Species: *Onuphis* sp B SCAMIT, 2023 §

Synonyms: *Onuphis* sp LA1 Haggin, 2019 §

Subfamily: Onuphinae  
Family: Onuphidae  
Order: Eunicida  
Subclass: Errantia  
Class: Polychaeta  
Phylum: Annelida

**Diagnostic Characters:**

147 chaetigers (incomplete) 61 mm X 2 mm  
(including parapodia)

1) Prostomium sub-triangular, with clavate frontal antennae (FA), tapering distally.

2) Eyes present, 1 pair, far lateral on prostomium, obscured by the Inner Lateral Antennae from above. Eyes a collection of many small spots.

3) Peristomium about = in size to chaetiger 1, slightly smaller than prostomium (Images 1 & 2). Peristomial cirri long, extending beyond anterior margin of prostomium, to about midpoint of Frontal Antennae.

4) Outer Lateral Antennae (OLA) with ~25 annulations, reaching to chaetiger 2 (Images 1—3).  
**Ceratophores with brown pigment on annulations 2-5 and 14-16. Subdermal pigment spot in annulations 3 & 4, 10 & 11 and 17 & 18. Styles short, ~½ length of ceratophore, with brown pigment at base of styles.**

5) Inner Lateral Antennae (ILA) with 29 to 30 annulations, reaching to around chaetiger 10 (Images 1—3).  
**Ceratophores with brown pigment on annulations 3-6 and 18-24. Subdermal pigment spot in annulations 3-7, 12-14 and 18 & 19. Styles long, ~1.3X ceratophores, with brown pigment at base of styles.**

6) Median Antennae (MA) with ~20 annulations, reaching to chaetiger 6 or 7 (Images 1—3).  
**Ceratophores with brown pigment on annulations 2-5 and 10-13. Subdermal pigment spot in annulations 4 & 5 and 10 & 11. Styles slightly longer than ceratophores, with light brown pigment at base of style (not as noticeable as in ILA & OLA).**

7) Branchiae from chaetiger 1 (Images 1, 2 & 4), Pectinate with 5 (maybe a small 6) filaments at maximum development (Image 7). 1st branching from chaetiger 17; 2nd branch from chaetiger 26.

8) Dorsal cirri digitate, slender, < length of branchiae in most chaetigers (longer in 1st 2 or 3 chaetigers only) (Images 4—7).

9) Ventral cirri digitate in chaetigers 1-6 (Image 3), papilliform in chaetiger 7, globose in chaetiger 8 and pad-like from chaetiger 9 (globose VC in chaetiger 8 may be small pad).

10) Postchaetal lobe (PL) digitate for 23 chaetigers (reducing rapidly in size from chaetiger 13) then small, conical to chaetiger 35 (Images 4—6). PL reduced to papillae after.

11) Interramal papillae present on chaetigers 5-10 (Images 5 & 6).
Diagnostic Characters (cont.):

12) Pseudocompound Hooded Hooks (PCHH) present on chaetigers 1-5. Tridentate, with proximal tooth very thin and set close to median tooth (may appear bidentate) (Image 4).

13) Subacicular Hooded Hooks present from chaetiger 10; bidentate, hooded (Image 6).

14) Pectinate chaetae present from chaetiger 6, distally slightly oblique, with 9-10 very long teeth.

15) Limbate chaetae with very fine wings present on all chaetigers (Image 5).

16) Compound spinigers absent.

17) Maxillary Formula: MI 1+1 (falcate); MII 9+9; MIII 8+0; MIV 6+8(9); MV 1+1 (oval plates, rounded at one end and pointed at the other, giving appearance of a tooth) (Images 8-11).

18) Pygidium unknown.

19) Cuticle iridescent.

Pigmentation:

1) Prostomium with transverse brown band anterior to MA, stretching between the bases of OLA & ILA (Images 1 & 2).

2) Peristomium with transverse brown band dorsally and scattered pigment around the edge of lips ventrally (Images 1—3).

3) Anterior chaetigers with transverse brown bands dorsally and 2 brown pigment patches (1 dorso-lateral & 1 ventro-lateral) on posterior of parapodia base (dorso-lateral patch connects to dorsal bands, ventro-lateral patch separate) (Images 1—3).
Pigmentation (cont.):

4) Slight brown pigment in posterior interramal region of parapodia.
5) Dorsal pigment decreasing in intensity thru chaetiger 40 (Image 1).
6) ** See also description of ceratophore pigmentation on page 1 **
Onuphis sp B

Material Examined:
0888-1D—off Rocky Point, Palos Verdes, 31m (1 ind., incomplete—147 chaetigers) (33.76500N, 118.43530W—05AUG88) (all images)

Similar Species:
Onuphis eremita parva  Berkeley & Berkeley, 1941 — Onuphis eremita parva & Onuphis sp B are similar by the presence of interramal papillae in anterior chaetigers and branchiae present from chaetiger 1 and becoming pectinate. However, the branchiae in O. e. parva first branch in chaetigers 23 - 30 and in O. sp B they first branch in chaetiger 17 and a second branch in chaetiger 26. The two species differ in the number of chaetigers with pseudocompound hooded hooks (1-4 in O. e. parva & 1-5 in O. sp B), the start of subacicular hooded hooks (chaetiger 8 in O. e. parva & chaetiger 10 in O. sp B), the maximum number of annulations on the occipital ceratophores (21 annulations in O. e. parva & 30 annulations in O. sp LA1) and the start of pad-like ventral cirri (chaetiger 7 in O. e. parva & chaetiger 8 or 9 in O. sp B).

Onuphis multiannulata  Shisko, 1981 — Onuphis multiannulata and Onuphis sp B are similar in the first appearance of subacicular hooded hooks at chaetiger 10 and the branchiae present from chaetiger 1 and becoming pectinate, but differ in the maximum number of branchial filaments (3 filaments in O. multiannulata & 5(6) filaments in O. sp B) and both have pseudocompound hooded hooks in the first 5 chaetigers but differ in their dentition (bi- & tridentate in O. multiannulata & tridentate in O. sp B). The two species differ in their maxillary formula (O. multiannulata—MII 8/9+10; MIII 10+0; MIV 7+10/11 and O. sp B—MII 9+9; MIII 8+0; MIV 6+8(9, difficult to count)), O. multiannulata lacks the interramal papillae in anterior chaetigers that are present in O. sp B and Onuphis multiannulata lacks pigment while Onuphis sp B is heavily pigmented in anterior chaetigers.

Habitat:
Onuphis sp B is known from a single specimen from off Rocky Point, Palos Verdes, CA in shallow water (31m) in sediments of silty sand. Also collected in the sample were the polychaetes Platynereis bicaudiculata (Baird, 1863); Nereis sp A SCAMIT, 2007 §; Glycine armigera Moore, 1911; Glycera nana Johnson, 1901; Glycera oxycephala Ehlers, 1887; Diopatra tridentata Hartman, 1944; Onuphis sp A SCAMIT, 1992 §; Mooreonuphis nebulosus (Moore, 1911); Podarkeopsis glabrus (Hartman, 1961); Micropodarke dubia (Hessle, 1925); Lumbineris latreilli Audouin & H. Milne Edwards, 1834; Phylloodoce hartmanae Blake & Walton, 1977; Nephtys californiensis Hartman, 1938; Nephtys caecoides Hartman, 1938; Tenonia priops (Hartman, 1961); Sthenelanella uniformis Moore, 1910; Sthenelais tertialagra Moore, 1910; Dipolydora caulleryi (Mesnil, 1897); Dipolydora socialis (Schmarda, 1861); Laonice cirrata (M. Sars, 1851); Paraprionospio alata (Moore, 1923); Prionospio lighti Maciolek, 1985; Prionospio jubata Blake, 1996; Spiophanes duplex (Chamberlin, 1919); Spiophanes norrisi Meißner & Blank, 2009; Ampharete labros Hartman, 1961; Melinna ocularata Hartman, 1969; Lanice conchilega (Pallas, 1776); Streblosoma crassibranchia Treadwell, 1914; Pista wui Saphronova, 1988; Spiochaetopectus costarum Cmplx; Chaetozone corona Berkeley & Berkeley, 1941; Chaetozone setosa Cmplx; Apherocochaeta-Monticellina Cmplx; Scalibregma californicum Blake, 2000; Aricidea (Ariciaea) wassi Pettibone, 1965; Leitoscoloplos pugettensis (Pettibone, 1957); Euclumeninae sp A SCAMIT, 1987 §; Dialychone veleronis (Banse, 1972); an unidentified Chone, an unidentified Lumbrineris, an unidentified Mediomastus, and an unidentified Nereiphylla.

Discussion:
Arias (2016) gave the generic diagnosis of Onuphis as follows:

Prostomium often anteriorly extended; with frontal lips. Antennae and palps with ceratophores usually with 10-25 rings and short to moderately long styles, palpostyles shorter than palpophores. Nuchal grooves straight. Peristomial cirri present. Anterior three to four (rarely two to five) pairs of parapodia modified but not enlarged. Ventral cirri subulate on anterior four to six chaetigers; dorsal cirri moderately long. Branchiae rarely absent, usually present from chaetiger 1, rarely 3-6; single or pectinate filaments (maximum 12). Hooks of modified parapodia usually tridentate (rarely only bidentate, sometimes bi– to multidentate) Pseudocompound with relatively short hoods; median hook slightly larger but not becoming simple and changing to large median hook. Hooks varying specifically, from all having appendages of almost equal thickness and length to being clearly differentiated into slender long-appended and robust short-appended hooks. Dorsal limbate chaetae from chaetiger 1, ventral limbate chaetae replacing Pseudocompound hooks from chaetiger 4 or later until replaced by bidentate hooded Subacicular hooks usually from chaetiger 9-14. Tubes round in section, ranging from thin mucous to tough parchment-like inner layer covered with extraneous particles.

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Voucher Sheet
B. Haggin
April, 2023
Onuphis sp B may be Onuphis eremita parva but the description of O. e. parva was vague and the variability of characters within the species is unknown. Recent work (Arias & Paxton 2014) suggest that Onuphis eremita is a species complex and due to differences in the insertions of some characters a provisional species, Onuphis sp B, has been erected. WoRMS currently lists 47 accepted species of Onuphis and SCAMIT Ed. 13 has 7 named species and 3 provisional species of Onuphis. Onuphis sp B would be the 4th provisional species when added in Edition 14.

References:


Other Literature Consulted:


Version History:
Version 1.0—Voucher sheet created (01AUG2019)
Version 2.0—Updated voucher sheet to new SCAMIT guidelines; Updated photo labelling to reduce image clutter; Updated name to Onuphis sp B and author to SCAMIT, 2023 §; Updated material examined section; Updated References section; Added ITI-Code; Added Habitat, Discussion and Other Literature Consulted sections (12APR2023)