

Key to the Paraonidae (Annelida: Polychaeta) reported from the City of San Diego Ocean Monitoring program with description of 7 provisional species¹ (revised July, 2006)

Family Paraonidae Cerruti, 1909

Aricidea (Acmira) catherinae Laubier, 1967

Aricidea (Acmira) cerrutii Laubier, 1966

Aricidea (Acmira) horikoshii Imajima, 1973

Aricidea (Acmira) lopezi Berkeley & Berkeley, 1956

Aricidea (Acmira) rubra Hartman, 1963

Aricidea (Acmira) simplex Day, 1963

²*Aricidea (Acmira) taylori* Pettbone, 1965

Aricidea (Acmira) sp SD1 fide Barwick, 1999

³*Aricidea (Acmira) sp SD2 fide* Barwick, 2006

Aricidea (Aedicira) pacifica Hartman, 1944

Aricidea (Allia) antennata Annenkova, 1934

Aricidea (Allia) hartleyi Blake, 1996

⁴*Aricidea (Allia) monicae* Laubier, 1967

²*Aricidea (Allia) quadrilobata* Webster & Benedict, 1887

Aricidea (Allia) sp A fide SCAMIT, 1996

Aricidea (Allia) sp SD1 fide Barwick, 2000

Aricidea (Allia) sp SD2 fide Barwick, 2001 *incertae sedis* [B12(2), 17JUL01, 319 ft.]

Aricidea (Aricidea) pseudoarticulata Hobson, 1972

Aricidea (Aricidea) wassi Pettibone, 1965

Aricidea (Aricidea) sp SD1 fide Barwick, 1996

Aricidea (Aricidea) sp SD2 fide Barwick, 2001 *incertae sedis* [B'98 off Orange County, 2210, 22JUL98, 45m]

³*Aricidea (Aricidea) sp SD3 fide* Barwick, 2006 [= *Aricidea (Aricidea) longobranchiata* of CSD not Day, 1961]

Cirrophorus branchiatus Ehlers, 1908

Cirrophorus furcatus (Hartman, 1957)

Levinsenia gracilis (Tauber, 1879)

Levinsenia multibranchiata (Hartman, 1957)

Levinsenia oculata (Hartman, 1957)

Levinsenia sp SD1 fide Barwick, 2000

Paradoneis eliasoni Mackie, 1991

Paradoneis lyra (Southern, 1914)

Paradoneis spinifera (Hobson, 1972)

Paradoneis sp SD1 fide Barwick, 2000

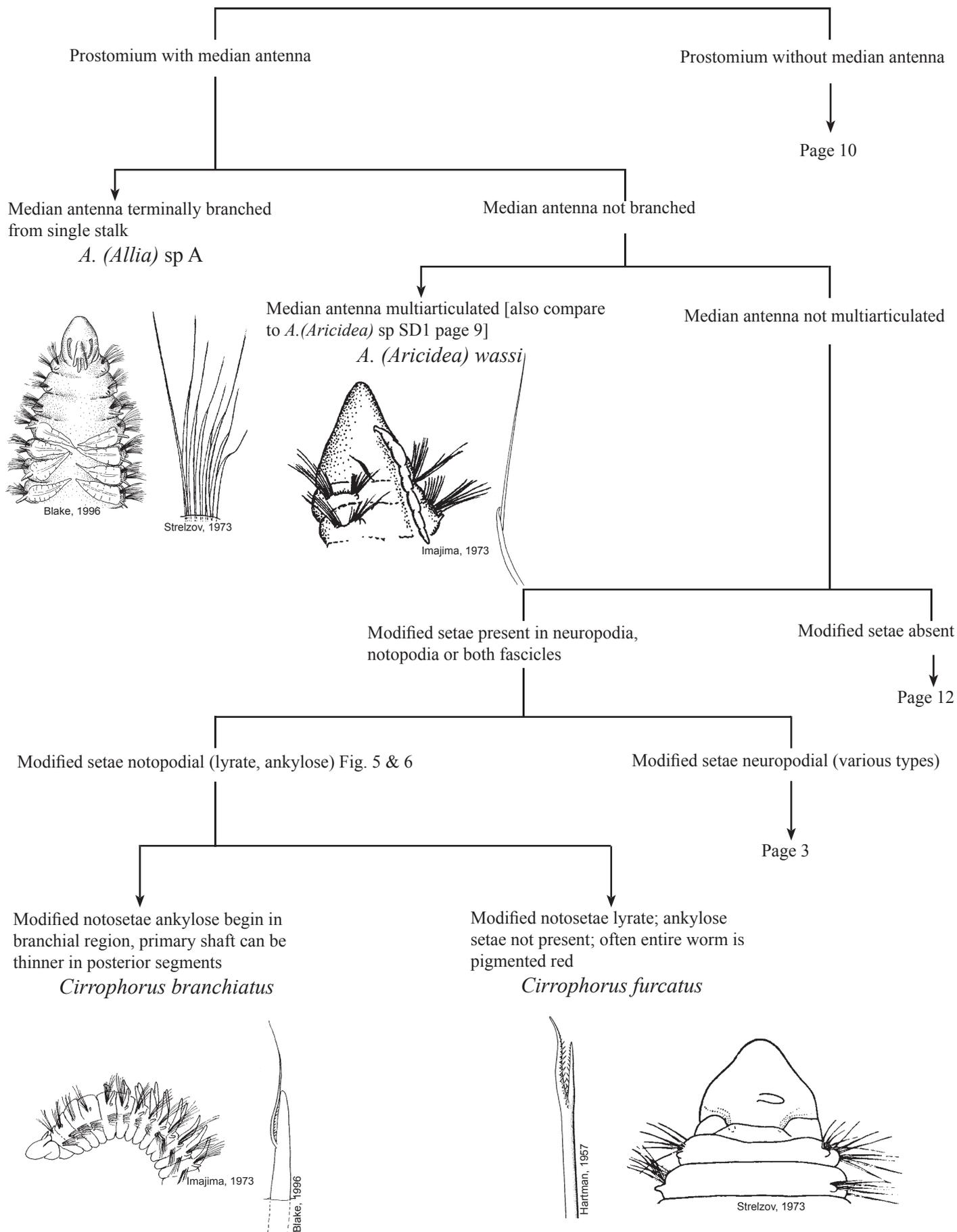
³*Paraonella platybranchia* (Hartman, 1961)

¹ Based on a draft of the "Key to the Paraonidea (Annelids: Polychaeta) reported from the Southern California shelf with description of 4 new provisional species" by Larry Lovell and Kelvin Barwick.

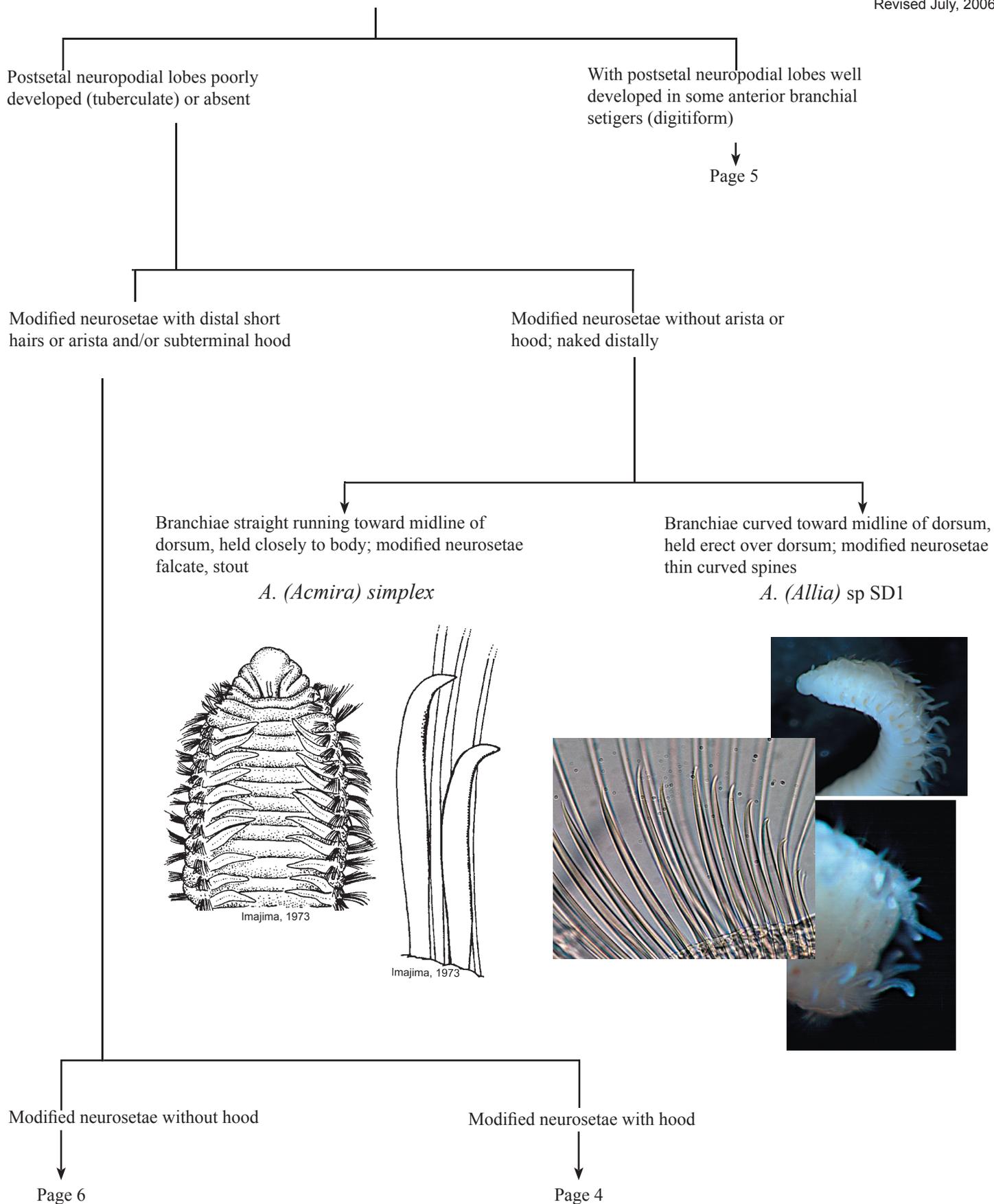
² Reported in the SCAMIT (2001) species list but not reported from the CSD program and not included in key. See Strelzov, 1973 for description.

³ Species added to July, 2006 revision.

⁴ Reported in the SCAMIT (2001) species list but not reported from the CSD program.



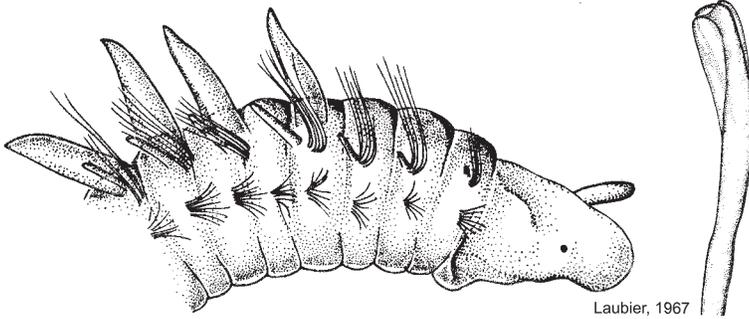
Modified setae neuropodial (various types)
[Continued from Page 2]



Modified neurosetae with hood
[Continued from Page 3]

Antenna short, digitate, not reaching past setiger 1; modified setae with subterminal hood, terminal arista absent

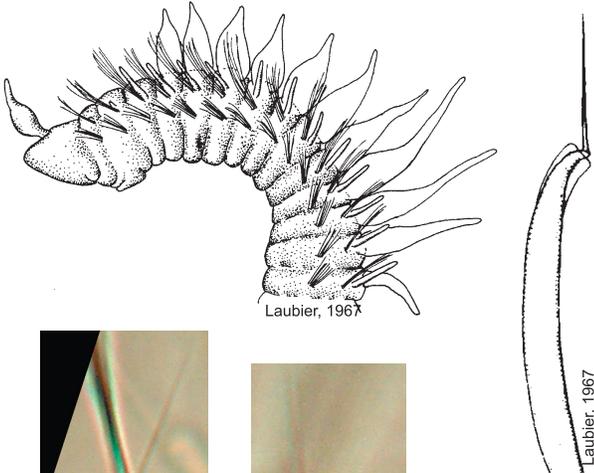
A. (Acmira) cerrutii



Antenna reaching past setiger 1, clavate or filiform; modified setae with subterminal hood and terminal arista

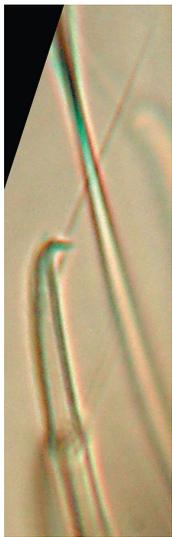
Median antenna clavate; 9 - 25 pairs of branchiae [also compare with *A. (Acmira) lopezi* page 8, Table 1]

A. (Acmira) catherinae



Antenna long, tapering reaching to setiger 3 - 4; 26 - 28 pairs of branchiae [also compare to *A. (Aricidea)* sp SD2 page 7]

A. (Aricidea) sp SD3

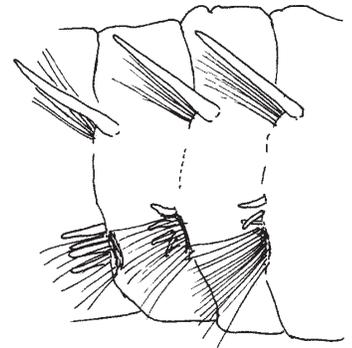
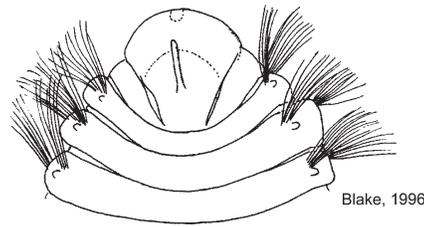


Postsetal neuropodial lobes well developed, digitiform, in
 some anterior branchial setigers
 [Continued from Page 3]

One long, digitiform postsetal neuropodial lobe
 present in some anterior setigers; median antenna
 long extending well past setiger 1

1-3 short, digitiform postsetal neuropodial lobes
 present on setigers 6-16; median antenna cirriform not
 extending past posterior margin of prostomium

A. (Allia) monicae

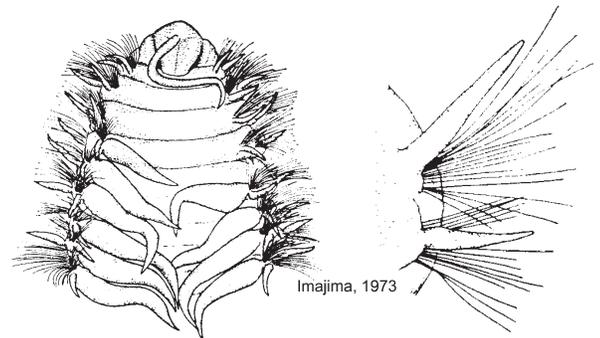
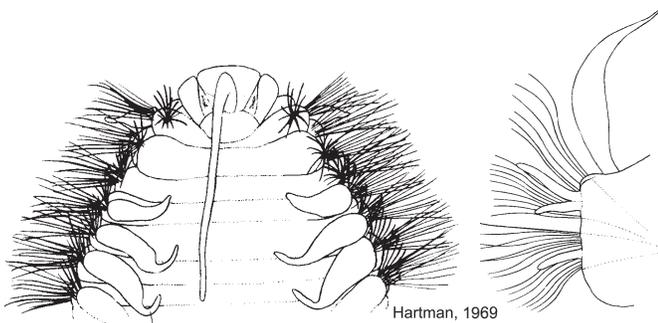


Postsetal notopodial lobes bifurcated in some anterior-
 branchial setigers; median antenna long extending to setiger
 5-9; modified notosetae bent tip acicula with or without
 terminal arista, some with fine hairs at distal end of spines

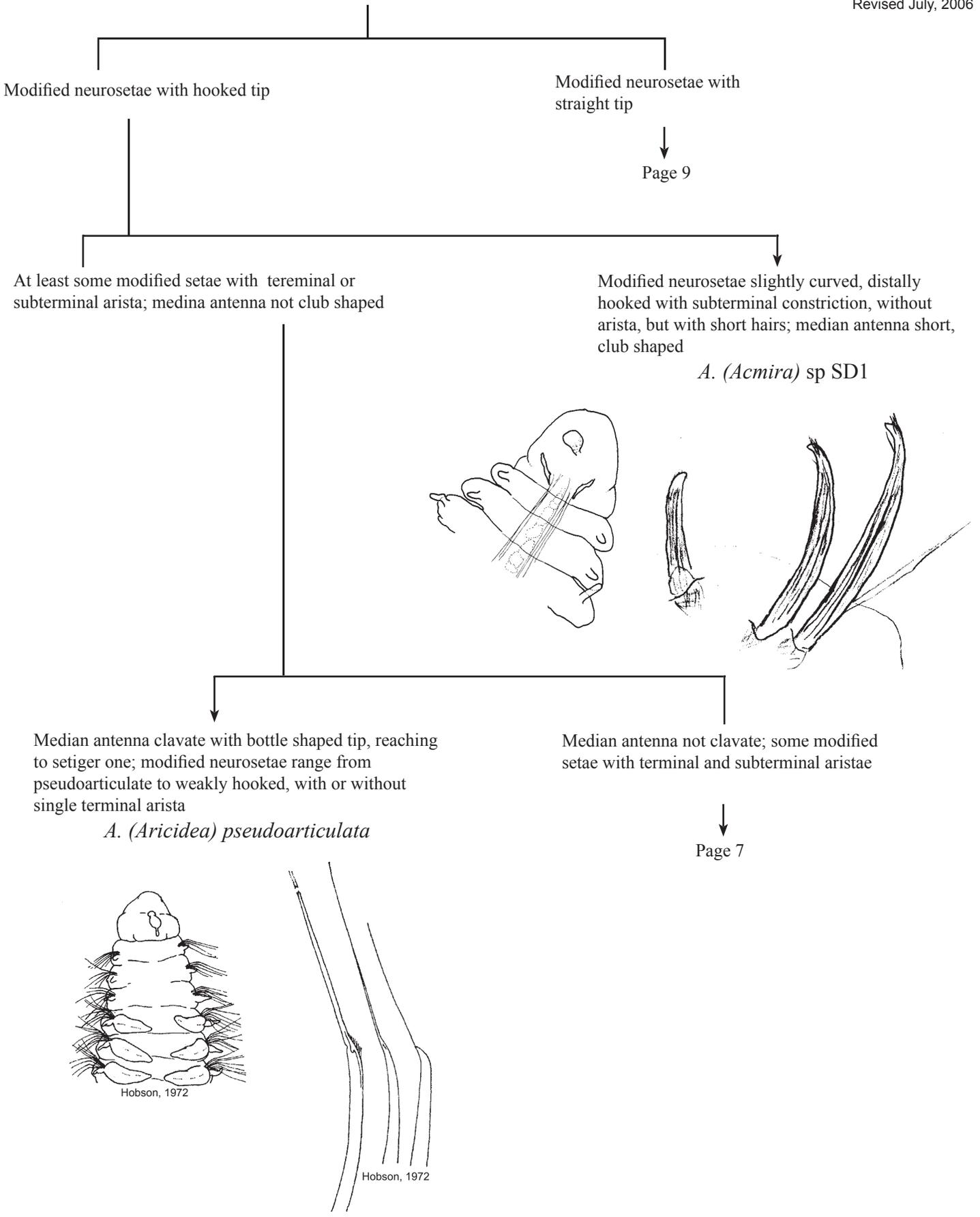
A. (Allia) antennata

Postsetal notopodial lobes not bifurcated; median antenna
 extending to setiger 4-5; modified setae with “distally
 curved tip which is covered by short cilia and has a
 narrow guard along the convex side of the shaft” (Imajima,
 1973)

A. (Acmira) horikoshii

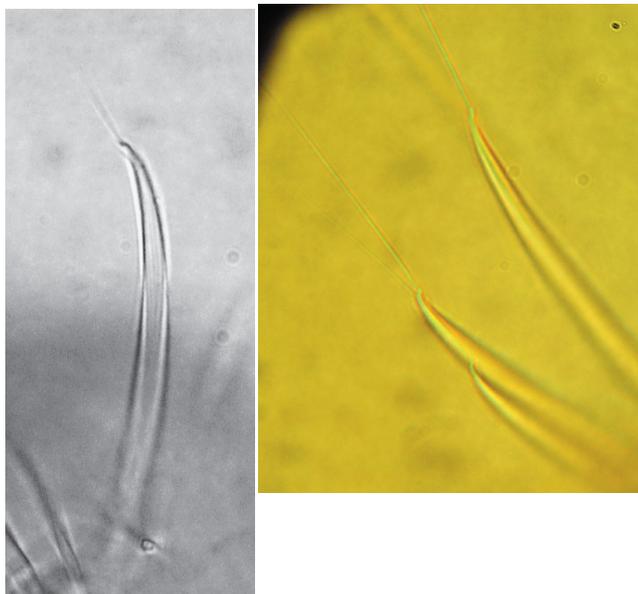
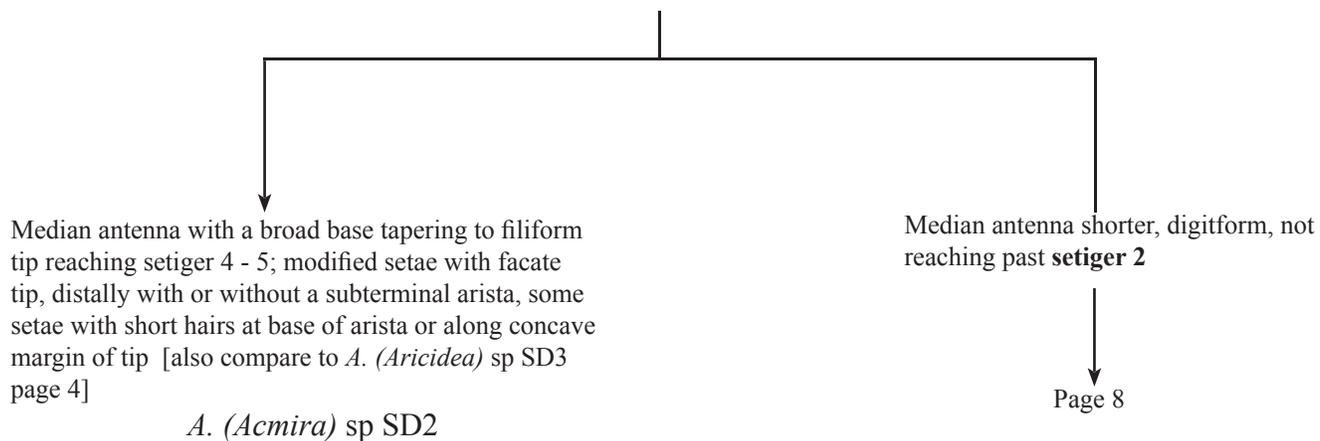


Modified neurosetae without hood
[Continued from Page 3]



Median antenna not clavate; some modified setae with subterminal arista

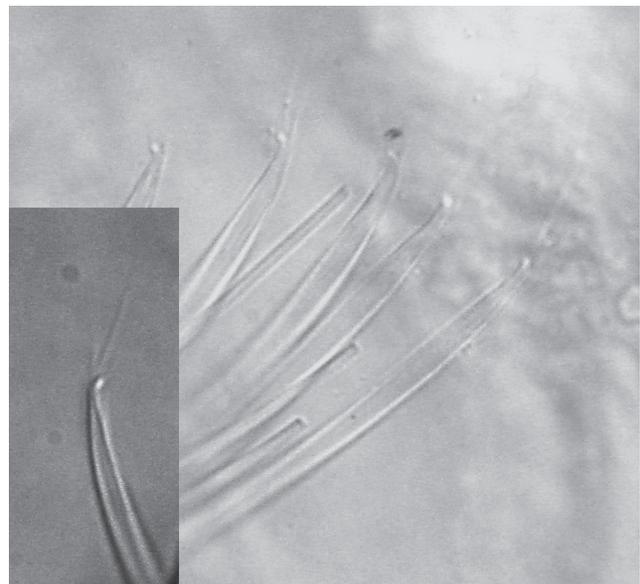
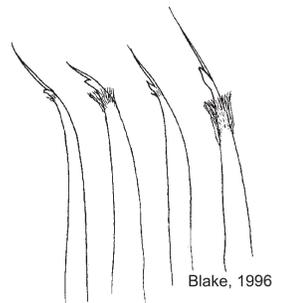
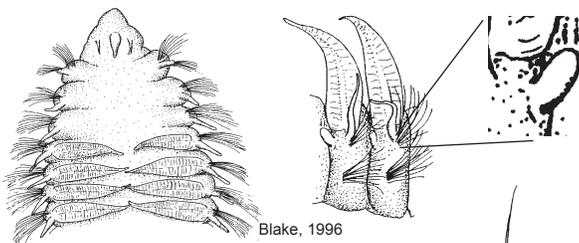
[Continued from Page 6]



Median antenna shorter, digitiform, not reaching past **setiger 2**
[Continued from Page 7]

With minute, bulbous extra papillae located dorsal to notopodial lobe in middle branchial region
A. (Acmira) rubra

Without minute, bulbous extra papillae in middle branchial region [also compare with *A. (Acmira) catherinae* page 4, Table 1]
A. (Acmira) lopezi



Modified neurosetae with straight tip
[Continued from Page 6]

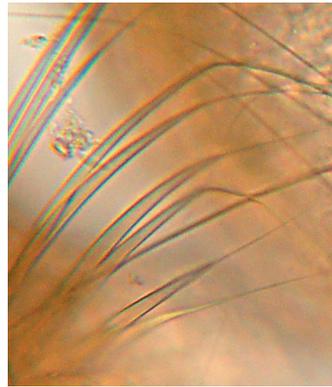
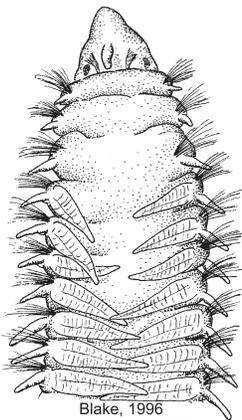
Modified neurosetae of one
type in a single fascicle

Modified neurosetae of
two types in a single
fascicle

Take to specialist for further ID

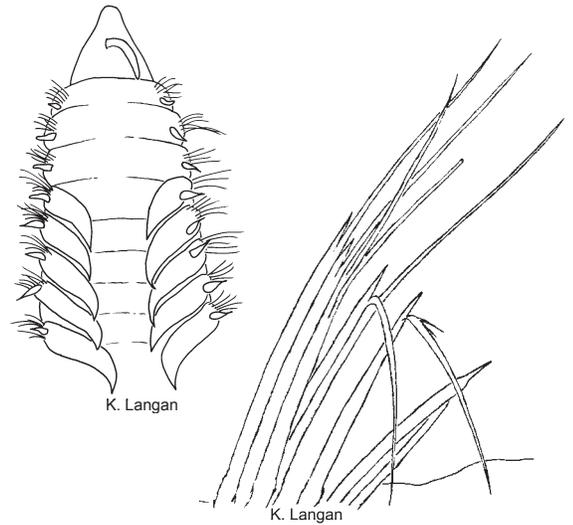
Each modified setae with terminal arista only (maybe worn or
absent); inserted late in the post branchial region (setiger 45 - 50);
median antenna short, blunt; 11 - 13 pairs of branchiae

A. (Allia) hartleyi



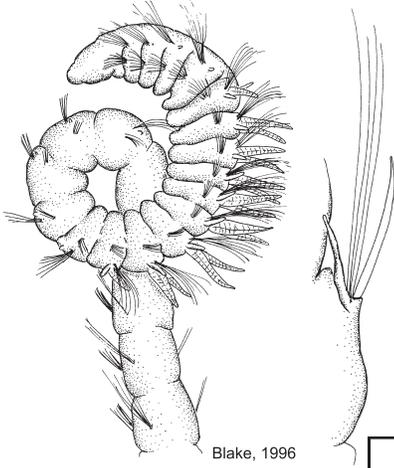
Each modified seta with subterminal arista; median
antenna filiform, reaching to setiger 1; 18-33 pairs
of branchiae [also compare to *A. (Aricidea) wassi*
page 2]

A. (Aricidea) sp SD1



Modified notopodial setae consist of a single curve spine in mid-body notopodia; up to 4 spines per fascicle in more posterior setigers

Paradoneis spinifera



Modified notopodial setae lyriform or absent

Modified notosetae present, lyriform

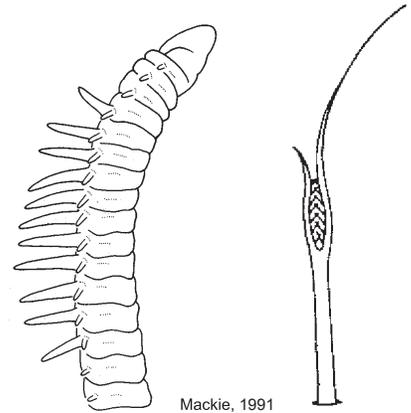
Modified notosetae absent

Page 11

One or more spines in some posterior neuropodia

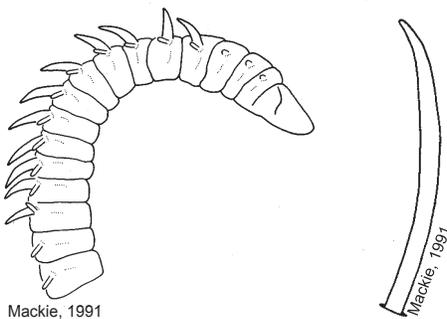
Acicular spines absent in all posterior setigers, modified setae lyrate (entire specimen necessary fo specific ID)

Paradoneis lyra



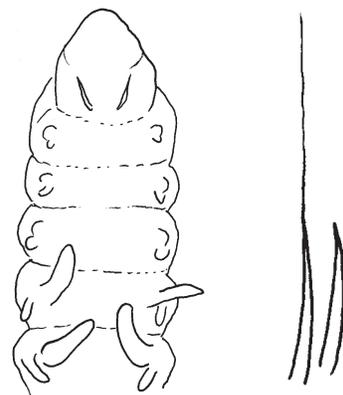
Single curved spines present in some posterior neuropodia, no terminal arista

Paradoneis eliasoni



Multiple curved spine present in some posterior neuropodia, many with a terminal arista

Paradoneis sp SD1



Modified notosetae absent
[Continued from Page 10]

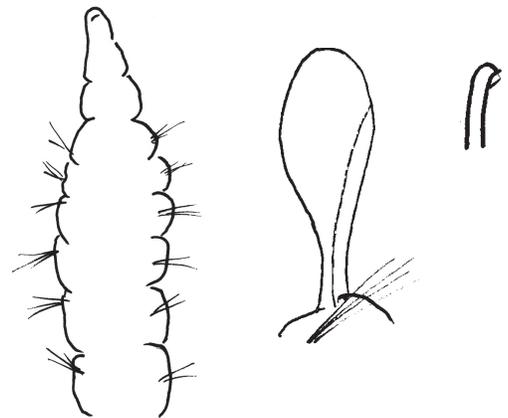
Branchiae long and filiform
Levinsenia multibranchiata



Branchiae short

Modified neurosetae
without hood

Modified neurosetae with strongly curved tips with
subterminal hood; first 4-5 setigers slightly more
inflated than subsequent setigers; branchiae spatulate
Levinsenia sp. SD1

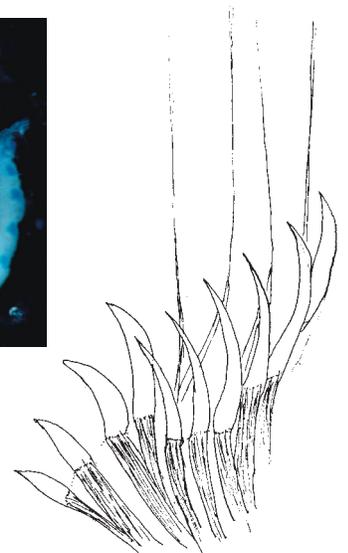


Stout curved neuropodial spines in a single row
and of one type, stout curved; body without methyl
green lateral spots postbranchially
Levinsenia gracilis



stout curved and slender, tapered neuropodial sin
spines; with methyl green stain spots on postbranchial
setigers

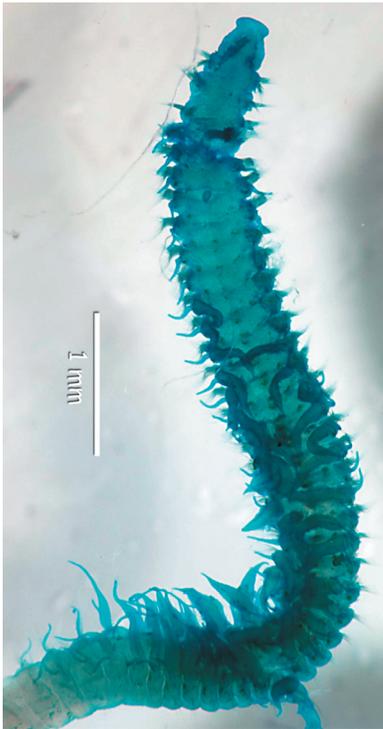
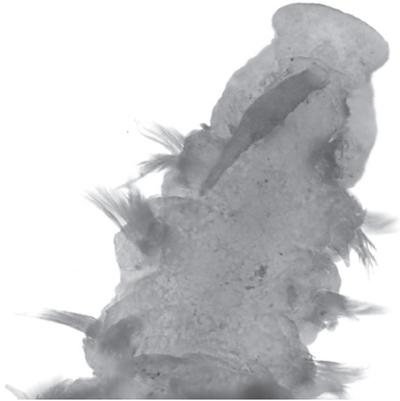
Levinsenia oculata



Modified setae absent
[Continued from Page 2]

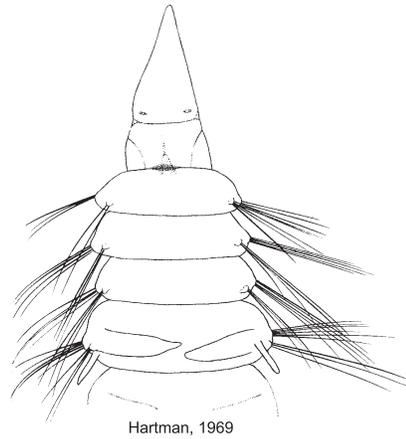
Prostomium truncate external laterally, median antenna extending to setiger 2 - 4; 30-66+ branchial pairs; last few pairs with broad base tapering to long filiform tip

A. (Aedicira) pacifica



Prolonged, conical prostomium conical; median antenna absent; 25 - 29 branchial pairs; branchiae broad, flat, and distally pointed

Paraonella platybranchia



Literature Cited

- Blake, J. A. 1996. Chapter 2. Family Paraonidae Cerruti, 1909. pp 81-223 In: Blake, J. A., Brigitte Hilbig, and Paul H. Scott (eds). Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and Western Santa Barbara Channel. Vol. 6, The Annelida Part 3. Polychaeta: Orbiniidae to Cossuridae. 418pp.
- Blake, J. A. & C. P. Walton. 1977. New specie and records of Polychaeta from the Gulf of Farallones, California. In: Reish, D. J. and K. Fauchald (eds). Essays on the Polychaetous Annelids in Memory of Dr. Olga Hartman. Allan Hancock Foundation Publication, pp 307-321.
- Day, J. H. 1961. The Polychaet Fauna of South Africa. Part 6. Sedentary species dredged off Cape Coasts with a few new records from the shore. Journal of the Linnean Society of London, Vol. 44(299). pp. 463-560
- Hartman, O. 1957. Orbiniidae, Apistobranchidae, Paraonidae and Longosomidae. Allan Hancock Pacific Expeditions 15(3):211-293, plates 20-44, 1 chart.
- Hartman, O. 1969. Atlas of Sedentariate Polychaetous Annelids from California. Allan Hancock Foundation, University of Southern California, Los Angeles, 812pp.
- Hobson, K. D. 1972. Two new species and two new records of the Family Paraonidae (Annelida, Polychaeta) from the northeastern Pacific Ocean. Proceedings of the Biological Society of Washington 85: 549-556.
- Imajima, M. 1973. Paraonidae (Polychaeta) from Japan. Bull. Natn. Mus. Tokyo, 15(2):253-292.
- Laubier, L. 1967. Sur Quelques *Aricidea* (Polycètes, Paraonidae) de Banyuls-sur-mer. Vie et Mileu, séries A: Biologie Marine, 18(1A):99-132.
- Mackie, A. S. Y. 1991. *Paradoneis eliasoni* sp. nov. (Polychaeta, Paraonidae) from northern European waters, with a redescription of *Pardoneis lyra* (Southern, 1914). Ophelia supplement 5:147-155.
- SCAMIT, 2001. A Taxonomic Listing of Soft Bottom Macro- and Megainvertebrates from Infaunal & Epifaunal Monitoring Programs in the Southern California Bight, Edtition 4. 192pp.
- Strelzov, V. E. 1973. Polychaet Worms of the Family Paraonidae Cerruti, 1909 (Polychaeta, Sedentaria) (English translation) Amerind Publishing Co., New Delhi, 212pp.

Table 1 - Additional characters for separating *Aricidea (Acмира) catherinae* from *A.(A.) lopezi* (Pesonal communication L. Lovell March 7, 2006)

Character	<i>catherinae</i>	<i>lopezi</i>
Relative length of branchiae	Increases toward posterior	Subequal through out
Antennae length	Reaching to setiger 1- 3	Reaching to just past setiger 1*
Modified neurosetae shape and arrangement	Individual setae more curved in ventral part fascicle	No change in setal shape trough out fascicle
Modified neurosetae number per fascicle	9-10	7-8

* I t was incorrectly drawn in MMS Atlas (Vol. 6, Fig. 2.15A, pg. 58). Larry has seen the type. This is the same image used in the in-house key.

City Of San Diego Voucher Sheet

Species: *Aricidea (Acmira)* sp SD1

Authority: Barwick, 1999

Common Synonyms:

None known

Taxon: Polychaeta: Paraonidae

Date: May 1999 (2nd revision April 2006)

By: K. Barwick

Voucher Specimen(s):

Station	Date	Depth	Storage Location/#
2518	7/23/98	112m	Bight' 98 / 981119
2472	7/22/98	25m	CSD / P-70

Full Description: (14 specimens examined, one entire)

- Antenna short, does not reach past posterior of prostomium; club shaped (Fig. 2 & 4)
- 12 pairs of branchiae; start on setiger 4
- Branchiae with broad base, tapering to filiform tips; last two pairs much reduced in size with the last pair being smallest (Fig. 2)
- Prostomium rounded, triangular with nuchal slits present; pigment present on some specimens (Fig. 4)
- Postsetal notopodial lobes present from setiger one, start as short and tuberculate; transition through branchial region to filiform in the postbranchial setigers
- No postsetal neuropodial lobes
- Modified postbranchial neuropodial setae with a slight curve and distal hook; slight constriction and short hairs distally (Fig. 1)
- Pygidium with two filamentous anal cirri (Fig. 5)
- Rust colored pigment on most animals (often faded to light speckling) (Fig. 3)

Illustrations: (K. Barwick)

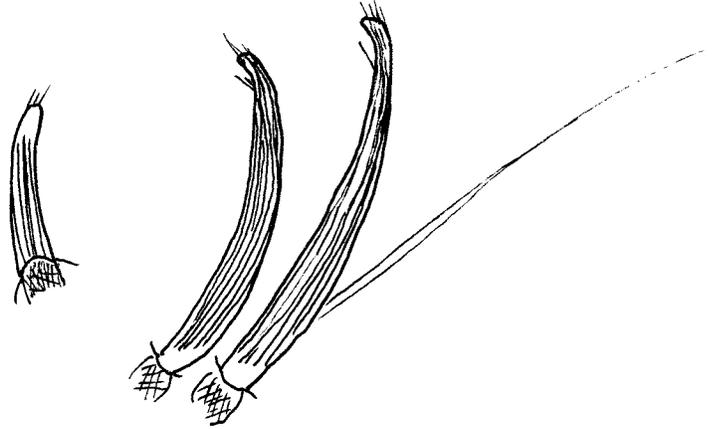


Fig 1 Modified postbranchial neurosetae 1000x



Fig 2 Lateral view of anterior end showing median antenna and branchiae (Bight'98/981119)

additional images on 2nd page

Comments:

The modified setae most closely resemble *Aricidea (Acesta) finitima* Strelzov, 1973 (pg. 113, fig. 41e & f). Also see figure 2-36c in Gaston, 1984. This species has been synonymized with *Aricidea (Acmira) rubra* Hartman, 1963 (Blake, 1996). The median antenna of *Aricidea (Acmira)* sp. SD1 is shorter than the median antenna of *Aricidea (Acmira) rubra*. *A. (Acmira)* sp. SD1 has considerably fewer pairs of branchiae and has at least some pigment in preservation. The specimens examined also lack the "extra papilla located dorsal to the podial lobe." described for *A. (Acmira) rubra* by Blake (1996).

Distribution:

Only known from voucher locations (see above). Stations are located east and south of Santa Cruz Island.

Additional Illustrations: (K. Barwick)



Fig. 3 Anterior A. Dorsal view B. Ventral view (CSD/P-70)

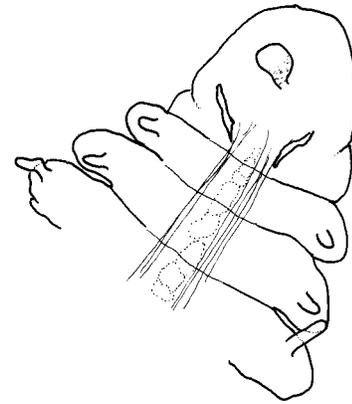


Fig. 4 Prostomium dorsal view

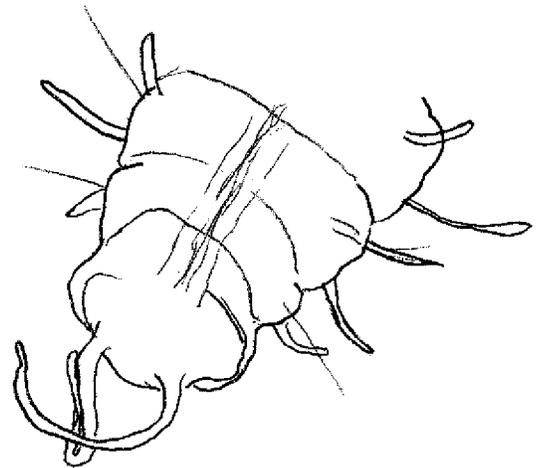


Fig. 5 Pygidium

Literature Cited:

- Blake, J. A., 1996. Chapter 2. Family Paraonidae Cerruti, 1909. Pp. 27-70 IN: Taxonomic Atlas of the Santa Maria Basin and Western Santa Barbara Channel. J. A. Blake, B. Hilbig and P. H. Scott, (eds). Santa Barbara Museum of Natural History. Vol. 6, The Annelida Part 3. Polychaeta: Orbiniidae to Cossuridae. 418pp.
- Gaston, G. R. 1984. Chapter 2. Family Paraonidae Cerruti, 1909. IN: Taxonomic Guide to the Polychaetes of the Northern Gulf of Mexico. J. Ubelacker and P. Johnson (eds). U.S. Department of the Interior, Minerals Management Service. 53pp.
- Strelzov, V. E. 1973. Polychaete Worms of the Family Paraonidae Cerruti, 1909 (Polychaeta, Sedentaria). (English translation). Amerind Publishing Co. Pvt. Ltd., New Delhi. 212pp.

City Of San Diego Voucher Sheet

Species: *Aricidea (Acmira)* sp SD2

Authority: Barwick, 2006

Common Synonyms:

None known

Taxon: Polychaeta: Paraonidae

Date: April 2006

By: K. Barwick

Voucher Specimen(s):

Station	Date	Depth	Storage Location/#
DS1(0.5mm fraction)	25APR03	508 m	CSD/TBA
DB14	24OCT06	508 m	CSD/TBA

Full Description: (3 incomplete specimens examined)

- Antenna reaching to setiger 4 - 5; slightly clavate with long filiform tip (Fig 1A)
- 17 - 19 pairs of branchiae; start on setiger 4
- Branchiae with broad base, tapering to long filiform tips on posterior branchial setigers; second to last branchia longest, nearly twice the length of the anterior most (Fig 1C & 2)
- Prostomium triangular, rounded terminally, dorsum of prostomium with nuchal slits anterior to lateral eyespots near posterior margin (Fig 1A)
- Postsetal notopodial lobes present from setiger one, start as tuberculate; transition through branchial region to filiform in the postbranchial setigers
- No postsetal neuropodial lobes
- Modified postbranchial neuropodial setae with falcate tip, distally with or without a subterminal arista, some with short hairs at base of arista or along the concave margin of the tip(Fig 1B & 3)
- Pygidium unknown
- Body of two specimens with light speckling of pigment on lateral edge of each parapod, on edges of each branchia and the anterior dorsum of branchial region (Fig 2)

Illustrations: (K. Barwick)

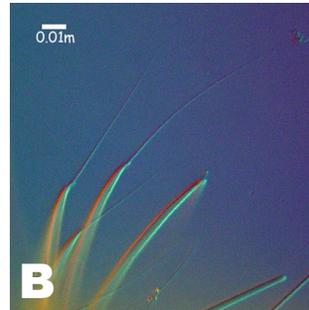


Fig 1 A. Prostomium dorsal view, B. modified postbranchial neurosetae C. Anterior dorsum Scale bar = 1 mm (Specimen from DB14)

additional images on 2nd page

Comments:

The anterior of *A. (A.)* sp SD1 most closely resembles the illustration of the holotype *A. (Acmira) lopezi* in Blake (1996) (Fig. 2.15A). However L. Lovell states that he has seen the type for *A. lopezi* and the actual antenna is much shorter, reaching only to setiger one (personal communication March, 2006). The modified setae can be confused with *A. (Acmira) catherinae* and *A. lopezi*. The actual morphology of the setae is difficult to resolve, exactly. The limited records of *A. (A.)* sp SD2 are from over 500 meters depth and the unique combination of characters warrant erecting this provisional..

Distribution:

Only known from voucher locations (see above). 500+ meters.

Additional Illustrations: (K. Barwick)



Fig. 2 A. Anterior ventrum, B. Anterior dorsum (Specimen from DS1)

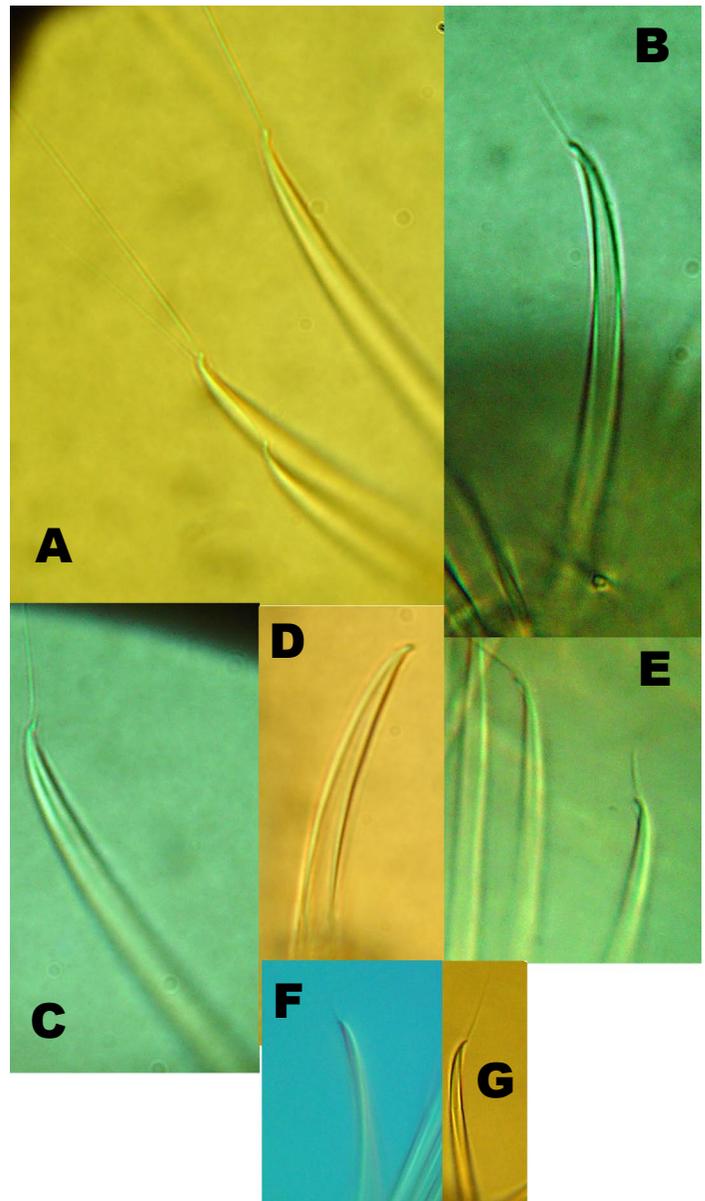


Fig. 3 Modified postbranchial neurosetae 1000x (A,B & E. Station DS1; C,D, F & G Station DB14)

Literature Cited:

Blake, J. A., 1996. Chapter 2. Family Paraonidae Cerruti, 1909. Pp. 27-70 IN: Taxonomic Atlas of the Santa Maria Basin and Western Santa Barbara Channel. J. A. Blake, B. Hilbig and P. H. Scott, (eds). Santa Barbara Museum of Natural History. Vol. 6, The Annelida Part 3. Polychaeta: Orbiniidae to Cossuridae. 418pp.

City of San Diego Provisional Voucher Sheet

Species: *Arcidea (Allia)* sp SD1

Authority: Barwick, 2000

Common Synonyms:

Allia sp SD1

Taxon: Polychaeta: Paraonidae

Date: April 5, 2000 (Revised April, 2006)

By: K. Barwick

Voucher Specimen(s):

Station	Date	Storage Location/#
ITP I6(1) (87 ft.)	1/12/96	DLZ/TA
Pt. Loma A14(5) (150 ft.)	10/24/89	Main/TBA
Pt. Loma A12(2) (165 ft.)	1/26/90	Main/TBA

Full Description: (based on examination of 4 incomplete specimens)

- 1 Prostomium rounded, smaller in diameter than succeeding segments, giving it a slight shrunken look in some specimens (Fig. 1)
- 2 Median antenna present, short blunt, club shaped, does not reach to setiger 1 (Fig. 1)
- 3 Branchiae begin on setiger 4; 23–27 pairs, filiform, recurved up over dorsum, the tips pointed laterally (Fig. 2)
- 4 Some neurosetae modified in posterior of animal, short curved setae with sharp tips (Fig. 4) mixed with capillaries (Fig. 3 & 5)
- 5 Postsetal notopodial lobes short, digitiform in prebranchial segments to filiform in branchial region and, finally, thin, threadlike in the postbranchial region

Illustrations: (K. Barwick)



Fig. 1 — Dorsal-lateral view of the anterior (R. Rowe)



Fig. 2 — Dorsal view of median branchial setigers (R. Rowe)

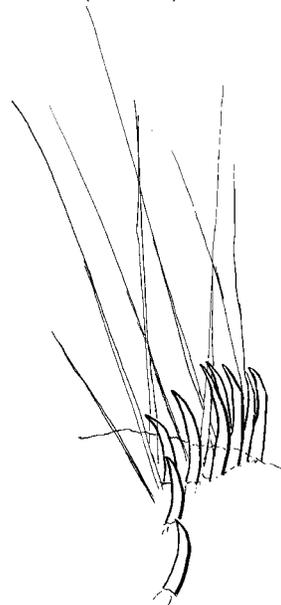


Fig. 3 — Postbranchial neuropodia with modified setae (K. Barwick)

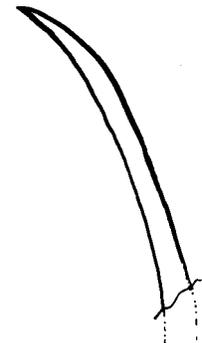


Fig. 4 — Detail of typical postbranchial modified neurosetate (K. Barwick)

additional images on 2nd page

Comments:

Two morphs of the posterior branchial region have been observed. In one form the branchiae end abruptly with little differentiation from the preceding branchiae. In the other form the last few branchiae shorten gradually to tiny tubercles before disappearing. Modified setae found on only two of the four specimens examined.

Distribution:

Collected at: Pt. Loma A-12 (165ft), Pt. Loma A-14 (150ft.), & ITP I-6 (87ft.)

Additional Illustrations: (K. Barwick)

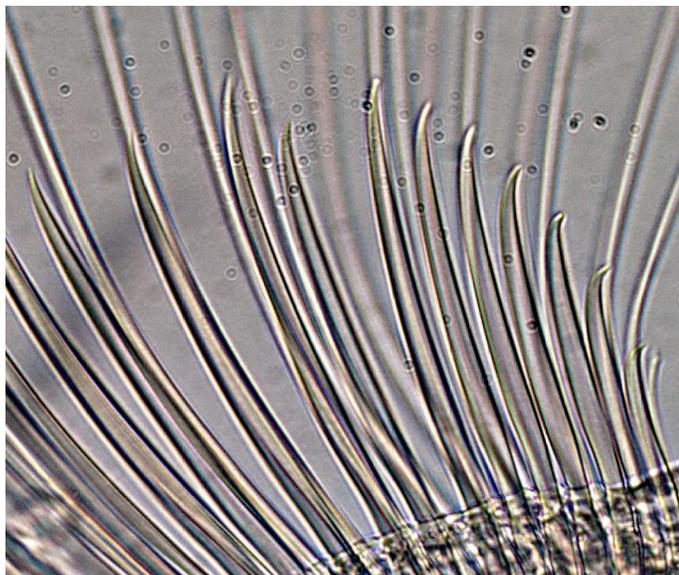


Fig. 5 — modified neuroseate [Regional Station 2729, 6JUL00, 142 ft.]

City of San Diego Provisional Voucher Sheet

Species: *Aricidea (Aricidea)* sp SD1

Authority: Barwick, 2000

Common Synonyms:

Arididea sp SD1 Barwick, 1996

Taxon: Polychaeta: Paraonidae

Date: April 5, 2000

By: K. Barwick

Voucher Specimen(s):

Station	Date	Storage Location/#
ITP 2016(1) (80 ft.)	7/21/95	Main/TBA
ITP 2016(2) (80 ft.)	7/21/95	Main/TBA

Full Description: (modified, in part, from an unpublished draft of a SCAMIT voucher sheet by L. Lovell and K. Barwick)

1. Median antenna reaches to setiger 1, bluntly rounded (Fig. 1)
2. Modified post-branchial setae straight spines tapering to a central point with a subterminal arista, begin on setiger 22 - 30, up to 16 per fascicle, some setae with clump of fimbriae at inner junction of arista and main shaft (Fig. 2)
3. 18 - 31, one with 33, pairs of branchiae. Tips of individual branchial pairs meet dorsally, last few pairs reduced
4. Postsetal notopodial lobes papillaform on setigers 1 and 2 and digitiform from setiger 3
5. Pygidium with dorsal lobe and 2 anal cirri and base with anal opening just below.

Illustrations: (K. Langan)

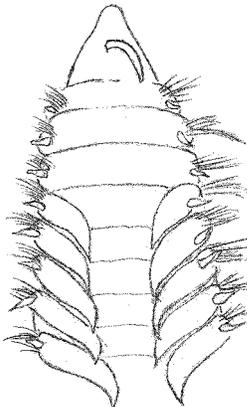


Fig. 1 — Anterior - Dorsal view



Fig. 2 — Modified postbranchial neurosetae, 1000X

Comments: (modified, in part, from an unpublished draft of a SCAMIT voucher sheet by L. Lovell and K. Barwick)

This animal most closely resembles *A. (Aricidea) wassi* Pettibone, 1965. *A. (Aricidea)* sp SD1 differs in two respects: (1) the antenna lacks any articulations, and (2) the modified postbranchial neurosetae taper evenly to straight tips, not curved as in *A. (A.) wassi*.

Distribution:

Collected at ITP Station: 2016 (80 ft.)

City of San Diego Provisional Voucher Sheet

Species: *Aricidea* (*Aricidea*) sp SD3

Authority: Barwick, 2006

Common Synonyms:

A. (Aricidea) cf. longobranchiata Day, 1961

Taxon: Polychaeta: Paraonidae

Date: April, 2006

By: K. Barwick

Voucher Specimen(s):

Station	Date	Storage Location/#
SBOO I6(1), 86 ft	23JUL97	DLZ/2028
SBOOI4(2), 18 m.	12JUL05	Main/TBA

Full Description: (Based on 3 incomplete specimens. Adapted from preliminary voucher sheet *A. (Aricidea) cf. longobranchiata* by R. Rowe, 11/6/97)

- Median antenna long, reaching to setigers 3 - 4, proximal third of length slightly broader than rest tapering quickly to a long filiform tip (Fig. 1A, 2A)
- Modified postbranchial neurosetae falcate with subdistal hood and terminal arista (Fig. 1B, 2B-C)
- 26 - 28 pairs of branchiae, last few pair are longer with tapering tips
- Postsetal notopodial lobes range from digitate anteriorly to filiform posteriorly, neuropoidal lobes absent.
- Eye spots absent
- Nuchal openings deep oval pits (Fig. 1A, arrows)

Illustrations: (K. Barwick)

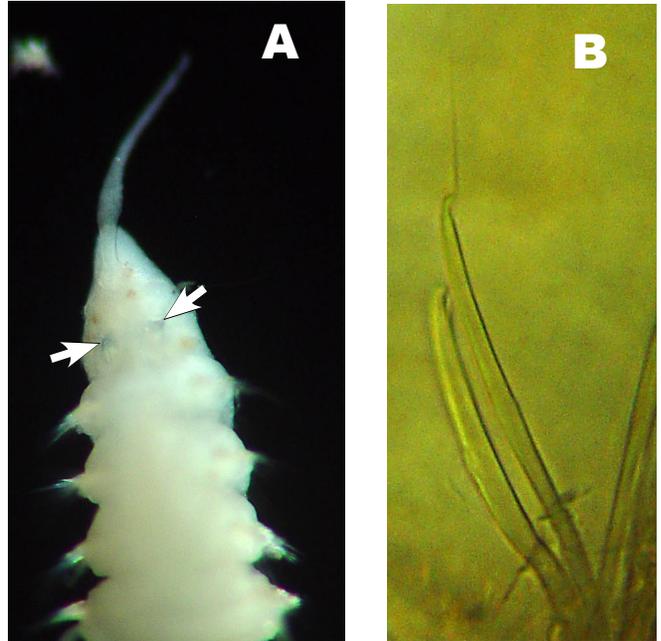


Fig. 1 A. Anterior - dorsum, B. Modified postbranchial neurosetae 1000x [specimen from I4(2)]

additional images on 2nd page

Comments:

Aricidea longobranchiata Day, 1961 was originally described from South Africa. Blake and Wallton (1977) describe something with the same name from the Gulf of Faralones off San Francisco Bay. They noted a couple of small differences from Day's original description. Their northern Californian specimens: had a greater number of branchial pairs (up to 27), eyespots, and "segmental red pigment spots at the base of some anterior branchiae" (Blake and Walton, 1977). Day describes *A. longobranchiata* as having acicular setae with "unidentate tips and fine tapered guard or aristae arising just below the tips" (Day, 1961). (Fig. 3) L. Lovell believes that records for *A. longobranchiata* for the Southern California Bight are in error. (Personal communication March, 2006)

The specimen described here differs from both the South African form and the northern California form in that the postbranchial neurosetae have a subterminal hood with a terminal arista. They also lack eyespots. The previous version of this voucher sheet had reported eyespots as being present. Upon re-examination no eyespots were found. It is possible that the nuchal openings may have been miss interpreted as eyespots.

Distribution:

Known from one specimen at 86 ft and 2 specimens from 18 m, all from the SBOO.

Additional Illustrations:

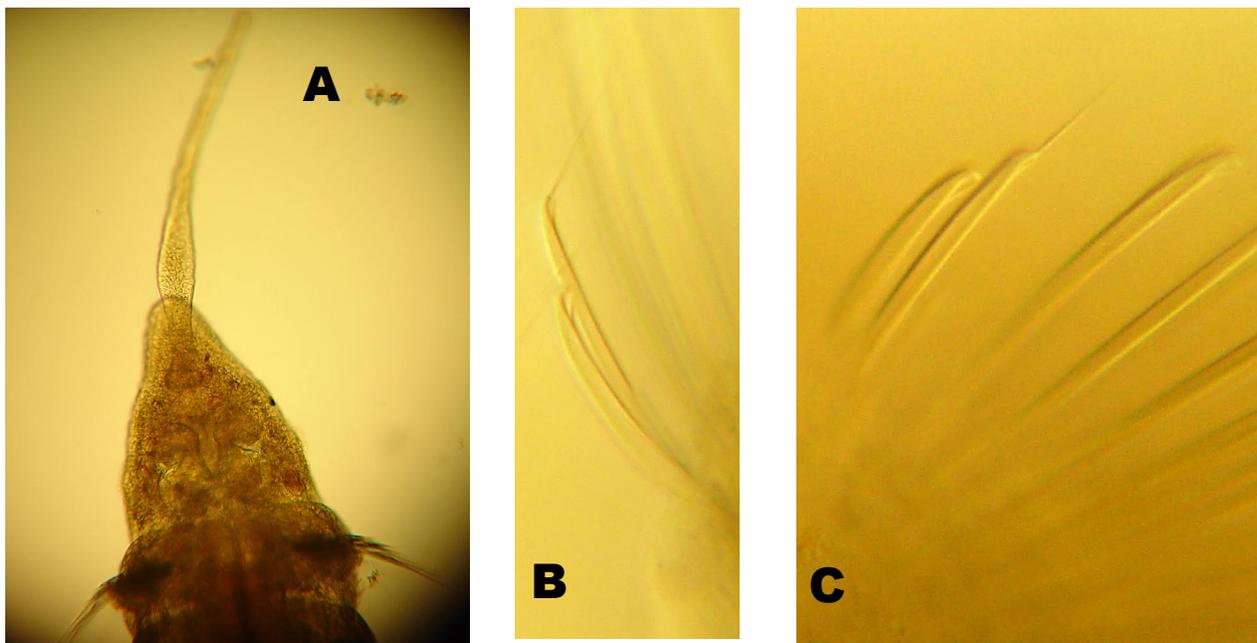


Fig. 2 A. Prostomium dorsal view, B - C. Modified postbranchial neurosetae 1000x (specimen from I4(2)) (K. Barwick)

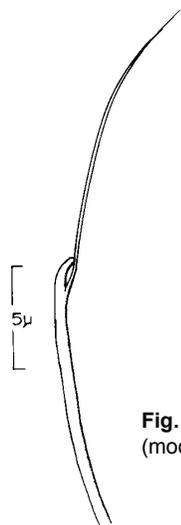


Fig. 3 Modified postbranchial neurosetae of *A. longobranchiata* (modified from Blake and Walton, 1977)

Literature Cited:

Blake, J. A. & C. P. Walton. 1977. New species and records of Polychaeta from the Gulf of the Farallones, California. In: D. J. Reish and K. Fauchald eds. Essays on the Polychaetous Annelids in Memory of Dr. Olga Hartman. Allan Hancock Foundation Publication, pp. 307-321.

Day, J. H. 1961. The Polychaet Fauna of South Africa. Part 6. Sedentary species dredged off Cape Coasts with a few new records from the shore. Journal of the Linnean Society of London, Vol. 44(299). pp. 463-560.

City of San Diego Provisional Voucher Sheet

Species: *Levinsenia* sp SD1

Authority: Barwick, 2000

Common Synonyms:

Taxon: Polychaeta: Paraonidae

Date: April 5, 2000

By: K. Barwick

Voucher Specimen(s):

Station	Date	Storage Location/#
ITP I9(2) (94 ft.)	7/1/99	Lost

Full Description: (Based on single anterior fragment, lost)

1. Prostomium elongated, conical. (Fig. 1)
2. 8 pairs of branchiae begin on setiger 7
3. Branchiae flattened with broad rounded tips, spatulate (Fig. 2)
4. Postbranchial neurosetae acicular, distally falcate with subdistal hood (Fig. 3)
5. First 4 - 5 setigers slightly more inflated than subsequent setigers (Fig. 1)

Illustrations: (K. Barwick)

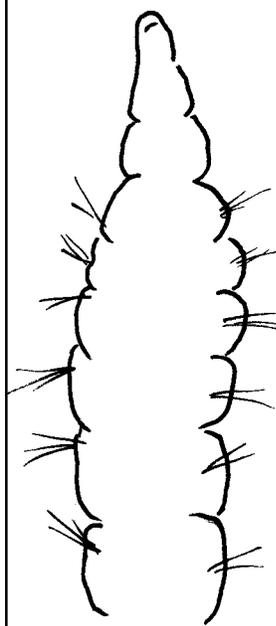


Fig. 1 — Anterior - Dorsal view

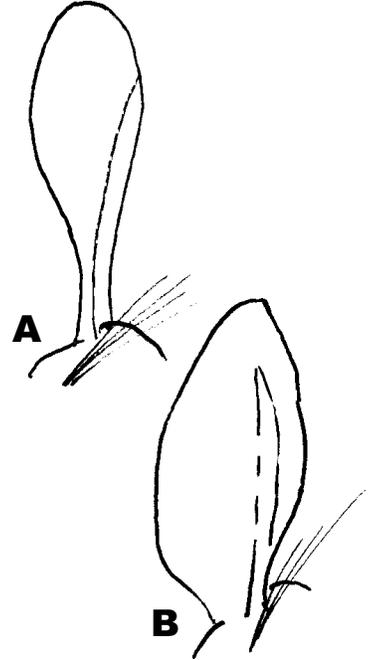


Fig. 2 — Branchiae from:
A. segment 10, B. segment 9



Fig. 3 — Modified postbranchial neurosetae

Comments:

Most closely resembles *Levinsenia* sp 1 Lovell, 1997.

Distribution:

Collected at ITP Station: I9 (94ft.)

City of San Diego Provisional Voucher Sheet

Species: *Paradoneis* sp SD1

Authority: Barwick, 2000

Common Synonyms:

Taxon: Polychaeta: Paraonidae

Date: April 5, 2000

By: K. Barwick

Voucher Specimen(s):

Station	Date	Storage Location/#
Bight '98 2088 (40.6m)	7/24/98	Main/P318
Pt. Loma A12 (161 ft.)	7/10/87	Main/P318

Full Description:

1. Prostomium short, rounded with two nuchal slits (Fig. 2)
2. Median antenna absent
3. Branchiae begin on setiger 4, 6-8 pairs
4. Notopodia with single furcate seta per fascicle
5. Modified neurosetae present in far posterior setigers, short curved curved spines with or without terminal arista, several present per fascicle (Fig. 1)
6. Postsetal notopodial lobes digitate in the post branchial region to end of animal, slightly longer in the posterior most setigers with the longest on the last setiger, see Mackie (1991)
7. Pygidium with three anal cirri

Illustrations: (K. Barwick)

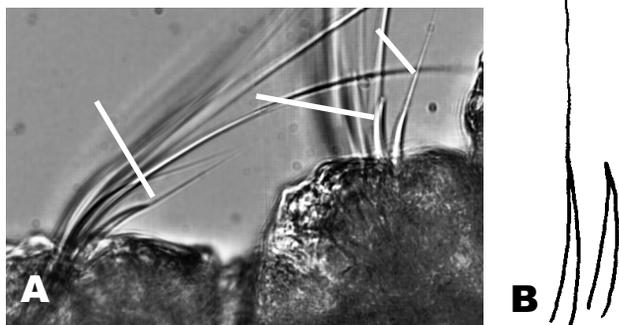


Fig. 1 — A. Two neuropodal fascicles from posterior setigers (400X), B. Detail of modified neurosetae

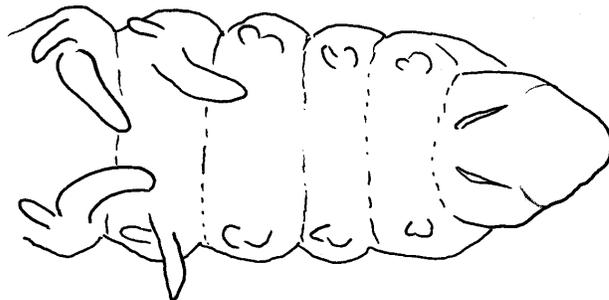


Fig. 2 — Dorsal view of anterior, setae not shown

Comments:

This animal is very similar to *P. eliasoni* Mackie, 1991. The main difference between the two is that *P. eliasoni* is described as having only "single curved hooks" in posterior neuropodia. *P. sp. SD1* has numerous (2 or more) curved spines per fascicle many with terminal arista. Specimens in the Pt. Loma voucher collection labeled *P. eliasoni* were all determined to be *P. sp SD1*.

Distribution:

Collected at Bight '98 stations 2088 (Catalina Island 40.6m), 2472 (Channel Islands 25m), & 2493 (44m); ITP station 2137 (157ft.), & Pt. Loma station A12 (161 ft.)

Literature Cited:

Mackie, A. S. Y. 1991. *Paradoneis eliasoni* sp. nov. (Polychaeta: Paraonidae) from northern European waters, with a redescription of *Paradoneis lyra* (Southern, 1914). *Ophelia* supplement 5: 147-155.