

Voucher Sheet

B. Haggin 2017



Species: *Scoloplos* sp LA3

Haggin 2017 §

Subfamily:

Synonyms: *Scoloplos armiger* Cmplx

of SCAMIT in part

Family: Orbiniidae

Order:

Infraclass: Scolecida

Subclass: Sedentaria

Class: Polychaeta

Phylum: Annelida

Description: 1) Prostomium conical, pointed, elongate (Image 3). Eyes absent. Peristomium with 1 achaetous segment.
2) Branchiae from setigers 9 - 14. Branchiae as small papillae (often overlooked on first few setigers) becoming triangular to strap-like in abdomen, slightly swollen subdistally, laterally ciliated.
3) Thorax with 13 - 19 setigers.
4) 1 - 2 subpodial lobes (Images 1 & 2) present ventral to neuropodia from chaetigers 12 - 20 (usually present on last 3 thoracic and 1st 3 abdominal setigers). Stomach papillae absent. Intra-segmental Ciliary Band (ICB) absent.
5) Thoracic neuropodia mammiform, with a digitate Postsetal Process (PsP), sometimes with a 2nd PsP in posterior thorax.
6) Thoracic neurosetae with crenulate capillaries and acicular spines. Spines in 1 "J"-shaped row (~ 5 - 12 spines/row) between 3 anterior & 1 posterior row of capillaries (C-C-C-S-C), occupying the inferior 1/2 of the fascicle (Images 6 & 7). Spines mostly straight, bent slightly at tips with coarse serrations and hoods. ** Spines absent or very small in posterior thorax.
7) Abdominal notopodial postsetal lobe digitate to foliose. Notopodia with crenulate capillaries and furcate setae (in far posterior abdomen). Flail setae not seen.
8) Abdominal neuropodia bilobed, inner lobe longer. Abdominal neurosetae crenulate capillaries with 1 - 2 fine, barely emergent acicula.
9) Abdominal subpodial flange thin with a well-developed notch.
10) Pygidium unknown.
11) Brown pigmentation often present between branchial bases in abdomen. Pigment sometimes present on abdominal neuropodial flange. Sometimes with a brown pigment stripe dorsally thru thorax.

Material Examined: STNs: B43A (51 m); B55A (52 m); B73A (38 m); B80A (38 m); 0796-2D; 0799-8D; 0706-0D; 0707-(0C, 0D, 1D, 3D, 9D, 10C); 0708-(0D, 9C, 10C, 10D (30 m)); 0715-10C; B13-9467 (29 m); B13-9481 (23 m); 22942-BF1; 22969-BF1; 22970-BF1; 24253-BF1; 24376-BF1

All "C" stations are 61 m. All "D" stations are 30 m.

Similar Species: *Scoloplos acmeceps* Chamberlin 1919. These species have overlapping ranges of branchial insertion, # of thoracic setigers and have similar morphological characters throughout. *Scoloplos acmeceps* differs in lacking subpodial lobes and a 2nd PsP in the posterior thorax and anterior abdomen. Both species are present from the intertidal to the shelf (<200 m).

Scoloplos sp LA1 Haggin 2017 §. These species have overlapping ranges of branchial insertion, # of thoracic setigers and have similar morphological characters throughout. *Scoloplos* sp LA1 differs in lacking subpodial lobes and a 2nd PsP in the posterior thorax and anterior abdomen. Both species are present from the intertidal to the shelf (<200 m).

Scoloplos sp LA2 Haggin 2017 §. These species have overlapping ranges of branchial insertion, # of thoracic setigers and have similar morphological characters throughout. The two species differ in the setal arrangement of the thoracic neuropodia. *Scoloplos* sp LA2 has ~8 - 15 spines in 3 rows occupying the entire fascicle. Both species are present from the intertidal to the shelf (<200 m).

Similar Species continued: ***Leitoscoloplos pugettensis* (Pettibone 1957)**. These species have overlapping ranges of branchial insertion and # of thoracic setigers. *L. pugettensis* lacks the thoracic neuropodial acicular spines, subpodial lobes and 2nd PsP that are found in *Scoloplos* sp LA3. Both are shelf species (<220 m).

***Leitoscoloplos panamensis* (Monro 1933)**. These species have an overlapping # of thoracic setigers. *L. panamensis* differs in having branchiae from setiger 9 and possessing an interramal cirri (IRC). *L. panamensis* lacks neuropodial acicular spines in the thorax. Both are shelf species (<220 m).

Distribution: Pt. Conception - Palos Verdes, California, USA

Depth range: Intertidal - 61 m

Type locality: Palos Verdes, California, USA

Images: Images 1, 2 & 7 from a specimen collected from station 22970-BF1.

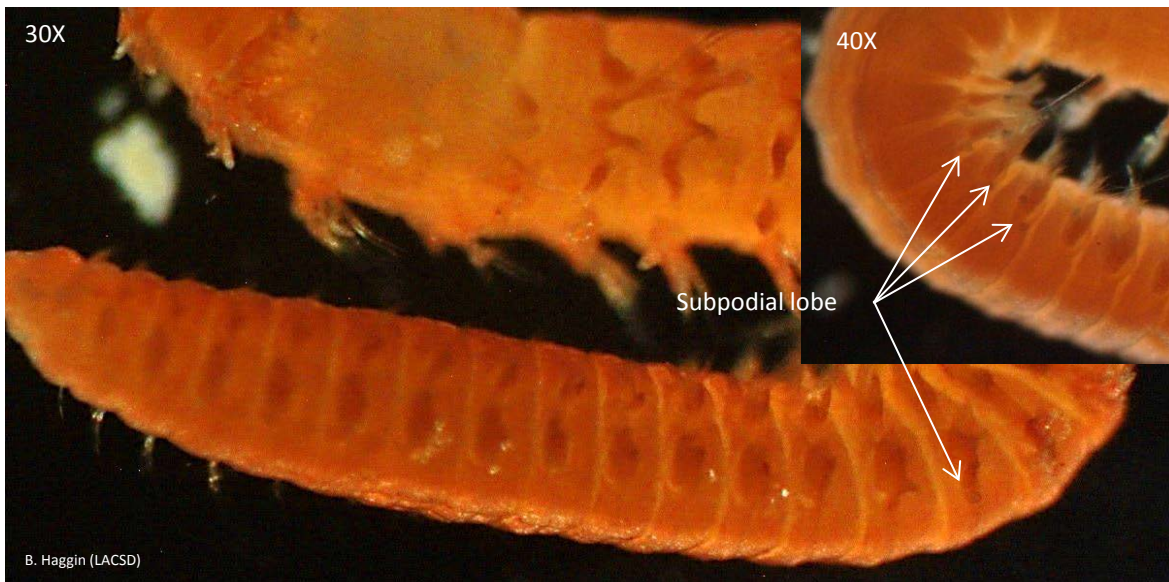


Image 1. Lateral view with Shirlastain A stain showing subpodial lobes.

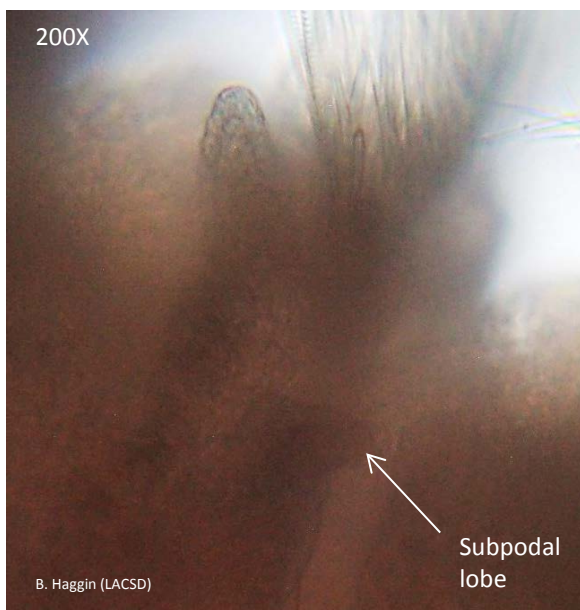


Image 2. (Left) Detail of the subpodial lobe of setiger 11.



Image 3. (Right) Prostomium.

Images continued:

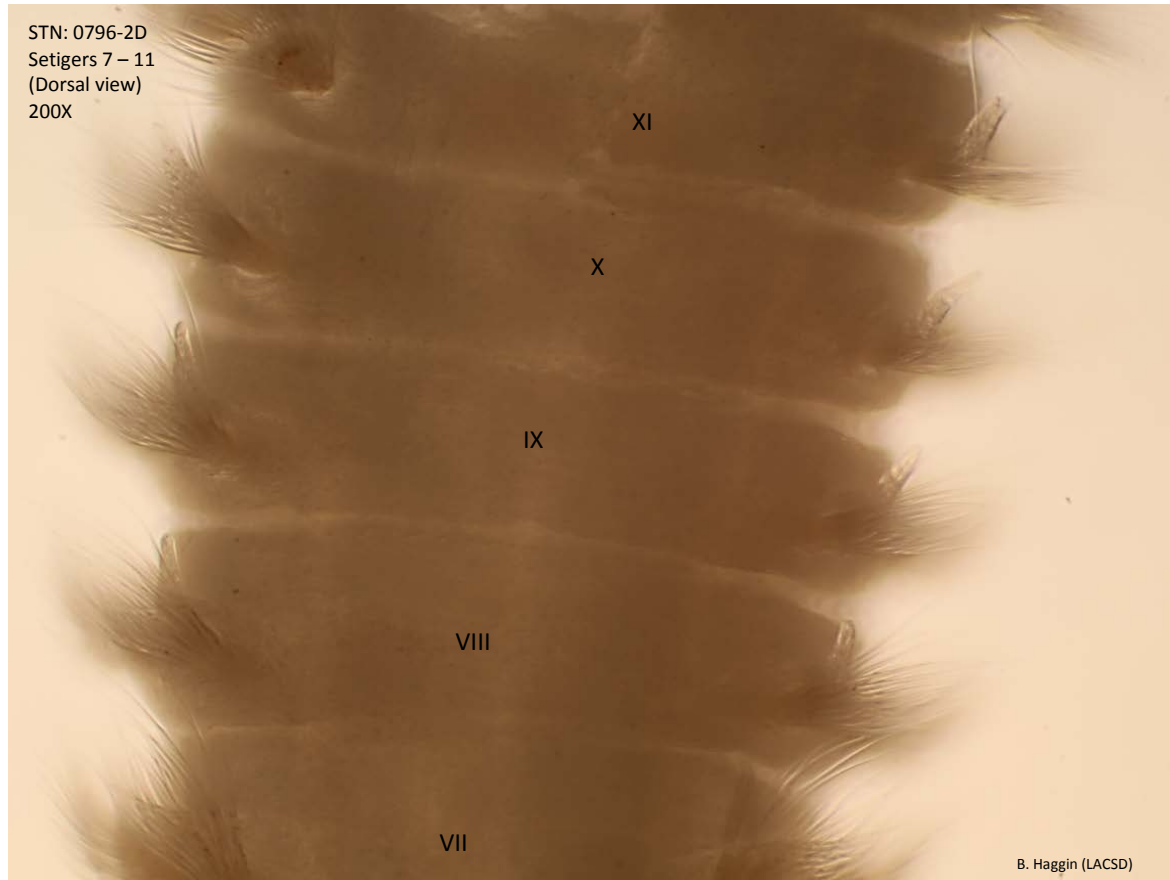


Image 4. Dorsal anterior showing notopodia & notosetae.



Image 5. (Left) thoracic notopodia.

Image 6 (Right) thoracic neuropodia showing neuroacacula in a single row (C-C-C-S-C arrangement).

Images continued:

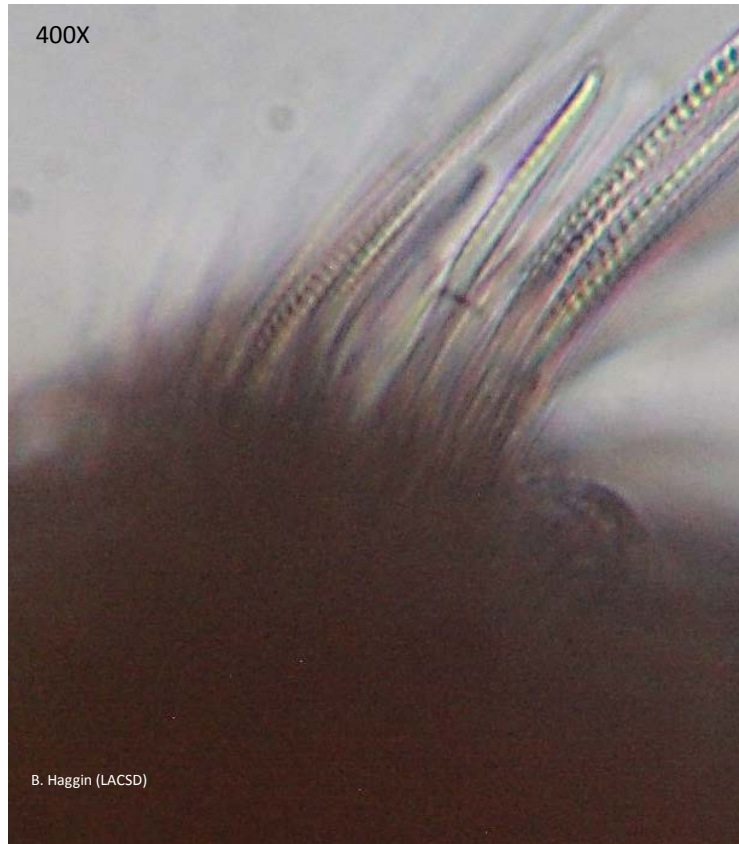


Image 7. Thoracic neuropodial acicular spines with serrations and hood in posterior of fascicle.

Literature reviewed:

Blake, J. A. 1996: *Family Orbiniidae Hartman, 1942*. Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and Western Santa Barbara Channel. Volume 6. The Annelida Part 3 - Polychaeta: Orbiniidae to Cossuridae. 418 pp (9-10).

Bleidorn, C., Kruse, I., Albrecht, S. & Bartolomaeus, T. 2006. Mitochondrial sequence data expose the putative cosmopolitan polychaete *Scoloplos armiger* (Annelida, Orbiniidae) as a species complex. *Bmc Evolutionary Biology* 6: 47.

Chamberlin, R. V. 1919. Pacific Coast Polychaeta Collected by Alexander Agassiz. *Bulletin of the Museum of Comparative Zoology* 63(6): 250-270.

Hartman, O. 1969. *Atlas of the Sedentariate Polychaetous Annelids from California*. Los Angeles, Ca, Allan Hancock Foundation, University Of Southern California. 812 pp (19-20).

Mackie, A. S. Y. 1987. A review of species currently assigned to the genus *Leitoscoloplos* Day, 1977 (Polychaeta: Orbiniidae), with descriptions of species newly referred to *Scoloplos* Blainville, 1828. *Sarsia* 72: 1-28.

Pettibone, M. H. 1957. North American genera of the family Orbiniidae (Annelida: Polychaeta), with descriptions of new species. *Journal of the Washington Academy of Science* 47(5): 159-167.