SOUTHERN CALIFORNIA ASSOCIATION OF MARINE INVERTEBRATE TAXONOMISTS

September–December 2024 SCAMIT Newsletter Vol. 43 No. 3-4

Attendees from the 2024 SCAMIT All-Hands meeting from left to right: Karla Gutierrez Burgos, Amber Von Tungeln, Cristina Fuentes, Norbert Lee, Wayne Dossett, Chase Mcdonald, Cody Larsen, Erin Oderlin, Nick Galliani, Brent Haggin, Andy Davenport, Zoë Scott, JoAnne Linnenbrink, Wendy Enright, Stephanie Smith, Dean Pasko, Lauren Valentino, Adam Webb, Maiko Kasuya, Rose Cardoza, Kelvin Barwick.

This Issue

Publication Date: April 2026

09 SEPTEMBER 2024, MISCELLANEOUS PHYLA CONVENTIONS & FIDs, OCSD, LEAD – W. ENRIGHT

Attendance: Brent Haggin, Wayne Dossett, Don Cadien, Amber Von Tungeln, LACSD; Wendy Enright, Zoë Scott, Coulson Lantz, CSD; Tony Phillips, DCE; Ben Ferraro, OCSD; Jennifer Smolenski, CLAEMD; Rod Velasquez, Linnea Mooney, MTS.

UPCOMING MEETINGS

Visit the SCAMIT website at: www.scamit.org for the most current meetings announcements.

Following up on agreements made during the May 2024 Bight '23 Trawl Voucher/FID meeting, participants confirmed that data submissions and updates targeted for completion by May 31 had been successfully accomplished. A newly proposed provisional species, Limnactiniidae sp. DC1 Pasko & Enright, 2024 §, was formally presented and reviewed. The associated voucher sheet has been posted to the SCAMIT provisional website and is anticipated to be incorporated into SCAMIT Ed. 15.

Several noteworthy taxa recently documented within Los Angeles Harbor were discussed. The invasive ascidian *Corella japonica* Herdman, 1880 was confirmed by Marie Nydam (SOKA). Diagnostic features distinguishing *Corella* from *Ascidia* and *Ascidiella*, particularly the presence of spiral versus straight stigmata, were reviewed. Jennifer Smolenski will examine Bight harbor samples to assess whether this species has been encountered previously.

The majority of the meeting focused on clarifying and standardizing naming and counting conventions across a wide range of phyla. Key outcomes included reaffirming size-based identification limits for Sipuncula, clarification of countability criteria for Enteropneusta, Bryozoa, Entoprocta, and Phoronida, and guidance on backing off identifications when critical morphological structures are absent. Don Cadien reported locating specimens of *Prometor* sp. LA1 (Echiura) and will work toward developing a voucher sheet. For Porifera identifications requiring spicule analysis, participants were advised to consult Tom Turner (UCSB).

Updates and resources for Ascidiacea and Cnidaria were also addressed. The Ascidiacea reference table on the SCAMIT website will be updated, and members encountering identification challenges were encouraged to share images with Marie Nydam. For Cnidaria, it was recommended that specimens lacking posterior structures remain identified at the family level. The presence of *Pachycerianthus* in the harbor was confirmed, and Jennifer will distribute the Cnidarian naming conventions discussed at the June 2024 SCAMIT meeting.

Additional discussions covered recent taxonomic revisions within Nemertea, molecular influences on Platyhelminthes taxonomy, and variable agency practices for Nematoda enumeration. For Phoronida, members agreed that pink pigmentation may be reproductive in nature, with specific criteria established for assigning *Phoronis* sp. SD1 Lilly, 2006 §. No new conventions were established for Brachiopoda or Kinorhyncha during this meeting.

Overall, the meeting reinforced consistency in identification and enumeration practices, highlighted emerging taxa of interest, and assigned follow-up actions to support voucher development and convention dissemination ahead of upcoming SCAMIT publications.

07 OCTOBER 2024, ARTHROPOD FIDS, LEADS – D. PASKO AND A. DAVENPORT

Attendance: Brent Haggin, Chase McDonald, Amber Von Tungeln, Wayne Dossett, Don Cadien, LACSD; Dean Pasko, Michael Vendrasco (Pasadena City College), DCE; Ben Ferraro, OCSD; Andrew Davenport, Katie Beauchamp, CSD; JoAnne Linnenbrink, Craig Campbell, CLAEMD.

The meeting opened with a review of nomenclatural changes introduced in SCAMIT Edition 14 for *Pinnixa* and the galatheoidea taxa. Dean summarized subsequent revisions he has made to several of his arthropod identification keys to reflect these updates. Andrew Davenport then presented images of a potentially new amphipod from the family Stegocephalidae collected during Bight ’23 sampling from a 668 m station. After the meeting Dean determined it to be *Pseudo viscaina* (J.L. Barnard, 1967***).*** Members were advised to rely primarily on Dean Pasko’s keys for amphipod identifications and to consult Don Cadien’s regional keys when difficulties arise.

Pseudo viscaina (J.L. Barnard, 1967***)***, B’23 station 12318, 668m, Photo by A. Davenport

A comparative discussion followed on *Caprella simia* Mayer, 1903 and *Caprella californica* Stimpson, 1856, highlighting differences in overall robustness, with *C. simia* appearing more delicate and *C. californica* more robust. Attendees were reminded of the importance of maintaining consistency in size-group conventions when identifying caprellids to family, genus, or species.

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The group then reviewed a series of older provisional species to determine their suitability for elevation to SCAMIT provisional status. Three taxa—*Photis* sp. SD9 CSDMWWD, 1999 §, *Photis* sp. SD10 Pasko, 1999 §, and *Photis* sp. OC1 Diener, 1992 §—were formally reviewed and approved for elevation to SCAMIT provisional names in Edition 15. Several additional provisional taxa were discussed but not selected for elevation at this time. These included *Philomedidae* sp. SD1 Pasko, 2013 §; *Philomedes* sp. LA1 Haney, 2004 §; *Cumella* (Cumewingia) sp. K Cadien, 2011 §; *Cyclopsis* sp. SD3 Pasko, 1999 §; *Elassocumella* sp. SD1 Nestler, 2005 §; *Araphura* sp. SD1 Pasko, 2006 §; *Americhelidium* sp. SD4 Pasko, 2005 §; and *Protolafystius* sp. B Tang, 2020 §. LACSD will search for site information for *Philomedes* sp. LA1 so that the voucher sheet can be updated and the taxon reconsidered for SCAMIT provisional status.

Meeting outcomes were further advanced through an email thread initiated by Dean Pasko on September 12, 2025, in which updated voucher sheets for nine provisional arthropod taxa were circulated. These revisions incorporated standardized SCAMIT letter designations and formatting adjustments intended to improve compliance with SCAMIT conventions. Brent Haggin reviewed the updates and provided guidance regarding authorship consistency and potential naming conflicts, particularly for *Cumella* sp. K, noting that final designation decisions should be deferred to the SLRC Arthropod group.

The nine revised provisional species voucher sheets referenced in the discussion are included with this newsletter, providing members with the most current documentation for these taxa as SCAMIT continues preparations for Edition 15.

18 NOVEMBER 2024, POLYCHAETA - POLYNOIDAE, LACSD, LEAD – B. HAGGIN

Attendance: Brent Haggin, Mac Power, Christina Fuentes, Norbert Lee, LACSD; Erin Oderlin, Greg Lyon, Nicholas Galliani, CLAEMD; Tony Phillips, Kelvin Barwick, DCE; Leslie Harris, NHMLAC; Maiko Kasuya, Veronica Rodriguez, Ricardo Martinez Lara, Adam Webb, CSD; Rob Gamber, OCSD; Danny Burgess, WADOE; Alison Fisher, Ashley Loveland, SFPUC; Erica Keppel, Smithsonian; Linnea Mooney, MTS; Bill Furlong; Oscar Diaz.

The meeting began with an overview of polynoid biology and anatomy, followed by a review of the taxonomic history and current status of the family. Polynoidae presently comprises approximately 867 described species in more than 150 genera across nine recognized subfamilies. SCAMIT Edition 14 includes 28 named species, five provisional species, one species complex, and one taxon identified only to genus. Family and subfamily-level diagnoses were presented for all polynoid groups, including those not currently represented on the SCAMIT species list, with emphasis on deep-water taxa likely to be encountered during Bight surveys.

Several subfamilies not represented on the current species list were reviewed, including Admetellinae, Uncopolynoinae, Lepidonotopodinae, Macellicephalinae, and Eulagiscinae. Diagnostic characters, depth distributions, and known regional occurrences were summarized, highlighting the potential for future encounters in southern California deep-water samples.

The presentation then shifted to subfamilies represented on the SCAMIT species list. Lepidastheniinae and Lepidonotinae were discussed in detail, including recent revisions affecting *Halosydna*. The work of Salazar-Silva (2013) was noted for resolving historical confusion within *Halosydna*, increasing the number of locally recognized species. Additional genera reviewed included *Hololepida*, *Lepidonotus*, and *Thormora*.

The Arctonoinae was reviewed, with one described species currently listed in Edition 14 and two additional species reported locally. A provisional taxon, *Arctonoinae* sp. LA1 Haggin, 2024 §, was available.

The Polynoinae, one of the largest and most complex subfamilies, was reviewed extensively. Discussions included *Antinoe*, *Arcteobia*, *Bylgides*, *Eucranta*, *Eunoe*, and *Harmothoe*. Members were advised to treat *Antinoe* sp. as provisional if encountered, and *Arcteobia* cf. *anticostiensis* SCAMIT, 1990 § should continue to be regarded as provisional. Updates to species concepts within *Eunoe* were reviewed, and members were advised to update the MMS Atlas to reflect the correct use of *Eunoe barbata* Moore, 1910 rather than *Eunoe oerstedi* Malmgren, 1865.

Significant discussion focused on *Harmothoe*, including the status of *H. extenuate* (Grube, 1840), *H. triannulata* Moore, 1910 and the *H. imbricata* (Linnaeus, 1767) species complex. Members were encouraged to critically evaluate local records and apply provisional names where appropriate. Clarification was also provided regarding *H. hirusta* Johnson, 1897 noting that images in the MMS Atlas correspond to *Harmothoe* sp. C Harris, 2018 § rather than the true *H. hirusta*.

Norbert presented an updated *Malmgreniella* comparison table originally developed by Cheryl Brantley, now enhanced with photographic imagery of parapodia, elytra, and chaetae. This resource, along with an updated key to Polynoidae families and subfamilies, will be added to the SCAMIT toolbox.

In a supplemental update, Brent Haggin reported the discovery of two new provisional ampharetid species from Bight ’23 material: *Amphisamytha* sp. LA1 Haggin, 2024 § and *Samytha* sp. LA1 Haggin, 2024 §. Diagnostic staining patterns and chaetal differences distinguishing these taxa from closely related species were presented. Provisional voucher sheets for both taxa are included with this newsletter, along with a comprehensive Polynoidae reference list.

10 DECEMBER 2024, SCAMIT ANNUAL ALL-HANDS MEETING, SCCWRP

Attendance: Brent Haggin, Wayne Dosset, Chase McDonald, Norbert Lee, Christina Fuentes, Amber Von Tungeln, Karla Gutierrez Burgos, LACSD; Kelvin Barwick, Dean Pasko, DCE; Rose Cardoza, Ben Ferraro, Cody Larsen, OCSD; Adam Webb, Lauren Valentino, Wendy Enright, Maiko Kasuya, Andrew Davenport, Stephanie Smith, Zoë Scott, CSD; Erin Oderlin, Joanne Linnenbrink, Nicholas Galliani, Danielle Ayala, CLAEMD.

The 2024 SCAMIT Annual All-Hands Meeting provided an opportunity to review SCAMIT activities conducted throughout 2024, discuss organizational updates, and establish priorities for the upcoming year. While formal minutes were not recorded, the following summary reflects the agenda and discussions from the meeting.

Members were welcomed and presented with a comprehensive review of SCAMIT meetings held during 2024. The year’s schedule included monthly topic-focused meetings covering a broad range of taxonomic groups and identification initiatives. These included Bivalves Part VI (January), Echiura, Sipuncula, and Echinodermata (February), an introduction to Annelida (March), two trawl FID and voucher verification meetings hosted by OCSD (April), Bight ’23 photo voucher verification (May), a DISCO (Discovery Initiative for the Southern California Ocean) identification meeting hosted by NHMLAC (May), Cnidaria (Gorgonians) and identification conventions (June), Mollusca identification conventions and FIDs (August), Other

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Phyla identification conventions and FIDs (September), Arthropoda identification conventions (October), and Polychaeta—Family Polynoidae (November). No meetings were held in July, and no guest speakers participated during the 2024 meeting cycle. The annual all-members meeting concluded the year in December.

Planning priorities for 2025 were then discussed. Members agreed that meetings will continue to be offered in a hybrid format (in-person and virtual) to maximize accessibility and participation. Meeting content in 2025 will largely focus on Bight ’23 identification questions, unresolved taxa, and data issues arising from regional survey efforts. Both LACSD and OCSD confirmed their willingness to continue hosting hybrid meetings as needed.

Upcoming scientific conferences scheduled for 2025 and 2026 were reviewed to help coordinate member participation and ensure awareness of opportunities for collaboration and professional engagement.

The provisional species website and database were reviewed next. Four new provisional species were added during 2024, including three polychaetes and one cnidarian. Members were reminded of the importance of using the provisional species database to document Bight ’23 unknowns and newly recognized taxa, ensuring consistent tracking and review across agencies. Kelvin Barwick provided an update on the activities of the Species List Review Committee, highlighting ongoing efforts to evaluate provisional taxa and maintain the accuracy and consistency of the SCAMIT species list.

Erin Oderlin presented the Treasurer’s report, which is included at the end of this newsletter. She reiterated that SCAMIT no longer offers a hardcopy membership option and reported that the organization currently has approximately 150 members, representing agencies and institutions across the United States and internationally. Financial status and membership stability were noted as strong.

A brief Secretary update followed. Megan was unable to attend due to travel commitments, and it was noted that newsletter production is currently behind schedule. This prompted further discussion later in the meeting regarding newsletter format and distribution.

Members then worked collaboratively to populate the 2025 meeting calendar, with good progress made toward identifying topics and potential leads. A call for officer nominations followed, during which the current suite of officers was nominated to continue serving in their respective roles.

The meeting concluded with a roundtable discussion covering several topics of interest to the membership. These included transitioning the SCAMIT newsletter to an all-digital format, ongoing challenges associated with Bight ’23 data and identifications, and strategies for improving the effectiveness of hybrid meetings. Members were encouraged to suggest future meeting topics by emailing Leslie Harris, Brent Haggin, or the SCAMIT list server, with an emphasis on volunteering to lead meetings when possible. Discussion also addressed the concept of a Major Phyla discussion forum on the SCAMIT website; members agreed that direct group emails to subject-matter experts within the Southern California Bight community would be a more effective approach.

ARTHROPOD PERSONALS PART 7 - BY D. CADIEN

Please enjoy the next installment, attached, in Don’s arthropod personals series.

Please visit the SCAMIT Website at: www.scamit.org

SCAMIT OFFICERS

If you need any other information concerning SCAMIT please feel free to contact any of the officers at their e-mail addresses:

President	Brent Haggin	(562)908-4288 x 5672	bhaggin@lacsd.org
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Secretary	Megan Lilly	(619)708-8979	megansea8@yahoo.com
Treasurer	Erin Oderlin	(310)648-5477	erin.oderlin@lacity.org

SCAMIT is a 501(c)(3) charity. The newsletter is published every two months and is distributed freely to members in good standing. Membership is $20 for an electronic copy of the newsletter, available via the web site at www.scamit.org, and $35 to receive a printed copy via USPS. Institutional membership, which includes a mailed printed copy, is $65. All correspondences can be sent to the Secretary at the email address above or to:

SCAMIT
PO Box 50162
Long Beach, CA 90815

Treasure's Report (2023-2024 {as of 5/31/2024})

- No publication grants awarded in 2024
- $7,595.96 (25% of $30,383.83) available for publication grants

Account Balances (as of 5/31/2024)

Checking	$ 30,383.83
PayPal	$ 0.00
Total	**$ 30,383.83**

Income

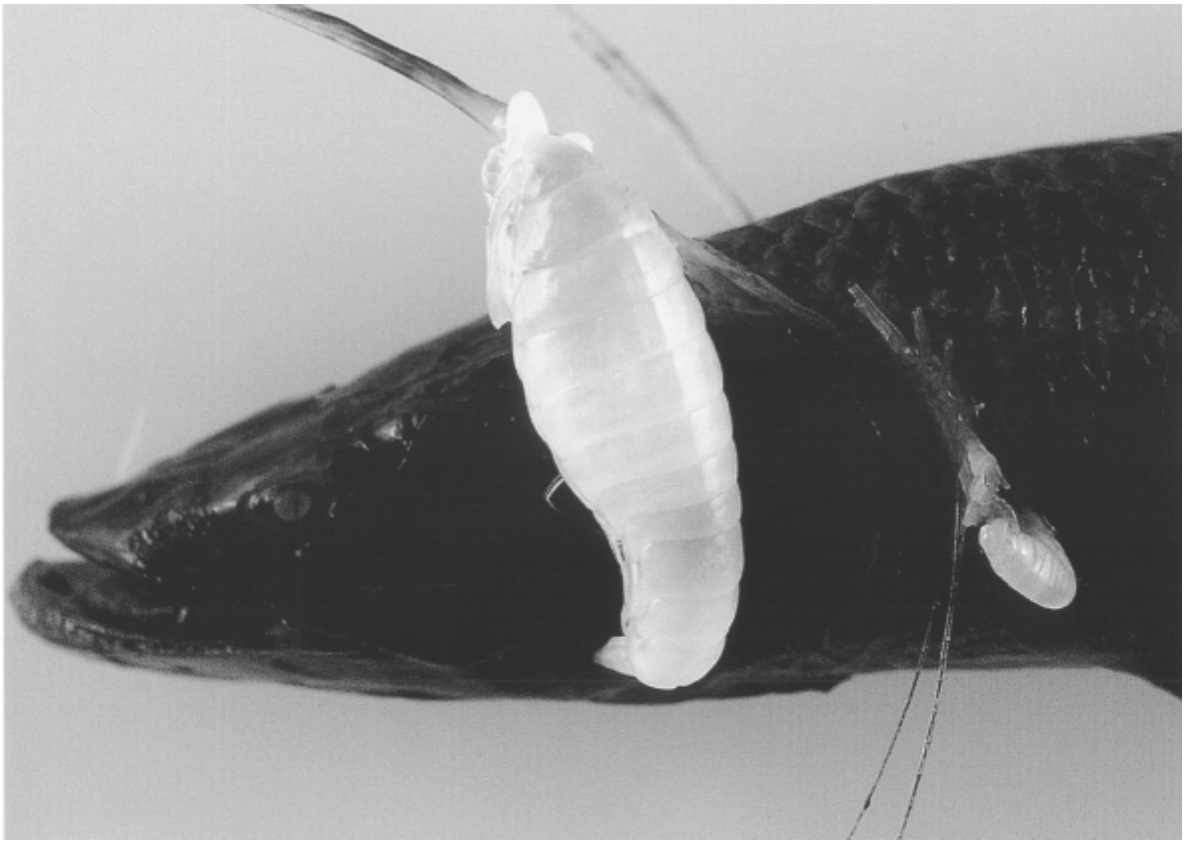
2023-2024 Membership Dues	$ **1,639.92**

Expenses

Newsletter (printing/postage)	$ 564.34
CA Attorney General Registry of Charitable Trusts Fee	$ 25.00
Zoom Subscription	$ 191.88
SCAMIT Meeting Refreshments	$ 260.23
Total	**$ 1,041.45**

Arthropod Personals – Seeking Companion?
Pt. 7 – The unscratchable itch dbcadien, WWRF, Los Angeles County Sanitation Districts, 27Dec23

Fishes are known to be plagued by a variety of ectoparasitic arthropods. The cirolanid isopods which parasitize gills, fins, and tongues of fishes are well known; a large and varied group well represented in our local trawl catches. Copepods too are associated with a large number of fish host species, occurring on gills, on fins, on surface scales, and even on eyes. While one does not often see them or think of them, amphipods also are known to be ectoparasites of fishes. There are three families of amphipods that do so in local waters; Opisidae, Trischizostomatidae, and Lafystiidae. Of these the rarest is Trischizostomatidae, known in the NEP from a single female *Trischizostoma unam* Winfield, Hendrickx and Ortiz 2016 taken in the southern Gulf of California. Both of the other families have members reported from the SCB. All three of these families have members whose parasitism has been observed in situ on the host.



Two *Trischizostoma* still attached to preserved host, the black-finned spider fish
(from Freire and Serejo 2004)

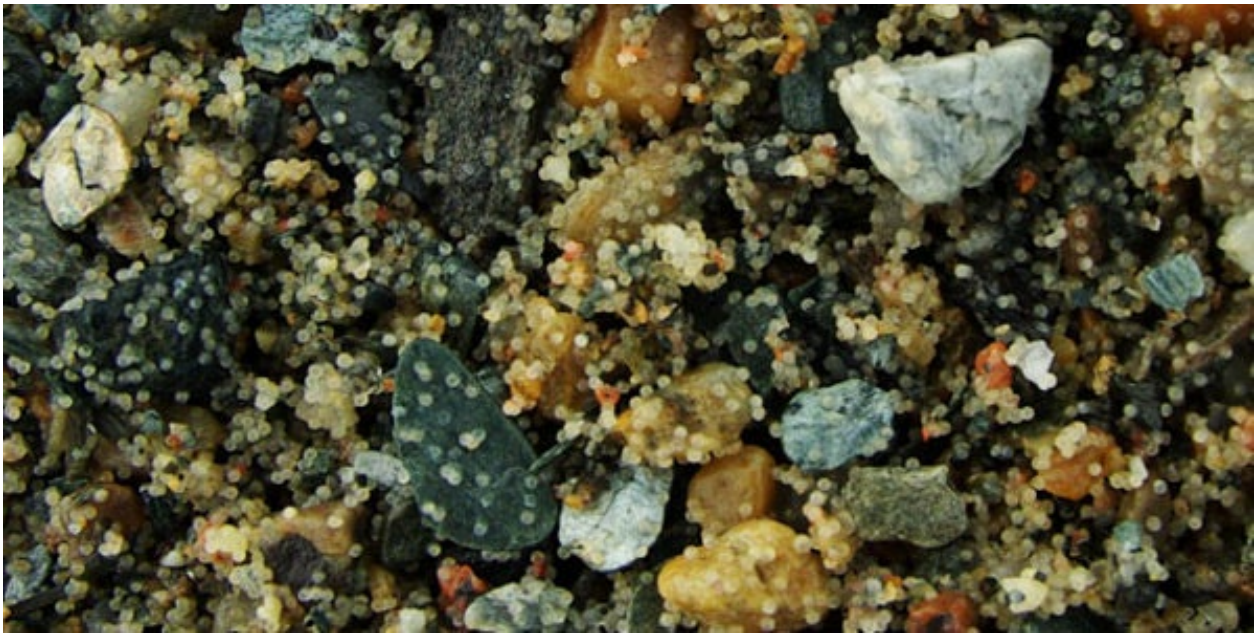
A fourth family, Pardaliscidae, has at least one local member whose parasitic life-style has been inferred from morphology, but not observed (Bousfield 1987). *Opisa tridentata* Hurley 1963 (Opisidae) is fairly frequently recovered in grab samples from local agencies, but no observations of it on fish hosts are known to local amphipod workers (although Stoddart and Lowry 2010 mention reports of *O. tridentate* from live and dead fish). The parasitic association of this species is extrapolated from that of its congener *O. eschrichtii,* recovered from the skins of haddock and both European Cod and Atlantic Cod in western European waters (Bousfield 1987). Two other genera in the Opisidae, also bearing enlarged pincher-like first gnathopods, are also regarded as fish symbionts: *Normanion* (Kilgallen, Myers and McGrath 2006) and *Podoprionella* (Lowry and Stoddart 1995). Neither occur in the NEP. In both members of the Trischizostomatidae and the Opisidae the cheliform first gnathopods are used as pinchers to grab onto the fish' skin. The nature of this association: whether it is just for transportation or leads instead to actual consumption of fish tissues by the amphipod is not fully demonstrated. Yet even the circumstantial evidence available is persuasive. Modified piercing and sucking mouthparts in these families suggest that presence on the fish is for parasitic nutrition (Friere and Serejo 2004), and not just movement from place to place. As the amphipods are most frequently observed in benthic samples, and not on the fishes themselves, the frequency of such predation remains moot. Photodocumentation of the presence of amphipods on live fishes, and their retention on preserved hosts also support a parasitic symbiosis.

Trischizostoma raschi attached just behind the last gill opening of the velvet shark, *Etmopherus spinax* at 40m in a Norwegian fjord (**Photo: ©UWPhoto / Rudolf Svensen**)

The inferred parasitism of the pardaliscid *Rhynohalicella halona* is also based on mouthpart morphology, but so far there are no observations of such activity with any host fish. This is not true of the Lafystiidae, which have been repeatedly observed in association with fishes. Two undescribed species of *Protolafystius* are reported from the SCB: P. sp A SCAMIT 2012 and P. sp B Tang 2020. The first is known from a single collection off a Black-Gill Rockfish, where it was distributed on the orbital membranes, and in sensory pits on the snout and head. The single occurrence of P. sp B was from *Scorpaena*. There is a single described member of the genus, *P. madillae*, known only from the Puget Sound Area on the gills of English Sole. Given that there appears to be some degree of host specificity within the family, it is likely that other species occur in the NEP, and perhaps also in the SCB. A fourth species is illustrated in a photo of a Sturgeon Poacher (*Podothecus acipenserinus*) taken in Puget Sound. Fifteen or more specimens of an

apparently undescribed lafystiid are visible in the photo, arrayed all along the head from near its tip to well behind the eye. They are not in depressions or pits, but appear to cling to the fish' skin with their dactyls. The exhibited color pattern of the living amphipods is unlike that of either of the live-taken species known from the SCB. The combination of rostral length/shape and body length/width place this into *Protolafysius* rather than one of the other genera in the family. No specimens of this fourth species are available for study, as the photographed fish was not collected after the photo was taken.

While it is difficult to consider the calliopiid *Calliopius laeviusculus* as a parasite of fishes, it does attack the eggs of *Mallotus villosus*, the capelin, instead of the adult (Cadien 2015). The amphipods have nothing to do with adult fish, other than preferentially consuming their eggs during fish spawning. Capelin are a communal spawning fish that release small buoyant eggs into the water in large masses. During spawning runs, beaches in the boreal eastern Pacific and Northwest Atlantic become clogged with capelin eggs. The amphipods, which under normal circumstances are generalist detritivores, consume large numbers of these eggs, as do nearly all other large marine organisms in the vicinity of the spawning. Since the sediments become full of the eggs, all it takes to become a capelin egg parasite is a mouth and hunger. While this isn't much of a symbiosis, it is an interesting interaction.



All these little white globes are capelin eggs waiting to be consumed (from ArcticBiodiversity.com)

Observations of amphipod egg predation on fishes is more common in fresh than in brackish or marine waters. The amphipods involved in these cases are gammarids. 'Symbiotic' amphipod/fish interactions in fresh water by both native and introduced gammarids were recently examined by Taylor and Dunn 2017.

While ectoparasitic amphipods are rare on fishes, ectocommensal amphipods are even less frequently seen. One reported example is that of the caprellid *Caprella suprapiscis* Galván-Villa and Ayón-Parente 2015 on *Scorpaena mystes* in West Mexico. In their description of the amphipod no particular modifications in structure were evident to facilitate a commensal life-style (Galván and Ayón-Parente 2015). None were needed as virtually all caprellids are modified for a clinging lifestyle which also serve to keep them in association with a host. The association was documented by Fernández-Del Valle et al 2017). They found no evidence of either damage or benefit to the fish, which seemed to completely ignore it's partner. The amphipods were deemed obligate commensals based on the presence of the amphipods on the fish at all life stages. They were primarily distributed on the head of the fish, as is the case with the parasitic Laphystiid amphipods. There was no evidence of feeding on the host, so this is a commensal rather than a parasitic relationship. The benefit to the amphipods is not clear, but may include protection, exposure to preferential feeding sites through host movement, or perhaps feeding on host waste, or perhaps the mucus of the fish skin. Gut analyses could either rule out or confirm some of these potential benefits, but have not yet been performed..

Cited literature:

Bousfield, E. L. (1987). "Amphipod parasites of fishes of Canada." Canadian Bulletin of Fisheries and Aquatic Sciences(217): 1-37.

Cadien, D. B. (2015) Amphipoda of the Northeast Pacific (Equator to Aleutians, intertidal to abyss): XI. Calliopioidea - a review. 22pp.

Fernández-Dell Valle, V., C. M. Galván-Villa, J. L. Arreola-Robles and M. Ayón-Parente (2017). "Symbiotic association between caprellids (Amphipoda: caprellidae) and the scorpionfish *Scorpaena mystes* (Pisces: Scorpaeniae)." Symbiosis **71**(1): 65-68.

Freire, P. R. and C. S. Serejo (2004). "The genus *Trischizostoma* (Crustacea: Amphipoda: Trischizostomidae) from the Southwest Atlantic, collected by the REVIZEE Program." Zootaxa (645): 1-15.

Galván-Villa CM, Ayón-Parente M (2015) *Caprella suprapiscis* sp. nov. (Crustacea: Amphipoda: Caprellidae) from the Pacific coast of Mexico. Zootaxa 3956(4):569–578

Hurley, D. E. (1963). "Amphipoda of the family Lysianassidae from the West Coast of North and Central America." Allan Hancock Foundation Publications: Occasional Paper (25): 1-160.

Kilgallen, N. M., A. A. Myers and D. M. McGrath (2006). "A review of the North Atlantic amphipod genus *Normanion* (Crustacea: Amphipoda: Lysianassoidea)." Zootaxa (1363): 1-21.

Lowry, J. K. and H. E. Stoddart (1995). "The Amphipoda (Crustacea) of Madang Lagoon: Lysianassidae, Opisidae, Uristidae, Wandinidae and Stegocephalidae." Records of the Australian Museum (Supplement 22).

Stoddart, H. E. and J. K. Lowry (2010). "The family Opisidae (Crustacea: Amphipoda: Lysianassoidea) in Australasian waters." Zootaxa (2479): 22-38.

Taylor, N. G. and A. M. Dunn (2017). "Size matters: predation of fish eggs and larvae by native and invasive amphipods." Biological Invasions **19**(1): 89-107.

Winfield, I., M. E. Hendrickx and M. Ortiz (2016). "A new deep-water species of *Trischizostoma* (Crustacea: Amphipoda: Gammaridea: Trischizostomatidae) from western Mexico, NE Pacific Ocean." Journal of the Marine Biological Association of the United Kingdom: 97(1): 141-149.

SYNONOMY: *Araphura* sp SD1 Pasko 2006

LITERATURE:

Dojiri, M. and J. Sieg (1997). The Tanaidacea. Santa Barbara, California, U.S.A., Santa Barbara Museum of Natural History.

DISTRIBUTION: Orange County – San Diego, CA 60–100m

DIAGNOSTIC CHARACTERS

- Blind
- Antenna 1 4-segmented
- Chela articulated to cephalothorax by "side-piece" along lateral margin of basis
- Granular ridge on inner margin of fixed finger of chela (**vs.** smooth ridge)
- Pereopod 1 with short, slender tergal spine distally on merus and carpus (≤ ½ length of respective articles vs. long, robut tergal spine, > 2/3 respective articles)
- Pereonites 2-5 longer than broad (L≅1.3 W vs. L ≅ W
- Uropod with fused exopod (pseudo-exopodite) and bi-articulate endopod
- Pseudo-exopod short, stout (≤ ½ first article of endopod **vs**. ≥ ½ endopod article 1)
- Pseudoexopod projection shorter than basal article (**vs.** subequal to basal article)
- Pseudoexopod with long terminal seta and shorter proximal seta (**vs.** long proximal seta and shorter subterminal seta)

Similarities:

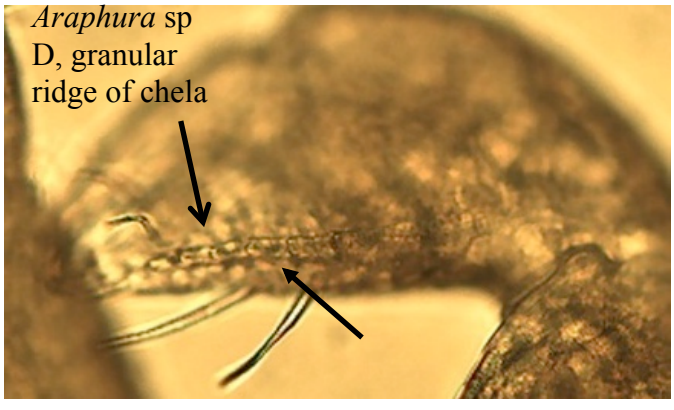
Araphura sp SD1 can be distinguished from other co-occuring species by the following set of couplets, modified from Dojiri and Sieg (1997).

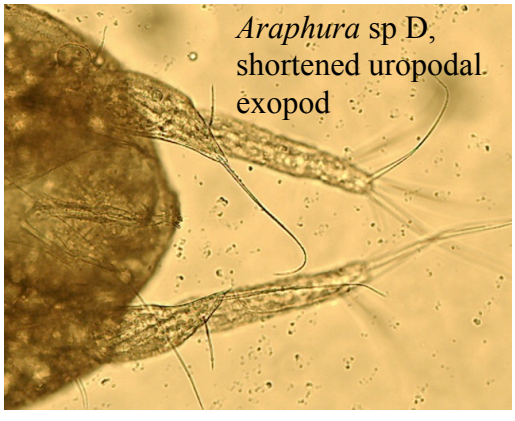
1. Ventro-lateral margin of chelae with tuberculate ridge (4–7 tubercles); uropodal pseudo-exopod short, stout (≤1/2 first article of endopod); pereopod 1 with short, slender tergal spine(s) distally on merus and carpus (≤1/2 length of respective articles); pereonites 2–5 longer than broad (L ≅1.3 W) .....***Araphura* sp D**

— Ventro-lateral margin of chelae with smooth ridge (tubercles absent); uropodal pseudo-exopod relatively long (≥1/2 first article of endopod).....2

2. Uropodal pseudo-exopod ~1/2 length of first article of endopod, and noticeably curved medially; pleotelson without conical process along posterior border; cephalon elongate, broad (see Dojiri and Seig 1997, Fig 3.18).....***Araphura brevaria***

— Uropodal pseudo-exopod ~3/4 length of first article of endopod and only slightly curved medially or not; pleotelson with small conical process along posterior border; cephalon elongate, narrow (see Dojiri and Seig 1997, Fig 3.19) ..... ***Araphura cuspirostris***





***Cumella (Cumewingia)* sp C SCAMIT 2024§** Prepared by D.Pasko 18April2023
Cumacea: Nannastacidae

SYNONYMY: Cumella sp K Cadien 2011

LITERATURE:

Cadien, D. B. 2013. Cumacea of the North East Pacific, Aleutians to the Equator, intertidal to the abyss. 1-59 [available at SCAMIT.org in the taxonomic toolbox]

Cadien, D. B. 2013. Cumacea of the NEP: equator to Aleutians and intertidal to the abyss Part 6. The Family **Nannastacidae.** dbcadien 15 October 2006 (revised 18 October 2013)

DIAGNOSTIC CHARACTERS: (See photos)

- Carapace tubular, without distinct ornatation
- Ocular elements clustered along doral midline; eyelobe with 5 lenses
- Pseudorostral lobes approximated, pseudorostrum amterior margin distally flattened, serrate
- Antennal sinus broadly rounded, antero-ventral margin serrate
- Exopods on maxilliped and pereopods 1–4
- Thoracic pleurae upturned, laterally flaring, forming narrow shelf, continuing to abdominal segments 1–3 in females and 1-4 in males
- Uropod peduncle twice as long as last obdominal segment, longer than rami

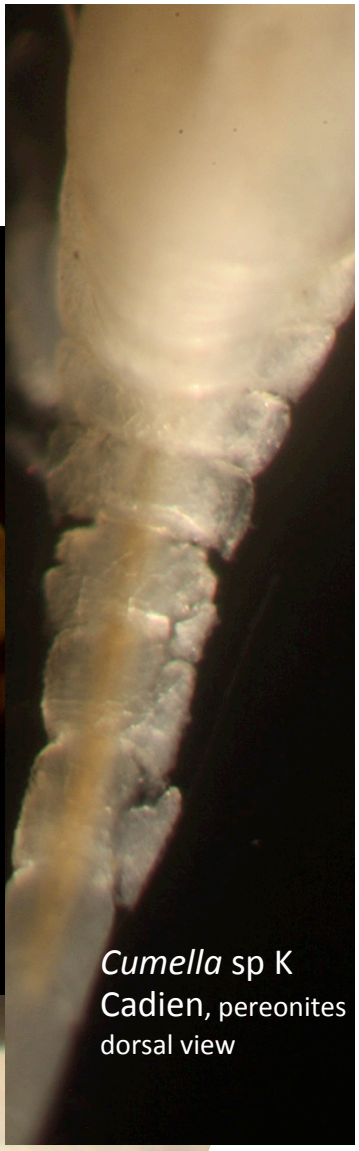
RELATED SPECIES AND CHARACTER DIFFERENCES:

Cumella vulgaris (males) have more eyelenses and less tubular carapace, tapering more anteriorly, and with little flaring of the thoracic pleurae.

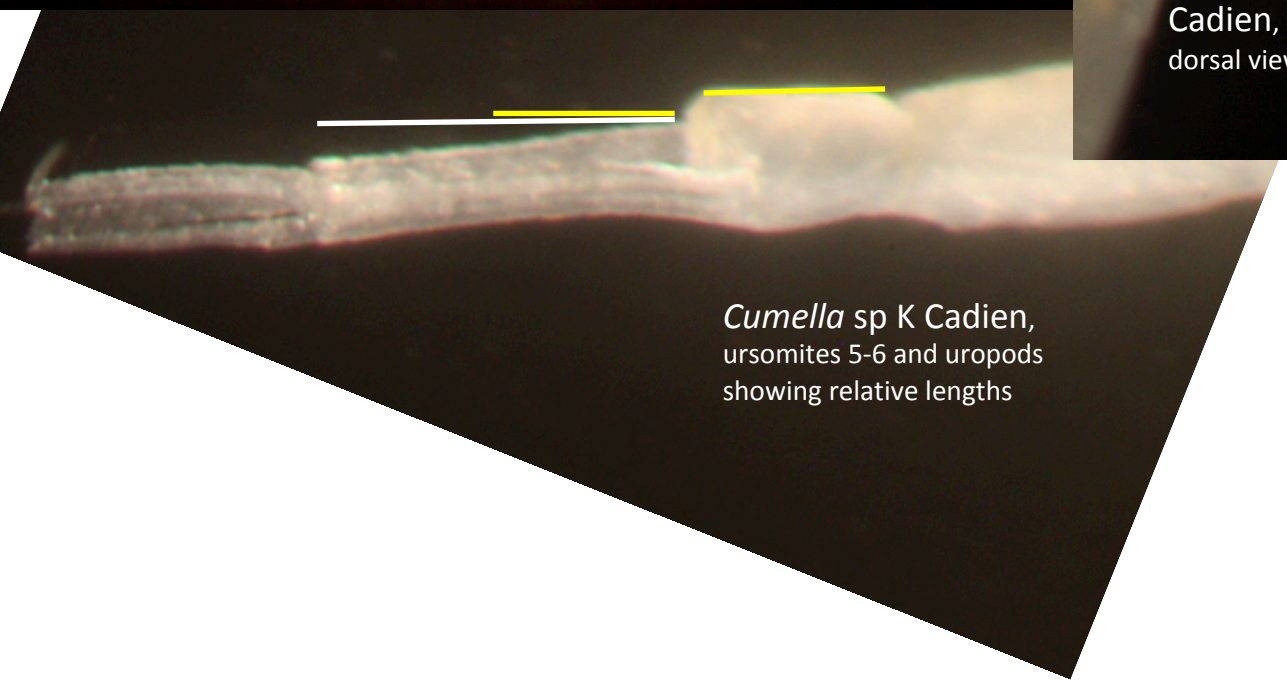
DEPTH RANGE: Coastal shelf, 25 – 127m

DISTRIBUTION: Three records: Government Point, Point Conception, 30m; Prisoner's Harbor, Santa Cruz Island, <30m; East Santa Barbara Channel, Bight'18 Stn 10293, 127m.

Cumella sp K Cadien, carapace, lateral view



Cumella sp K Cadien, pereonites dorsal view



Cumella sp K Cadien, ursomites 5-6 and uropods showing relative lengths

SCAMIT CODE: None

Date Examined: January 1999 ; Rev 3/29/2023

SYNONOMY

6/8/2001: immature male *Cyclaspis nubila*; 1/17/2006: *Cyclaspis* sp G based on "large male" from CSD Stn 2042(2), 7/18/2005, 65m

Vouchered by: Dean Pasko

Voucher sheet prepared by: Dean Pasko

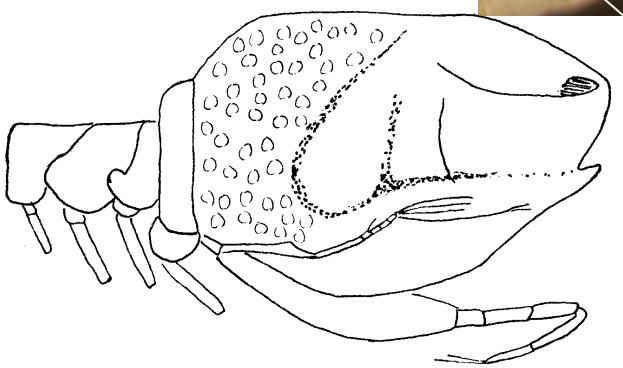
LITERATURE:

SCAMIT Newsletters: Vol 4, No. 12; Vol. 8, No. 2; Vol. 14, No. 6.
Cadien, D.B. 1996. Key to the Bodotriidae of California.
Zimmer, C. 1936. California Crustacea of the order Cumacea. Proc. U.S. Nat'l Mus. 83(2992):423-439.
Zimmer, C. 1980. Cumaceans of the American Atlantic Boreal Coast Region (Crustacea: Peracarida). Smith. Contr. Zool. No 302: 29 pp.

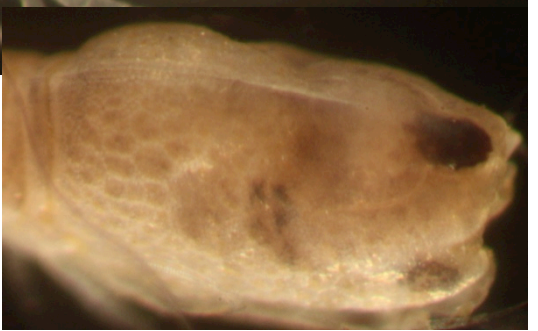
DIAGNOSTIC CHARACTERS:

From two (2) immature male specimens ~3.5mm TL, 1.0mm CL

- Eyelobe rounded, eye prominent, dorsal, dark maroon, 3–4 faint lenses visible
- Pseudorostrum with smooth, blunt anterior margin
- Carapace with strong dorsal crest running nearly the entire length, crest teeth absent; surface sculpturing consists of unpatterned pitting posteriorly and ventrally, and two relatively broad, smooth lateral sulci, each defined by minutely granular ridges
- Antennal sinus prominent, slightly flaring, smooth
- Exopods on Mxpd & pereopod 1
- Pereonite 1 fused with carapace; pereonites 1 & 2 postero-dorsally pointed; pereonite 3 reduced; pereonites 4 & 5 broad
- Coxae of pereonites 3–5 and pleonite 1 not laterally produced, but extending posteriorly as rounded lobes
- Uropod peduncle naked, longer than last abdominal segment, slightly longer than rami
- Uropod inner ramus uniarticulate, outer ramus biarticulate
- Rami subequal, naked except for terminal spines, each with plumose setae
- Pleopods, 4 pairs each biramus, with two rami subequal, flat, distally blunt with 3 to 4 short, curved stout terminal setae.



Cyclaspis sp SD3: carapace and pereonites 2 - 5, lateral view

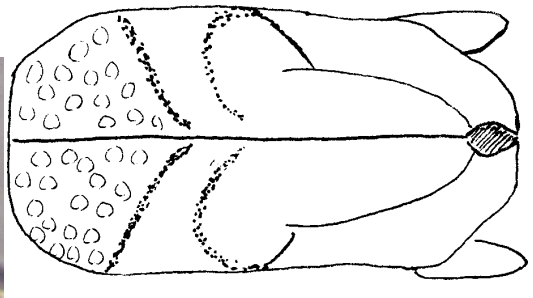


RELATED SPECIES AND CHARACTER DIFFERENCES:

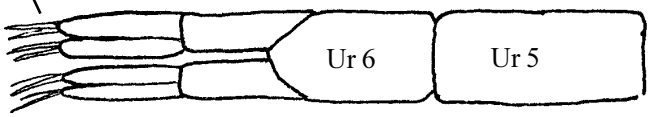
Cyclaspis sp SD3 resembles Cyclaspis sp C in the general shape of the carapace, dorsal crest, and strong antennal sinus, but is distinquished by the shallow lateral ridges and depressed areas on carapace and the naked uropods. It appears to be distinquished from all other Cyclaspis from the SCB by the absence of any spination on the uropods.

DEPTH RANGE: 7 to 88m

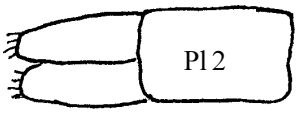
DISTRIBUTION: San Diego, CA, off La Jolla Canyon
(CSDMWWD Station B-11, 8 Apr1998, 288 ft)
Santa Monica Bay, 7m, Chevron Ocean Outfall Station B8, 3-Nov-2022



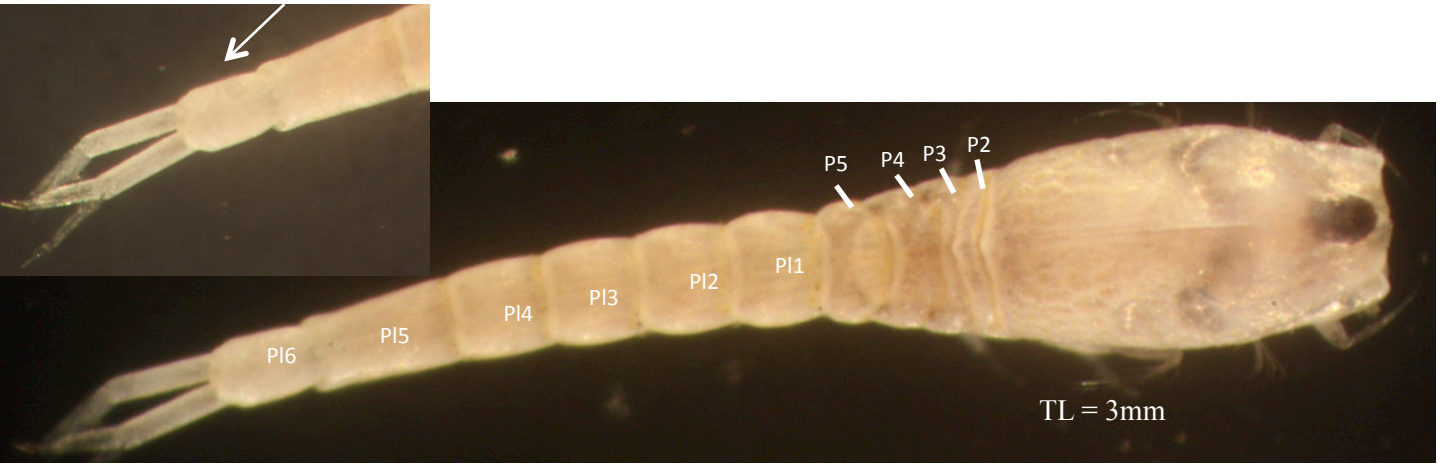
Cyclaspis sp SD3: carapace, dorsal view



Cyclaspis sp SD3: abdominal somites 5 & 6 and uropods, dorsal view.



Cyclaspis sp SD3: pleopod 2, dorsal view

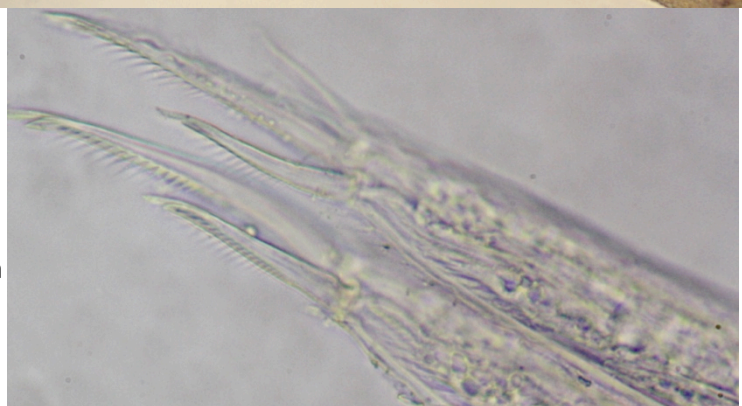


Cyclaspsis sp SD3 differs from known eastern Pacific species by the absence of marginal setae on the uropods (Table 2 below). Note Table 2 compares only female specimens. Red underline = common to C. sp SD3

TABLE 2. Comparison of characters of *Cyclaspis* species recorded from the Eastern Pacific. IM= inner margin; OM= outer margin; AP= apical.

Character	***C. boquillensis***	***C. hyalinus***	***C. bituberculata***	***C. breedyae***	***C. concepcionensis***	***C. dolera***	***C. giveni***	***C. nubila***	***C. peruana***	***C. testudinum***	***C. vargasae***
Sex	Female	Female	Female	Female	Female	Female	Female	Female	Female	Female	Female
Body length	5.3 mm	2.3 mm	5.2 mm	5 mm	2.1 mm	14 mm	2.6 mm	6 mm	8.5 mm	8 mm	6 mm
Type locality	La Boquilla, Oaxaca	Copalita mouth river, Oaxaca	Bacochibampo Bay, Sonora	Gulf of Nicoya, Costa Rica	Concepcion Bay, Baja California	Salinas Bay, Costa Rica	Todos Santos Bay, Baja California	Corona del Mar, California	Independencia Bay, Peru	Chatam Island, Galapagos	Murcielago Island, Costa Rica
Antenna 1- main flagellum	Biarticulate	Uniarticulate	Biarticulate	Biarticulate	Biarticulate	----	Biarticulate	----	Biarticulate	Biarticulate	----
Antenna 1- first basal article inner margins	8 fine hairlike setae	Small row of medial fine hairlike setae and tree setae	2 apical setae	Bare	1 medial seta and 2 apical setae	----	Bare	----	Small row of fine hairlike setae medial-proximally	3 medial setae	----
Carapace-teeth on dorsal surface	3	Absent	Absent	4	Absent	0–1	Absent	Absent	----	Absent	Absent
Maxilliped 3- inner margin basis	Not serrate	Not serrate	Not serrate	Serrate	Not serrate	----	Not serrate	----	----	----	Serrate
Maxilliped 3 - No. of setae on basis expansion	8IM; 2AP; 7 OM	3IM; 2AP; bare OM	4IM; 2AP; 5OM	3IM; 2AP; bare OM	2IM; 2AP; bare OM	----	3IM; 2AP; a row of fine hairlike setae on OM	----	----	----	12OM; 2AP; bare OM
Maxilliped 3 - Outer margin of the merus expansion	With cuspidate setae	With a row of fine hairlike setae	----	Bare	Bare	----	With a row of fine hairlike setae	----	----	----	With cuspidate setae
Pereopod 1- basis inner margin	1 medial cuspidate seta and 2 distal cuspidate setae	1 row of setulate setae	3 distal setae	Bare	3 medial-distal setae	----	Bare	----	Bare	3 medial-distal setae	At least 7 cuspidate setae
Endopod of the uropod- peduncle inner margin	28 teeth	Bare	5 cuspidate setae	14 teeth	Bare	18 setae	Bare	Bare	Bare	About 21 teeth	17 teeth
Endopod of the uropod- apical seta	Not fused	Fused	Not fused	Not fused	Not fused	Not fused	Not fused	Not fused	Not fused	Not fused	Not fused
Endopod of the uropod– inner margin	Teeth and seven serrate setae	2 cuspidate setae	7 cuspidate setae	4 cuspidate setae	Serrate	5 cuspidate setae	2 distal cuspidate setae	9 cuspidate setae	10 setae	13 setae	Serrate, with 1 seta

Table from Jarquin-Gonzalez & Garcia-Madrigal, 2013



Jarquin-Gonzalez, J. & M.D.S Garcia-Madrigal. 2013. Annotated checklist and keys for cumaceans (Crustacea: Peracarida) from the Tropical Eastern Pacific, with six new species from the Southern Mexican Pacific . Zootaxa 3721 (3): 201-257

SYNONOMY: *Elassocumella* sp SD1 Nestler 2005

LITERATURE:

Cadien, DB. (2015). Cumacea of the NEP: equator to Aleutians and intertidal to the abyssPart 6. The Family Nannastacidae. 15 October 2006 (revised 18 October 2013)

Cadien, DB. (2021). Further commentary on NEP Nannastacidae.

Watling, L. (1991). Rediagnosis and revision of some Nannasticidae (Crustacea: Cumacea). Proc. Biol. Soc. Wash. 104(4): 751–775

Watling, L. and LD Mccann. (1997). Cumacea, *In* Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and Western Santa Barbara Channel. Vol. 11: The Crustacea Part 2 - The Isopoda, Cumacea and Tanaidacea. J.A. Blake and P.H. Scott, Eds. Santa Barbara Museum of Natural History, Santa Barbara California: 278 pp: 121-180.

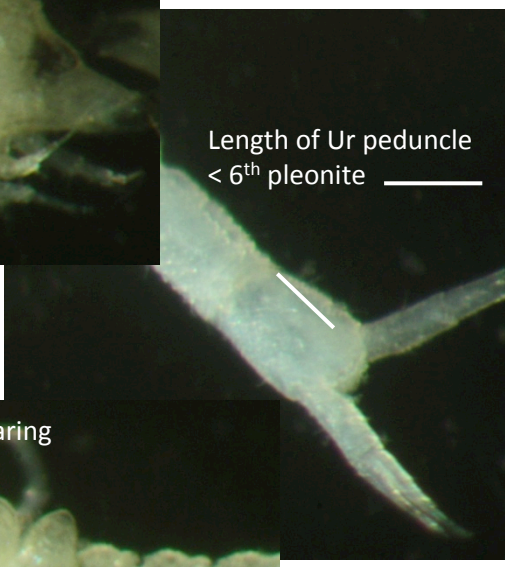
DIAGNOSTIC CHARACTERS (See figures following page.) Based on females, n=5; City of San Diego Monitoring Program, 97 – 101m.

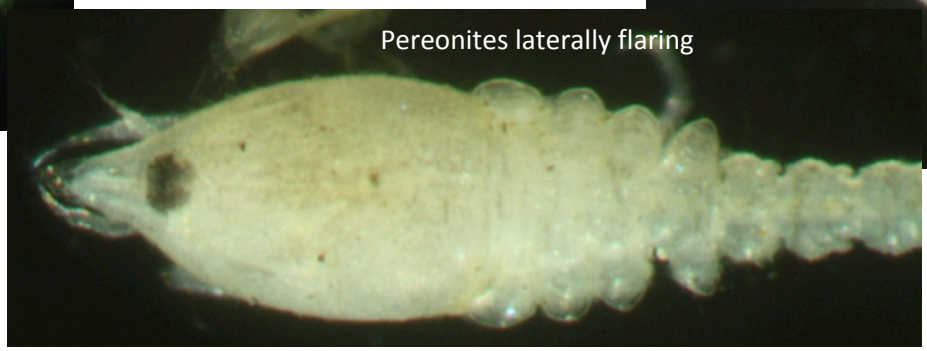
- Mandibular molar process truncate
- Ocular elements medially fused into single, rounded mid-dorsal lobe not reaching tip of pseudorostrum
- Carapace with spines along middorsal crest, continuing onto pereonites, and frequently on to some pleonites
- Pereonites laterally flaring
- Exopods absent (in female)
- Abdomen shorter than cephalothorax
- Uropodal peduncle short, shorter than pleonite 6

Similarities:

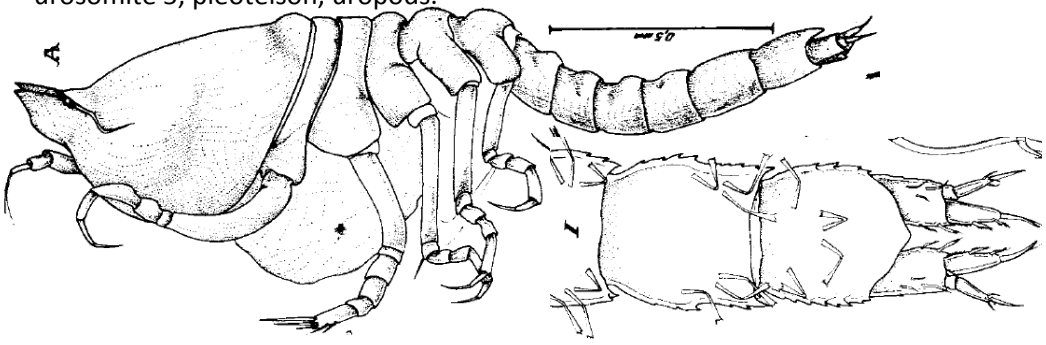
- Differs from *Elassocumella micruropus* (Zimmer 1943) in having spines along the mid-dorsal crest of the carapace, as well as lacking a distinct bump posteriorly and more elongate uropod (peduncle and rami).
- Differs from *Elassocumella krakeri* Jarquin-Gonzalez & Garcia-Madrigal 2013 in having spines along the mid-dorsal crest of the carapace, the absence of long setae on the carapace and pereonites, as well as having more elongate uropod (peduncle and rami).
- Differs from all members of *Cumella*, including *Cumella californica* Watling and McCann 1997, which also has dorsal spines on the carapace, in the absence of exopods on every pereopod and the 3rd maxilliped.

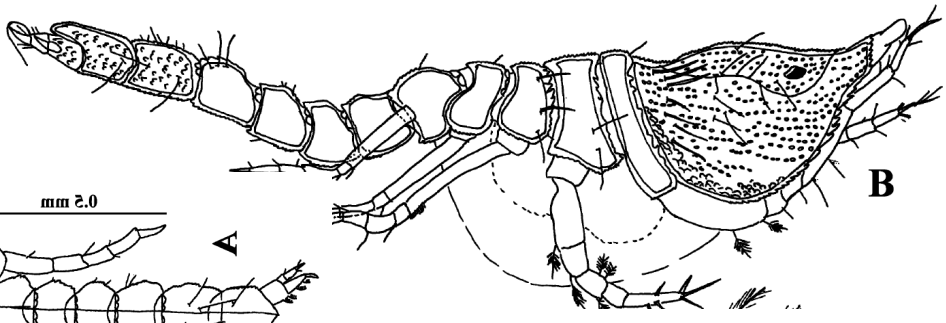
Notes: Cadien 2021 provides a brief but detailed commentary on the history and current status of *Elassocumella*.

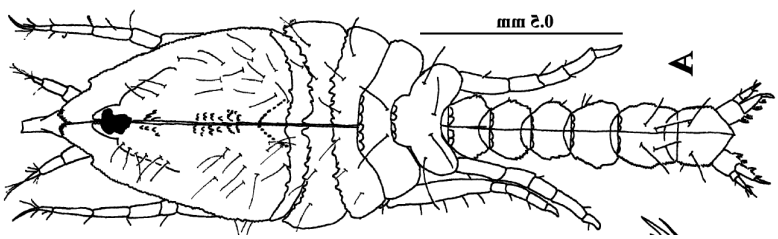




Elassocumella micruropsus (Zimmer 1943), from Bacescu & Muradian 1977: Whole female, lateral view; urosomite 5, pleotelson, uropods.







Elassocumella krakeri Jarquin-Gonzalez & Garcia-Madrigal, 2013: Whole female, dorsal and lateral views.

SYNONOMY: Philomedes sp LA1 Haney 2004
Philomedes sp TB1

LITERATURE:

Kornicker, LS. 1982. A Restudy of the Amphiatlantic Ostracode Philomedes brenda (Baud, 1850) (Myodocopina). Smithsonian Contributions to Zoology, 358:28 pages, 9 figures.

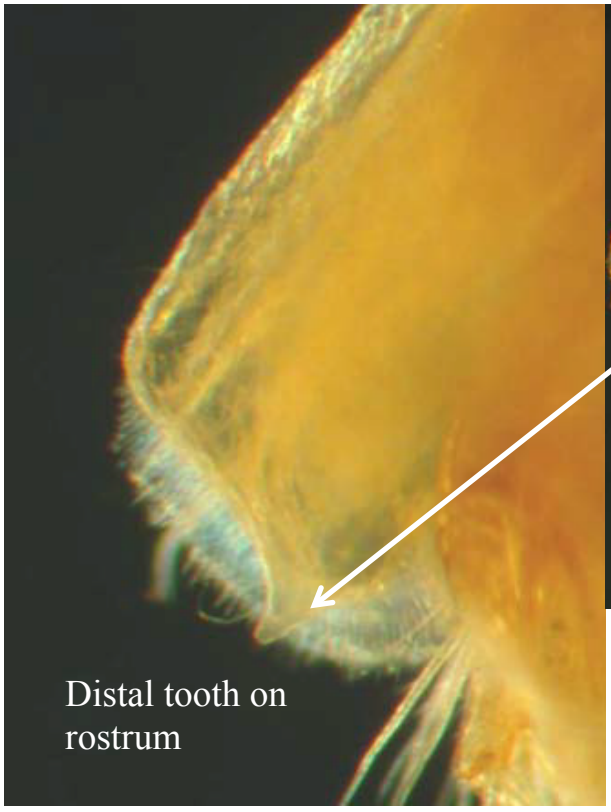
Kornicker, LS. 1988. Myodocopida Ostracoda of the Beaufort Sea, Arctic Ocean. Smith. Contr. Zool. No. 456.

DISTRIBUTION:

DIAGNOSTIC CHARACTERS

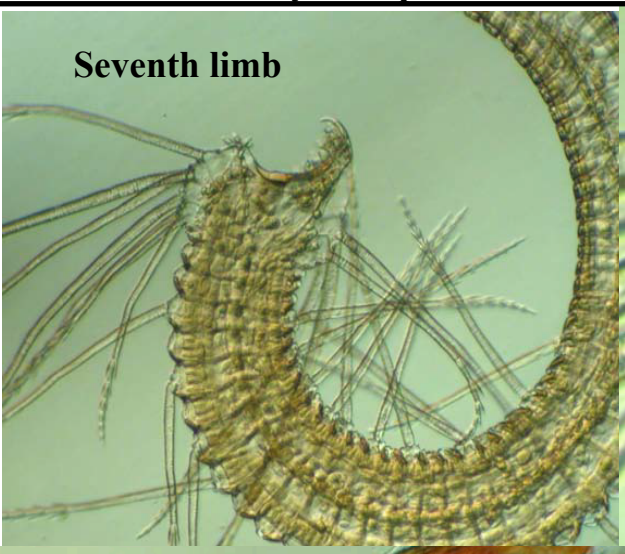
- Rostrum distally broad, blunt, ventral margin with distinctive distal tooth; carapace generally broadly rounded
- Carapace faintly pitted, semi-translucent
- Furca with with 11 claws, serially decreasing in size, none fused to base
- Long peg absent from seventh limb; lateral bristles numerous

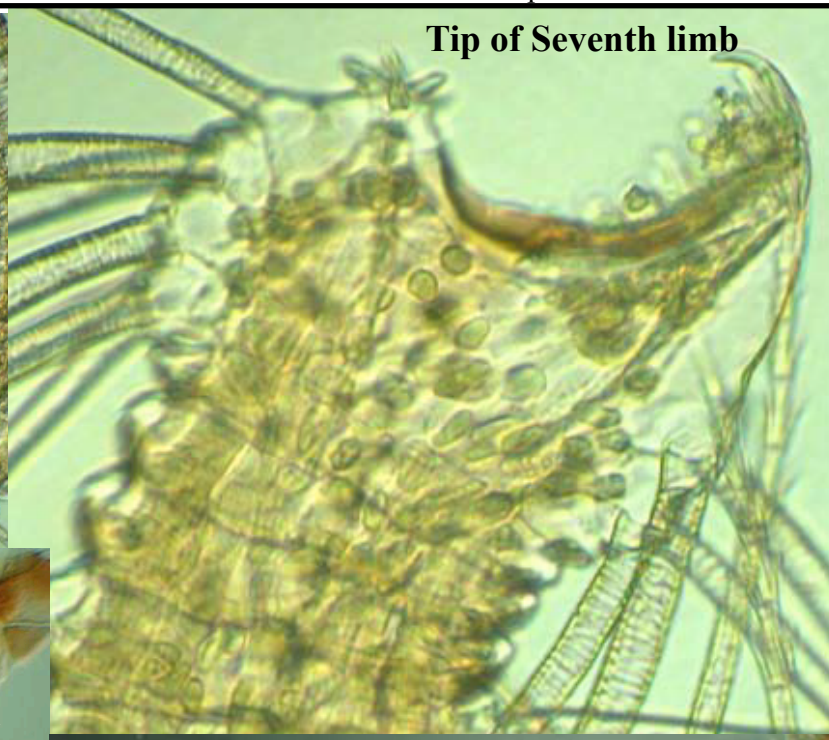
Similarities: Philomedidae sp B is distinguished from *Philomedes dentatus* Poulson 1962 and *Philomedes* sp A Cohen 1975 by: **(1)** the presence of a distal tooth on the rostrum (vs. flat); **(2)** 11 caudal furca claws (vs. 10); **(3)** absence of a long peg on the seventh limb (vs. presence of one long peg in *Philomedes* sp A).

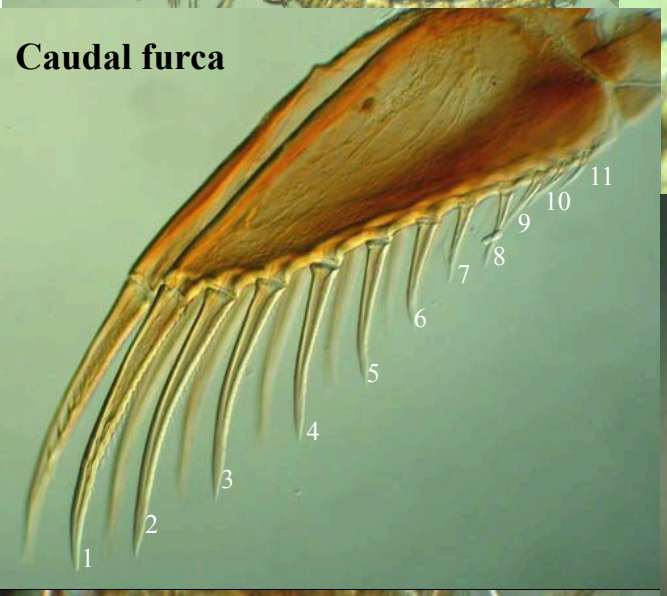


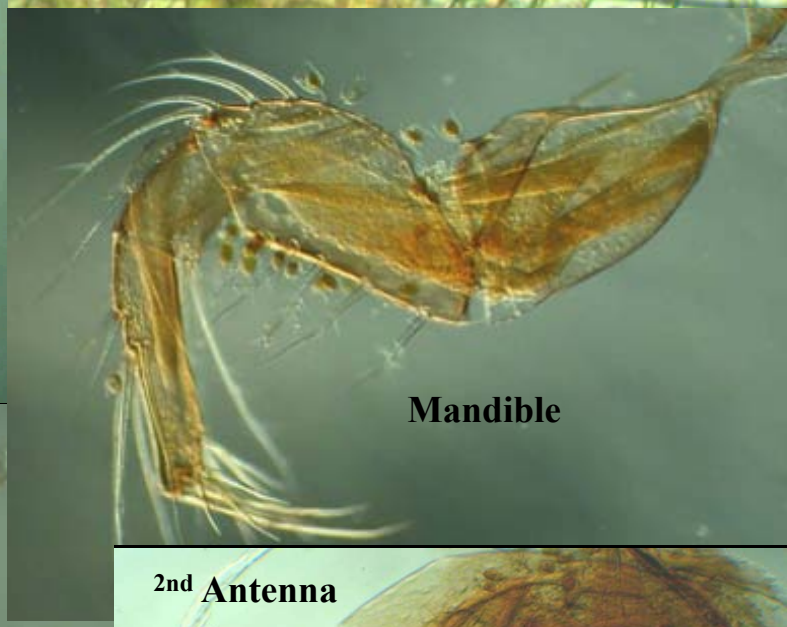
Philomedes sp B SCAMIT 2024 §
Ostracoda: Myodocopa: Philomedidae

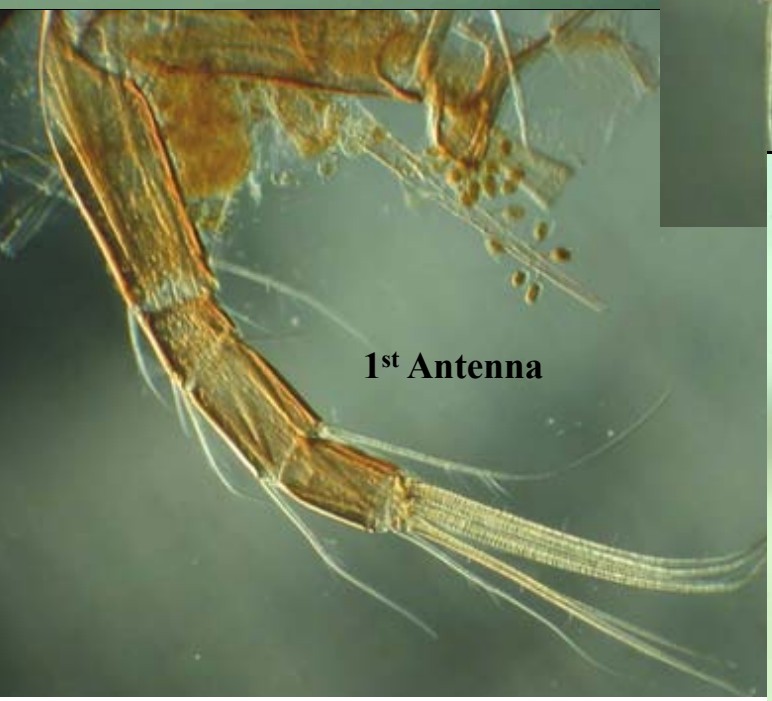
Prepared April 24, 2023; D Pasko
Rev. 13-Sep-2025

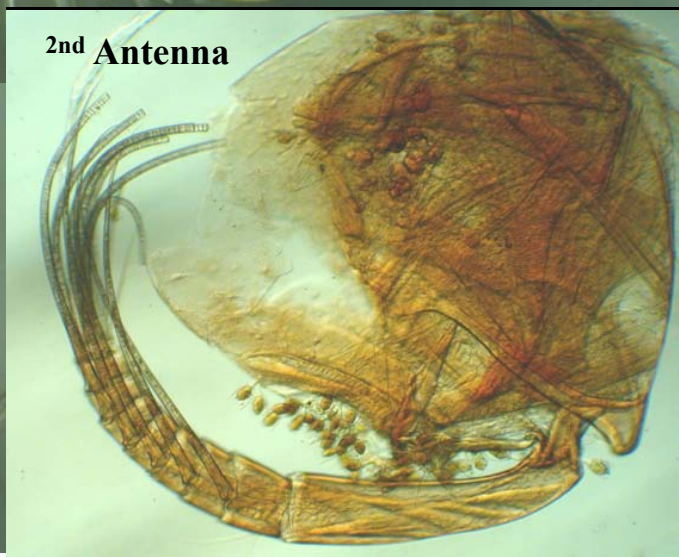












Prepared April 24, 2023; D Pasko
Rev. 13-Sep-2025

SYNONOMY: Philomedidae sp SD1 Pasko 2013
Philomedes sp SD1 Pasko 2013

LITERATURE:

Kornicker, LS. 1982. A Restudy of the Amphiatlantic Ostracode Philomedes brenda (Baud, 1850) (Myodocopina). Smithsonian Contributions to Zoology, 358:28 pages, 9 figures.

Kornicker, LS. 1988. Myodocopida Ostracoda of the Beaufort Sea, Arctic Ocean. Smith. Contr. Zool. No. 456.

DISTRIBUTION: Bight'13 Station 9351, 75m, 20-Aug-2013, Channel Island Strata; CLA-EMD Sample Set.

DIAGNOSTIC CHARACTERS

- Rostrum distally broad, blunt, very weakly incised
- Carapace faintly pitted, with blunt serrations along anterior and ventral margins
- Posterior margin of carapace with up to 10 long setae per valve (not shown). Length = 1/5 of carapace length
- Furca with distinctive Y-shaped sclerite, with 11 claws: 2L-3S-1L-5S. Claws 1 & 2 robust; claws 3, 4, & 5 thinner and smaller; the 6th claw short and thick; the remaining 5 claws short and thick, but less robust than the 6th

NOTE: There appears to some variation in the shape of the 3S claws. The pictures below show a thickened set of 3; where as the specimens from Station 9351 are thin. These photos are from a specimen from San Diego, but the specimen I collected at Station 9351 are the same.

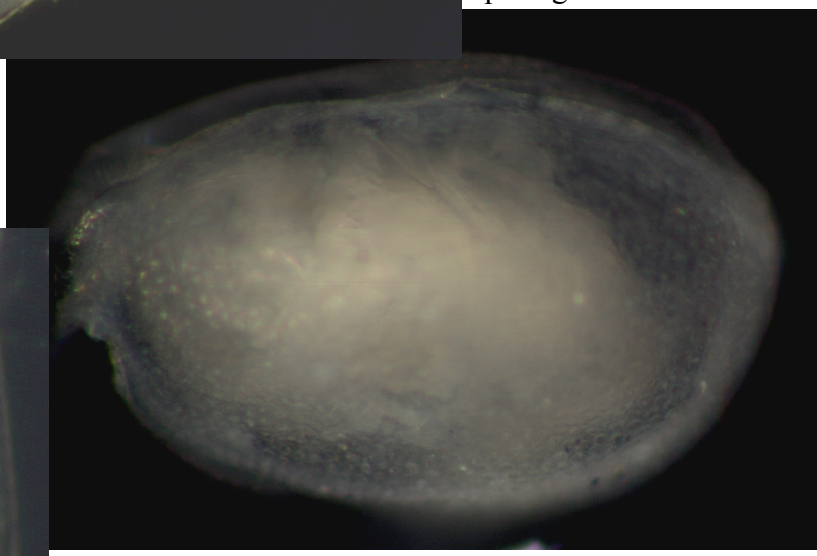
Similarities: *Philomedes* sp C is distinguished from other SCB philomedids by the absence of a rostral incision in combination Y-sclerite of the caudal furca and serrate margin of the carapace.

Philomediae sp C, lateral view

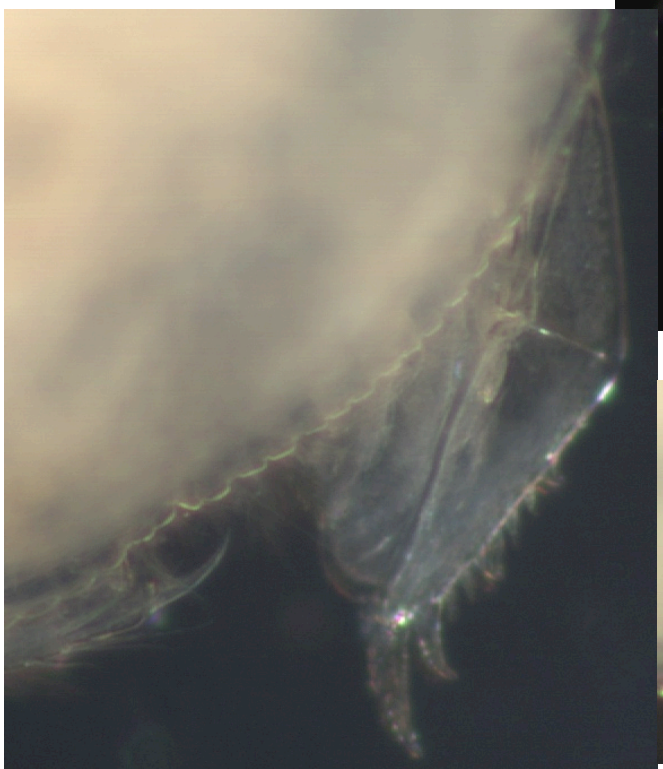
Prepared April 24, 2023; D Pasko
Rev. 13-Sep-2025

Philomedes sp C, lateral view

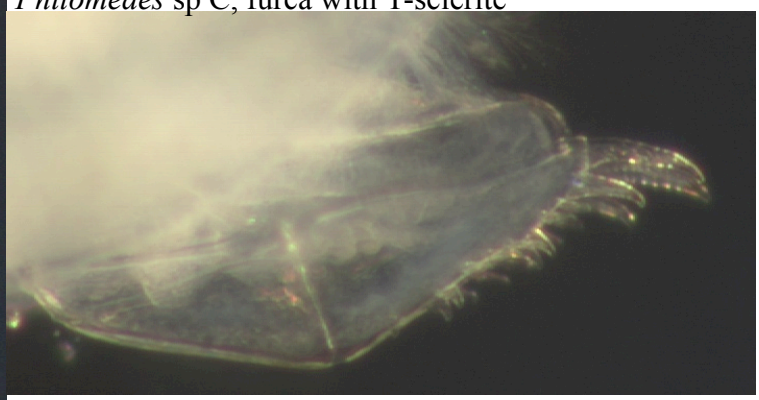
Philomedes sp C, lateral view, note carapace pitting



Philomedes sp C, ventral margin of carapace and furca



Philomedes sp C, furca with Y-sclerite



SCAMIT CODE: None

Date examined: 16 June 1999
Vouchered by: Dean Pasko

SYNONOMY: *Photis ? conchicola*
Photis sp SD9 CSDMWWD 1999

LITERATURE: See Page 2

DIAGNOSTIC CHARACTERS:

General:

Eye lobe poorly produced, blunt

Antennae short, setae moderately long

Male:

Coxae moderately setose (≤15 setae along ventral margin, typically 10-12)

Gnathopod 1, article 2 broad (L:W ≤ 2.0), posterior margin convex

Gnathopod 1, article 5 shorter than article 6, posterior margin narrow and lobate (approx. one-third the length of anterior margin)

Gnathopod 1, palm concave, defining corner quadrate and slightly produced; coxa 1 ventral margin flat.

Gnathopod 2, robust, transverse (defining process extending to level of dactylar hinge); defining tooth displaced medially; palmar tooth tapered; dactyl thick, with blunt median tooth.

Gnathopod 2, article 2 broad, antero-distally produced, with stridulating ridge.

Female:

Coxae moderately setose.

Gnathopod 1, palm flat, nearly simple, defining corner poorly defined (little change of angle, no defining spine), the hind margin straight; article 5 subequal to 6, posterior margin approx. one-half anterior margin; article 2 narrow, unproduced.

Gnathopod 2, palm weakly stepped (or strongly excavate); article 2 unproduced.

Coloration: unknown, white in alcohol

Figure 1. *Photis* sp SD9, male gnathopod 1.

Figure 2. *Photis* sp SD9, male gnathopod 2

RELATED SPECIES:

Male *Photis parvidons* Conlan 1983 differs from *Photis* sp SD9 in that coxae 1 and 2 are distinctly shorter than coxae 3 & 4 (not subequal); gnathopod 1, article 5 is subequal to article 6, the posterior margin is approx 1/2 the anterior margin, article 6 is narrow and the defining corner is rounded; gnathopod 2, article 2 is less stout (according to the illustration in Conlan 1983), and the defining tooth of article 6 is not displaced medially. Females differ in the concave or sinuous palm of gnathopod 1 and the concave palm of gnathopod 2 (i.e., not stepped or excavate).

Male *P. conchicola* have coxae 1 & 2 distinctly shorter than 3 & 4, gnathopod 1 palm is convex or flat, and the dactyl of gnathopod 2 does not posses a tooth. Female *P. conchicola* appear to be more similar to *Photis sp* SD9, but differ because coxae 1 & 2 are much shorter than 3 & 4, the coxae are more densly setose, and gnathopod 2, article 2 posseses a strong antero-distal process.

LITERATURE:

Barnard, J.L. 1962. Benthic marine Amphipoda of southern California: Families Aoridae, Photidae, Ischyroceridae, Corophiidae, Podoceridae. Pacific Naturalist, 3: 1-72.

Conlan, K.E. 1983. The amphipod superfamily Corophioidea in the northeastern Pacific region. 3. Family Isaeidae: Systematics and distributional ecology. Publications in Natural Sciences, No. 4. 1-75.

DISTRIBUTION: La Jolla, CA.

HABITAT: Intertidal among *Phyllospadix* rhizomes

Figure 3. *Photis* sp SD9, female gnathopod 1

Figure 4. *Photis* sp SD9, female gnathopod 2

SYNONOMY: *Photis californica* Barnard 1962 (in part)
Photis sp OC1 Diener 1992

LITERATURE:

Cadien, DB. 2015. Amphipoda of the Northeast Pacific (Equator to Aleutians, intertidal to abyss): IX. Photoidea – a review. LACSD 22 July 2004 (revised 21 May 2015).

Conlan, Kathleen E. 1983. The amphipod superfamily Corophioidea in the northeastern Pacific region. 3. Family Isaeidae: systematics and distributional ecology. National Museums of Canada Publications in Natural Sciences, no. 4: 1–75.

Barnard, J. Laurens. 1962. Benthic Marine Amphipoda of Southern California: 1. Families Aoridae, Photidae, Ischyroceridae, Corophiidae, Podoceridae. Pacific Naturalist 3, no. 1: 3–72.

Shoemaker, Clarence R. 1942. Amphipod crustaceans collected on the Presidential Cruise of 1938. Smithsonian Miscellaneous Collections 101, no. 11: 1–52.

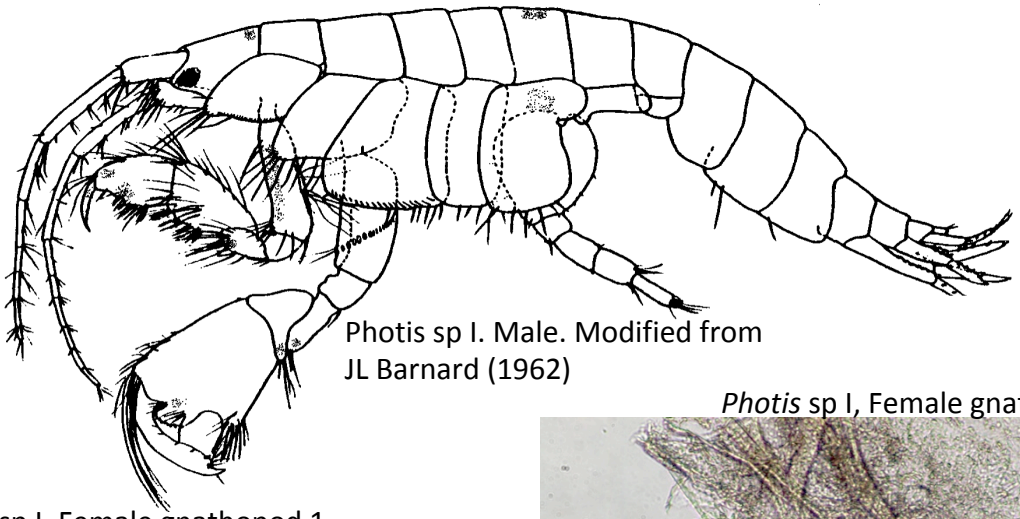
DIAGNOSTIC CHARACTERS (See Figures following page)

- Males and females with spotty pigmentation, especially in the head and gnathopods 1 and 2; antenna 2 weakly geniculate; coxae 1–4 moderately setose; epimeron 3 subquadrate (not produced).
- Male Gn1 palm excavate (or slightly concave). carpus subequal to propodus; hind margin of carpus broad (about one-half anterior margin); often with dark spot distally on propodus
- Male Gn2 transverse, defined by tooth; dactyl simple, without tooth along inner margin; palmar tooth present, square (or blunt); coxa 2 setose, but not dense (~15–20 setae along ventral margin); often with dark spot distally on propodus
- Female Gn1 palm concave to slightly excavate; dactyl not serrate;
- Female Gn2 basis without disto-lateral crests; palm oblique, palm sinuous, distally acute

Similarities:

- Males differ from *Photis brevipes* in the smaller overall size, absence of a tooth at mid-point of dactyl, less setose coxae, less geniculate antenna 2, and distinctive body pigmentation.
- Females are quite similar to *Photis brevipes* but also differ in the much smaller overall size, more excavate palm of gnathopod 1, the less serrate dactyl of Gn1, less setose coxae, and distinctively spotty body pigmentation.
- Males are similar to *Photis californica* in size, but differ in the blunt palmar tooth of Gn2 and distinctively spotty body pigmentation.
- Females differ from *Photis californica* in the sinuous and distinctly acute Gn2 palm (vs. rounded palm in *P. californica*), absence of a disto-lateral crests on the Gn2 basis, and the distinctively speckled body pigmentation.

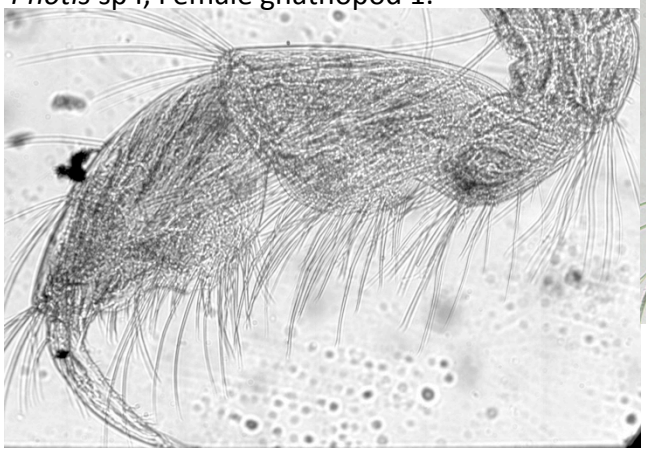
Notes: *Photis* sp I was first recognized in samples from the Orange County Sanitation District Monitoring Program by SCAMIT in March 1995 (SCAMIT NL Vol. 13, No. 11) during a review of coloration patterns in the genus, specifically *Photis californica*. There proved to be several differences in morphology found during this re-examination, which prompted erection of "*Photis* sp OC1" as a provisional taxon for the variant specimens. The structure of the male gnathopods originally illustrated in Barnard 1962 as representative of *P. californica* Stout 1913 (see Figure 12A) more closely resembles *Photis* sp I, particularly in the squared palmar tooth. That latter has been widely recognized in SCB monitoring programs for decades, and while it can co-occur with *P. brevipes* and *P. californica,* it is more commonly found in shallow coastal shelf samples.



Photis sp I. Male. Modified from JL Barnard (1962)

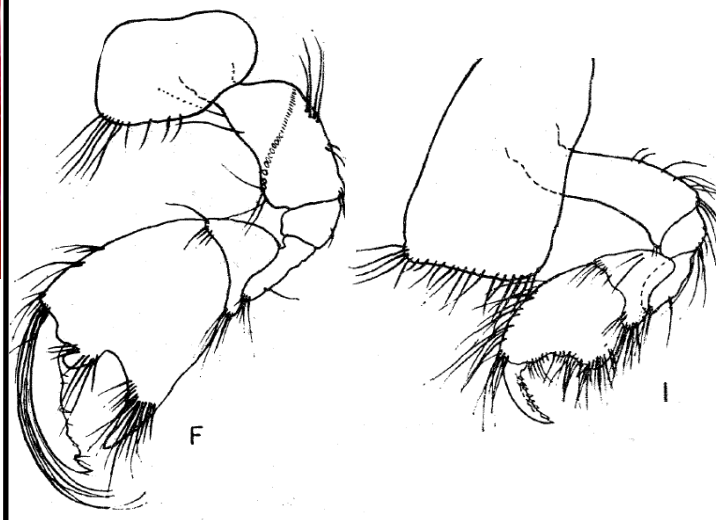
Photis sp I, Female gnathopod 2.

Photis sp I, Female gnathopod 1.



Photis sp OC1. Male. Photo by D. Pasko

Photis californica. Male Gn2 (F); Female Gn2 (I). From JL Barnard (1962)



Provisional Name: *Photis* sp J
Authority: SCAMIT 2024 §
Common Synonyms: *Photis* sp SD10

Taxon: Amphipod: Isaeidae **Taxonomist:** Dean Pasko
Date: October 1999; Rev 12-Sep-2025
Specimen(s): **Station Date Depth (ft/m) #spms storage location**
2685 (1), 28 July 99, 398 ft, 1 spm, DP: ITP-99 FID #1
B11 (1), 01-Feb-2019

Characters:

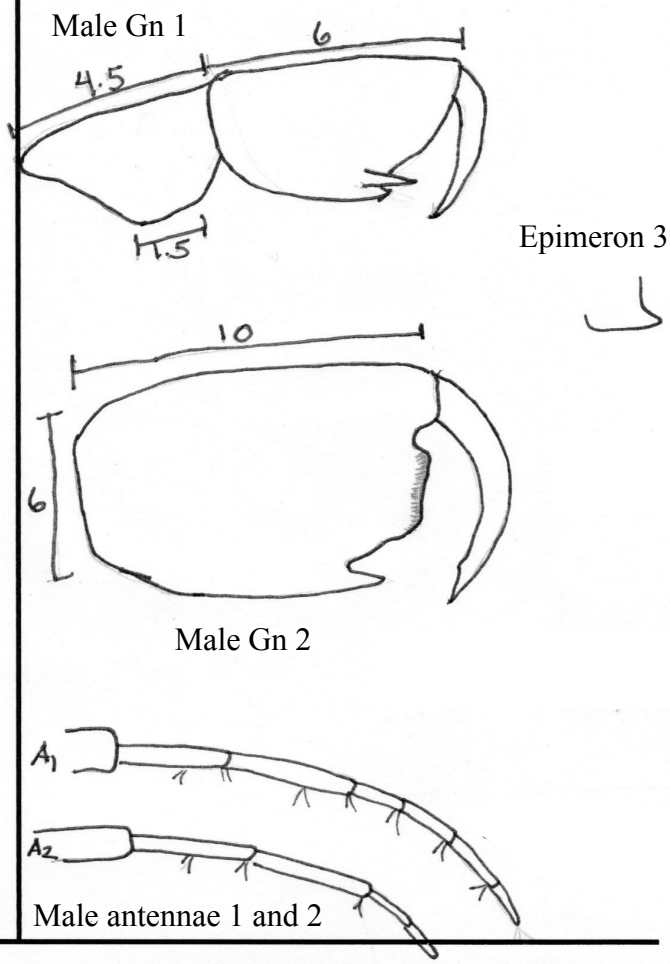
Male specimen (2.5 mm)

- Articles of antennae long, few in number (A1 flagellum with 4 articles; A2 with 5), sparsely setose
- Eye normally sized; eye lobe sub-acute
- Gnathopod 1 palm oblique with small defining tooth and large mesial spine; article 5 slightly shorter than article 6, posterior margin short (approx. 1/3 of anterior margin); basis unproduced antero-distally.
- Gnathopod 2 article 6 elongate (approx. 1.75 as long as broad) with oblique palm; palmar tooth large, strongly produced, squared and slightly emarginate; dactyl strongly overlapping palm; article 2 without stridulation ridge.
- Coxae 2-5 elongate, narrow, with 10-15 marginal setae
- Body coloration patchy.

Female specimen (2.25 mm) – see page 2

- Eye normally sized; eye lobe sub-acute
- Gnathopod 1 palm oblique, flat to slightly convex; article 5 subequal to article 6, posterior margin broad (approx. 4/5th anterior margin); basis unproduced antero-distally, with row of 5-8 short, evenly distributed setae.
- Gnathopod 2 oblique, article 6 elongate (approx. twice as long as broad) convex to very slightly sinuous palm; basis unproduced antero-distally, with row of 5-8 short, evenly distributed setae.
- Coxae 2-5 elongate, narrow, with 10-15 marginal setae.

Illustrations:



Related Species & Other Comments:

This species, represented by a single male specimen, differs from all other species of *Photis* reported from the southern California Bight in the possession of a defining tooth on gnathopod 1. *Photis* sp J closely resembles *Photis macinerneyi* in the elongate nature of gnathopod 2, article 6, but differs in the larger and more squared and emarginate palmar tooth, and the more oblique nature of the palm (i.e., the defining tooth does not extend out to a distance level with the dactylar hinge). It is also similar to *Photis lacia* but differs in having gnathopod 1, article 5 shorter than article 6 with a posterior margin is only 1/3 the anterior margin, gnathopod 2 with a much stronger, more emarginate palmar tooth, and in the absence of a stridulating ridge on gnathopod 2, article 2.

This specimen may represent a juvenile or immature specimen, however, the presence of a process defining the palm of gnathopod 1 makes this specimen unique enough to call it out as something to look for.

References:

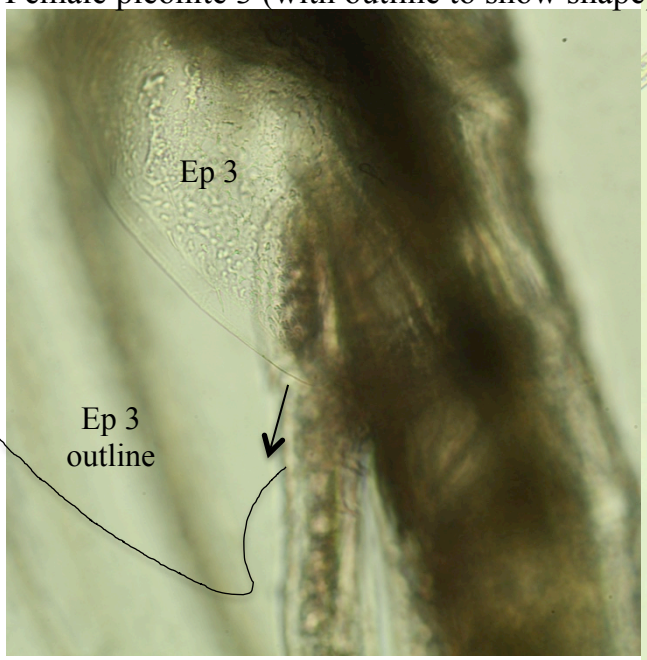
Barnard, J.L. 1962. Pacific Naturalist, 3. 1-72.
Conlan, K. 1983. Publications in Natural Sciences, No. 4. 1-75.

Provisional Name: *Photis* sp J
Authority: SCAMIT 2024 §
Common Synonyms: *Photis* sp SD10

Taxon: Amphipod: Isaeidae **Taxonomist:** Dean Pasko
Date: October 1999; Rev 12-Sep-2025
Specimen(s): **Station Date Depth (ft/m) #spms storage location**
2685 (1), 28 July 99, 398 ft, 1 spm, DP: ITP-99 FID #1
B11 (1), 01-Feb-2019

Female, whole specimen. (City of San Diego Station B11, 01-Feb-2019

Female pleonite 3 (with outline to show shape)



Female head, antennae, eye lobe (outlined to show shape)

Taxon: *Photis* sp K SCAMIT 2024 §
Synonomy: *Photis* sp OC2 Pasko 2013
? *Photis* sp B Gillingham

Examined by Dean Pasko, 15-Oct-2013
Rev 12-Sep-2025

Collected: OCSD, Winter Semi-Annual survey, Station 75, 6 March 2013, 54 m

Literature:

Conlan, K.E. 1983. The amphipod superfamily Corophioidea in the northeastern Pacific region. 3. Family Isaeidae: systematics and distributional ecology. Natl. Mus. Nat. Sci. (Ottawa), Publ. Nat. 4: 1–75.

Conlan, K.E. 1994. New species of the amphipod crustacean genera *Photis* and Gammaropsis (Corophioidea: Isaeidae) from California. Amphipacifica 1 (3): 67–73.

Pasko, D. 1999. Key to the Photis (Amphipoda: Isaeidae) from Coastal Shelf Bottoms of the Southern California Bight. City of San Diego Marine Biology Laboratory. Unpublished.

Characters (See Figures following page)

- Antenna 1, article 1 elongate (subequal to length of head), article 2 at least twice as long as article 1, article 3 subequal to article 1, with pairs of long setae (setae equal to length of antenna 1 flagellum articles);
- Coxa 1 directed forward, elongate, tapering distally, longer (deeper) than broad, approximately one-half the depth of coxa 2, setae sparse (5) and long;
- Gnathopod (Gn) 1 basis bi-carinate along anterior margin, each distally produced; palm strongly excavate, setose, hind margin rounded, defined by strong spine; oblique row of long setae medially; carpus subequal to propodus, hind margin narrowed (one-third of anterior margin);
- Coxa 2 elongate, narrow, broadly squared distally with 10 widely spaced setae, coxa 2 through 5 subequal in depth;
- Gn2 oblique; dactyl slightly shorter than palm, with distal spine-bearing notch but no tooth; palm produced into small, crenulate bump near dactylar hinge, followed by sinuous excavation prior to small, narrow palmar tooth, remainder of palm obliquely angled, and distally rounded, not defined by spine;
- Gn2 basis strongly produced distally with narrowing and tapered distal process bearing stridulation ridges proxmially.

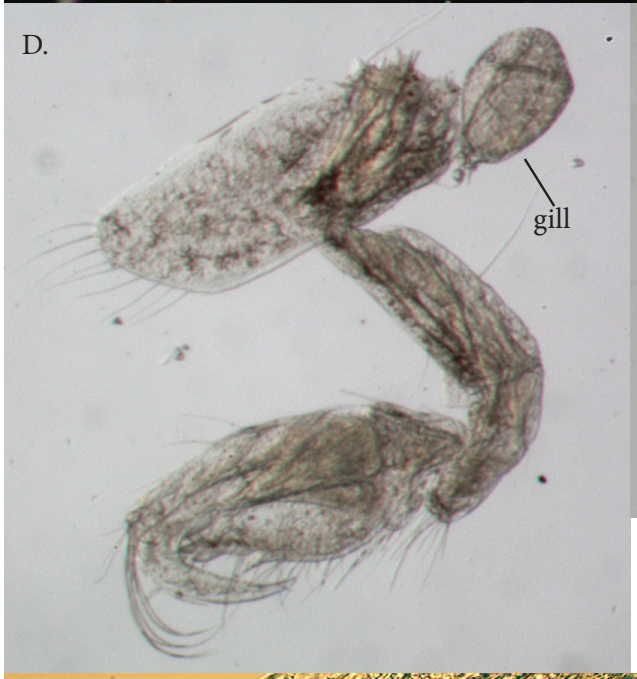
Similarities:

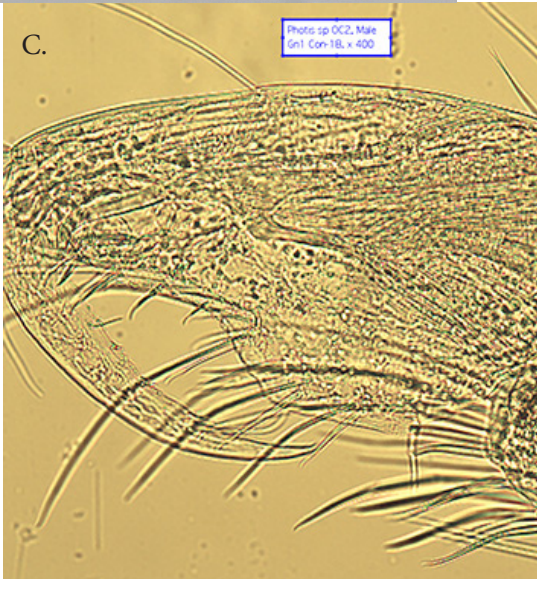
- These specimens seem to be most similar to *P. linearmanus* Conlan 1994 in sparsely setose coxa, oblique Gn2 palm without defining spine, and elongate propodus and dactyl of pereopods 3–5, but are distinguished by the larger palmar tooth on Gn2 and the shorter coxa 1.
- Similar to *P. macinerneyi* Conlan 1983 but Gn2 palmar tooth is strongly tapered rather than squared, and oblique rather than transverse.
- Similar to *P. chiconola* J.L. Barnard 1964 but Gn2 is distinctly oblique and not defined by a process.
- Similar to *P. viuda* J.L. Barnard 1962 in general shape of Gn2 (see J.L. Barnard 1962, Fig 20), but Gn1 is strongly excavate and Gn2 is without a defining process.
- Similar to Photis sp G SCAMIT 2020 § in having a proximal palmar process and tapered tooth, but Gn2 lacks a defining tooth or process.

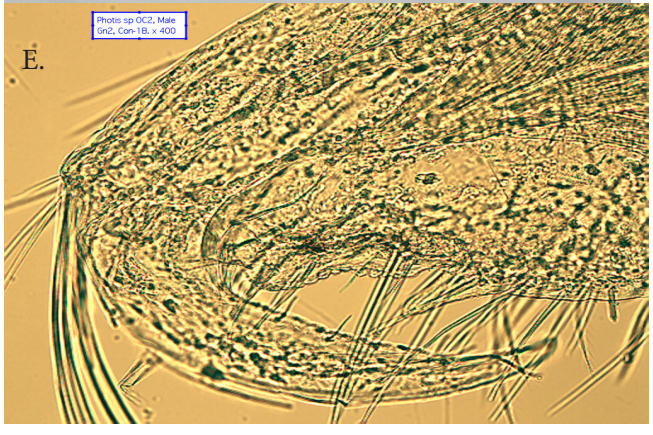
Taxon: *Photis* sp K SCAMIT 2024 §
Synonomy: *Photis* sp OC2 Pasko 2013
? *Photis* sp B Gillingham

Examined by Dean Pasko, 15-Oct-2013
Rev 12-Sep-2025

***Photis* sp K**: (**A**) male, lateral view; (**B**) Gn 1; (**C**) detail of Gn1 palm; (**D**) Gn2; (**E**) detail of Gn2 palm.







LOS ANGELES COUNTY SANITATION DISTRICTS
Converting Waste Into Resources

Voucher Sheet
B. Haggin
October, 2025

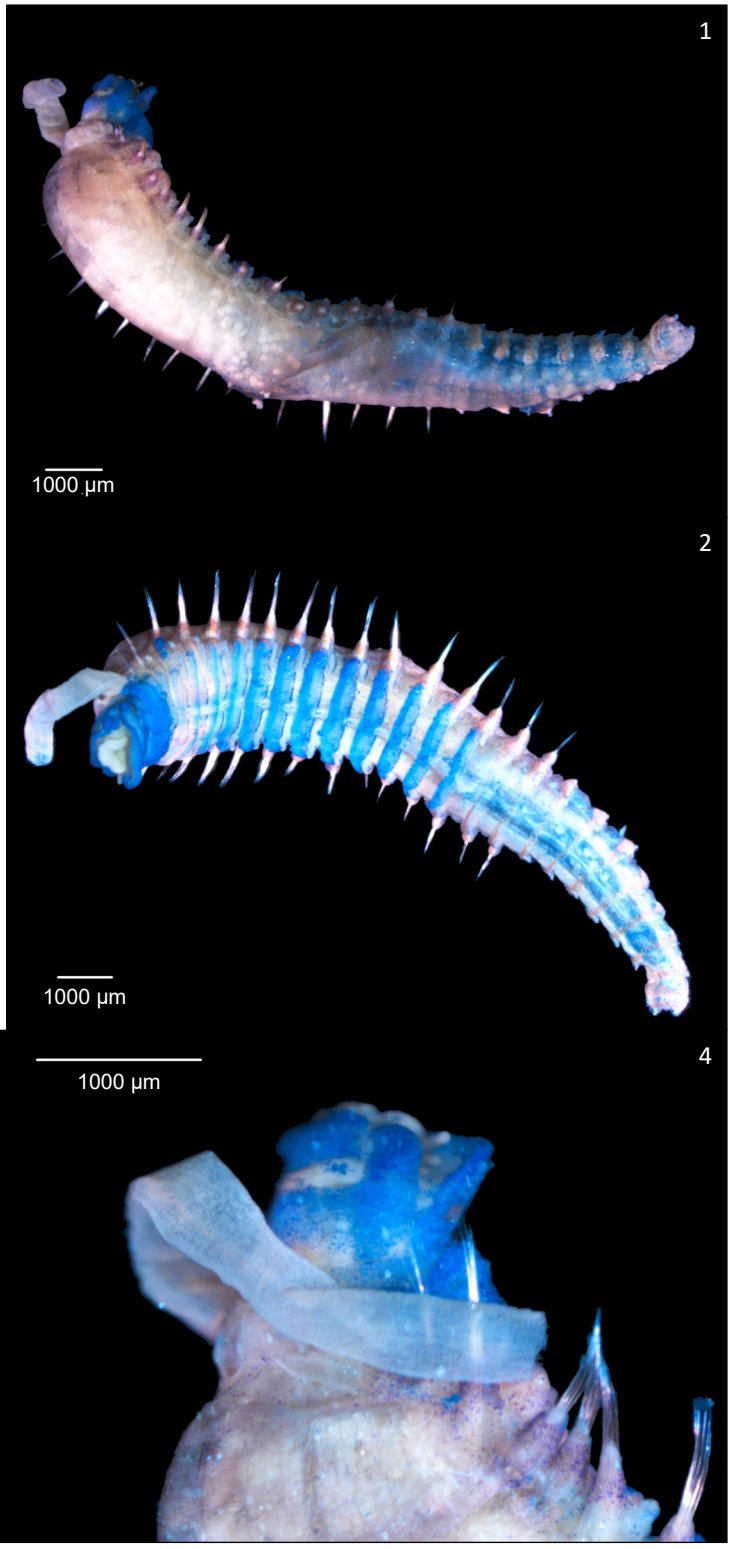
Species: *Amphisamytha* sp LA1 Haggin 2024 §
Synonyms:

P-code—P-309
ITI-code— Group 1

Subfamily: Ampharetinae
Family: Ampharetidae
Suborder: Terebelliformia
Order: Terebellida
Infraclass: Canalipalpata
Subclass: Sedentaria
Class: Polychaeta
Phylum: Annelida

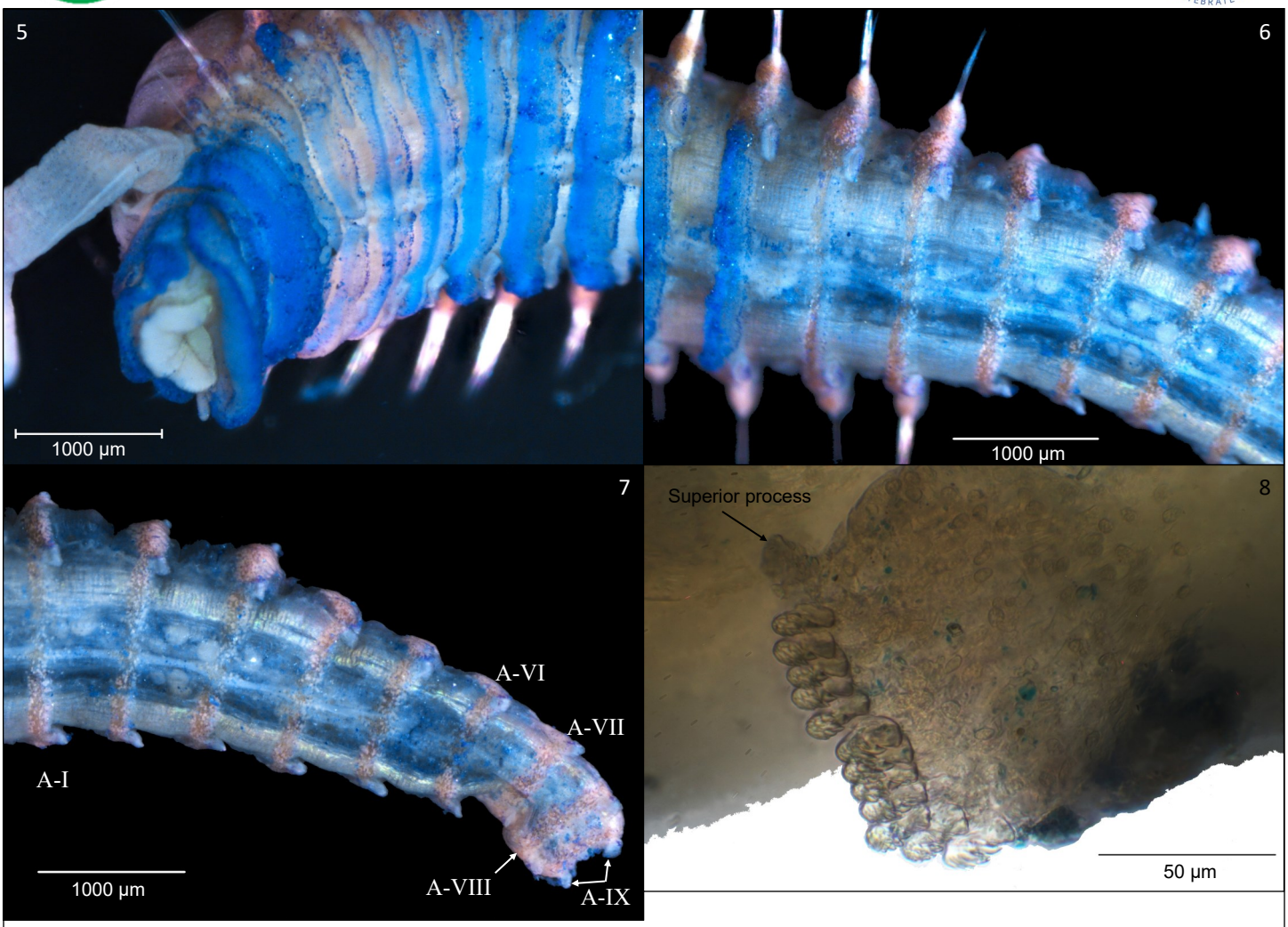
Diagnostic Characters:

1) Prostomium weakly trilobed, eyes not observed **(Images 1, 3 & 4)**.
2) Peristomium forming ventrally downturned lip, not crenulated **(Images 2 & 5)**.
3) 4 pair of branchiae, smooth; at least 1 pair very long, extends back to chaetiger 14.
4) Palae absent **(Images 1-5)**.
5) Thorax with 17 chaetigers, 14 uncinigers **(Images 1 & 2)**.
6) Ventral scutes present to chaetiger 17; obvious thru C15, ventral scutes of C16 & C17 less obvious, but with brown pigment band extending between neuropodia, similar to in abdominal region **(Images 2& 6)**.
7) Abdomen with 9 chaetigers; brown pigment band ventrally between neuropodial lobes **(Images 6 & 7)**.
8) Neuropodial lobes with small superior process **(Image 8)**.
9) Abdominal chaetigers with glandular pads and very small interramal papillae on at least the first 6 abdominal segments **(Images 7 &9)**.



Amphisamytha sp LA1

Haggin, 2024 §



Diagnostic Characters cont.:

10) Pygidium with 1 pair, very small, lateral anal cirri (only visible with compound microscope) **(Images 10 & 11)**.

11) Thoracic notochaetae limbate **(Images 12 & 13)**.

12) Thoracic uncini with 4 rows of teeth; lower row with 1 tooth, 2nd row with 2 teeth, 3rd row with 1 tooth, upper row with crested with many small teeth; >80 uncini in thoracic tori, number reducing slightly in last thoracic segment **(Image 13)**.

13) Abdominal uncini with 4 rows of teeth; lower row with 1 tooth, 2nd row with 2 teeth, 3rd row with 3-5 teeth, upper row with crested with many small teeth; ~25 uncini in abdominal tori **(Image 8)**.

Pigmentation/MGS:

1) Prostomium and peristomium staining intensely; mid-prostomium with 2 stain patches in non-staining band, giving the appearance of eyes **(Images 1-5)**.

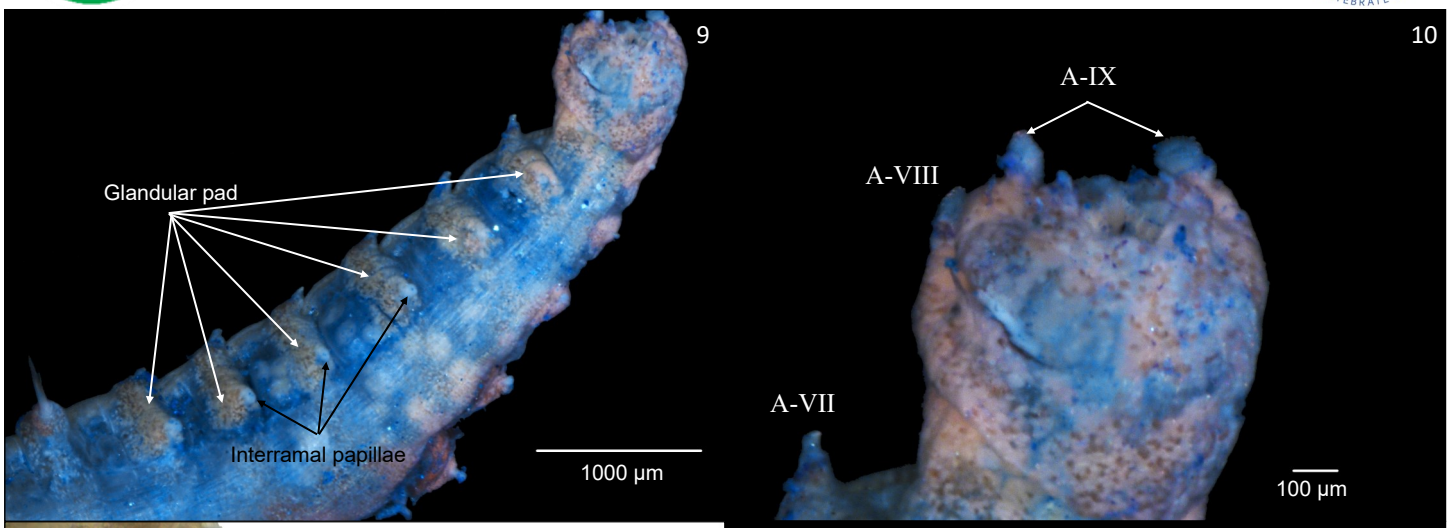
2) Slight stain under branchial base.

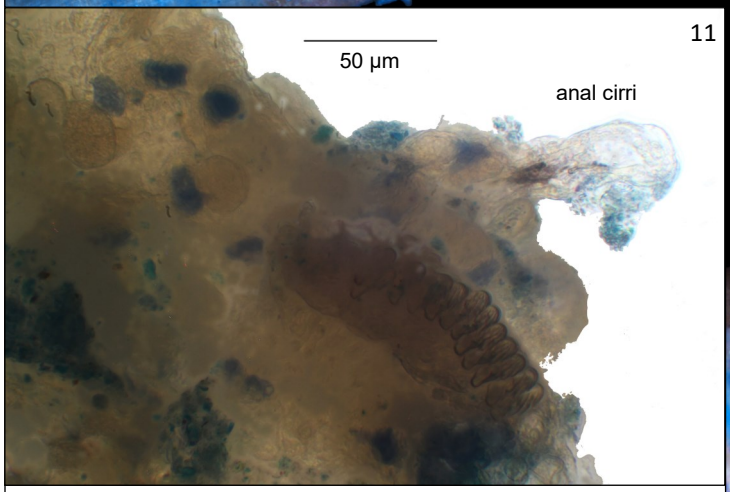
3) Slight speckled stain on anterior notopodia **(Image 4)**.

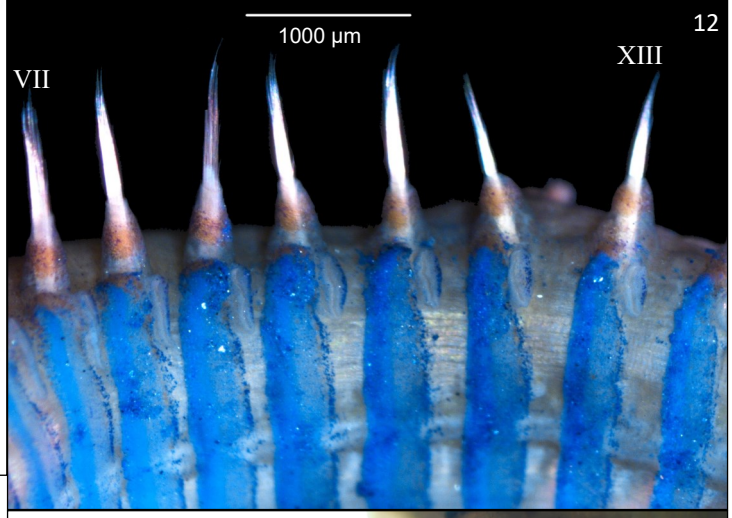
4) Ventral scutes stain thru chaetiger 15 then stops abruptly **(Images 2 & 6)**.

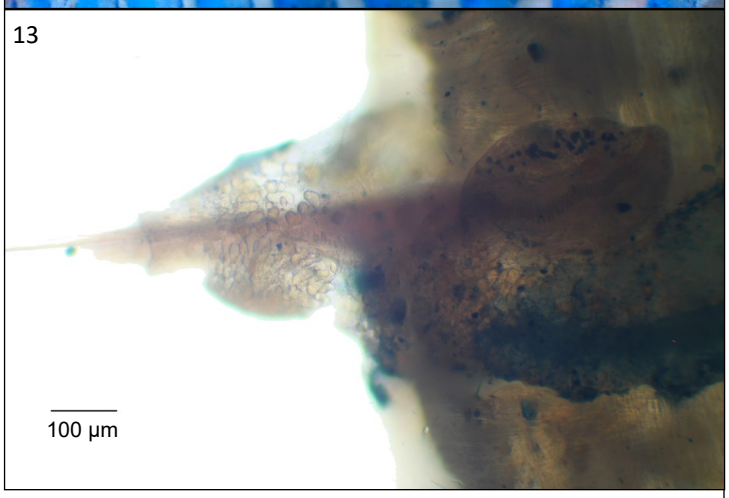
Amphisamytha sp LA1

Haggin, 2024 §









Material Examined:

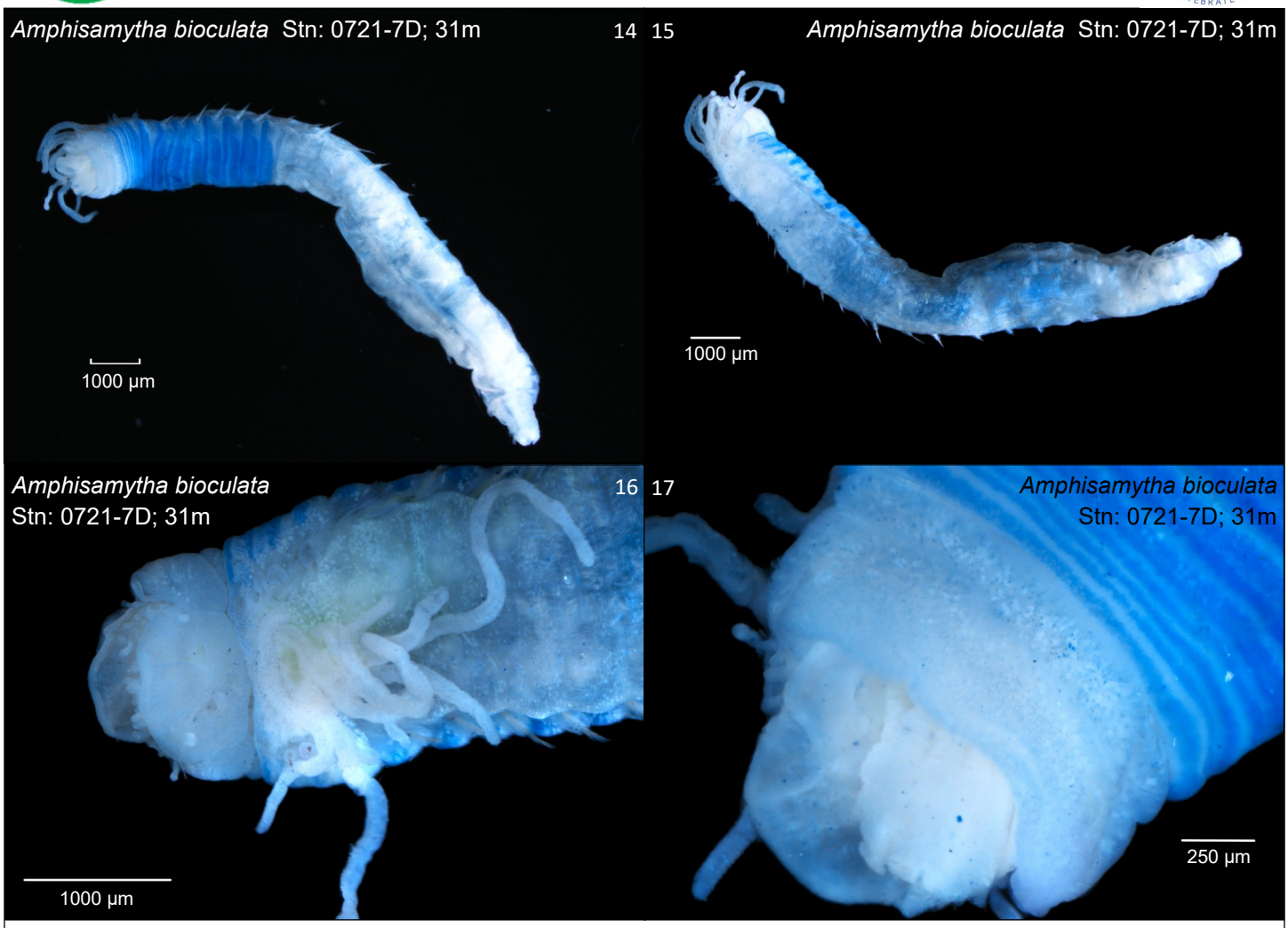
B23-12343 (708m—33.96569N, 119.15230W—17JUL2023) - 1 individual **(Images 1-13)**

Comparative Material: *Amphisamytha bioculata*: 0721-7D (28m—33.71354N, 118.34339W—13JUL2021) - 1 individual **(Images 14-17)**

All photos by B. Haggin

Habitat:

Amphisamytha sp LA1 is known from a single individual collected during Bight '23. It was collected from a depth of 708m off Point Mugu in substrates of silty clay. Also collected in the sample were the polychaetes *Aricidea* (*Acmira*) sp LA1 Lovell, 2014 §; *Dodecamastus mariaensis* Blake, 2000; *Subadyte mexicana* Fauchald, 1972; an unidentified polynoid; *Chaetozone commonalis* Blake, 1996; *Kirkegaardia* sp B SCAMIT, 2023 §; an unidentified cirratulid; *Prionospio lobulata* Fauchald, 1972; *Spiophanes fimbriata* Moore, 1923; *Spiophanes wigleyi* Pettibone, 1962; *Eclysippe* sp LH1 Harris, 2020 §; *Lysippe annectens* Moore, 1923; and some unidentified juvenile ampharetids.



Similar Species:

With 17 thoracic chaetigers and 14 thoracic uncinigers, *Amphisamytha* sp LA1 is similar to other local genera with similar thoracic counts. The genera *Amphicteis* and *Lysippe* both have 4 pair of branchiae as well but can be differentiated from *Amphisamytha* by the presence of large palae in *Amphicteis* and very small palae in *Lysippe* (these can be easily overlooked and may cause the most confusion). The genus *Samytha* is similar in lacking palae, but has only 3 pair of branchiae.

Amphisamytha bioculata (Moore, 1906)—*Amphisamytha bioculata* differs from *Amphisamytha* sp LA1 in having a pair of large eyes that are lacking in *A*. sp LA1 and in the number of abdominal chaetigers, 13-14 in *A. bioculata* vs. 9 in *A*. sp LA1. The two also differ in the development of their ventral scutes, the glandular pads and in their stain pattern. The ventral scutes of *A. bioculata* are only obvious to chaetiger 9, are indistinct on chaetiger 10 and 11, and absent in the remaining thoracic segments **(Image 14)** while the ventral scutes of *A*. sp LA1 are obvious to chaetiger 15 and indistinct on chaetigers 16 & 17. The glandular pads are not obvious in *Amphisamytha bioculata* but are very evident in *Amphisamytha* sp LA1. The prostomium is unstained and the ventrum only stains to chaetiger 10 of *A. bioculata* **(Images 14-17)** while the prostomium has an intense stain pattern and the ventrum stains until chaetiger 15 in *Amphisamytha* sp LA1.

Similar Species cont.:

Amphisamytha japonica Hessle, 1917 (*sensu* Reuscher *et al*. 2015)—*Amphisamytha japonica* is similar to *Amphisamytha* sp LA1 in lacking eyes but differs in the number of abdominal chaetigers, 12-14 in *A. japonica* and 9 in *A*. sp LA1. *Amphisamytha japonica* is known only from Japanese waters in depths of 25-1005m.

Amphisamytha galapagensis Zottoli, 1983 (*sensu* Stiller *et al*. 2013)—*Amphisamytha galapagensis* is similar to *Amphisamytha* sp LA1 in having well developed glandular pads in abdominal segments and in lacking eyes. The two differ in the number of abdominal chaetigers, 14-15 in *A. galapagensis* vs. 9 in *A*. sp LA1. *Amphisamytha galapagensis* lacks any anal cirri while *Amphisamytha* sp LA1 has a small pair present. *Amphisamytha galapagensis* is known only from the Galápagos Ridge hydrothermal vents and the East Pacific Rise from depths greater than 2450m.

Amphisamytha fauchaldi Solís-Weiss & Hernández-Alcántara, 1994—*Amphisamytha fauchaldi* also lacks eyespots but differs from *Amphisamytha* sp LA1 in the number of abdominal chaetigers, 14-16 in *A. fauchaldi* vs. 9 in *A*. sp LA1. *Amphisamytha fauchaldi* is known from sedimented hydrothermal vents in the Gulf of California, methane seeps off Costa Rica and from Hydrate Ridge off Oregon from depths of 600-2000m.

Discussion:

The most recent Generic Diagnosis for *Amphisamytha* is from Reuscher *et al*. (2015) and is given below:

Prostomium with middle lobe encircled by surrounding lobe, lacking glandular ridges. Buccal tentacles smooth. Four pairs of cirriform branchiae. Segment II without chaetae. Thorax with 17-20 chaetigers and 14-17 uncinigers. No modified or intermediate segments. Glandular pads above abdominal neuropodia.

Reuscher *et al*. (2009) discussed the interpretation of abdominal structures relating to the notopodia of the genus *Amphisamytha*. Hessle (1917) originally described the genus as having rudimentary notopodia in the abdomen to accommodate *A. bioculata* (Moore, 1906) and *A. japonica* Hessle, 1917. Zottoli (1983) used the term glandular pads to describe the puffy structures above the abdominal neuropodia and was used by Desbruyères & Laubier (1996) when they described *Amphisamytha lutzi* (as *Amathys lutzi*). Moore (1906) considered the rudimentary notopodia of *A. bioculata* as small papillae, while Williams (1987) considered them as cirri. Stiller *et al*. (2013) noted that the glandular pads are neither neuropodial nor notopodial in nature and considered them as interramal structures. The papillae that may be associated with the glandular pads are considered interramal papillae. The nomenclature of these structures used by Stiller *et al*. is used within.

There are currently 12 accepted species of *Amphisamytha* listed on WoRMS. *Amphisamytha bioculata* was the first described species (originally as *Samytha bioculata*) in 1906 from a depth of 57-165m off of British Columbia, and is now reported from Canada to southern California, from 21-774m (Stiller *et al*. 2013)). A second, *Amphisamytha japonica* was described in 1917 from a depth of 300m off Japan, now with a depth distribution of 25-1005m (Reuscher *et al*. 2015). No other members of this genus were described until 1983 with *Amphisamytha galapagensis* Zottoli, when submersibles began to investigate the hydrothermal vents and methane seeps of the worlds oceans. None of the 10 newest species have been reported from depths shallower than 1400m.

The P-Code assigned to *Amphisamytha* sp LA1 was inherited from *Amphisamytha bioculata.*

References:

Desbruyères, D. & Laubier, L. 1996. A new genus and species of ampharetid polychaete from deep-sea hydrothermal vent community in the Azores triple-junction area. *Proceedings of the Biological Society of Washington* 109(2): 248-255.

Hessle, C. 1917. Zur Kenntnis der terebellomorphen Polycaeten. *Zoologiska bidrag från Uppsala* 5: 39-258; plates I-V.

Hilbig, B. 2000. Family Ampharetidae Malmgren, 1867. pages 169-230. IN: Blake, J. A., Hilbig, B. & Valentich-Scott, P. *Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and Western Santa Barbara Channel. 7 - The Annelida Part 4 - Polychaeta: Flabelligeridae to Sternaspidae*. Santa Barbara Museum of Natural History.

Moore, J. P. 1906. Additional new species of Polychaeta from the North Pacific. *Proceedings of the Academy of Natural Sciences of Philadelphia* 58: 217-260; plates X-XII.

Reuscher, M., Fiege, D. & Wehe, T. 2009. Four new species of Ampharetidae (Annelida: Polychaeta) from Pacific hot vents and cold seeps, with a key and synoptic table of characters for all genera. *Zootaxa* 2191: 1-40.

Reuscher, M., Fiege, D. & Imajima, M. 2015. Ampharetidae (Annelida: Polychaeta) from Japanese waters. Part IV. Miscellaneous genera. *Journal of the Marine Biological Association of the United Kingdom* 95(6): 1105-1125.

Solís-Weiss, V. & Hernández-Alcántara, P. 1994. *Amphisamytha fauchaldi*: A New Species of Ampharetid (Annelida: Polychaeta) from the Hydrothermal Vents at Guaymas Basin, Mexico. *Bulletin of the Southern California Academy of Sciences* 93(3): 127-134.

Stiller, J., Rousset, V., Pleijel, F., Chevaldonné, P., Vrijenhoek, R. C. & Rouse, G. W. 2013. Phylogeny, biogeography and systematics of hydrothermal vent and methane seep *Amphisamytha* (Ampharetidae, Annelida), with descriptions of three new species. *Systematics and Biodiversity* 11(1): 35-65.

Williams, S. J. 1987. Taxonomic Notes on some Ampharetidae (Polychaeta) from Southern California. *Bulletin of the Biological Society of Washington* 7: 251-258.

Zottoli, R. A. 1983. *Amphisamytha galapagensis*, a new species of ampharetid polychaete from the vicinity of abyssal hydrothermal vents in the Galapagos Rift, and the role of this species in rift ecosystems. *Proceedings of the Biological Society of Washington* 96(3): 379-391.

Other Literature Consulted:

Fauchald, K. & Hancock. D. R. 1981. Deep-water polychaetes from a transect off central Oregon. *Allan Hancock Monographs in Marine Biology* 11: 1-73.

Zhou, Y., Chen, C., Sun, Y., Watanabe, H. K., Zhang, R. & Wang, C. 2019. *Amphisamytha* (Annelida: Ampharetidae) from Indian Ocean hydrothermal vents: Biogeographic implications. *Deep-Sea Research Part I: Oceanographic Research Papers* 154: 103148.

Version History:

Version 1.0—Voucher sheet created (11JUL2024)
Version 1.1—Added P-Code (15JUL2024)
Version 1.2—Corrected scale on Image 8 (08AUG2024)
Version 1.3—Added SCAMIT logo (22JUL2025)
Version 2.0—Moved “Habitat” Section (15OCT2025)

LOS ANGELES COUNTY SANITATION DISTRICTS
Converting Waste Into Resources

Voucher Sheet
B. Haggin
October, 2025

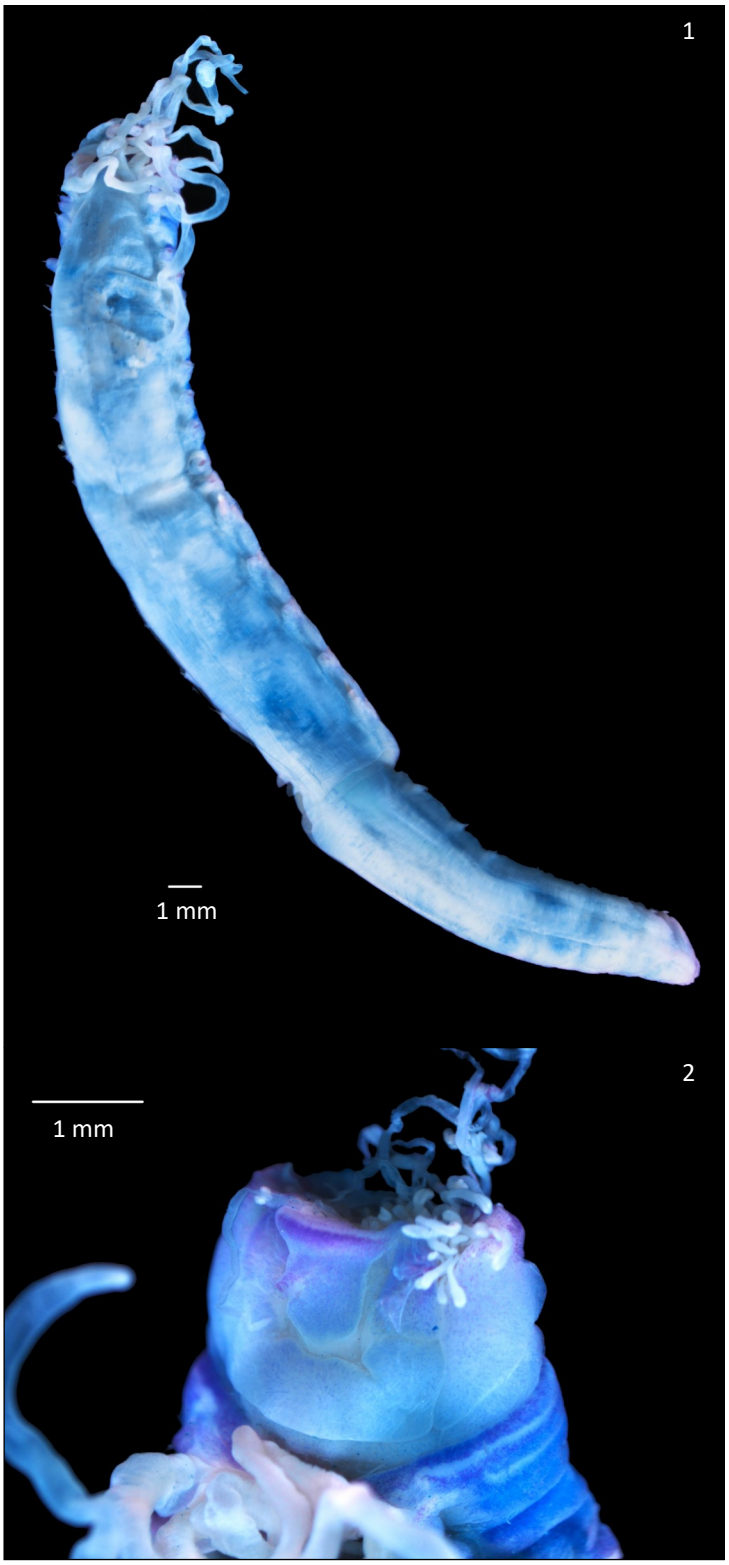
Species: *Samytha* sp LA1 Haggin, 2024 §
Synonyms: *Samytha californiensis* of Authors SCB in part, not Hartman, 1969

P-code—P452
ITI-code—Group 1

Subfamily: Ampharetinae
Family: Ampharetidae
Suborder: Terebelliformia
Order: Terebellida
Infraclass: Canalipalpata
Subclass: Sedentaria
Class: Polychaeta
Phylum: Annelida

Diagnostic Characters:

1) Prostomium trilobed, eyes absent **(Image 2)**.
2) Peristomium with lower lip not or not obviously crenulated **(Image 3)**.
3) 3 pair of branchiae **(Image 4)**; long, smooth, cirriform, extending back to chaetiger 14; inner, posterior pair with long attachment scar **(Image 5)**.
4) Palae absent **(Images 4 & 5)**.
5) Thorax with 17 chaetigers, 14 uncinigers **(Image 1)**.
6) Thoracic notochaetae limbate capillaries; smooth, tapering to fine points (~14 per fascicle) **(Image 6)**.
7) Thoracic uncini with 6-7 teeth in a single column over the basal prow or 3-4 teeth in a single column then 1 row of 2 teeth then a single tooth over the basal prow (~60 uncini—chaetiger 12) **(Image 7)**.
8) Ventral groove present from chaetiger 12 thru abdomen **(Image 8)**.
9) Abdomen with 10 chaetigers; with small glandular pads **(Image 9)**.
10) Abdominal parapodia rounded, without cirri **(Image 10)**.
11) Abdominal uncini with 5-6 teeth in a single column over the basal prow or 3 teeth in a single column then 2 rows of 2 teeth over the basal prow (~30 uncini—chaetiger 19, 2nd abdominal chaetiger) **(Image 11)**.
12) Pygidium with circlet of ~20 small papillae, lateral flaps or cirri absent **(Image 12)**.



Samytha sp LA1

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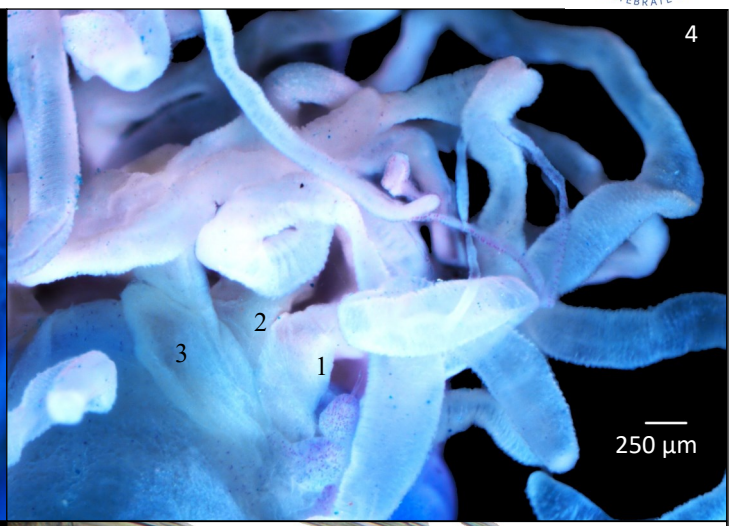

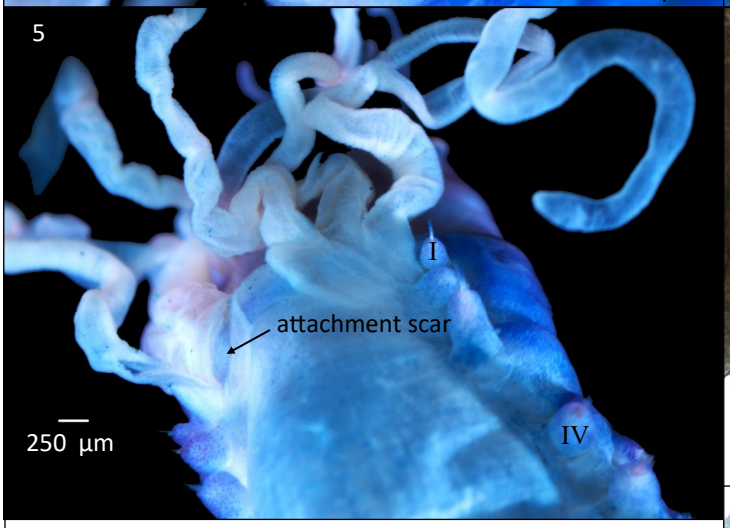

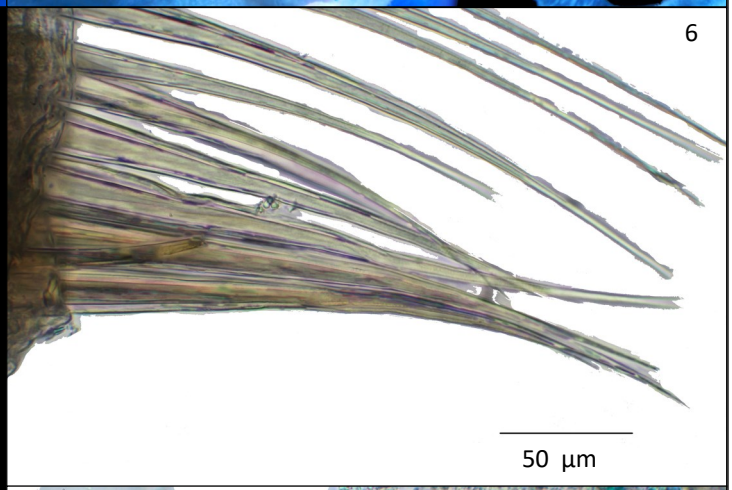

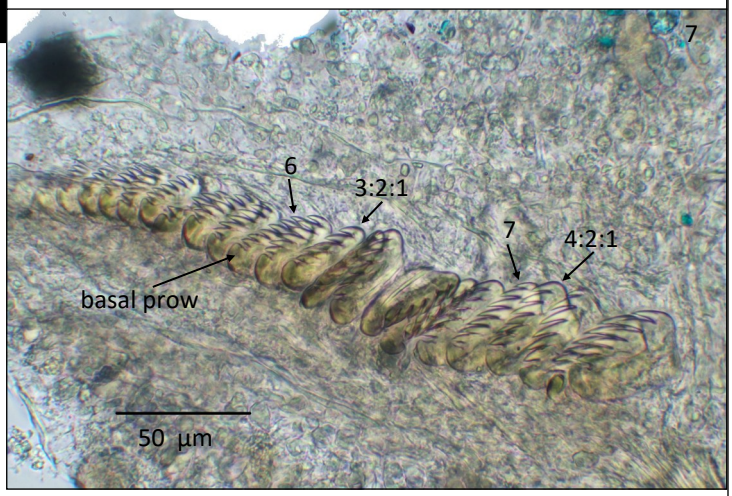

Pigmentation/MGS:

1) Prostomium retaining light stain, anterior border of prostomium darkest **(Images 2 & 3)**.
2) Slight stain retained dorsally beneath branchial base, no other stain dorsally **(Image 2)**.
3) Peristomium retains stain ventrally on lower lip **(Image 3)**.
4) Ventral scutes stain intensely to chaetiger 11, slight speckling on chaetiger 12 **(Image 11)**.

Material Examined:

LACSD stations: 0715-4C (62m—33.72340N, 118.38465W—08JUL2015) - 1 individual **(Images 1-12)**; 0724-2B (157m—33.73241N, 118.42627W—30JUL2024) - 1 individual; 0724-3B (157m—33.72382N, 118.40719W—18JUL2024) - 1 individual; 0724-3C (60m—33.73005N, 118.40237W—18JUL2024) - 1 individual; 0724-9B (148m—33.68146N, 118.32188W—16JUL2024) - 1 individual *All photos by B. Haggin

Samytha sp LA1

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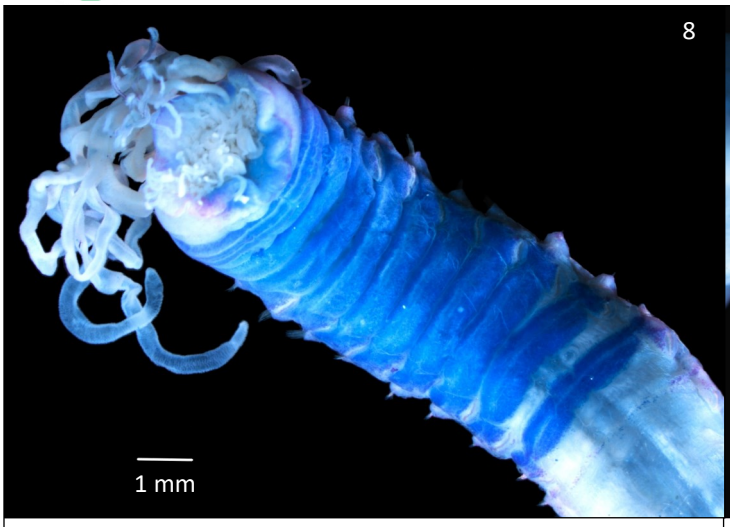
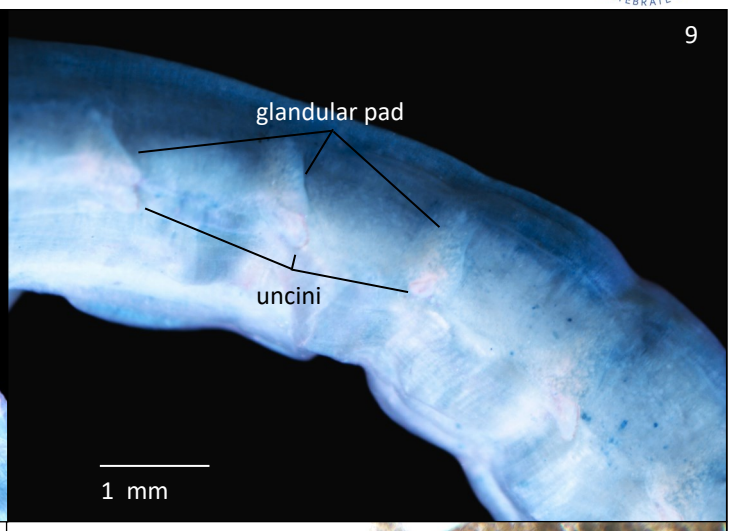
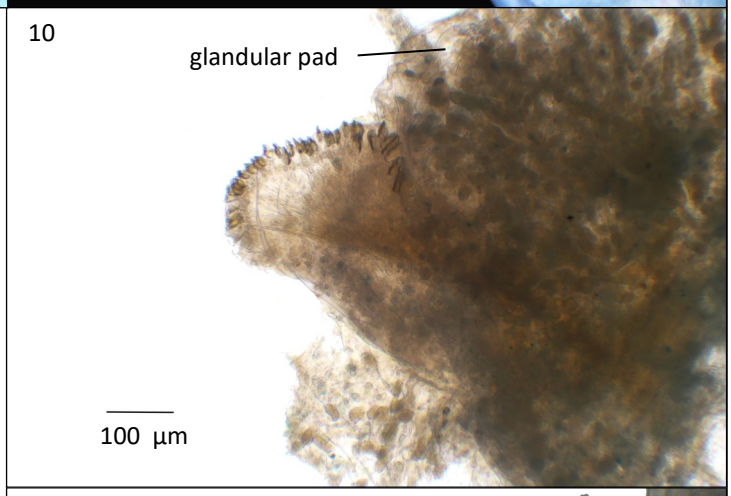




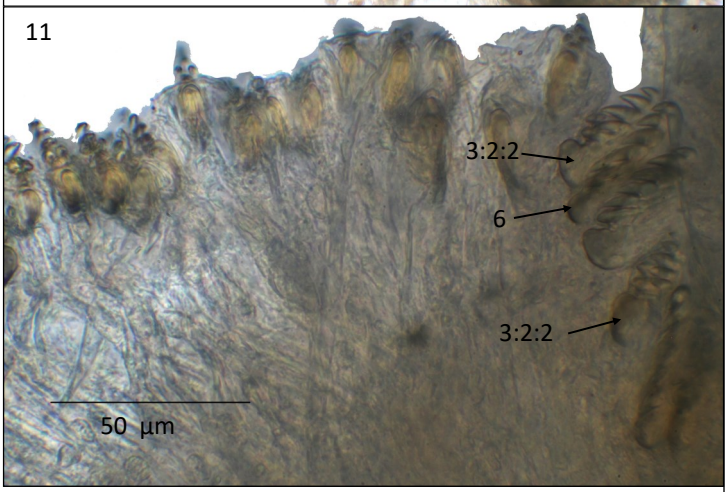
Comparative Material:

Samytha californiensis: 0101-0D (33m—33.80252N, 118.42300W—04JAN2001) - 1 individual **(Image 13)**; 0709-10A (297m—33.65778N, 118.30138W—22JUL2009) - 1 individual; 0713-2B (152m—33.73264N, 118.42591W—10JUL2013) - 1 individual; 0714-0C (60m—33.80721N, 118.43053W—08JUL2014) - 1 individual; 0722-9C (61m—33.68885N, 118.31855W—13JUL2022) - 2 individuals



Habitat:

Samytha sp LA1 is currently known only from a few specimens collected from 60-157 m of water off Palos Verdes, California in silty sediments. Also collected in the sample were the ampharetids *Amage scutata* Moore, 1923 (as *Paramage scutata*); *Amphicteis scaphobranchiata* Moore, 1906; and *Anobothrus bimaculatus* Fauchald, 1972 (as *Anobothrus gracilis* (Malmgren, 1866)). During the summer 2024 survey *Samytha* sp LA1 was found co-occurring with *Samytha californiensis* at stations 3B and 9B.

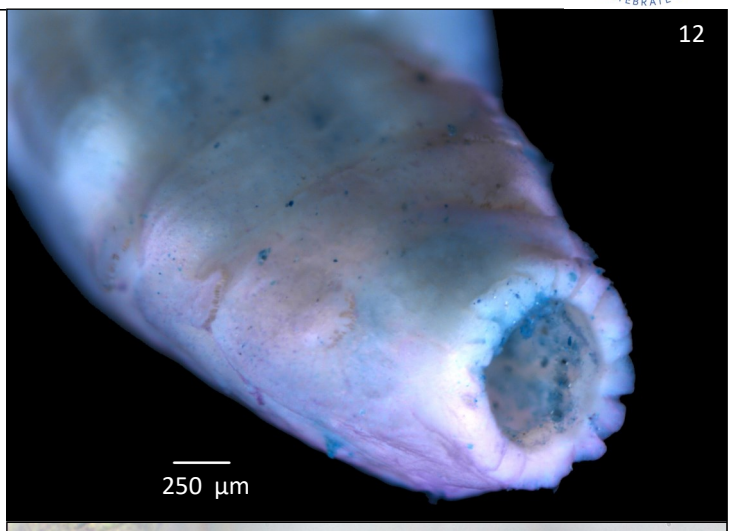


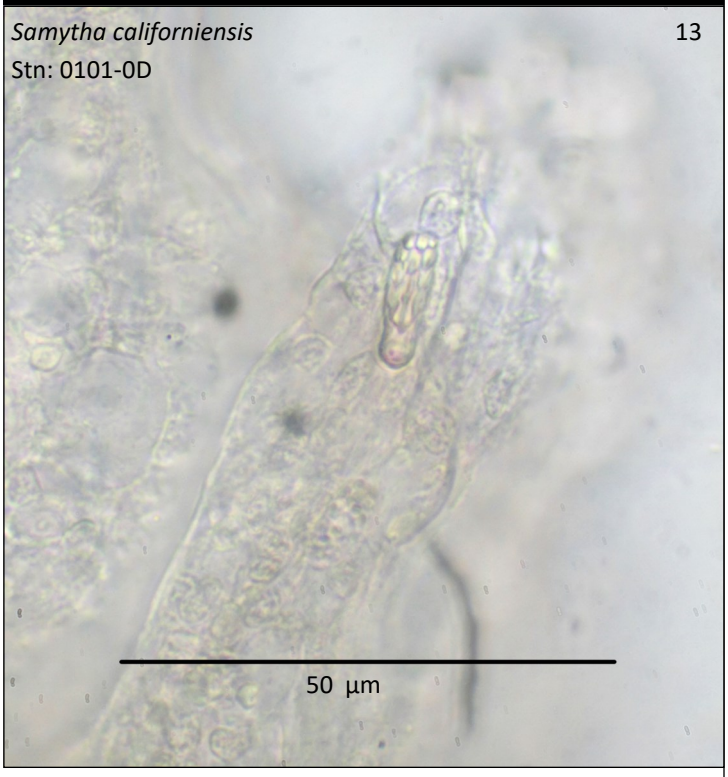
Similar Species:

Samytha californiensis Hartman, 1969 (*sensu* Hilbig (2000))—*Samytha californiensis* is similar to *Samytha* sp LA1 in having 17 thoracic chaetigers and 14 thoracic uncinigers, possessing 3 pair of branchiae and lacking palae. The two species differ in the number of abdominal segments (16-19 in *S. californiensis* vs. 10 in *S.* sp LA1), the degree of crenulation of the lower lip (highly crenulated in *S. californiensis* compared to not crenulated in *S.* sp LA1) and the pygidium. *Samytha californiensis* has 2 rounded lateral flaps and several small papillae, appearing crenulated. *Samytha* sp LA1 lacks the rounded lateral flaps and has only ~20 small papillae. The dentition of thoracic uncini (5-6 teeth over the

Similar Species (cont.):

Samytha californiensis Hartman, 1969 (cont.)—basal prow in *S. californiensis* compared to 6-7 teeth over the basal prow in *S.* sp LA1) and the dentition of the abdominal uncini (crested with 2 or 3 rows of 5 small teeth over the basal prow **(Image 13)** in *S. californiensis* vs. 3 teeth in a single column then 2 rows of 2 teeth over the basal prow in *S.* sp LA1) also differ between the two species. The ventral scutes of *S. californiensis* stain solidly thru chaetiger 10 then a band on 11 while *S.* sp LA1 stains solidly thru chaetiger 11 with a speckled band on 12.





Samytha storchi Reuscher & Wehe in Wehe, 2009—*Samytha storchi* has the most similar number of abdominal segments (11 vs. 10 in *Samytha* sp LA1) but differs in the dentition of the abdominal uncini (a single tooth then two columns of 4 teeth over the basal prow compared to 3 teeth in a single column then 2 rows of 2 teeth over the basal prow in *S.* sp LA1). *Samytha storchi* is known only from the Red Sea.

Amphisamytha bioculata (Moore, 1906)—*Amphisamytha bioculata* is similar to *Samytha* sp LA1 in having 17 thoracic chaetigers, 14 thoracic uncinigers, lacking palae and having small glandular pads in abdominal chaetigers. The two differ in the number of branchiae, 4 pair in *Amphisamytha bioculata* vs. 3 pair in *Samytha* sp LA1. The ventrum of *A. bioculata* only stains thru chaetiger 10 while the ventral scutes of *S.* sp LA1 stain thru chaetiger 11 with speckling on chaetiger 12.

Amphisamytha sp LA1 Haggin, 2024 §—*Amphisamytha* sp LA1 is similar to *Samytha* sp LA1 in having 17 thoracic chaetigers, 14 thoracic uncinigers, lacking palae and having small glandular pads in abdominal chaetigers, though the glandular pads are more pronounced in *Amphisamytha* sp LA1. The two differ in the number of branchiae, 4 pair in *Amphisamytha* sp LA1 vs. 3 pair in *Samytha* sp LA1. The ventral scutes of *Amphisamytha* sp LA1 stain thru chaetiger 15 while the ventral scutes of *S.* sp LA1 only strain thru chaetiger 11 with speckling on chaetiger 12. *Amphisamytha* sp LA1 is known only from deeper waters (708m) in southern California.

Discussion:

The most recent generic diagnosis for *Samytha* is from Reuscher *et al*. (2015) and is given below:

Prostomium without glandular ridges, with middle lobe encircled by surrounding lobe. Buccal tentacles smooth. Three pairs of cirriform branchiae. Segment II without chaetae. Thorax with 17 chaetigers and 14 uncinigers. Modified or intermediate segments absent. Abdomen with glandular pads above pinnules.

Samytha californiensis was originally described from the San Pedro Channel from 375m (205 fathoms) and has a reported distribution from central and southern California in 110-375m. A review of LACSD *Samytha californiensis* vouchers confirms the depth distribution to as shallow as 33m and no additional specimens of *Samytha* sp LA1 have yet to be encountered. Regeneration of the abdominal region was considered but there was no obvious damage to the abdomen and the difference in abdominal uncini dentition between the two warrants the erection of a provisional species. *Samytha* sp LA1 seems to be a rare species but shallow water records of *Samytha californiensis* should be reviewed to check for the possible inclusion of *Samytha* sp LA1.

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Version History:

Version 1.0—Voucher sheet created (08AUG2024)

Version 1.1—Updated “Material Examined” section, updated “Habitat” section (22JUL2025)

Version 2.0—Moved “Habitat” section (15OCT2025)

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