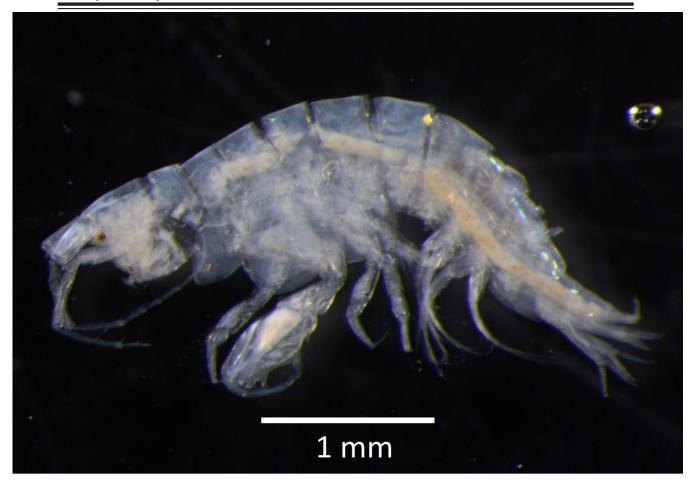
SOUTHERN CALIFORNIA ASSOCATIONOF MARINE INVERTEBRATE TAXONOMISTS



January-February, 2020

SCAMIT Newsletter

Vol. 38 No. 5



Photis sp HYP2, male, CLAEMD, Station B18-10385 (124 m), 17Jul18. Photo by C. Campbell

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

Publication Date: July 2020

13 JANUARY 2020, B'18 ARTHROPOD FIDS

Attendance: Ben Ferraro, Danny Tang, Kelvin Barwick (business meeting only), OCSD; Don Cadien, Chase McDonald, Terra Petry, Jovairia Loan, LACSD; JoAnne Linnenbrink, CLAEMD; Andrew Davenport, CSD; Dean Pasko, DCE.

Kelvin started off the day briefly discussing upcoming SCAMIT meetings. Also mentioned were the upcoming SCUM (Southern California Unified Malacologists) and WSM (Western Society of Malacologists) meetings. Kelvin reminded attendees

UPCOMING MEETINGS

Visit the SCAMIT website at: www.scamit.org for the latest upcoming meetings announcements.

that nominations were still open for the upcoming SCAMIT election. A Species List Review Committee meeting is tentatively scheduled for March. In closing he asked everyone to make sure that each agency/company takes their own minutes regarding their FID resolutions, and send that information to the SCAMIT Secretary, Megan.

With the business meeting concluded, we began looking at FIDs.

OCSD

- Leucon sp L, FID Ben had keyed it to this species but could not find a voucher. After group examination, it was identified as Leucon declivis Watling & McCann 1997. A species that is difficult to key unless it is male and Ben's was female. DCE and LACSD both said they had identified similar species to L. declivis in their own Bight samples.
- *Bruzelia tuberculata* G.O. Sars 1883, FID After much debate, the group agreed on the suggested identification. The rostrum on Ben's specimen was not as downturned as the Sars 1895 plate reflects for *B. tuberculata*. However, OCSD had two vouchers that were identical. Don suspected that all three specimens might be a new North American species that shares characters with several European species. See Don's musings below.
- 3 small Cyclodorippidae, FID determined to be 2 *Deilocerus planus* (Rathbun 1900) and 1 *Deilocerus decorus* (Rathbun 1933). The sheet used for these identifications is attached at the end of the NL.

CSD

- Caprella kennerlyi Stimpson 1864, FID Confirmed. Two specimens were found in CSD Regional sampling stations at 17m and 300m. Don mentioned it was a more northern species and this was an unusual find.
- Abyssorchomene abyssorum (Stebbing, 1888), 851m, FID This identification was
 arrived at by DCE but this species is not on the SCAMIT List and is not considered a SCB
 resident. Don took the specimen for further review and later determined that the ID should be
 left at Uristidae.
- *Bathlyberis* sp. vs *Bathylberis* nr *garthi* a discussion ensued about protocol. These animals were examined and CSD identified them as *B*. nr *garthi*, whereas Dean would leave them at *Bathlyberis* sp. A future discussion regarding this discrepancy is needed.



- Photis lacia J. L. Barnard 1962 56 females and 25 males were examined and discussed.
- Photis brevipes Shoemaker 1942 44 females and 13 males were examined and discussed.
- *Photis* spp, FID 11 males with unusual G2 were examined. Dean kept two and gave them the tentative ID, *Photis* sp HYP2*.

CLAEMD

- B'18 10288, 136m, *Photis* sp HYP2*, FID similar to *P. brevipes* but has a double palmar tooth, coxae have slight setae and antennae are not geniculate. CSD had brought similar photids. Consensus was for *Photis* sp HYP2*.
- B'18 10385, 134m, *Photis* sp HYP2*, FID Male and female. These specimens are also similar to *P. brevipes* but coxae have slight setae and antennae are not geniculate. Consensus was for *Photis* sp HYP2*.
- B'18 10013, 25m, *Listriella* sp SD1, FID wanted group input due to the size and shape of G2. Consensus was for *Listriella* sp SD1.

LACSD didn't have any FIDs to resolve.

Copied below is an email from Dean Pasko following up on the examined FID *Photis*.

"Short follow-up to a discussion concerning some interesting *Photis* specimens that we reviewed at the January 13, 2020 SCAMIT meeting (Bight'18 arthropod FIDs).

While working on some consulting samples from Goleta, CA, I ran across specimens of *Photis* sp B which caused me to review the *Photis* sp HYP2* (*sic*)(originally a tentative designation from a couple male specimens). At the meeting we were unsure if the two taxa were synonymous or not. I compared the two species more carefully. The attached is a 2-page set of photos which distinguish the two taxa by several gross characters, including:

- 1. Relative size
- 2. Shape of the eye lobe, and surrounding corneal lenses
- 3. Male gnathopod 1 coxa shape, basis width and shape, length of ventral margin of carpus
- 4. Male gnathopod 2 position of defining tooth, palmar gape between teeth near dactyl and defining tooth, as well as shape of teeth near dactylar hinge and defining tooth

I hope the pictures clearly demonstrate all of the above for everyone. I did not have an opportunity to compare female specimens.

Photis sp HYP2*(*sic*) may be (or somehow related to) *Photis viuda*, or some other invasive species. I've made no attempt to reconcile these questions because I wanted to get this out right away. Nor did I attempt to pull together a more exhaustive list of distinguishing characters. A more formal comparison will follow...hopefully before 2030!"

- Dean Pasko, posted to the SCAMIT List Server 14 January 2020

{*foot note – at the meeting, and in previous communications, this unknown species was referred to as *Photis* sp HYP1, however, it was since discovered that J. Roney (CLAEMD, retired) had



described a *Photis* sp HYP1 in 1986, and this was not the same animal. The name for this unknown *Photis* has since been changed to *Photis* sp HYP2 and is updated in this NL and in the attached voucher sheets; it is not considered a synonymy since there has been no formal publication to date}

Comments on examination of OCSD's "dexaminid" specimen on 13 Jan 2020, by D. Cadien After initial examination pointed towards synopiids based on the overall shape, the telson, the gnathopods and the coxae, appropriate genus was the next concern. My initial examination turned up an "eye" although the specimen was thought eyeless. This was a small unpigmented glassy structure just above the insertion of the second antenna and not far below the midline of the head. Subsequent examination by others went back and forth, some seeing this, some not, and some seeing a dark structure in that position instead. So, we tried to key it both ways, although eyed synopiids are a small subset of the whole. The body was very robust and tapered strongly posteriorly (very like *Nicippe* in overall mass distribution). The gnathopods were very small, subchelate, and oblique. Coxae were expanded distally. Although I initially thought the telson deeply cleft because of how it showed ventrally in my initial exam, it later proved to be entire, not even terminally notched. This proved important to the final decision. Since the dorsal midline was toothed we were pointed towards Bruzelia. According to Cadien (2014) there are two species of the genus known from the NEP, B. ascua J.L. Barnard, 1966 and B tuberculata. B. ascua has very long spines dorsally so did not match at all. B. tuberculata was quite close, although differing in the structure of the rostrum, and in having thickenings at the end of the coxae, giving the animal a low lateral ridge, absent in the specimen at hand. After comparison with OCSD voucher material of B. tuberculata it was evident that the present specimen was the same as the vouchers, and the decision was made to adopt that ID for the B'18 material, which keys there regardless of key used. Reservations remain, however, particularly because of the nearly horizontal rostrum, not downturned as in B. tuberculata or most synopiids for that matter. The head, in consequence, had more the appearance of an oedicerotid than of the shield-head of synopiids. While checking the literature on the genus we consulted Lörz and Coleman 2013, which reviews the genus worldwide. The first sentence of their generic diagnosis was rather telling: "Head not protuberant, except in type species". The type species, Bruzelia typica Boeck 1871, is well illustrated in Sars 1895, on the same plate with B. tuberculata, and shows a nearly horizontal rostrum, similar to that in the B'18 specimen examined. However, other details of that species do not match at all. This suggests to me that 1. The degree of deflection of the rostrum is, as also in oedicerotids, a significant character; and 2. Specimens identified as B. tuberculata locally are likely to be an as yet unrecognized NEP endemic rather than a circumboreal occurrence of a northern European species. For the moment though, the default ID will remain B. tuberculata Sars, 1883. Gurjanova (1951) reported both B. typica and B tuberculata from the boreal NWP and illustrated both with downturned rostra. Barnard (1972) also shows specimens identified as B. typica as bearing a downturned rostrum without commenting that this differs from Sars 1895. There seems to be an

As a side comment, while using Barnard 1972 a defect in the key to genera of synopiids was found. Couplet six leads only to couplet 8. The first half of the couplet should be corrected to lead to couplet 7 instead.

One last arthropod note - while not discussed in the minutes, readers will find a voucher sheet for *Photis* sp SD10, Pasko 2020, attached at the end of this newsletter.



27 JANUARY 2020, B'18 POLYCHAETE FIDS, OCSD

Attendance: Kelvin Barwick, Rob Gamber, Ernie Ruckman, OCSD; Ricardo Martinez, Veronica Rodriguez, Maiko Kasuya, Adam Webb, CSD; Erin Oderlin, Jennifer Smolenski, Greg Lyon, CLAEMD; Bill Furlong, Brent Haggin, Christine Boren, LACSD; Larry Lovell, Tony Phillips, DCE; Leslie Harris, NHMLAC; Miguel A. Meca, University of Bergen, Norway

The meeting began with a reminder from Kelvin of upcoming SCAMIT officer elections. Ballots will be mailed in February. The next two SCAMIT meetings will be: Feb 24 - Non-Polychaete Provisional species at OCSD, and Mar 9 - Polychaete Provisional species at OCSD.

With that we moved on to look at FID polychaete specimens.

CLAEMD

- Ampharetidae 585m Eclysippe trilobata (Hartman 1969)
- Spionidae 5m *Polydora* sp.
- Spionidae 18m *Dipolydora* sp. (anterior fragments)
- Ninoe 86m Ninoe sp. (juv) per L. Harris, <10mm juvenile, take to Ninoe sp.
- Polynoidae 585m Eucranta sp.
- Phyllodocidae 130m Eulalia sp.
- Paraonidae 80m Paraonidae??
- Syllidae 165m Syllis hyperioni Dorsey & Phillips 1987
- Sabellidae & Terebellidae juv specimens ultimately left at Family

OCSD

- Orbiniidae *Leitoscoloplos* sp LA3
- Onuphidae 680m to Leslie for additional review
- Ampharetidae Ampharetidae (fragments)
- Spionidae Spiophanes wigleyi (juv) Pettibone 1962

DCE

- *Pista* B'18-10338, 259m *Pista wui* Saphronova 1988
- Syllidae 3.1m Autolytinae
- Syllidae to Leslie for additional review

LACSD

• Cirratulidae - 305m - Cirratulidae (regenerating)



24 FEBRUARY 2020, B'18 (or not) PROVISIONAL SPECIES REVIEW, OCSD

Attendance: Kelvin Barwick, OCSD; Don Cadien, Jovairia Loan, Terra Petry, Chase McDonald, LACSD; Greg Lyon, Jennifer Smolenski, Craig Campbell, CLAEMD; Wendy Enright, Megan Lilly, CSD; Tony Phillips, DCE.

The business portion began with upcoming meetings announcements. During mention of the upcoming SLRC meeting on April 13th, Kelvin segued into a discussion of the SCAMIT Database project. He had met with Dean Pentcheff and Wai-yin Kwan and found it to be very helpful. Wai-yin is willing to help us develop a proposal for the project, as that is the first hurdle. He will make a full report at the next SLRC meeting. Kelvin reminded everyone that SCAMIT officer elections are currently in progress and he jokingly encouraged members to "vote early and vote often."

We then turned to pondering the purpose of today's meeting. It was listed as a B'18 provisional species review but not many provisional species had been submitted for consideration. We decided to make it a meeting addressing provisional species "in general" with the primary focus being on B'18 submissions but moving to other pending provisionals, time permitting.

Craig Campbell suggested a new protocol for dealing with provisional species: Start by using Cody Larsen's recently developed provisional species submittal site as a holding place for species needing review. Then, adding an agenda item to SCAMIT meetings where at the beginning of each meeting (after the business announcements but before the main topic) attendees would review one or two pending provisional species of phyla relevant to the day's meeting. This would allow us to begin tackling the backlog of provisional species. It would also, hopefully, keep a new backlog from forming. We will need to discuss rules and approaches, for instance, should there be a time limit, and how many species should be reviewed per meeting? Also we would need to reach out to the author(s) ahead of time, allowing them to decide if they will be prepared to discuss the species at the meeting, or if they would like to "take a pass" and we can move down the list. This concept would mean that Cody's site would be the repository for all agency provisional species, not just those created during Bight'18. We feel this is one instance where a password protected area is needed so pending provisional species aren't stumbled upon and used incorrectly and/or inconsistently. All of this will be addressed at the next SLRC meeting and the aim will be to codify and clarify our vision.

First animal of the day to be discussed was a large Heteronemertea that Cody had named Heteronemertea sp HYP3. Megan thought it looked similar to some large Heteronemertea specimens she had seen from one of CSDs monitoring stations (Sta. B8, 89m, July, 2016). She will go back and pull the specimens and compare them to Cody's sheet. The voucher sheet is attached at the end of this newsletter.

Cody's Lineidae sp HYP3 was discussed next. The sheet was approved with just a few minor edits needed. It was suggested that Cody revisit the idea of a CSO at the proximal end of the cephalic groove. That would be an unusual feature and it was suggested that the structure was perhaps not a true CSO. (For the initial publication of this voucher sheet, see Vol 38 no 3).

Photis sp HYP1, FID, by Craig Campbell was considered, and it was concluded that it should be *Photis* sp HYP2, since it is not the same as sp HYP1 Roney 1986. It was the same species as discussed during January's arthropod meeting. This animal was sampled from east Santa Barbara channel/ Channel Islands. With this suggested name change as a caveat, the sheet was conditionally approved. Craig will work on it further and reach out to Dean Pasko, as he wants to do more compare/contrast



with other species. He has since done so and the voucher sheet is attached at the end of this NL.

Speaking of provisional species, it was noted that a meeting to specifically address the state of *Turbonilla* provisionals and *Turbonilla* problems, is needed. Don felt that at that time a review of character states should be undertaken as well.

Jennifer Smolenski presented her sheet on Pennatulacea sp HYP1. It was approved with the suggestion to add photos/description of the sclerites.

Greg Lyon then brought up one of the topics for the day, Mangellidae troubles and the confounding problems surrounding *Propebela* spp. The central question being, are the two forms being reported new species, or are their published names already available? Earlier Greg had discovered species from Jim McLean's original negatives (for a discussion of Jim McClean's image files and their availability to SCAMIT members see, SCAMIT NL Vol 38 no 3), that closely resembled the SCAMIT forms. Greg stated that the two forms differ in that one has spiral sculpture of broadly but evenly spaced cords, present on the shoulder above the carina and continuous from suture to base of body whorl (Fig 1). The other form has reduced or absent spiral

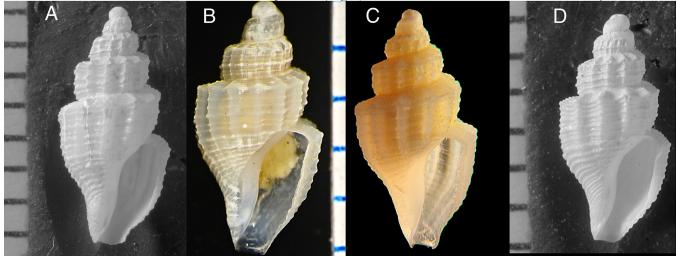


Figure 1 - A. Negative #486-22; J. McLean unpublished. B. B13-9329?, 95 m?, Channel Islands; T. Phillips. C. B'03-4255, 207 m; M. Lilly. D. Negative #486-27; J. Mclean unpublished. (All tic marks = 1 mm)

sculpture on the shoulder above the carina and raised spiral cords broadly and irregularly spaced below the carina to base of body whorl (Fig. 2). In his presentation, Greg compared these images with the two forms reported by various SCAMIT members. Unfortunately, no name references could be found in Jim's notebook scans. In the hope of finding more information, Kelvin undertook a trip to the Department of Malacology at NHMLAC. There, he hoped to look through Jim McLean's (Former Curator now deceased) notebooks for clues but didn't find anything. Lindsey Groves (Collections Manager) graciously provided him with a PDF copy of Jim's long gestating but never published MS for the Shelled Benthic Gastropoda of the Northeastern Pacific (British Columbia to central Baja California). It was provided with the stipulation that any new names proposed therein could not be published. Kelvin soon found illustrations of what had been proposed as new species in the MS that fit the two forms from Jim's negatives discovered by Greg. Additionally, Kelvin was able to look at the material examined including the types designated in the MS. These efforts confirmed Greg's earlier suspicions that there were two undescribed species. Greg and Kelvin agreed to work together to produce provisional voucher sheets for the two morphs.

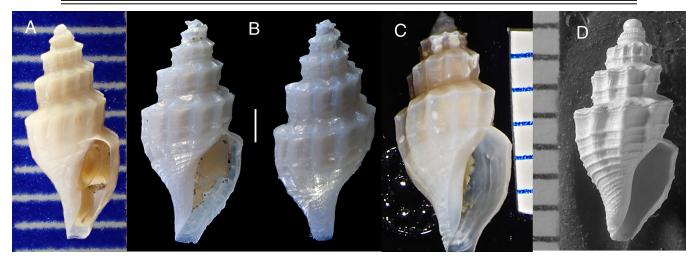


Figure 2 - A. B'18-10385, ~125 m, Channel Islands; G. Lyon. B. B'18-10300, 196 m, Eastern Santa Barbara Channel; K. Barwick (ventral and dorsal view, respectively). C. B'03-4067, 135 m, Point Conception; T. Phillips. D. Negative #486-24; J. McLean unpublished photo. (all tick marks and scale bars = 1 mm)

Tony and Don felt that there is a possible 3rd type collected at the Channel Islands during the B'13 survey. They would follow up and report later.

Next was a discussion regarding *Terebra* spp. Pat LaFolette had posted on the SCAMIT List Server (22 October 2019) a 3rd potential species that could be sampled in the SCB, *T. crenifera* (which according to WoRMS should be *Neoterebra crenifera* (Deshayes, 1859)). This species is not normally seen north of the gulf of California, but dead specimens have been found in the SCB. This issue will hopefully be addressed at the May SCAMIT meeting. A *Terebra* page was found in McClean's unpublished MS but Kelvin recommends that people stick with Bratcher and Cernohorsky, 1987 which contains photos of type specimens.

LITERATURE CITED

Barnard, J. L. (1972). A review of the family Synopiidae (=Tironidae), mainly distributed in the deep sea (Crustacea: Amphipoda). Smithsonian Contributions to Zoology (124): 1-94.

Bratcher, Twyla and W. Cernohorsky. 1987. Living Terebras of the World: A Monograph of the Recent Terebridae of the World. American Malacologists; 1st Edition. 240 pp.

Cadien, D. B. (2014) Amphipoda of the Northeast Pacific (Equator to Aleutians, intertidal to abyss): XVII. Synopioidea - a review. 20pp.

Gurjanova, E. F. (1951). Bokoplavy morey SSSR i sopredel'nykh vod (Amphipoda-Gammaridea). <u>Opredeliteli po Faune SSSR</u> **41**: 1-1029.

Lörz, A.-N. and C. O. Coleman (2013). The Marine Fauna of New Zealand and the Ross Sea: Amphipoda, Synopiidae (Crustacea). NIWA. Biodiversity Memoir (127): 1-160.

Sars, G. O. (1895). Amphipoda. An account of the Crustacea of Norway, with short descriptions and figures of all the species 1: 1-711.



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:

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SCAMIT PO Box 50162 Long Beach, CA 90815



CITY OF LOS ANGELES VOUCHER SHEET



Photis sp HYP2 SCAMIT Vol. 38, No 5

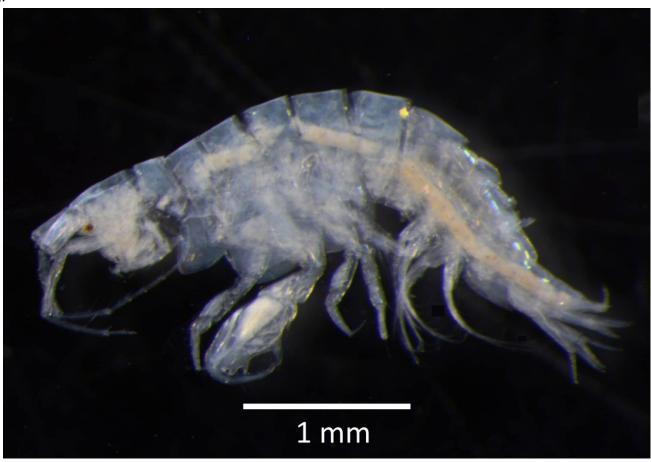
Group: Arthropoda:Malacostraca:Amphipoda:Photidae

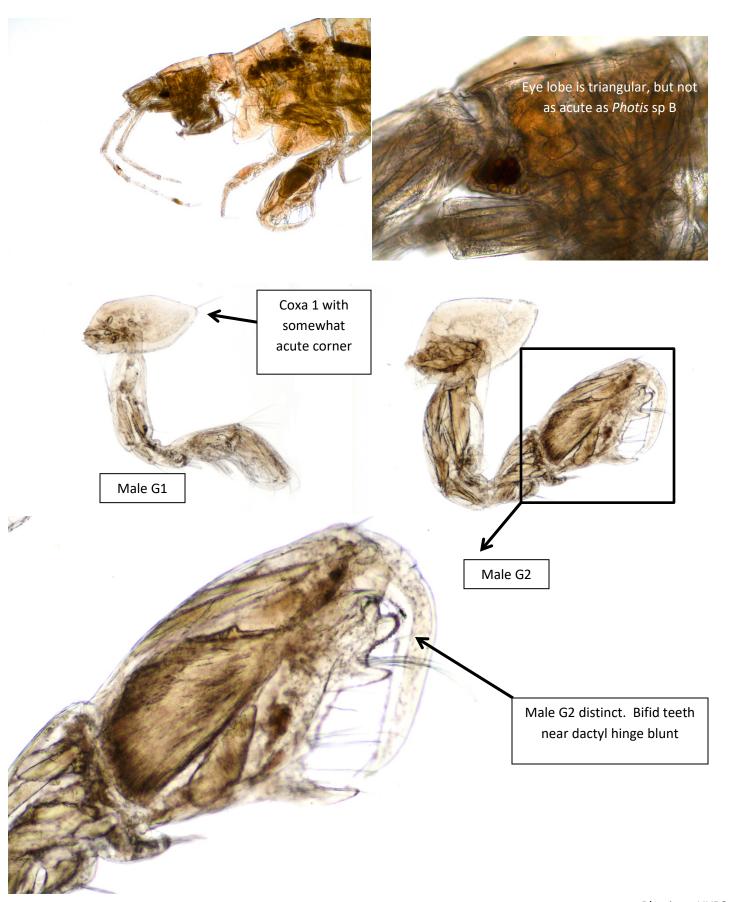
SCAMIT CODE: None Date Examined: 20FEB20 SYNONYMY: None Voucher By: C. Campbell

DIAGNOSTIC CHARACTERS:

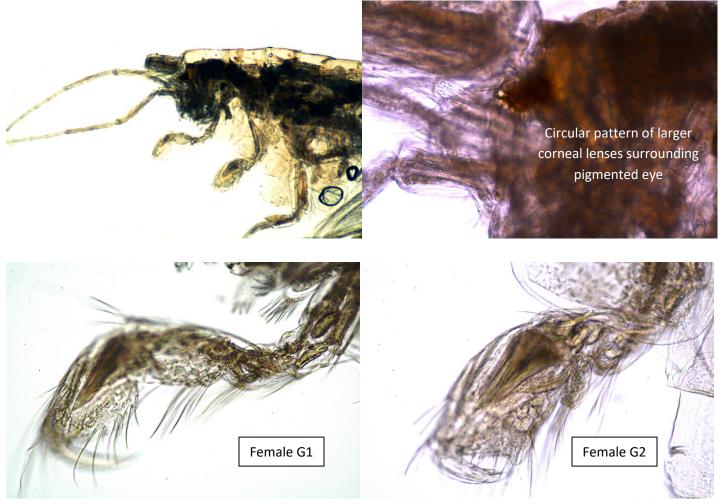
- 1. Both male and female have distinct gnathopod 2. Female G2 with blunt defining tooth and flat palm. Male G2 with defining tooth and multiple palmar teeth. Bifid palmer tooth closest to dactyl hinge is blunt.
- 2. Circular pattern of larger corneal lenses surrounding pigmented eye on both male and female.
- 3. Coxa 1 and 2 with very few setae. Female coxa 1 and 2 ventrally squared. Anterior corner of male coxa 1 and 2 somewhat pointed.
- 4. Ventral margin of G1 carpus broad on male and female.
- 5. The four specimens observed ranged from 3-7 mm, all mature.

MALE:





FEMALE:



Photis sp HYP2 CLAEMD, Station B18-10385 (124 m), 17Jul18

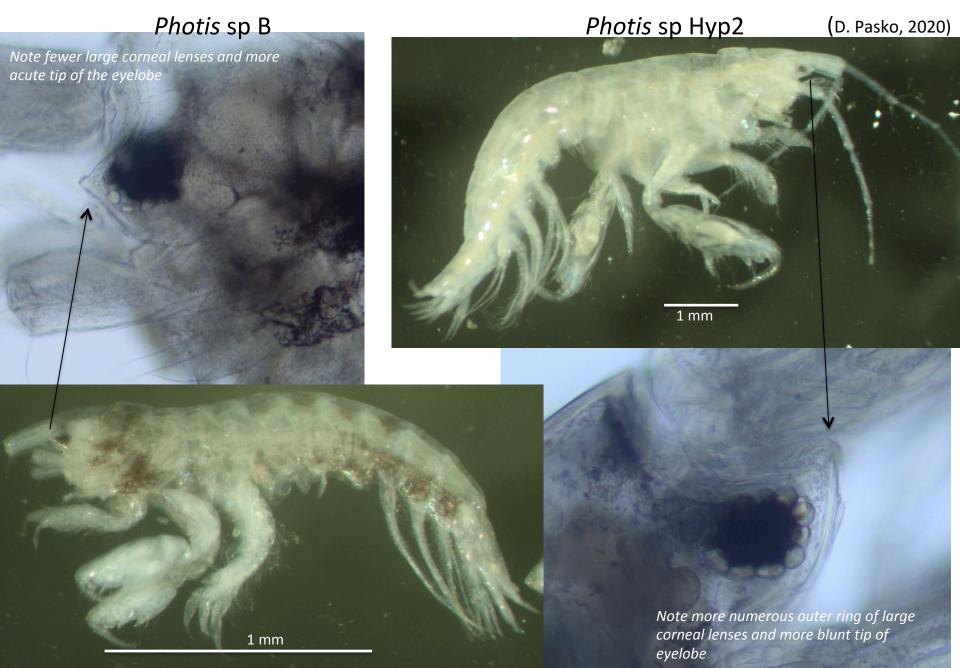
SPECIMEN COLLECTION(S):

- EXAMPLE: CLAEMD, Station B18-10385 (124 m), 17Jul18, 34.0788, -119.509, about 5 km from east end of Santa Rosa Island.
- Also collected at station B18-10288

RELATED SPECIES AND CHARACTER DIFFERENCES:

- Female G2 is similar to *Photis brevipes* which has a more sinuous palm and an acute defining tooth. *P. brevipes* also have heavily setose coxae (20 or more on ventral margin of coxa 2). *P.* sp HYP2 coxa have only a few setae.
- Gnathopods are very similar to *P. macrotica*. Both have very few setae on coxa 1 and 2 and coxa shape is very similar in both species, but eye is much larger in *P. macrotica*.
- *Photis* sp HYP2 has a triangular eyelobe and large corneal lenses forming an outer ring around eye. *Photis* sp B has a more acute triangular eye lobe and fewer corneal lenses. Male *P*. sp B lacks the bifid tooth on G2 palm near dactyl hinge.

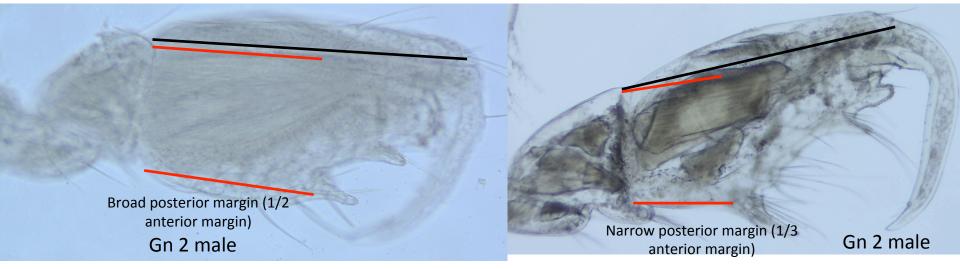
Photis sp B (Goleta, CA 25m) vs.Photis sp Hyp2 (B'18 10293, East Santa Barbara Channel, 127 m)



Photis sp B (Goleta, CA 25m) vs.

Photis sp Hyp2 (B'18 10293, East Santa Barbara Channel, 127 m)

Photis sp B Photis sp Hyp2 (D. Pasko, 2020)





Provisional Name: Photis sp SD10

Authority: Pasko **Common Synonyms:**

Taxon: Amphipod: Isaeidae Taxonomist: Dean Pasko

Date: 2020

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

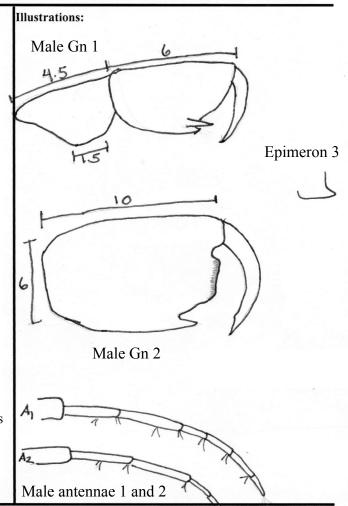
Characters:

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.



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 SD10 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 SD10

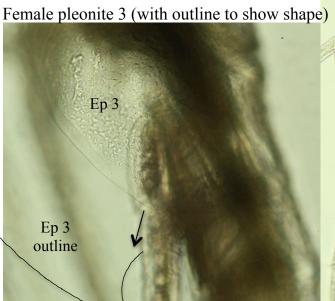
Authority: Pasko Common Synonyms: Taxon: Amphipod: Isaeidae Taxonomist: Dean Pasko

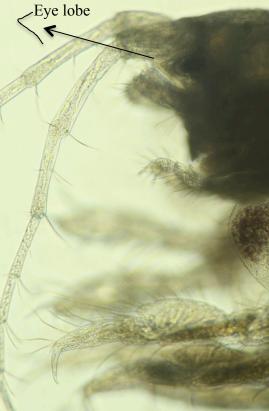
Date: 2020

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





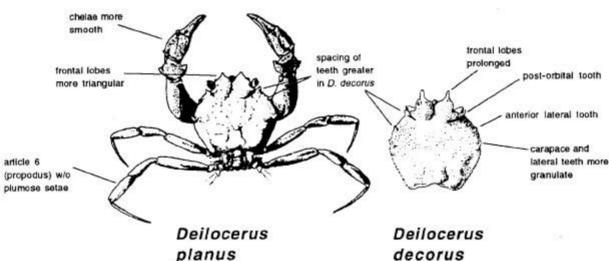


Female head, antennae, eye lobe (outlined to show shape)

Decapod Resources

Dellocerus spp dp 2/16/96

Deilocerus planus & D. decorus



Carapace and chelae less granulate

Article 6 of pereopods w/o plumose setae

Frontal lobes triangular

Anterior lateral carapace tooth closer to post-orbital tooth

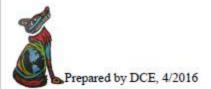
decorus

Carapace and chelae more granulate

Article 6 of pereopods with plumose setae

Frontal lobes prolonged

Anterior lateral carapace tooth more distant from post-orbital tooth





CITY OF LOS ANGELES VOUCHER SHEET



Heteronemertea sp HYP3 SCAMIT Vol. 38 No 5

Group: Nemertea: Anopla: Heteronemertea

SCAMIT CODE: None Date Examined: October 3, 2019

SYNONYMY: None Voucher By: Cody Larsen & Megan Lilly

DIAGNOSTIC CHARACTERS:

1. Head without horizontal cephalic slit.

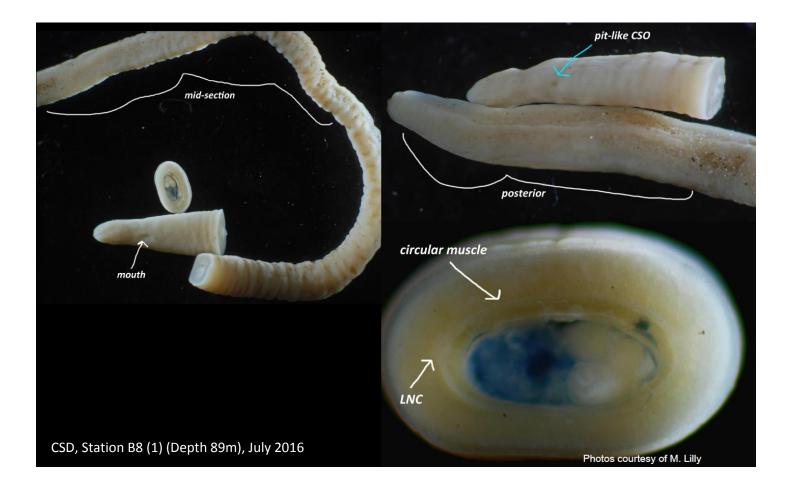
2. Distinctive body color pattern absent; uniform beige coloration.

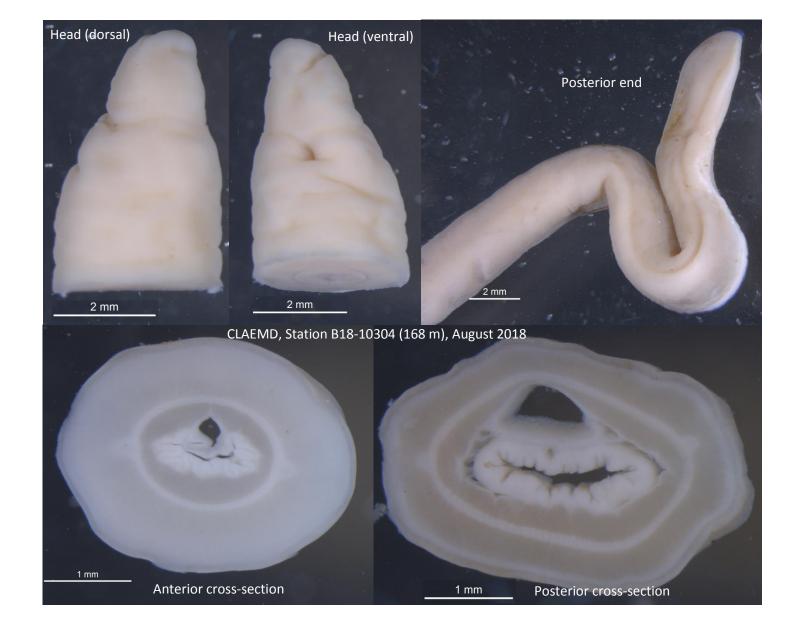
3. Small, pit-like cerebral sensory organ (CSO).

4. Three-layered Heteronemertean musculature, with thick, dense outer longitudinal muscle layer.

5. Body flattens from mid-section to posterior end, exhibiting lateral margins.

6. Small-to-moderate sized muscular mouth, with minor ribbing.





SPECIMEN COLLECTION(S):

- CLAEMD, Station B18-10304 (168 m), August 2018
- CSD, Station B8 (1) (Depth 89m), July 2016

RELATED SPECIES AND CHARACTER DIFFERENCES:

Heteronemertea sp HYP2

- Entire animal generally rounded, with a smooth body.
- Absence of tapered margins in posterior half.
- Head strongly tapered, with anterior half of body broader than posterior region.
- Thick dermis (although, also has thick longitudinal muscle layers).

