Voucher Sheet

B. Haggin 2018

SANITATION DISTRICTS OF LOS ANGELES COUNTY

Species:	*Leitoscoloplos mexicanus*	(Fauchald 1972)	
Subfamily:		Synonyms: *Haploscoloplos mexicanus*	Fauchald 1972
Family:	Orbiniidae		
Order:			
Infraclass:	Scolecida		
Subclass:	Sedentaria		
Class:	Polychaeta		
Phylum:	Annelida		

Description:

1) Prostomium short, conical, sharply pointed. Eyes absent. Nuchal organs small, dorso-lateral. Peristomium with 1 achaetous segment (Figure 1 & Image 1).
2) Branchiae from setigers 11-13. Branchiae small papillae (often overlooked on first few setigers) becoming slender, triangular to slender, strap-like in abdomen, slightly asymmetric, swollen subdistally, without lateral cilia (Image 2). **Lack of lateral cilia may be a result of it being described from an anterior fragment.
3) Thorax with 13 - 15 setigers.
4) Subpodial lobes absent. Stomach papillae absent. Intrasegmental ciliary band (ICB) absent.
5) Thoracic notopodia slender, digitate - triangular arising from a small mound in superior position with crenulate capillaries.
6) Thoracic neuropodia mammiform, with a moderate (~½ length of fascicle), slender triangular postsetal process (PsP) (Figure 1) with crenulate capillaries only (without thoracic neuropodial acicular spines).
7) Abdominal notopodial postsetal lobe foliose w/ basal constriction, without cilia. Notopodia with crenulate capillaries and furcate setae from ~ 10th abdominal setiger, tines unequal in length (Image 3). Flail setae not seen.
8) Abdominal neuropodia bilobed, both lobes triangular w/ rounded tips, inner lobe longer. Abdominal neurosetae crenulate capillaries with 1-3 fine, barely emergent acicula (Image 4).
9) Abdominal subpodial flange large with a well-developed notch.
10) Pigmentation absent.

Material Examined:

STNs: F3748 (1377 m); F3745 (1417 m); F3746 (1415 m)
** All specimens reviewed are from the type locality and are the same specimens reviewed by Mackie, 1987.**

Similar Species:

***Leitoscoloplos* sp A (Williams 1976 §)**. These species have overlapping ranges of branchial insertion and # of thoracic setigers. Both species have branchiae without lateral cilia. *L. mexicanus* has a thoracic neuropodia with a long, slender triangular PsP whereas *L.* sp A has one with a short, triangular PsP. *L.* sp A has an abdominal notopodial postsetal lobe that is digitate and an abdominal neuropodial lobe that is weakly bilobed w/ rounded lobes. *L. mexicanus* is a deep slope species (>1000 m). *L* . sp A is a shallow slope species (>200 m).

***Leitoscoloplos pugettensis* (Pettibone 1957)**. These species have overlapping ranges of branchial insertion and # of thoracic setigers. *L. pugettensis* has branchiae with lateral ciliation. *L. pugettensis* has an abdominal notopodial postsetal lobe that is foliose and has an ICB. *L. mexicanus* is a deep slope species (>1000 m). *L. pugettensis* is a shelf species (<220 m).

Similar Species continued:	***Leitoscoloplos* sp LA1 Haggin 2017 §**. These species have overlapping ranges of branchial insertion. *L.* sp LA1 has 16 thoracic setigers. *L.* sp LA1 has a long, digitate PsP and a 2nd PsP on posterior thoracic setigers (setigers 14 - 16). *L* . sp LA1 is a shallow slope species (>200 m). *L. mexicanus* is a deep slope species (>1000 m). ***Leitoscoloplos* sp LA2 Haggin 2017 §**. These species have overlapping ranges of branchial insertion and # of thoracic setigers. *L.* sp LA2 differs in having a 2nd PsP in posterior thoracic neuropodia (setigers 11 - 15) and having ciliated branchiae. *L* . sp LA2 appears to be a bay/estuary species known only from San Diego Bay. *L. mexicanus* is a deep slope species (>1000 m). ***Leitoscoloplos* sp LA3 Haggin 2017 §**. These species have an overlapping # of thoracic setigers. *L.* sp LA3 differs in having ciliated branchiae and an ICB as a cluster from setiger 3 and as a band from setiger 7. *L.* sp LA3 is a deep shelf/shallow slope species (>150 meters). *L. mexicanus* is a deep slope species (>1000 m). ***Leitoscoloplos* sp LA4 Haggin 2017 §**. These species have overlapping ranges of branchial insertion. *L.* sp LA4 has 16 thoracic setigers, short, strap-like branchiae with lateral cilia and has subpodial lobes in the posterior thorax and anterior abdomen (setigers 14 - 24) and has a 2nd PsP in the posterior thorax (setigers 14 - 16). *L.* sp LA4 is known only from the intertidal of Washington. *L. mexicanus* is a deep slope species (>1000 m).
Distribution:	Western Mexico & Gulf of California
Depth range:	1377 - 1417
Type locality:	Isla las Animas, Western Mexico

Images: Images 1, 2 & 4 from a specimen collected from station F3748.
Image 3 from a specimen collected form station F3746.

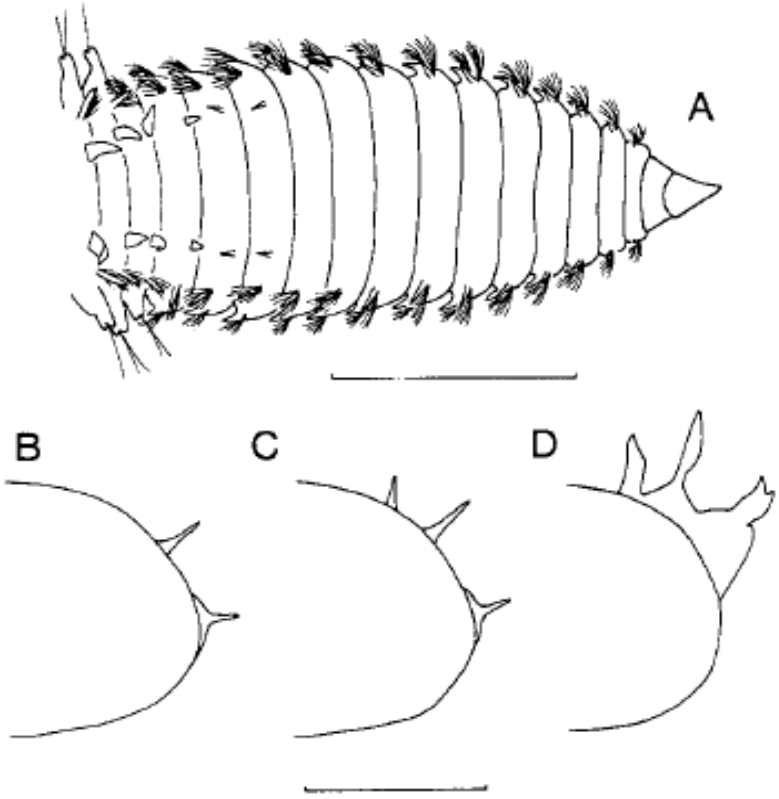

Figure 1 from Mackie, 1987

Fig. 10. *Leitoscoloplos mexicanus*. A. Anterior region, dorsal view. B–D. Setigers 9, 12, and 16, posterior view (setae omitted: B–D). Scale lines 1 mm (A) and 0.5 mm (B–D).

Images continued:

Image 1. Dorsal view with Shirlastain A.

Image 2. Abdominal branchiae without lateral cilia (setiger 18).

Image 3. Abdominal notopodia with furcate setae. (setiger 25)

Images continued:

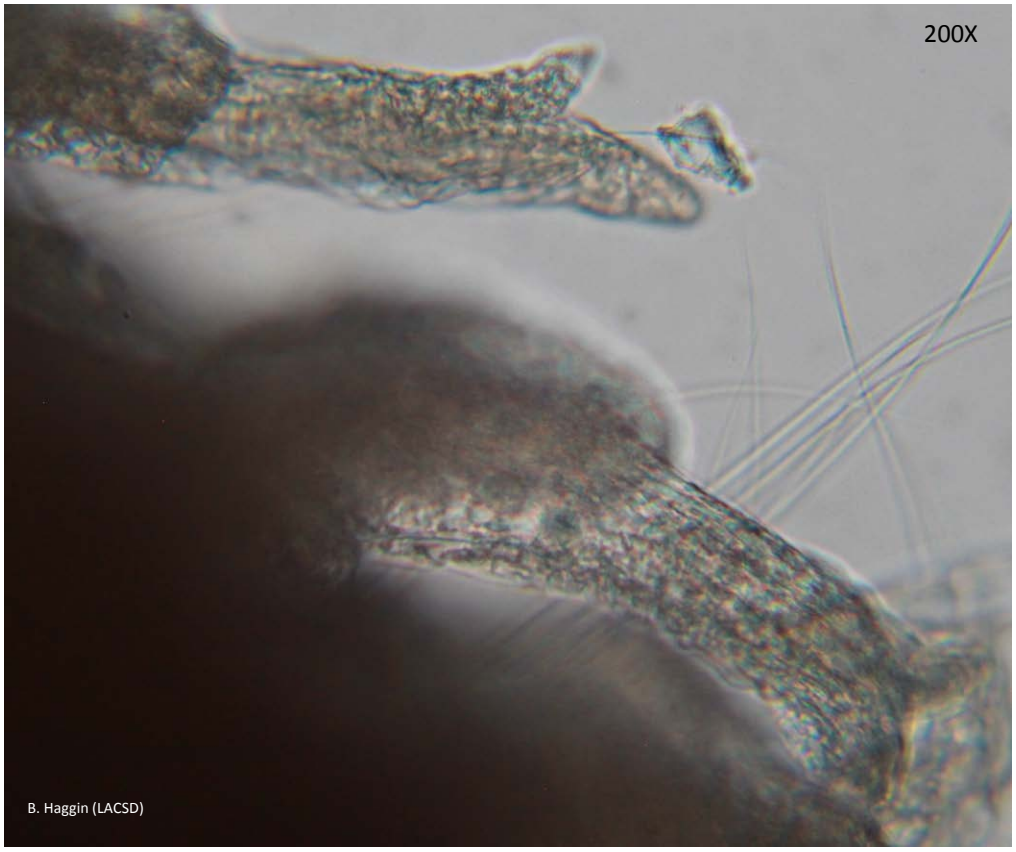

Image 4. Abdominal neuropodia (setiger 18).

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.