

# Voucher Sheet

B. Haggin 2017



Species: *Leitoscoloplos* sp LA4 Haggin 2017 §

Subfamily: Synonyms:

Family: Orbiniidae

Order:

Infraclass: Scolecida

Subclass: Sedentaria

Class: Polychaeta

Phylum: Annelida

- Description:
- 1) Prostomium conical. Eyes absent. Peristomium with 1 achaetous segment.
  - 2) Branchiae from setigers 11 - 12. Branchiae small papillae (often overlooked on first few setigers) becoming short, strap-like in abdomen (shorter than or equal to abdominal notopodia), pointed and swollen subdistally with lateral cilia (Images 1, 4 & 5A).
  - 3) Thorax dorso-ventrally flattened and inflating in abdomen (Image 2).
  - 4) Thorax with 16 setigers.
  - 5) A single subpodial lobe present on setigers 14 - 24 (Image 3). Stomach papillae absent. Intrasegmental ciliary band (ICB) absent.
  - 6) Thoracic notopodia long, triangular arising from a small mound in superior position with crenulate capillaries.
  - 7) Thoracic neuropodia mammiform, with a long, digitate postsetal process (PsP) and a 2nd PsP (Image 3) in posterior thorax, with crenulate capillaries only (without thoracic neuropodial acicular spines).
  - 8) Abdominal notopodial postsetal lobe foliose, basally constricted. Interramal cirri absent (Images 4 & 5B). Notopodia with crenulate capillaries. Flail setae & furcate setae not seen.
  - 9) Abdominal neuropodia bilobed, both lobes triangular, inner lobe longer. Abdominal neurosetae crenulate capillaries with 3 fine, barely emergent acicula (Images 4 & 6).
  - 10) Abdominal subpodial flange thin, triangular with subpodial lobes and a well-developed notch.
  - 11) Pygidium unknown.
  - 12) Pigmentation absent.

Material Examined: STN: LH00-195 (2 specimens) (1 m)

Similar Species:

***Leitoscoloplos panamensis* (Monro 1933)**. Both species have an overlapping # of thoracic setigers. *L. panamensis* has branchiae from setiger 9 that are slender and triangular in the abdomen rather than short & strap-like as in *L. sp LA4*. Both species have a 2nd PsP and subpodial lobes in the posterior thorax and anterior abdomen, however, *L. panamensis* has an interramal cirri in the abdomen that *L. sp LA4* lacks. *L. panamensis* is a shelf species (<200 m). *L. sp LA4* is known only from the intertidal of Washington state.

***Leitoscoloplos mexicanus* (Fauchald 1972)**. These species have overlapping ranges of branchial insertion but *L. mexicanus* lacks cilia on the branchiae, a 2nd PsP and subpodial lobes. *L. mexicanus* has 15 thoracic setigers vs. 16 in *L. sp LA4*. *L. mexicanus* has an abdominal notopodial postsetal lobe that is lanceolate. *L. mexicanus* is a deep shelf species (>1000 m). *L. sp LA4* is known only from the intertidal of Washington state.

***Scoloplos armiger* (Müller 1776)**. These species have many similar characteristics. *S. armiger* has thoracic neuropodial acicular spines that are lacking in *L. sp LA4*. *S. armiger* is a shelf/shallow slope (<300 m) species complex. *L. sp LA4* is known only from the intertidal of Washington state.

Similar Species  
continued:

***Leitoscoloplos pugettensis* (Pettibone 1957)**. These species have overlapping ranges of branchial insertion and # of thoracic setigers. *L. pugettensis* has long, strap-like branchiae and lacks a 2nd PsP and subpodial lobes in the posterior thorax and anterior abdomen. *L. pugettensis* has an ICB. *L. pugettensis* is a shelf species (<200 m). *L. sp LA4* is known from the intertidal of Washington state.

***Leitoscoloplos sp LA1* Haggin 2017 §**. These species have overlapping ranges of branchial insertion, # of thoracic setigers and a 2nd PsP on thoracic neuropodia. *L. sp LA1* lacks subpodial lobes in the thorax and anterior abdomen. *L. sp LA1* is a shallow slope species (>200 m). *L. sp LA4* is known only from the intertidal of Washington state.

***Leitoscoloplos sp LA2* Haggin 2017 §**. These species have overlapping ranges of branchial insertion and have a 2nd PsP in the posterior thorax. *L. sp LA2* differs in lacking a subpodial lobe and having long, strap-like branchiae and an ICB. *L. sp LA2* is a bay/estuary species known only from San Diego Bay. *L. sp LA4* is known only from the intertidal of Washington state.

***Leitoscoloplos sp LA3* Haggin 2017 §**. This species has long, strap-like branchiae from setiger 10 and 13-14 thoracic setigers vs. short, strap-like branchiae from setigers 11-12 and 16 thoracic setigers. *L. sp LA3* differs in having an ICB and lacking a 2nd PsP and subpodial lobes in the posterior thorax and anterior abdomen. *L. sp LA3* is a deep shelf/shallow slope species (>150 m). *L. sp LA4* is known only from the intertidal of Washington state.

***Leitoscoloplos sp A* (Williams 1976 §)**. These species have overlapping ranges of branchial insertion. *L. sp A* has 13 thoracic setigers vs. 16 in *L. sp LA4*. *L. sp A* differs in having long, strap-like branchiae without lateral cilia and lacks a 2nd PsP and subpodial lobes. *L. sp A* is a shallow slope species (>200 m). *L. sp LA4* is known only from the intertidal of Washington state.

Distribution: Willapa Bay, Washington, USA

Depth range: Intertidal

Type locality: Willapa Bay, Washington, USA

Images: All Images from a specimen collected from station LH00-195 (Collected by L. Harris).

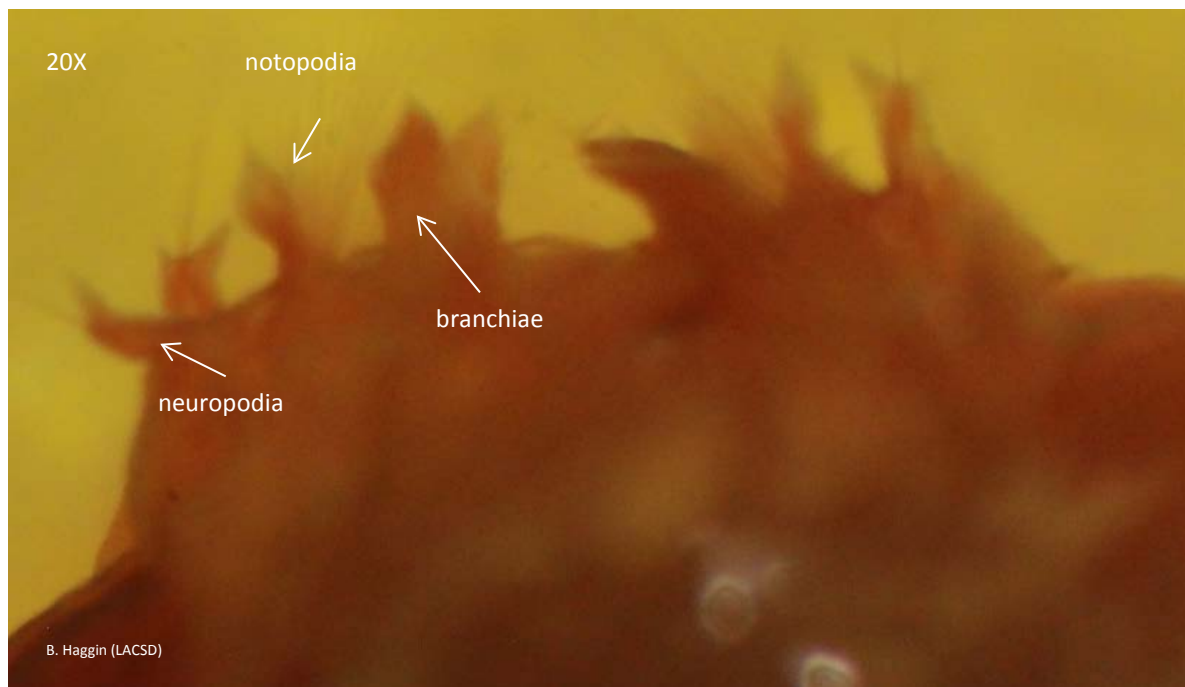


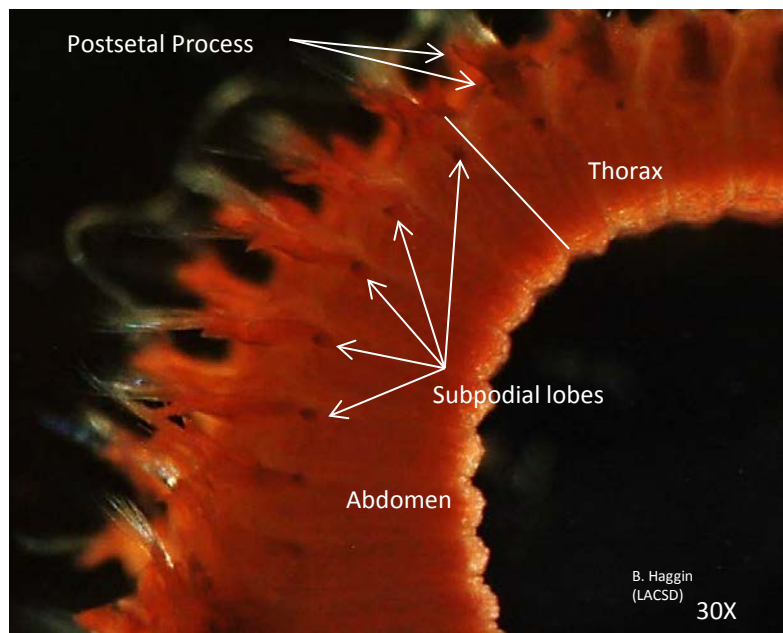
Image 1. Abdominal setigers showing branchiae & notopodial postsetal lobes (Interramal cirri absent).

Images continued:



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Image 2 (Above). Lateral view of animal.



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30X

Image 3 (Right). Lateral view with Shirlastain A showing subpodial lobes and PsP in thorax and abdomen.

Images continued:

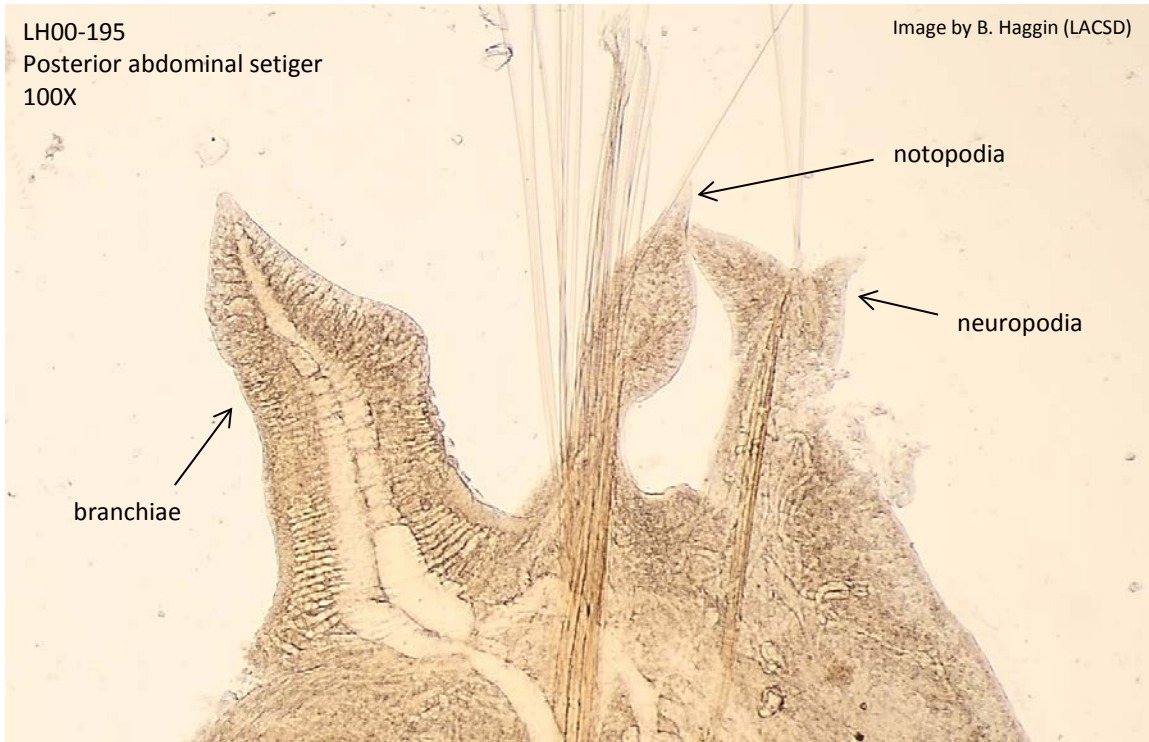


Image 4. Posterior abdominal setiger (Interramal cirri absent).



Image 5. Detail image of the posterior abdominal ( A ) branchiae ( B ) notopodia from Image 4.

Images continued:



Image 6. Detail image of the posterior abdominal notopodia from Image 4.

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)

**Dean, H. K. & Blake, J. A.** 2015. The Orbiniidae (Annelida: Polychaeta) of Pacific Costa Rica. *Zootaxa* 3956(2): 183-198

**Fauchald, K.** 1972. *Benthic Polychaetous Annelids from deep water off western Mexico and adjacent areas in the eastern Pacific Ocean*. Allan Hancock Monographs in Marine Biology, 7575 pp (167-169, 489)

**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