Voucher Sheet

B. Haggin 2017

SANITATION DISTRICTS OF LOS ANGELES COUNTY

Species:	*Leitoscoloplos* sp LA3		Haggin 2017 §	
Subfamily:		Synonyms:	*Leitoscoloplos* sp A	In part
Family:	Orbiniidae		*Leitoscoloplos pugettensis*	In part
Order:				
Infraclass:	Scolecida			
Subclass:	Sedentaria			
Class:	Polychaeta			
Phylum:	Annelida			

Description:

1) Prostomium conical. Eyes absent. Peristomium with 1 achaetous segment.
2) Branchiae from setiger 10. Very small, triangular in the thorax, becoming triangular to strap-like, with slight asymmetric subdistal swelling in the abdomen. Branchiae with lateral cilia (Images 1 & 5).
3) Thorax with 13 - 15 setigers.
4) Subpodial lobes absent. Stomach papillae absent. Intrasegmental ciliary band (ICB) present as a cluster from setiger 3 and as a band from setigers 7 - 8 (Image 2).
5) Thoracic notopodia long, triangular arising from a small mound in superior position (Image 3) with crenulate capillaries.
6) Thoracic neuropodia mammiform, with a moderate (extends ~1/2 the length of setal fasicle), digitate - triangular postsetal process (PsP). Thoracic neurosetae crenulate capillaries only (without thoracic neuropodial acicular spines) (Images 3 & 4).
7) Abdominal notopodial postsetal lobes foliose - lanceolate (Image 5). Abdominal notosetae crenulate capillaries with furcate setae present from around the 20th abdominal setiger, tines unequal. Flail setae not seen.
8) Abdominal neuropodia bilobed, triangular with pointed lobes (Images 5 & 6). Abdominal neurosetae with crenulate capillaries and 2 fine, barely emergent acicula.
9) Abdominal subpodial flange well-developed with a well-developed notch.
10) Pygidium unknown.
11) Pigmentation sometimes present on tips of branchiae in abdomen and on abdominal subpodial flange.
** This is what SCAMIT has been calling *Leitoscoloplos* sp A but differs from what Sue Williams was viewing for her provisional. *L.* sp A has been re-described and *L* . sp LA3 is now erected.

Material Examined:

STN: 0796-0A; 0799-0A; 0705-3A; 0707-(0A, 1A, 2A, 2B, 5A, 6A, 8A, 10A); 0708-(0A, 0B, 2A, 3A, 5A, 6A, 7A, 10A); 0714-(7A, 8A, 10A); 0715-(0A, 10A); B13-9001 (280 m); B13-9002 (320 m); B13-9021 (346 m); B13-9022 (277 m); B13-9026 (372 m); B13-9028 (272 m); B13-9055 (275 m); B13-9069 (839 m); B13-9099 (634 m); B13-9106 (484 m); B13-9107 (405 m); 22969-BF1; 24253-BF1; 24255-BF1
** All "A" stations 305 m. All "B" stations 152 m.

Similar Species:

***Leitoscoloplos pugettensis* (Pettibone 1957)**. These species have overlapping ranges of branchial insertion, # of thoracic setigers and pigmentation on the branchiae and abdominal subpodial flange. *L. pugettensis* has an ICB as a band from setiger 3 and *L.* sp LA3 has an ICB as a cluster from setiger 3. L. pugettensis has abdominal furcate setae from around the 10th abdominal setiger and L. sp LA3 has them from around the 20th abdominal setiger. *L. pugettensis* is a shelf species (<200 m). *L.* sp LA3 is a deep shelf/shallow slope species (>150 m).

***Leitoscoloplos mexicanus* (Fauchald 1972)**. These species have an overlapping # of thoracic setigers. *L. mexicanus* has branchiae without lateral cilia from setiger 11, *L.* sp LA3 has branchiae with lateral cilia from setiger 10. *L. mexicanus* has a thoracic neuropodia with a long, slender triangular PsP vs. a long, digitate PsP in *L.* sp LA3. *L. mexicanus* also lacks an ICB. *L. mexicanus* has an abdominal notopodial postsetal lobe that is lanceolate. *L. mexicanus* is a deep slope species (>1000 m). *L.* sp LA3 is a deep shelf/shallow slope species (150 - 839 m).

Similar Species continued:	***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 a 2nd PsP and subpodial lobes in the posterior thorax and anterior abdomen (setigers 13 - 25) and an interramal cirri in the abdomen that *L.* sp LA3 lacks. *L. panamensis* lacks abdominal notopodial furcate setae. *L. panamensis* is a shelf species (<200 m). *L.* sp LA3 is a deep shelf/shallow slope species (>150 m). ***Leitoscoloplos* sp A (Williams 1976 §)**. These species have overlapping ranges of branchial insertion and # thoracic setigers. *L.* sp A differs in having branchiae without lateral cilia, abdominal neuropodia lobes that are rounded and lacks an ICB. *L.* sp LA3 (>150 m) and L. sp A (>200 meters) are both shallow slope species. ***Leitoscoloplos* sp LA1 Haggin 2017 §**. This species has branchiae from setiger 11 and 16 thoracic setigers vs. 10 & 14 respectively in *L.* sp LA3. *L.* sp LA1 differs in having branchiae without pigmentation and a 2nd PsP in posterior thoracic neuropodia (setigers 14 - 16). *L.* sp LA1 lacks an ICB. *L.* sp LA1 (>200 meters) and *L.* sp LA3 (>150 m) are both shallow slope species. ***Leitoscoloplos* sp LA2 Haggin 2017 §**. These species have overlapping ranges of branchial insertion, # of thoracic setigers and having pigmentation in the branchiae. *L.* sp LA2 differs in having a 2nd PsP and having an ICB as a band from setiger 3. *L.* sp LA3 is a deep shelf/shallow slope species (>150 meters). L. sp LA2 is a bay/estuary species known only from San Diego Bay.
Distribution:	Southern California, USA
Depth range:	152 - 839 m
Type locality:	Palos Verdes, California, USA

Images: Images 1 & 4 from a specimen collected from station 24255-BF1. Images 2 & 6 from a specimen collected from station B13-9106. Images 3 & 5 from a specimen collected from station 0704-6A.

Image 1. Abdominal branchiae with lateral cilia.

Images continued:

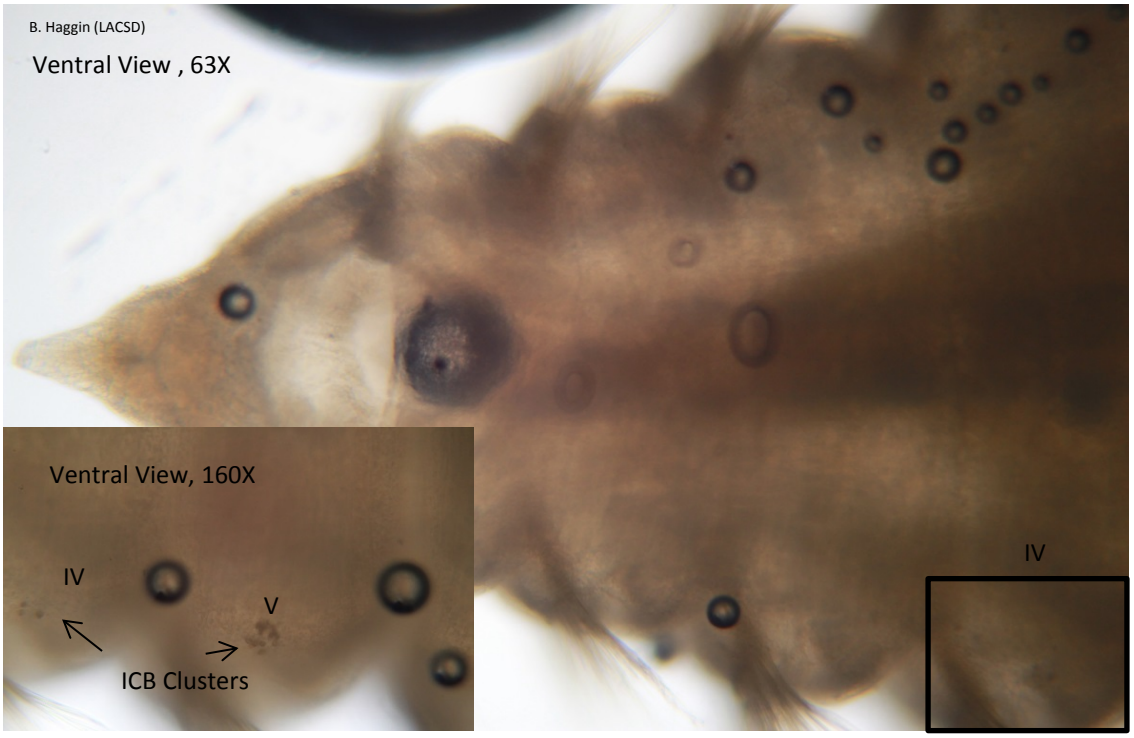

Image 2. ICB clusters in anterior thorax.

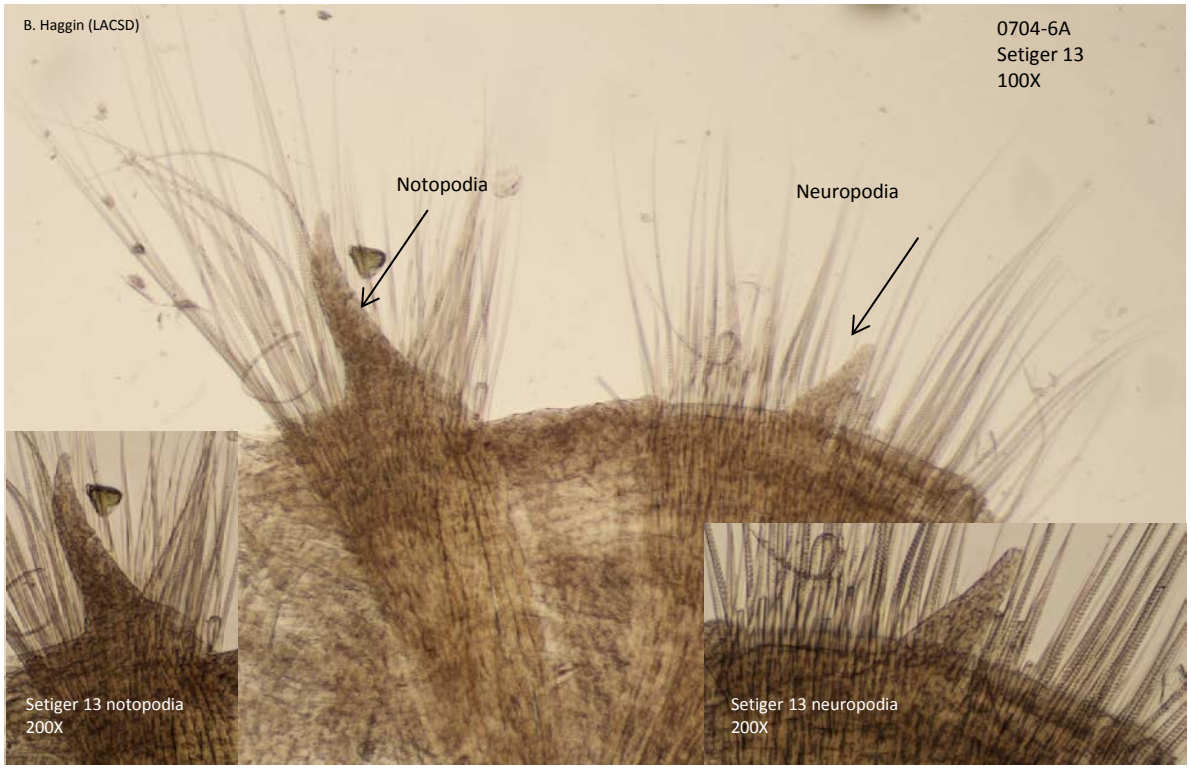

Image 3. Notopodia and neuropodia of the posterior thorax.

Images continued:

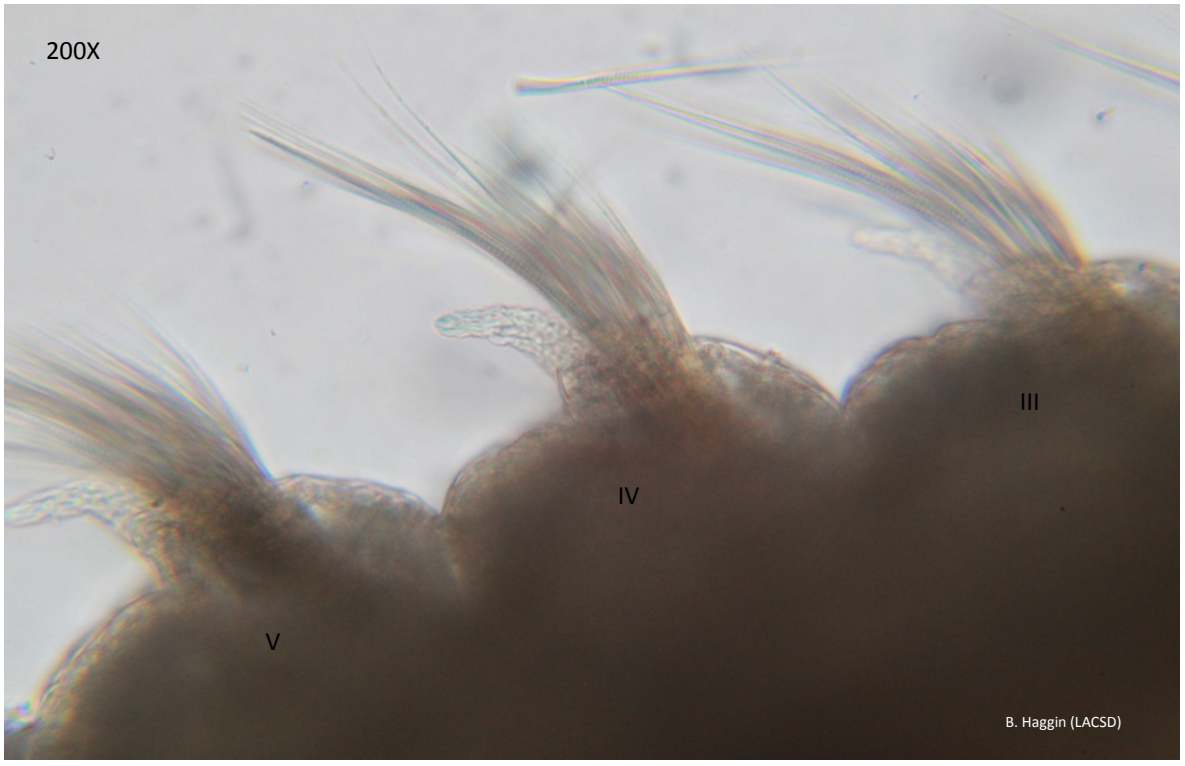

Image 4. Thoracic neuropodial setal bundles and postsetal process (PsP).

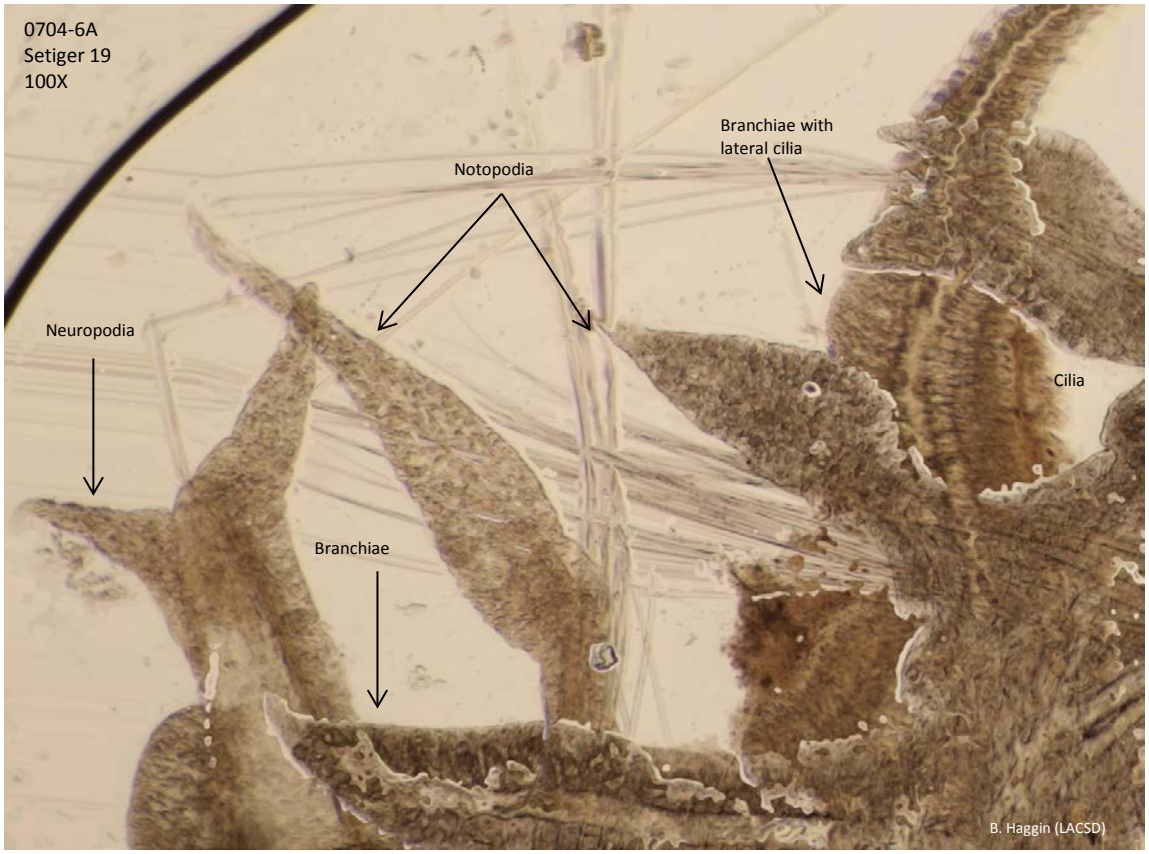

Image 5. Abdominal setigers showing notopodia, neuropodia and branchiae with lateral cilia.

Images continued:

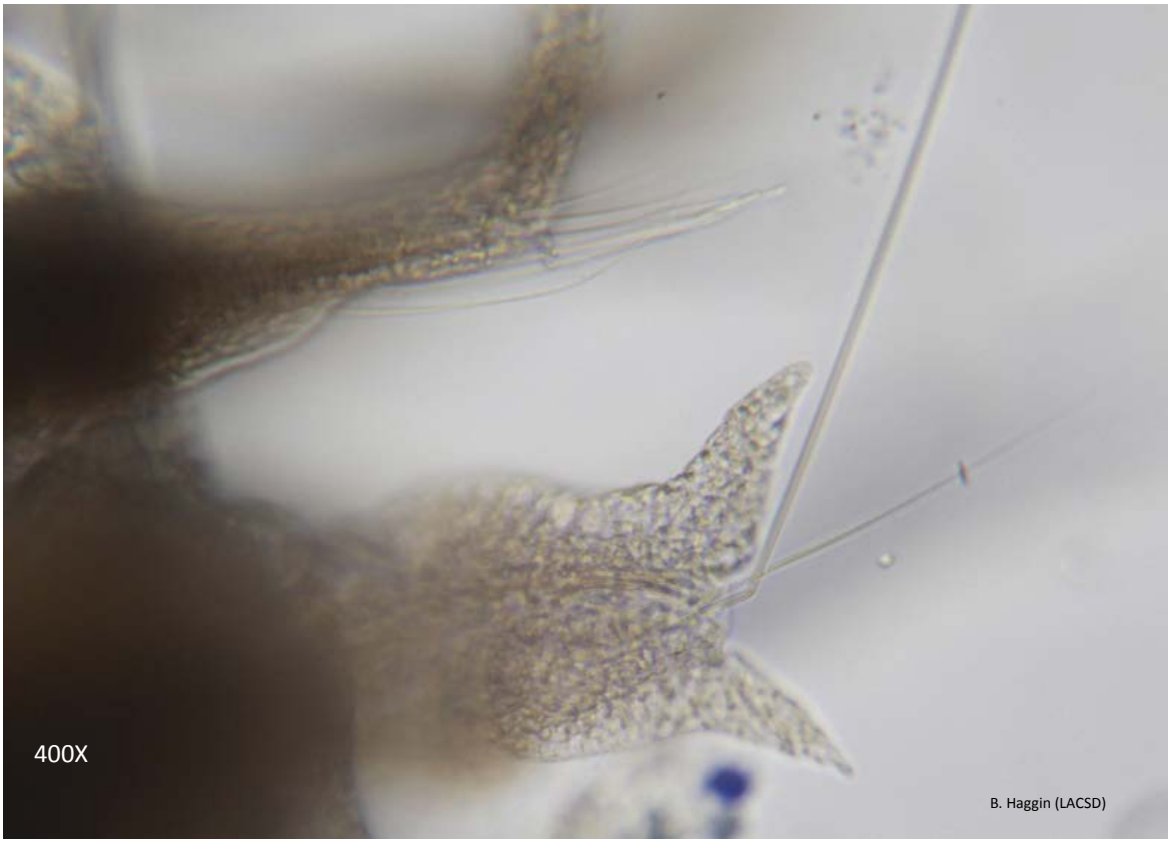

Image 6. Abdominal neuropodia

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)

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