

Voucher Sheet

B. Haggin 2017



Species: *Leitoscoloplos* sp LA1 Haggin 2017 §
Subfamily: Synonyms: *Haploscoloplos* sp A Williams 1976 § in part
Family: Orbiniidae *Leitoscoloplos* sp A (Williams 1976 §) in part
Order:
Infraclass: Scolecida
Subclass: Sedentaria
Class: Polychaeta
Phylum: Annelida

Description: 1) Prostomium conical. Eyes absent. Proboscis a bilobed sac. Peristomium with 1 achaetous segment (Image 1).
2) Branchiae from setiger 11. Very small, becoming strap-like, with asymmetric subdistal swelling in the abdomen. Branchiae with lateral cilia.
3) Thorax with 16 setigers.
4) Subpodial lobes absent. Stomach papillae absent. Intra-segmental ciliary band (ICB) absent (Image 2).
5) Thoracic notopodia triangular, arising from a small mound in superior position with crenulate capillaries.
6) Thoracic neuropodia mammiform, with a long, digitate postsetal process (PsP) with a 2nd PsP basally on lobe (Image 3 & 4). Thoracic neurosetae crenulate capillaries only (without thoracic neuropodial acicular spines).
7) Abdominal notopodial postsetal lobes long slender, triangular - lanceolate. Abdominal notosetae crenulate capillaries. Flail setae and furcate setae not seen.
8) Abdominal neuropodia bilobed with pointed lobes (Image 5). Abdominal neurosetae with crenulate capillaries and 2-3 fine, barely emergent acicula.
8) Abdominal subpodial flange well-developed with a well-developed notch.
9) Pygidium unknown.
10) Pigmentation absent.

Material Examined: STN: 24385-BF1 (1 specimen)
This specimen was originally identified by Sue Williams as *Haploscoloplos* sp A.

Similar Species: ***Leitoscoloplos pugettensis* (Pettibone 1957)**. These species have overlapping ranges of branchial insertion and # of thoracic setigers. *L. pugettensis* differs in having an ICB as a band from setiger 3. *L. pugettensis* lacks a 2nd PsP. *L. pugettensis* is a shelf species (<220 m). *L. sp LA1* is a shallow slope species (>200 m).

***Leitoscoloplos mexicanus* (Fauchald 1972)**. These species have overlapping ranges of branchial insertion. *L. mexicanus* has branchiae without lateral cilia and up to 15 thoracic setigers while *L. sp LA1* has 16. *L. mexicanus* has a thoracic neuropodia with a long, slender triangular PsP and lacks a 2nd PsP. *L. mexicanus* has an abdominal notopodial postsetal lobe that is lanceolate. *L. mexicanus* is a deep slope species (>1000 m). *L. sp LA1* is a shallow slope species (>200 m).

***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. *L. panamensis* has subpodial lobes in the posterior thorax and anterior abdomen (setigers 13 - 25) and an interramal cirri in the abdomen that *L. sp LA1* lacks. *L. panamensis* is a shelf species (<200 m). *L. sp LA1* is a shallow slope species (>200 m).

Similar Species

continued:

***Leitoscoloplos bifurcatus* (Hartman 1957)**. This species has branchiae starting from setigers 8 - 9 and 20 - 21 thoracic setigers. Branchiae are elongate with long tapering tips in *L. bifurcatus* rather than strap-like in *L. sp LA1*. Both species have a 2nd PsP in the posterior thorax, however, *L. bifurcatus* have triangular thoracic neuropodial lobes. *L. sp LA1* have mammiform lobes with digitate processes. *L. bifurcatus* is known from the intertidal of Australia. *L. sp LA1* is a shallow slope (>200 m) species known from southern California.

***Leitoscoloplos sp A* (Williams 1976 §)**. These species have overlapping ranges of branchial insertion. *L. sp LA1* has 16 thoracic setigers (based on single specimen) while *L. sp A* has 13. *L. sp A* has branchiae without lateral cilia and has a short, triangular PsP and lacks a 2nd PsP on posterior thoracic setigers. *L. sp LA1* has a foliose abdominal postsetal lobe with a basal constriction while *L. sp A* is digitate. Both species are shallow slope species (>200 m).

***Leitoscoloplos sp LA2* Haggin 2017 §**. These species have overlapping ranges of branchial insertion but *L. sp LA2* has 15 thoracic setigers vs. 16 in *L. sp LA1*. *L. sp LA2* differs in having branchiae with pigmentation. Both species have a 2nd PsP in posterior thoracic neuropodia. *L. sp LA2* also has an ICB present as a band from setiger 3. *L. sp LA2* appears to be a bay/estuary species known only from San Diego Bay. *L. sp LA1* is a shallow slope species (>200 m).

***Leitoscoloplos sp LA3* Haggin 2017 §**. This species has branchiae from setiger 10 and up to 14 thoracic setigers vs. 11 and 16 respectively in *L. sp LA1*. *L. sp LA3* differs in lacking a 2nd PsP and having an ICB as a cluster from setiger 3 and as a band from setiger 7. *L. sp LA3* (>150 m) and *L. sp LA1* (>200 meters) are both shallow slope species.

Distribution: This species is known from southern California, USA

Depth range: > 200 m

Type locality: southern California, USA

Images: All Images from a specimen collected from station 24385-BF1.



Image 1. Lateral view of thorax and anterior abdomen showing pointed prostomium.

Images continued:

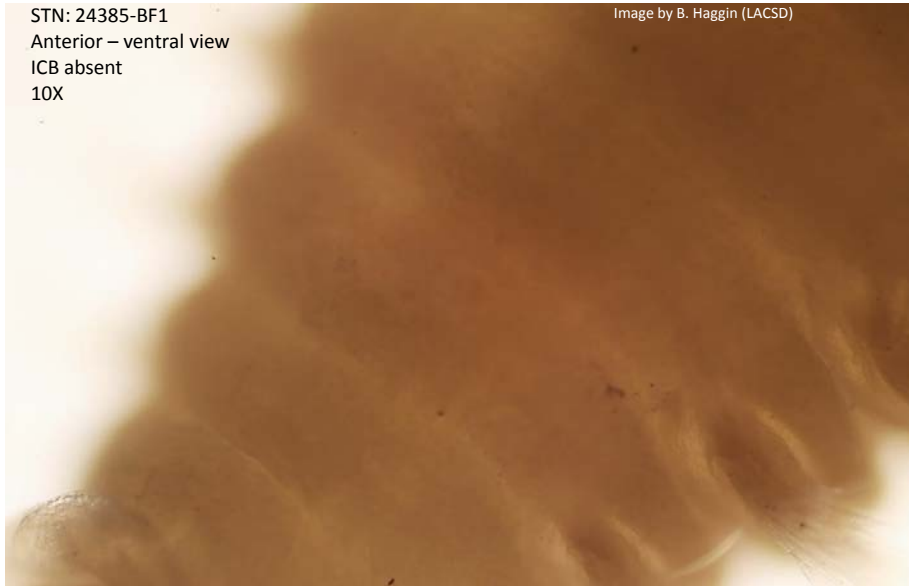


Image 2. Anterior end with ICB absent from ventrum of anterior setigers.

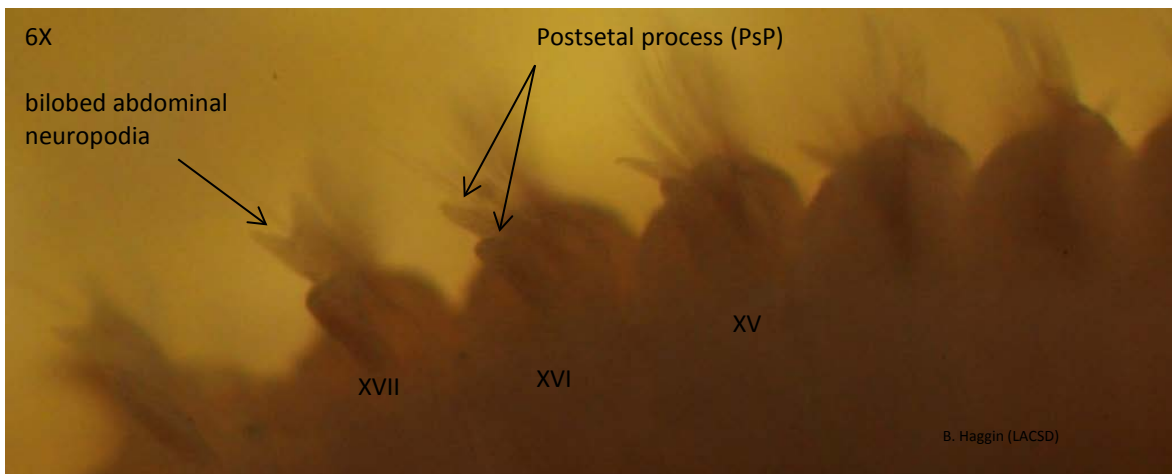


Image 3. Thoracic setigers showing 2nd PsP and abdominal neuropodial lobes and subpodial flange.

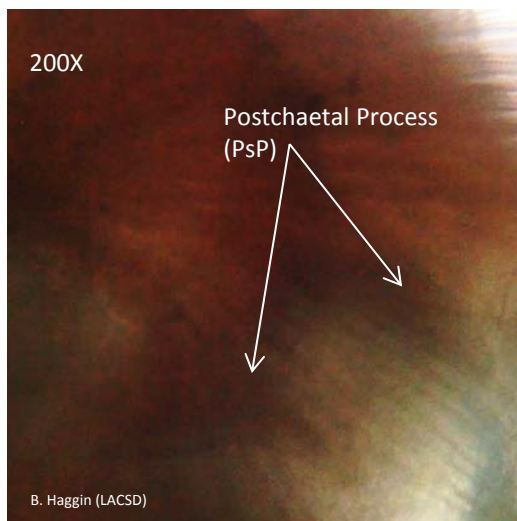


Image 4. Close-up of setiger 15 showing 2nd postsetal process (PsP).

Images continued:

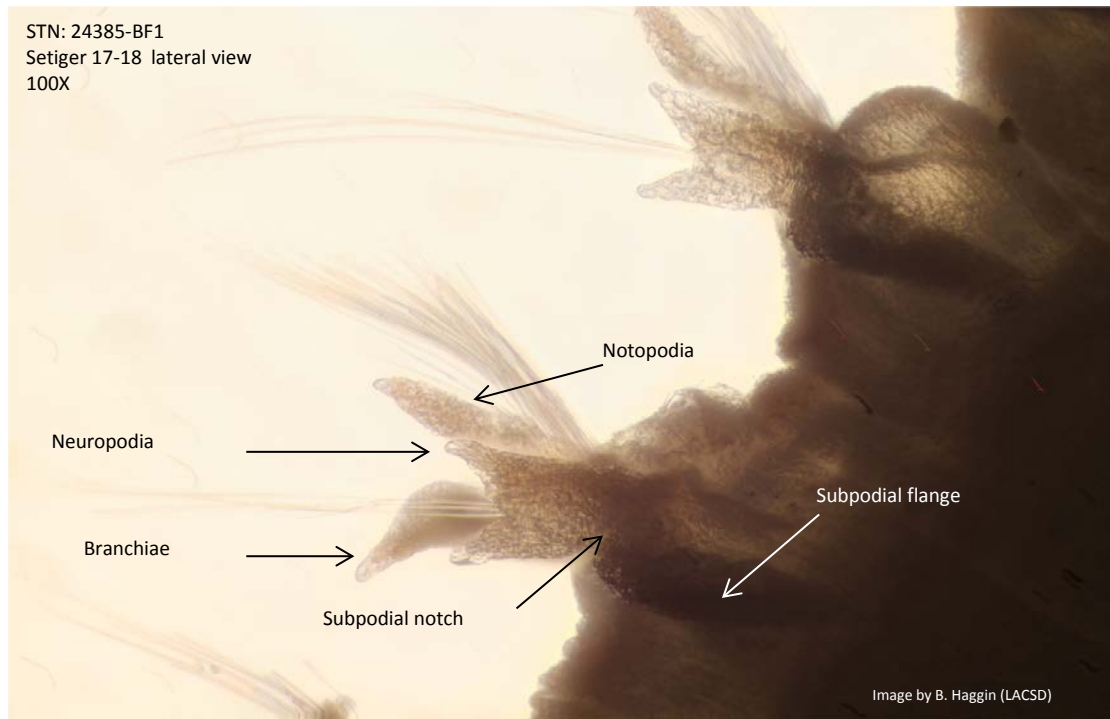


Image 5. Abdominal setiger

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

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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.