Voucher Sheet

B. Haggin 2017



Species: Scoloplos sp LA1 Haggin 2017 §

Subfamily: Synonyms: Scoloplos acmeceps of SCAMIT In part

Family: Orbiniidae

Order:

Infraclass: Scolecida Subclass: Sedentaria Class: Polychaeta Phylum: Annelida

Description: 1) Prostomium pointed. Eyes absent. Peristomium with 1 achaetous segment.

- 2) Branchiae from setigers 10 21. Branchiae as small papillae (often overlooked on first few setigers) becoming digitate to long, strap-like in abdomen, slightly swollen subdistally, laterally ciliated (Images 1 & 7).
- 3) Thorax with 12 25 setigers.
- 4) Subpodial lobes absent (Image 2). Stomach papillae absent. Intrasegmental Ciliary Band (ICB) absent.
- 5) Thoracic neuropodia mammiform, with a triangular Postsetal Process (PsP).
- 6) Thoracic neurosetae with crenulate capillaries and acicular spines. Spines in a single "J"shaped row of ~ 8 - 12 spines between 3 anterior & 1 posterior row of capillaries (C-C-C-S-
- C), occupying the inferior 1/2 of the fascicle. Spines nearly straight, bent slightly at tips, with coarse serrations and hoods (Images 3 & 4).
- 7) Abdominal neuropodia bilobed; inner lobe longer. Abdominal neurosetae crenulate capillaries with 1 - 3 fine, barely emergent acicula (Images 5 & 7).
- 8) Abdominal notopodial postsetal lobe digitate to broadly foliose. Notopodia with crenulate capillaries & furcate setae (from ~25th abdominal setiger) (Images 6 & 7).
- 9) Abdominal subpodial flange thin with a well-developed notch.
- 10) Pygidium with 1 long pair of dorso-laterally inserted anal cirri (Image 8).
- 11) Pigmentation absent.

Material Examined:	STNs: B73A (38 m); 0101-9D; 0707-(0C, 1D, 2C, 10D); 0708-(0D, 8C, 10C); LH05-134 (1 m)
	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. The two species differ in the setal arrangement of the thoracic neuropodia. Scoloplos acmeceps has ~16

spines in 3 rows occupying the entire fascicle. Both species are present from the intertidal to the

Scoloplos sp LA2 Haggin 2017 §. These species have overlapping ranges of branchial insertion, # of thoracic setigers and have similar morphological characters throughout. Scoloplos sp LA2 differs in having subpodial lobes and a 2nd PsP in the posterior thorax and anterior abdomen (setigers 13 - 27). Both species are present from the intertidal to the shelf (<200 m). ** Scoloplos sp LA2 is formerly part of the Scoloplos armiger Cmplx **

Scoloplos sp LA3 Haggin 2017 §. These species have overlapping ranges of branchial insertion, # of thoracic setigers and have similar morphological characters throughout. Scoloplos sp LA3 differs in having subpodial lobes and a 2nd PsP in the posterior thorax and anterior abdomen (setigers 12 - 20). Both species are present from the intertidal to the shelf (<200 m). ** Scoloplos sp LA3 is formerly part of the Scoloplos armiger Cmplx **

Similar Species continued:

Scoloplos sp LA4 Haggin 2018 §. These species have an overlapping range of branchial insertion and # of thoracic setigers. S. sp LA4 differs in having subpodial lobes. S. sp LA4 also has only a single spine that is nearly straight in a few anterior setigers only rather than a "J"-shaped row of multiple spines. Both are shelf species (<220 m).

Scoloplos acmeceps profundus Hartman 1960. These species have an overlapping range of branchial insertion and # of thoracic setigers. The branchiae of *S. acmeceps profundus* are simple filaments rather than strap-like. The spines of the thoracic neuropodia of *S. acmeceps profundus* are nearly smooth rather than with coarse serrations. *S. acmeceps profundus* is a <u>deep basin</u> species (>1500 m). *S.* sp LA1 is a <u>shelf species</u> (<220 m).

Scoloplos sp SF1 Norris 2007 §. These species have an overlapping range of branchial insertion and lack subpodial lobes in the posterior thorax. *S.* sp SF1 has neuropodial acicular spines as single, in 1 row or in 3 rows rather than in a "J"-shaped row in the inferior 1/2 of the fascicle as in *S.* sp LA1. *S.* sp SF1 is a <u>bay/estuary</u> species. *S.* sp LA1 is a <u>shelf</u> species (<220 m).

Leitoscoloplos pugettensis (Pettibone 1957). These species have overlapping ranges of branchial insertion and # of thoracic setigers. *L. pugettensis* lacks the thoracic neuropodial acicular spines that are found in *Scoloplos* sp LA1. 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, having subpodial lobes and possessing an interramal cirri (IRC). *L. panamensis* lacks neuropodial acicular spines in the thorax. Both are shelf species (<220 m).

Distribution: Palos Verdes, California, USA to Panama

Depth range: Intertidal to 61 m

Type locality: Isla Coibita, Gulf of Chiriquí, Panama

Images: Images 1, 2, 4-6 & 8 from a specimen collected from station 0708-0D (LACSD).



Image 1. Abdominal (setiger 20) branchiae with lateral cilia.

Images continued:

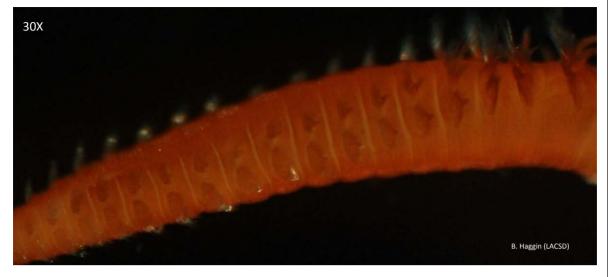


Image 2. Lateral view of the thorax with Shirlastain A stain showing no subpodial lobes.



Image 3. View of thoracic neurosetae showing "J"-shaped arrangement of neuroacicula in inferior 1/2 of the fascicle. Dots mark the tips of the acicula.

Images continued:



Image 4. Setiger 5 showing acicular spines in the neuropodia (posterior of the fascicle). A faint hood can be seen around the tips of the spines.

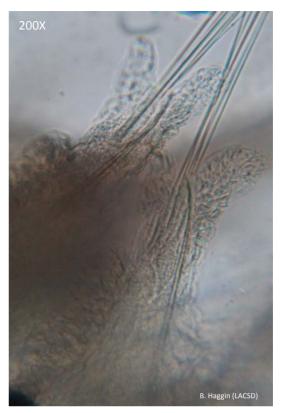


Image 5. Setigers 28 & 29 (Abdominal) showing the bilobed neuropodia, subdistal notch, acicula and setal bundles.

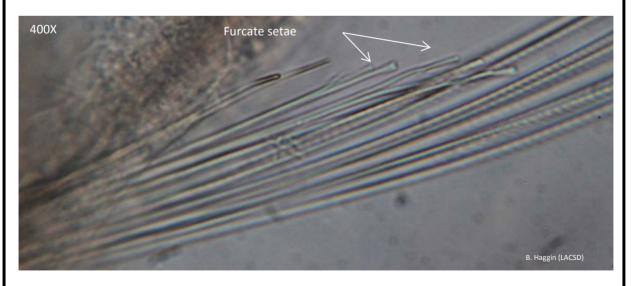


Image 6. Furcate setae in abdominal notopodia.

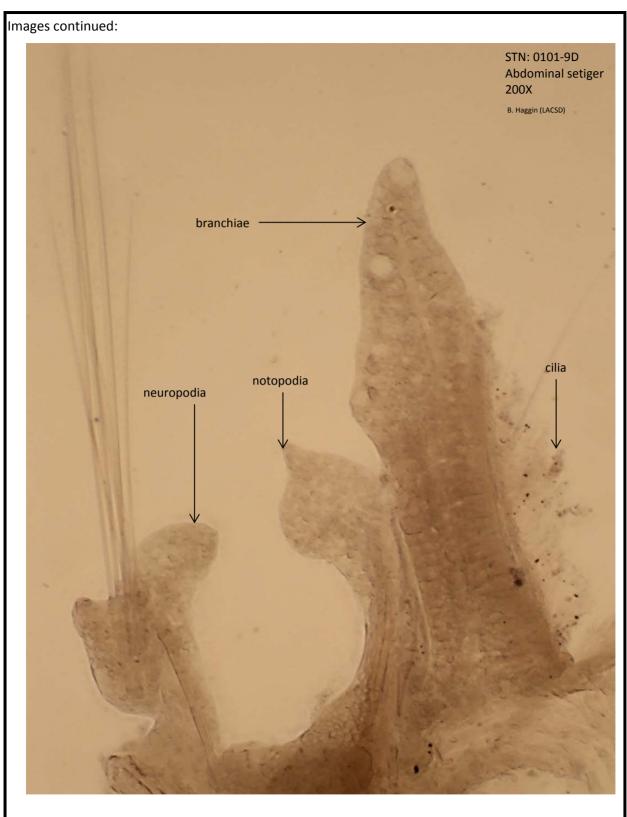


Image 7. Abdominal setiger.

Images continued:



Image 8. Pygidium.

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).

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