

Voucher Sheet

B. Haggin 2017



Species: *Scoloplos acmeiceps* Chamberlin 1919

Subfamily: Synonyms:

Family: Orbiniidae

Order:

Infraclass: Scolecida

Subclass: Sedentaria

Class: Polychaeta

Phylum: Annelida

- Description: 1) Prostomium small and slender, pointed. Eyes absent. Nuchal organs lateral. Peristomium with 1 achaetous segment (~ 2X length of setiger 1).
2) Branchiae from setigers 14 - 26 (7 - 10 in juveniles). Branchiae as small papillae (often overlooked on first few setigers) becoming digitate to triangular to strap-like in abdomen, slightly swollen subdistally, laterally ciliated (Image 1).
3) Thorax with 18 - 25 setigers (14 - 15 in juveniles).
4) Subpodial lobes absent. Stomach papillae absent. Intra-segmental Ciliary Band (ICB) absent.
5) Thoracic notopodia short, stout, triangular with crenulate capillaries.
6) Thoracic neuropodia mammiform, with a small papillose Postsetal Process (PsP) anteriorly (Image 2) and a long, triangular PsP posteriorly (Image 3).
7) Thoracic neurosetae with crenulate capillaries and acicular spines. Spines in 3 rows (~ 12 - 16 spines/row) between an anterior & posterior row of capillaries (C-S-S-C), occupying the entire fascicle. Spines bent slightly at tips with coarse serrations and tightly adhering hoods (Images 4, 5 & 6).
8) Abdominal notopodial Postsetal lobe foliose to lanceolate (may appear strap-like). Interramal cirri absent. Notopodia with crenulate capillaries & furcate setae from ~20th abdominal setiger (Image 1).
9) Abdominal neuropodia bilobed, inner lobe longer. Abdominal neurosetae crenulate capillaries with 2 fine, barely emergent acicula (Image 1).
10) Abdominal subpodial flange broad with a well-developed notch.
11) Pygidium a funnel with a slight dorsal invagination and with 1 long pair of dorso-laterally inserted anal cirri.
12) Brown pigmentation often present between branchial bases in abdomen.

Material Examined: STNs: B13-8018 (1m); N1479; N1480; N1484; N2316; N2318; N2320; N2323

"N" stations are from intertidal to shallow subtidal.

Similar Species: ***Scoloplos* sp LA1 Haggin 2017 §.** These species have overlapping ranges of branchial insertion, # of thoracic setigers and have similar morphological characters throughout. The two species differ in the setal arrangement of the thoracic neuropodia. *Scoloplos* sp LA1 has ~8 - 12 spines in a single "J"-shaped row occupying only the inferior 1/2 of the fascicle. Both species are present from the intertidal to the shelf (<200 m).
***Scoloplos* sp LA2 Haggin 2017 §.** These species have overlapping ranges of branchial insertion, # of thoracic setigers and have similar morphological characters throughout. *Scoloplos* sp LA2 differs in having subpodial lobes and a 2nd PsP in the posterior thorax and anterior abdomen (setigers 13 - 27). Both species are present from the intertidal to the shelf (<200 m). ** *Scoloplos* sp LA2 is formerly part of the *Scoloplos armiger* Cmplx **
***Scoloplos* sp LA3 Haggin 2017 §.** These species have overlapping ranges of branchial insertion, # of thoracic setigers and have similar morphological characters throughout. *Scoloplos* sp LA3 differs in having subpodial lobes and a 2nd PsP in the posterior thorax and anterior abdomen (setigers 12 - 20). Both species are present from the intertidal to the shelf (<200 m). ** *Scoloplos* sp LA3 is formerly part of the *Scoloplos armiger* Cmplx **

Similar Species
continued:

***Scoloplos* sp LA4 Haggin 2018 §.** These species have an overlapping # of thoracic setigers. *S.* sp LA4 differs in sometimes having a 2nd PSP in posterior thorax and subpodial lobes. *S.* sp LA4 also has only a single spine that is nearly straight in a few anterior setigers only rather than 3 rows of multiple spines. Both are shelf species (<220 m).

***Scoloplos acmeiceps profundus* Hartman 1960.** This subspecies has numerous differences from *S. acmeiceps*. It has an earlier branchial insertion and earlier thorax/abdomen transition. The branchiae of *S. acmeiceps profundus* are simple filaments rather than strap-like. The spines of the thoracic neuropodia of *S. acmeiceps profundus* are nearly smooth and occupy only the inferior portion of the fascicle rather than with coarse serrations in the entire fascicle. *S. acmeiceps profundus* is a deep basin species (>1500 m). *S. acmeiceps* is a shelf species (<220 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 that are found in *Scoloplos acmeiceps*. Both are shelf species (<220 m).

***Leitoscoloplos panamensis* (Monro 1933).** These species have an overlapping # of thoracic setigers. *L. panamensis* differs in having branchiae from setiger 9, having subpodial lobes and a 2nd PsP in the posterior thorax and anterior abdomen (setigers 13 - 25) and possessing an interramal cirri (IRC). *L. panamensis* lacks neuropodial acicular spines in the thorax. Both are shelf species (<220 m).

Distribution: NE Pacific - Alaska to Baja California, Mexico (Gulf of California)

Depth range: Intertidal to 200 m

Type locality: Laguna Beach, California, USA

Images: Image 1-4 & 6 from a specimen collected from station B13-8018.

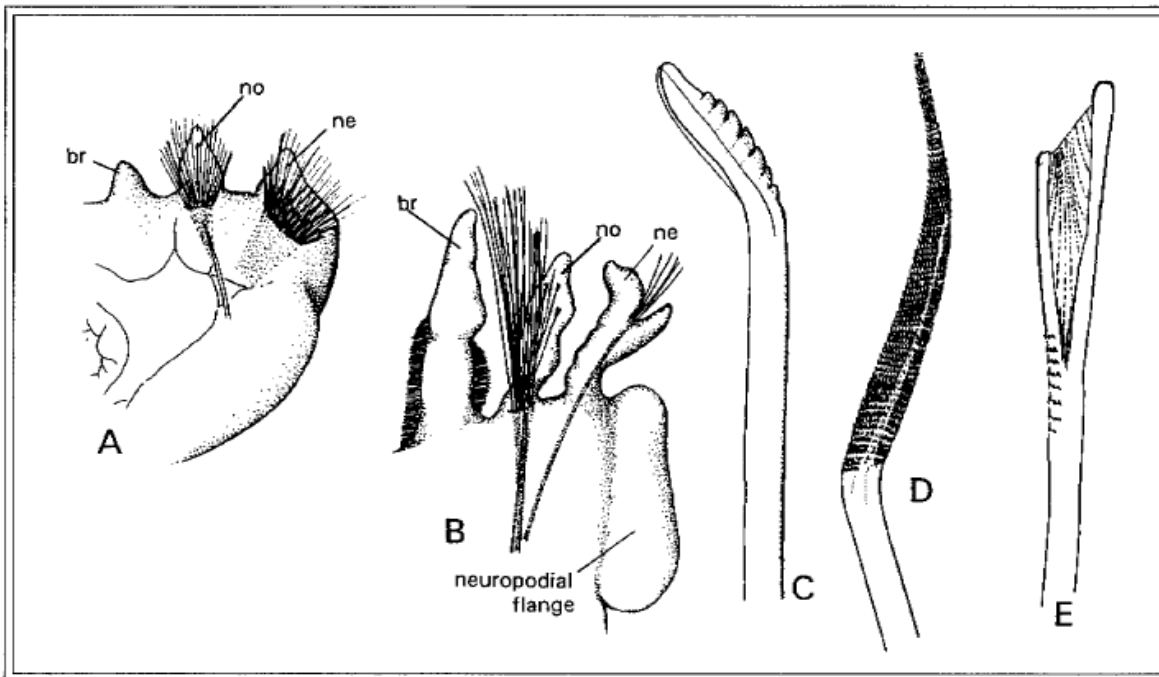


Figure 1.6. *Scoloplos acmeiceps*: A, thoracic parapodium, anterior view; B, abdominal parapodium, anterior view; C, thoracic neuropodial uncinus; D, camerated capillary notoseta from thoracic segment; E, furcate seta from abdominal notopodium. (after Hartman, 1957).

Figure 1. Figure from Blake, 1996 (MMS Atlas)

Images continued:

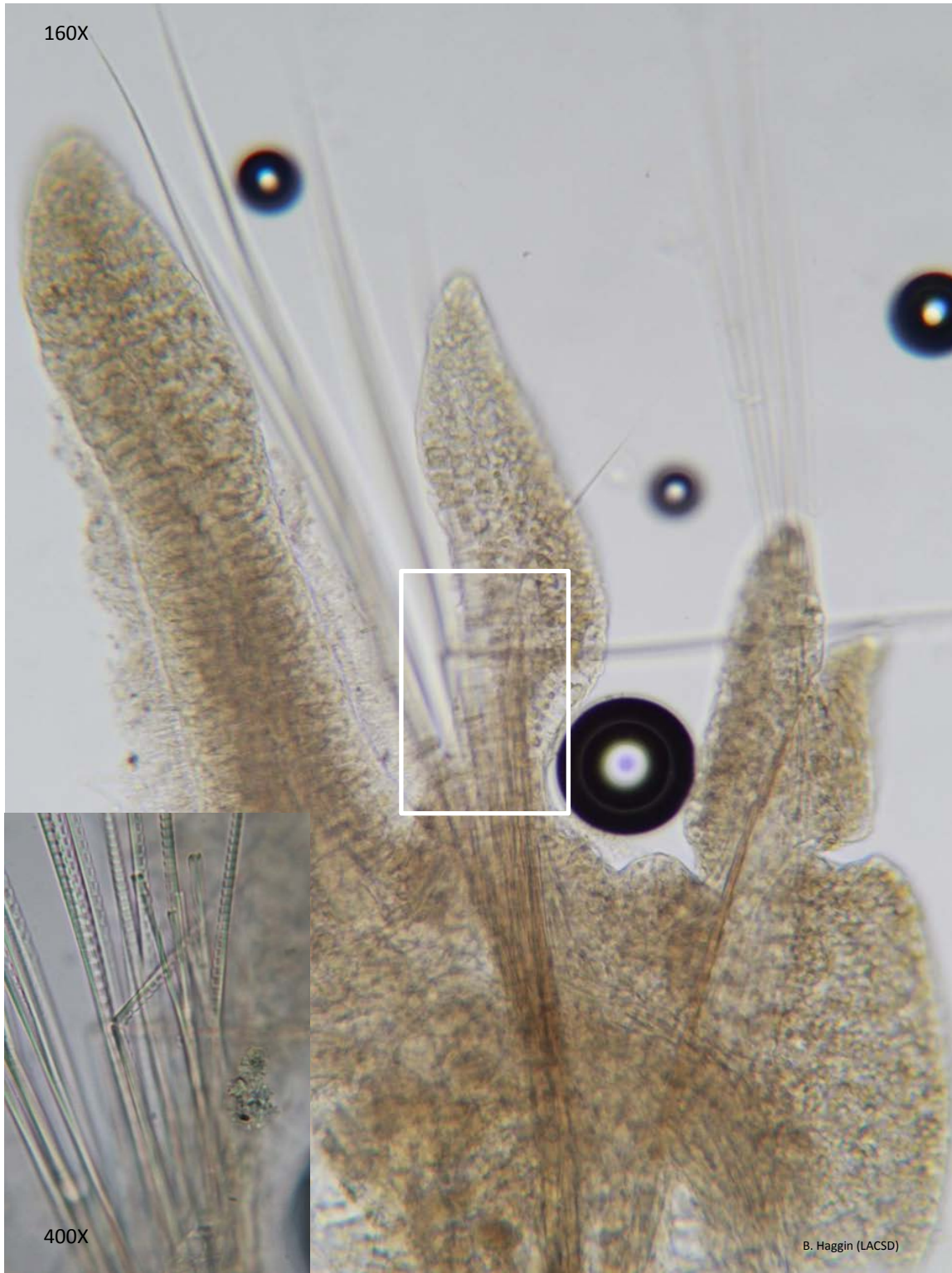


Image 1. Abdominal setiger (40) showing ciliated branchiae, furcate setae & neuropodial acicula.

Images continued:

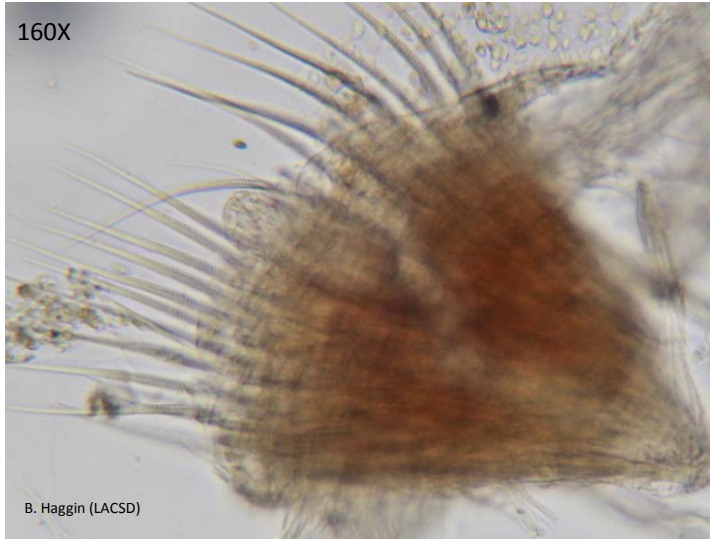


Image 2. Anterior thoracic neuropodia (setiger 5) with small, papillose PsP.



Image 3. Posterior thoracic neuropodia (setiger 17) with triangular PsP.



Image 4. Thoracic setigers 11 & 12 showing setal arrangement in neuropodia.

Images continued:



Image 5. (A) Thoracic neuropodia showing acicular spine arrangement occupying the entire fascicle and (B) spine detail showing the serrations and the hoods.

Images continued:

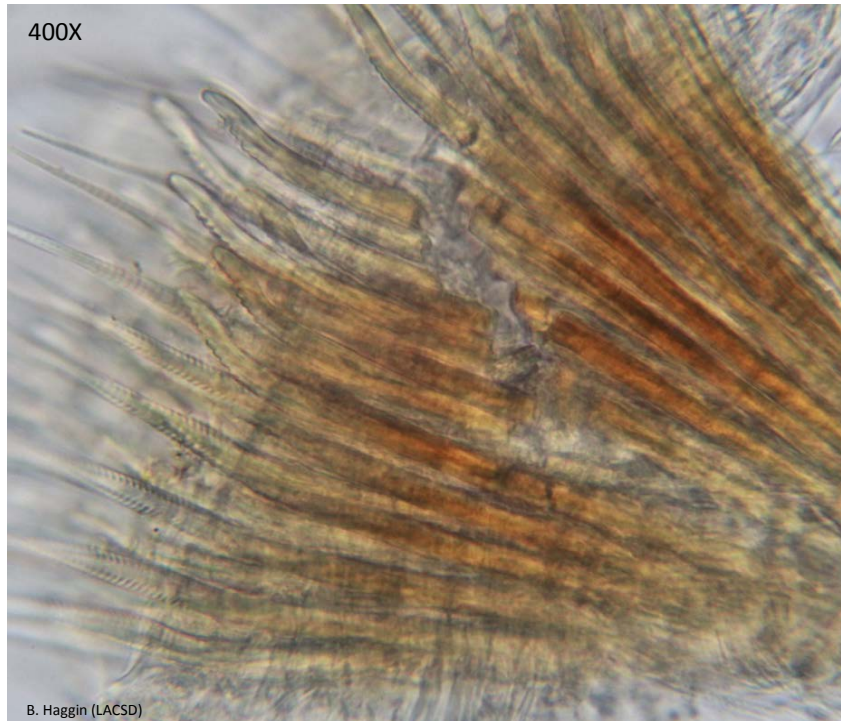


Image 6. Thoracic setiger 5 showing 3 rows of acicular spines in neuropodia.

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).

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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.