

Voucher Sheet

B. Haggin 2018



Species: <i>Scoloplos</i> sp LA4	Haggin 2018 §
Subfamily:	Synonyms: <i>Scoloplos armiger</i> Cmplx of SCAMIT in part
Family: Orbiniidae	
Order:	
Infraclass: Scolecida	
Subclass: Sedentaria	
Class: Polychaeta	
Phylum: Annelida	
Description: 1) Prostomium elongate, conical. Peristomium with 1 achaetous segment. 2) Branchiae from setigers 12-13. Branchiae triangular to strap-like in abdomen, slightly swollen subdistally, laterally ciliated. 3) Thorax with 17 - 19 setigers. 4) 1 - 2 subpodial lobes present ventral to neuropodia from setigers 18-21 (usually present on last 3 thoracic and 1st 3 abdominal setigers). Stomach papillae absent. Intrasegmental Ciliary Band (ICB) absent. 5) Thoracic neuropodia mammiform, with a triangular Postsetal Process (PsP), with a 2nd PsP in posterior thorax. 6) Thoracic neurosetae with crenulate capillaries and acicular spines. A single spine is present in anterior thorax only. Spine mostly straight, bent slightly at tips with coarse serrations and hoods (Images 1 & 2). ** Spines absent in posterior thorax. 7) Abdominal notopodial postsetal lobe foliose with basal constriction. 8) Abdominal neuropodia bilobed, inner lobe longer. 9) Abdominal subpodial flange thin with a well-developed notch. 10) Pygidium unknown. 11) Brown pigmentation often present dorso-medially in posterior thorax.	
Material Examined:	STNs: 9388-5-R1 (59 m) (*OCSD01227); 94103-1-R1 (56 m) (**OCSD00983) *OCSD01227 was originally ID'd as <i>Leitoscoloplos mexicanus</i> **OCSD00983 was originally ID'd as <i>Leitoscoloplos panamensis</i>
Similar Species:	<i>Scoloplos acmeceps</i> Chamberlin 1919. These species have an overlapping # of thoracic setigers. <i>S. acmeceps</i> differs in lacking a 2nd PSP in posterior thorax and subpodial lobes. <i>S. acmeceps</i> also has 3 rows of multiple spines rather than only a single spine that is nearly straight in a few anterior setigers only. <i>S. acmeceps</i> is a <u>shelf</u> species (<220 m). <i>S. sp LA4</i> is a <u>shallow shelf</u> species (<60 m). <i>Scoloplos</i> sp LA1 Haggin 2017 §. These species have overlapping ranges of branchial insertion, # of thoracic setigers and the presence of a 2nd PsP in the posterior thorax. <i>S. sp LA1</i> differs in lacking subpodial lobes in the posterior thorax and anterior abdomen. <i>S. sp LA1</i> is a <u>shelf</u> species (<200 m). <i>S. sp LA4</i> is a <u>shallow shelf</u> species (<60 m). <i>Scoloplos</i> sp LA2 Haggin 2017 §. These species have overlapping ranges of branchial insertion and # of thoracic setigers. The two species differ in the setal arrangement of the thoracic neuropodia. <i>S. sp LA2</i> has ~8 - 15 spines in 3 rows occupying the entire fascicle. <i>S. sp LA4</i> has a single spine in the anterior thorax. <i>S. sp LA2</i> is a <u>shelf</u> species (<200 m). <i>S. sp LA4</i> is a <u>shallow shelf</u> species (<60 m).

Similar Species

continued:

***Scoloplos* sp LA3 Haggin 2017 §.** These species have overlapping ranges of branchial insertion, # of thoracic setigers and have similar morphological characters throughout. *S.* sp LA3 differs in having a "J"-shaped arrangement of neuroacicula. *S.* sp LA4 has only a single spine in the anterior thorax. *S.* sp LA3 is a shelf species (<200 m). *S.* sp LA4 is a shallow shelf species (<60 m).

***Scoloplos acmeceps profundus* Hartman 1960.** These species have an overlapping range of branchial insertion. The branchiae of *S. acmeceps profundus* are simple filaments rather than strap-like. *S. acmeceps profundus* lacks a subpodial lobe and a 2nd PsP in the posterior thorax. The thoracic neuroacicula of *S. acmeceps profundus* are nearly smooth and occupy only the inferior portion of the fascicle rather than a single spine as in *S.* sp LA4. *S. acmeceps profundus* is a deep basin species (>1500 m). *S.* sp LA4 is a shallow shelf species (<60 m).

***Scoloplos armiger alaskensis* (Hartman 1948).** These species both have triangular - strap-like branchiae, subpodial lobes and a 2nd PsP in the posterior thorax and slightly overlapping ranges of branchial insertion and # of thoracic setigers. *S. armiger alaskensis* differs by having a few (>1) spines in the anterior thoracic neuropodia rather than only a single spine as in *S.* sp LA4. *S. armiger alaskensis* is an intertidal species from Alaska. *S.* sp LA4 is a shallow shelf species (<60 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, subpodial lobes and 2nd PsP that are found in *Scoloplos* sp LA4. *L. pugettensis* is a shelf species (<220 m). *S.* sp LA4 is a shallow shelf species (<60 m).

***Leitoscoloplos panamensis* (Monro 1933).** These species have an overlapping # of thoracic setigers, subpodial lobes and a 2nd PsP in the posterior thorax. *L. panamensis* differs in having branchiae from setiger 9 and possessing an interramal cirri (IRC). *L. panamensis* lacks neuropodial acicular spines in the thorax. *L. panamensis* is a shelf species (<220 m). *S.* sp LA4 is a shallow shelf species (<60 m).

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

Depth range: Intertidal - 61 m

Type locality: Palos Verdes, California, USA

Images:

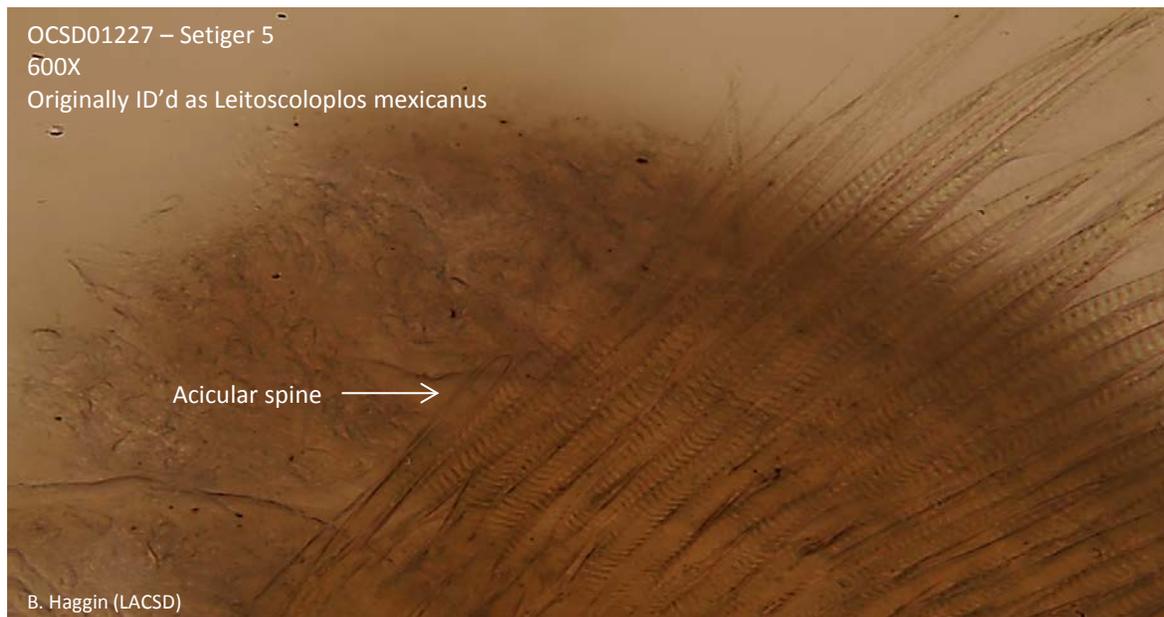


Image 1. single acicular spine in anterior thoracic neuropodia.

Images continued:

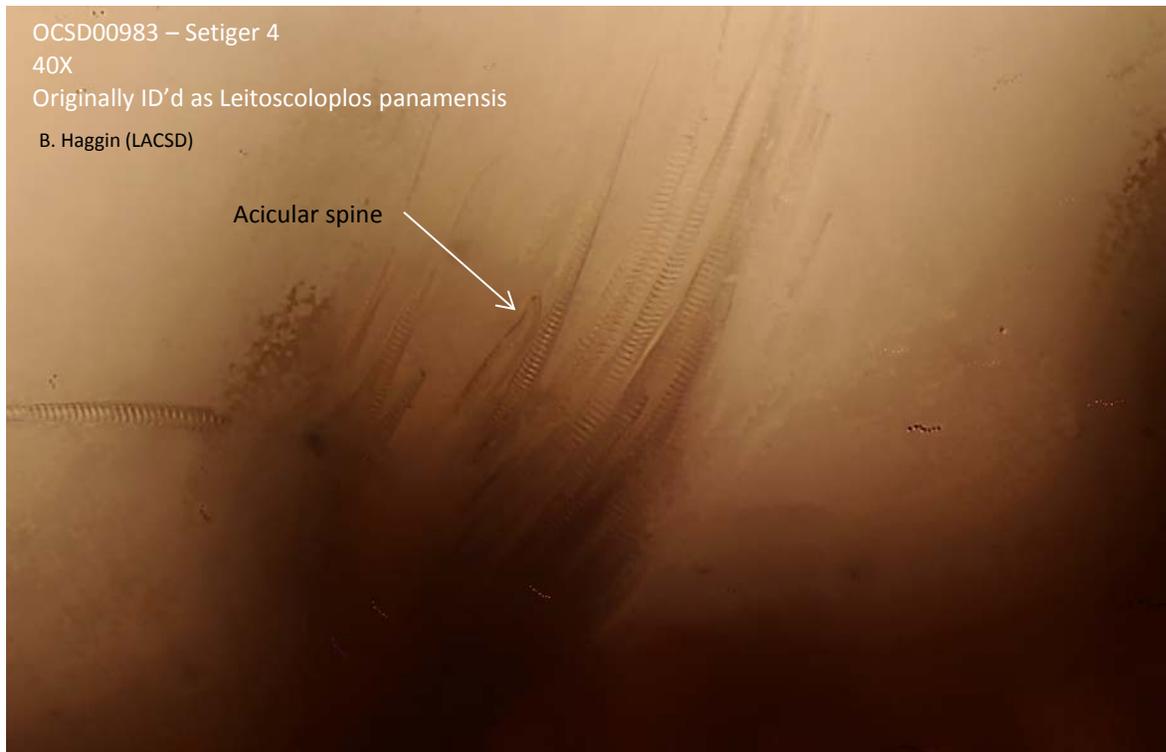


Image 2. single acicular spine in anterior thoracic neuropodia.

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.