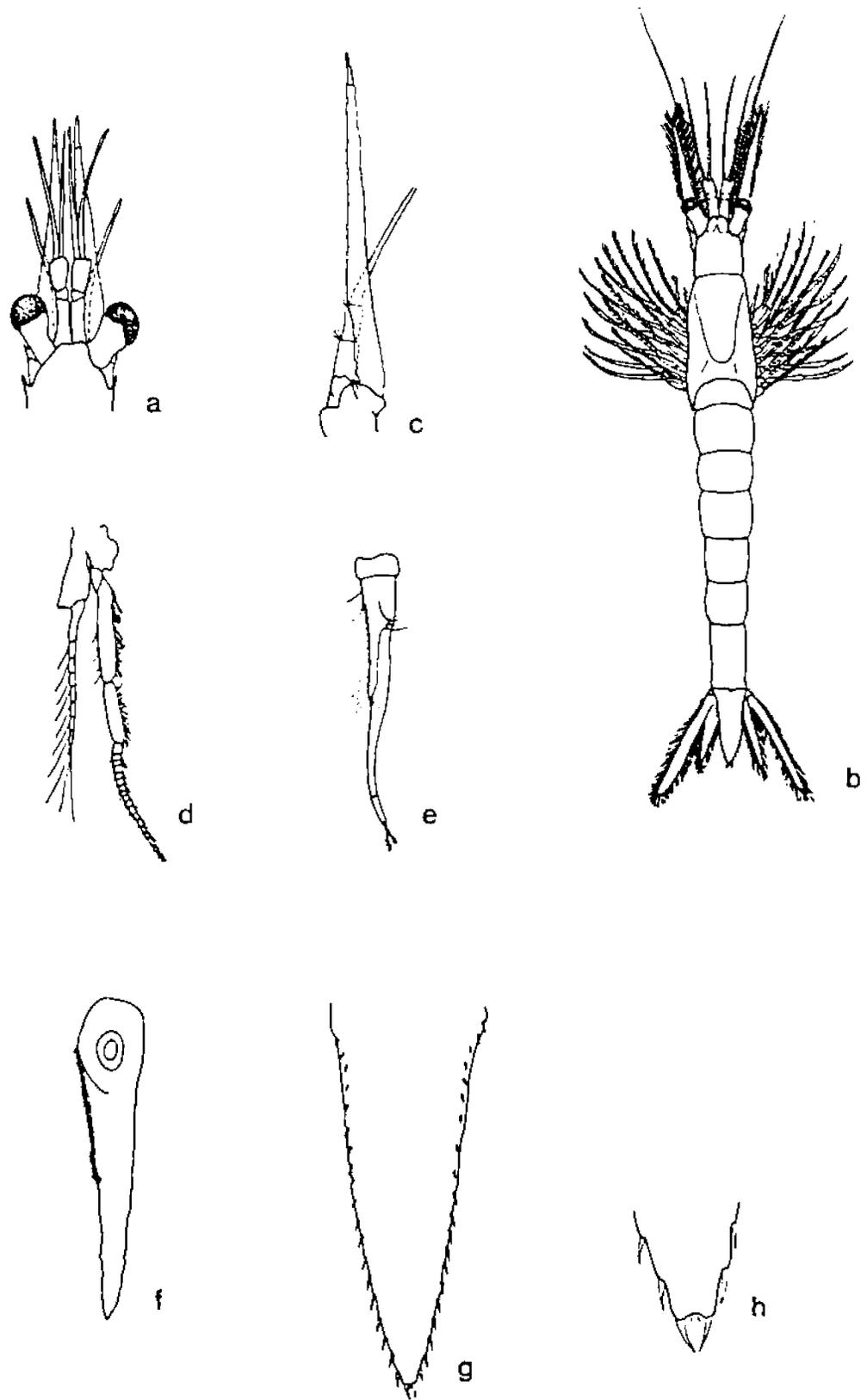


Figure. a. dorsal view, anterior end (2); b. antennular peduncle (1); c. antenna (9); d. labrum (3); e. 1st thoracopod (2); f. 4th thoracopod (2); g. 4th male pleopod (9); h. uropod (2); i. telson (9).

Neomysis mercedis

Figure 24. *Neomysis mercedis* Holmes, 1897
(from Kathman et al., 1986)



Neomysis rayi

Figure. a. dorsal view, anterior end, female (4); b. dorsal view (1); c. antenna (7); d. posterior thoracopod (4); e. 4th male pleopod (7); f. endopod of uropod (4); g. telson (7); h. telson apex (4).

Figure 25. Neomysis rayi (Murdock, 1885)
(from Kathman et al., 1986)

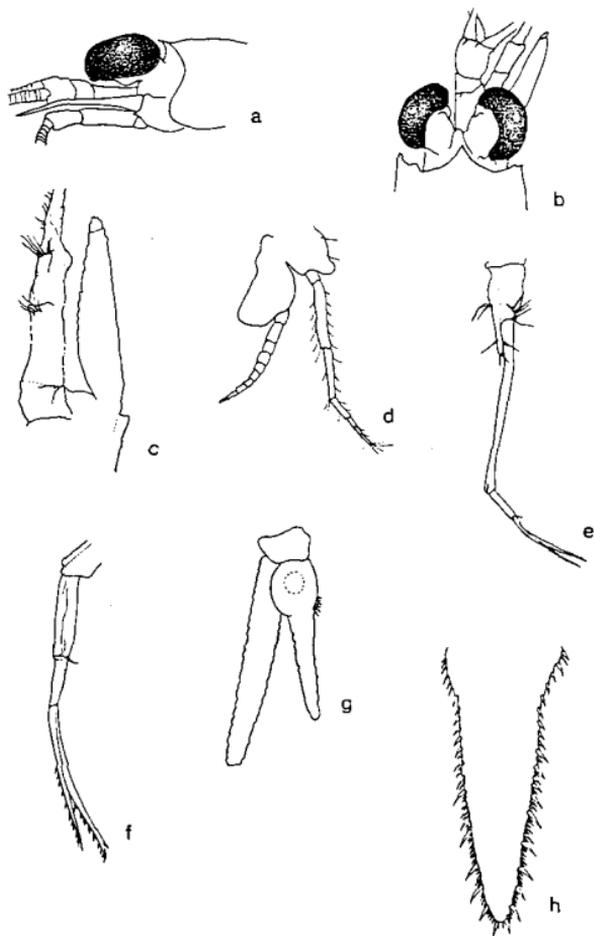


Figure. a. lateral view, anterior end (1); b. dorsal view, anterior end (1); c. antenna (3); d. 4th thoracopod (1); e. 4th male pleopod (3); f. 4th male pleopod, distal portion (3); g. uropod (1); h. telson (3).

Pacifacanthomysis nephrophthalma

Figure 26. *Pacifacanthomysis nephrophthalma* (Banner, 1948)

(from Kathman et al., 1986)

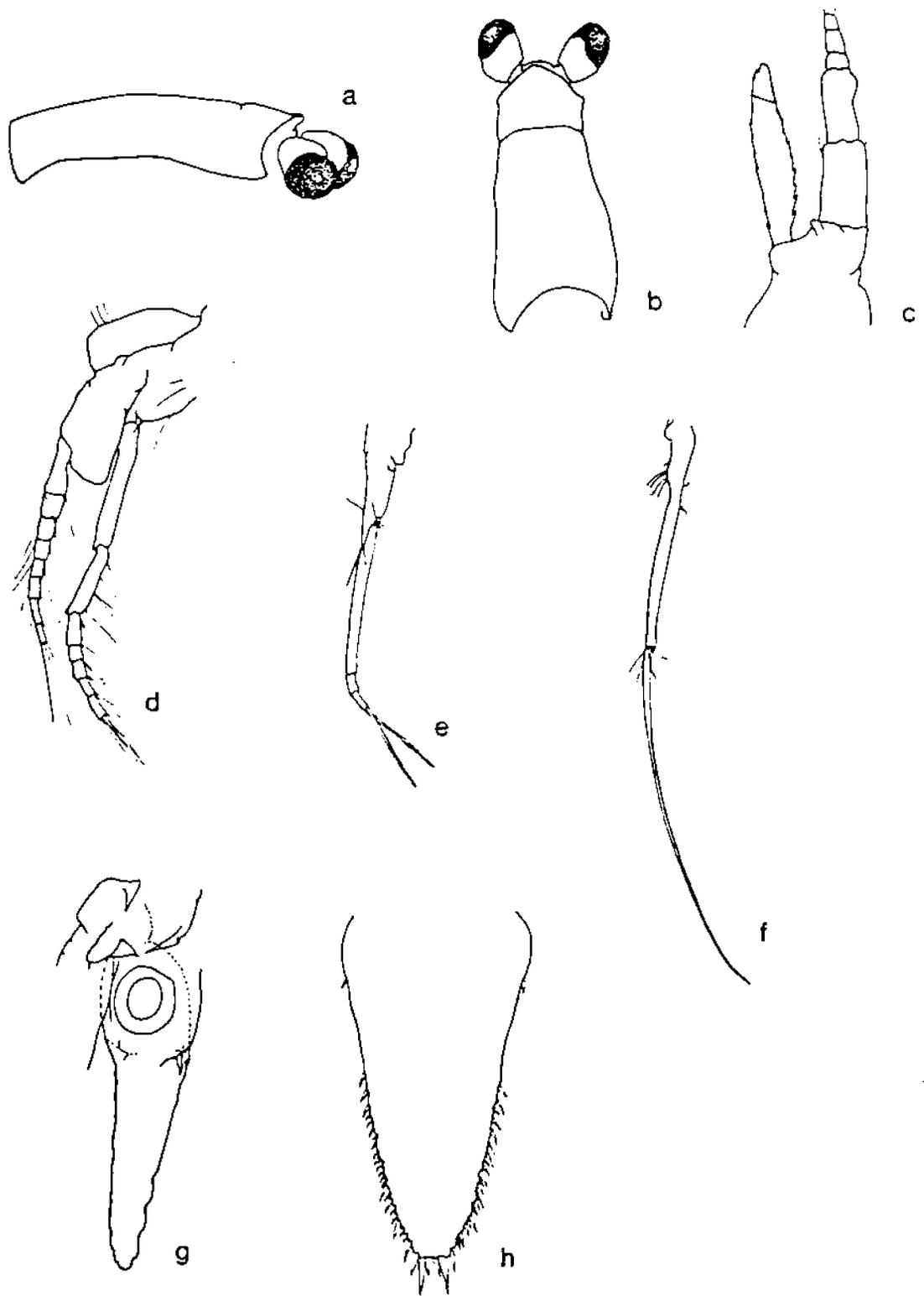
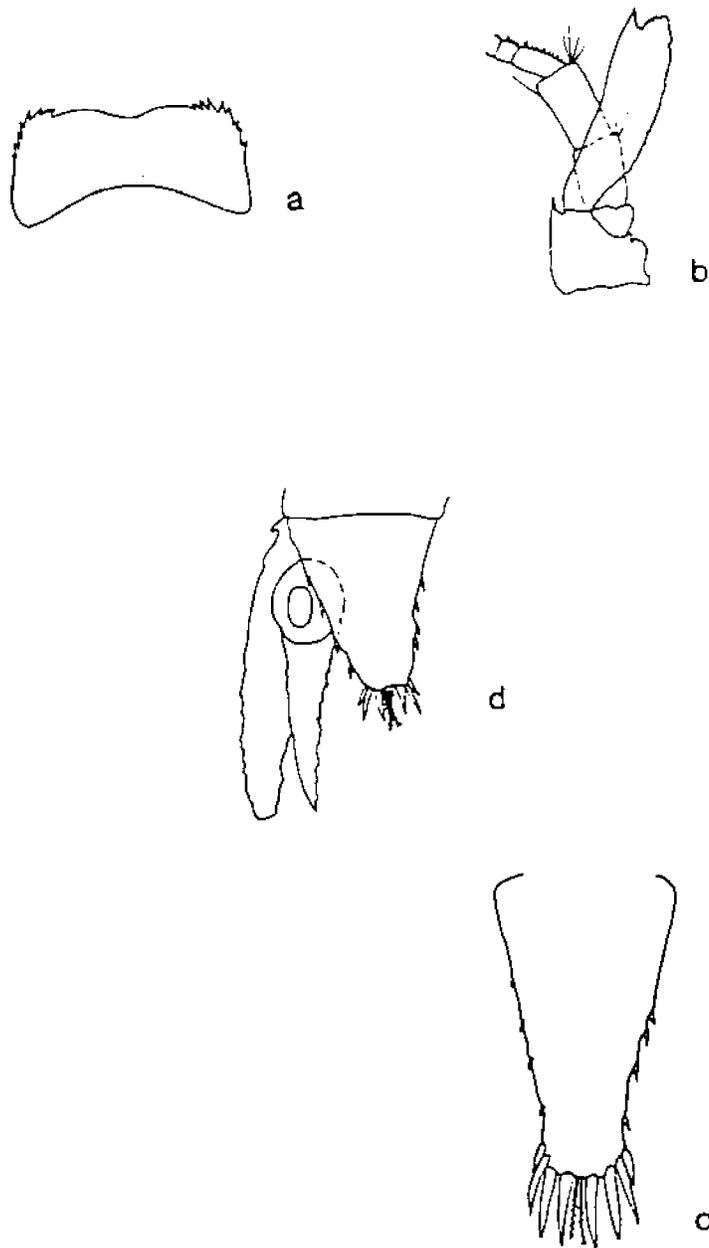


Figure. a. lateral view, anterior end (3); b. dorsal view, anterior end (3); c. antenna (1); d. 8th thoracopod (3); e. 4th male pleopod (1); f. 5th male pleopod (1); g. uropod (3); h. telson (3).

Proneomysis wailesi

Figure 27. *Proneomysis wailesi* W.M. Tattersall, 1933

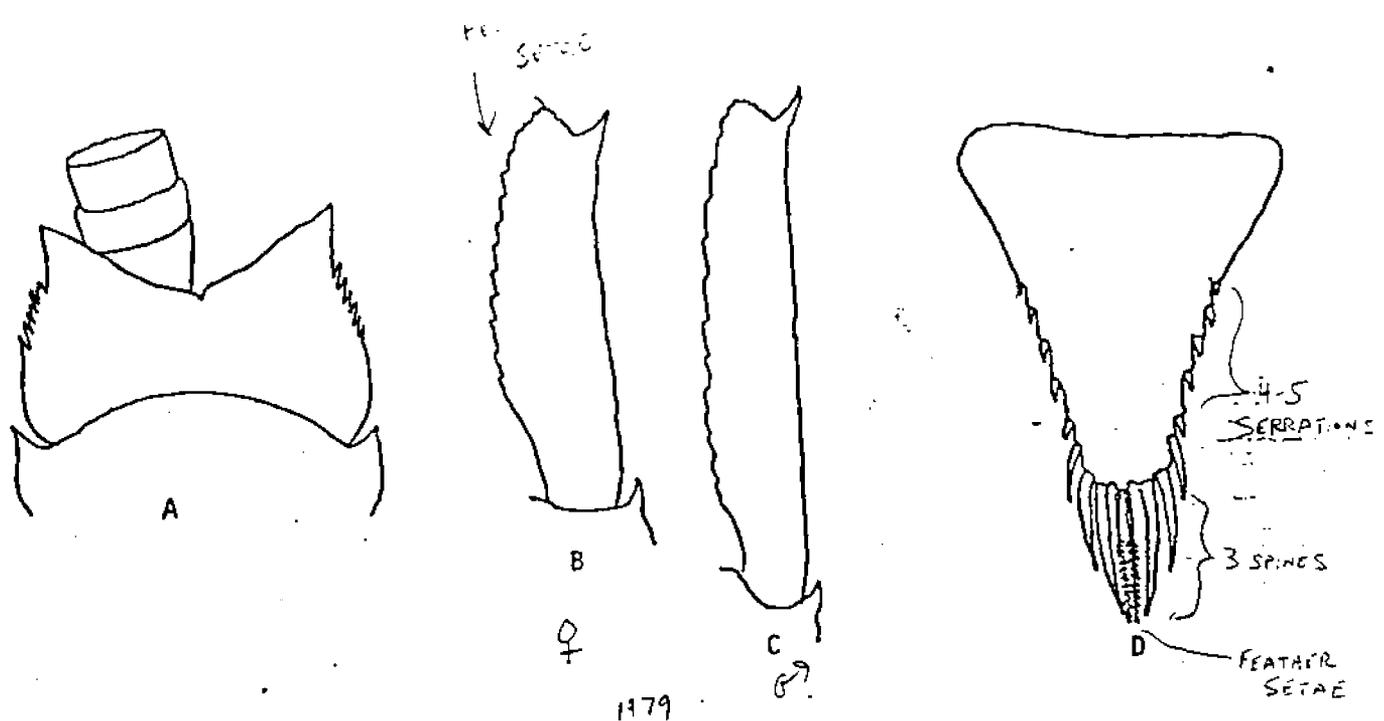
(from Kathman et al., 1986)



Pseudomma berkeleyi

Figure. a. ocular plate (1); b. antenna (1); c. telson (1); d. uropod and telson (original, but possibly not P. berkeleyi).

Figure 28. Pseudomma berkeleyi W.M. Tattersall, 1933
(from Kathman et al., 1986)



Pseudomma californica (Bacescu & Gleye). Fig. A. Anterior end to show rostral plate and ocular plate (x90); B. Antennal scale (♀) (x90); C. Antennal scale (♂) (x90); D. Telson (x45). (Fig A-D after Bacescu & Gleye).

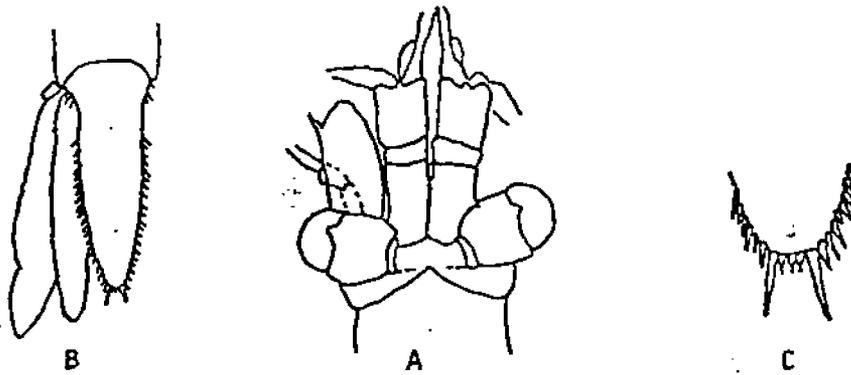
Diagnosis: Small (4-5 mm) "eyeless" mysid. Ocular plate large, with strongly serrated outer margins. Antennal scales sexually dimorphic, male scale longer and proportionately thinner. Male with well developed abdominal pleopods. Telson triangular with a pair of long apical spines and another two, shorter subapical spines. Six lateral spines increasing in length distally.

Occurrence: Southern California between Oceanside and Dana Point 75-100 meter depth.

Reference: Bacescu & Gleye.

F-2 10-4-83 LA PL VOUCHER C-117

Figure 29. Pseudomma californica Bacescu and Gleye, 1979
(from Gleye, unpub.)



Siriella pacifica (Holmes). Fig. A. Anterior end of adult male showing rostral plate, eyes, antennal scale and peduncle and antennular peduncle (x22); B. End of abdomen with telson and left uropod of male (x20); C. Distal portion of telson (x67). (Fig A-C after Tattersall).

Diagnosis: Delicate, medium sized (9mm) mysid. Eyes relatively small. Outer margin of antennal scale naked, terminating in a spine, terminal lobe broader than long. Male with well developed abdominal pleopods. Telson long and narrow, terminating in 3 small spines placed between a pair of long strong spines. Lateral margins armed with long and short spines with a bare area proximally.

Note: The telson spination of younger specimens may sometimes be confused with that of Neomysis, the antennal scale should be used as the #2 key characteristic.

Occurrence: Found in bottom nearshore samples containing kelp detritus, is considered a member of the kelp (Macrocystis) community.

Reference: Tattersall, 1951.

Figure 30. Siriella pacifica Holmes, 1900 (from Gleye, unpub.)