

Species: *Jasmineira* sp C SCAMIT, 2023 §

Synonyms: *Jasmineira* sp LA1 Haggin, 2019 §

P-code—119

ITI-code—Group 1

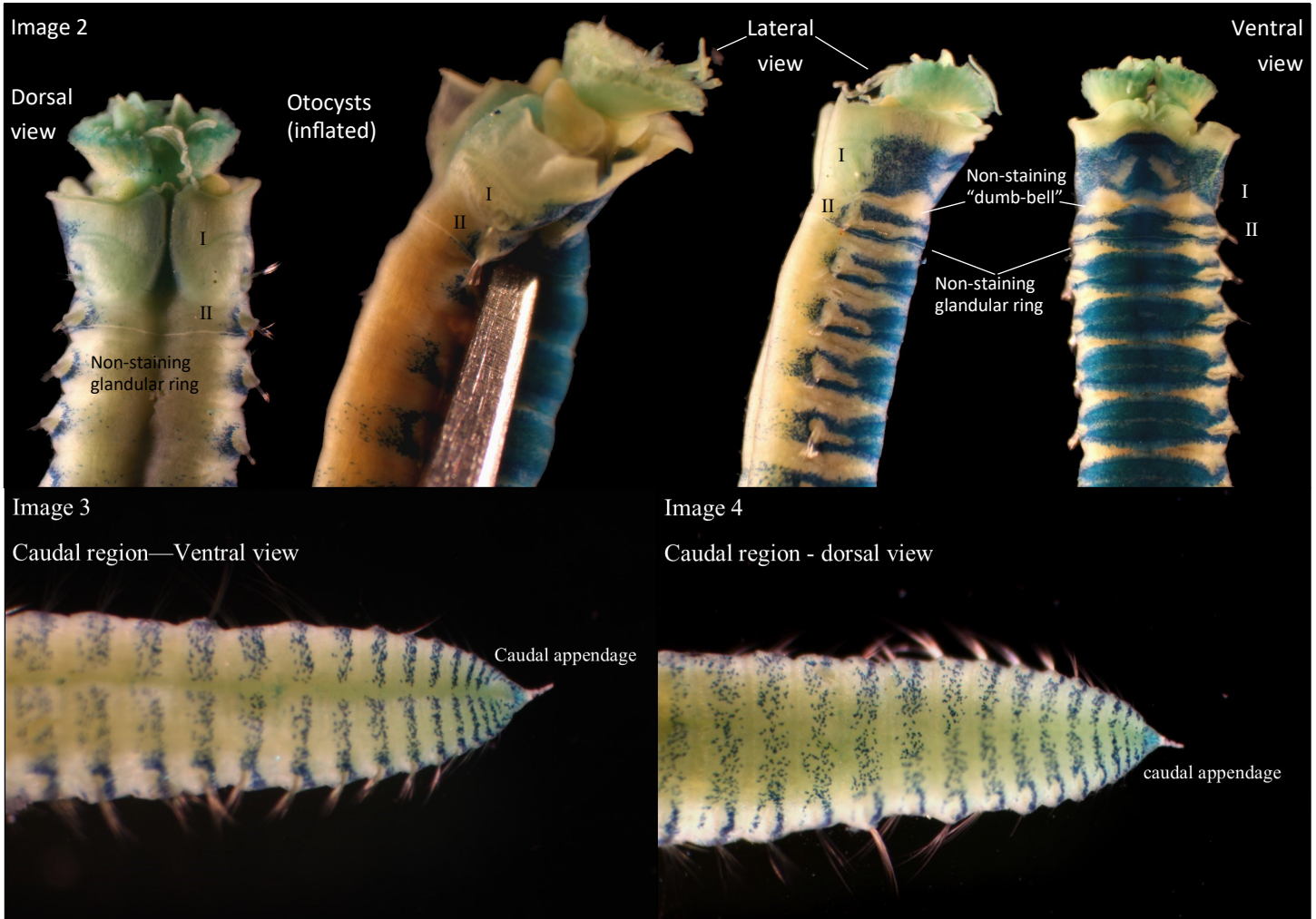
Subfamily: Sabellinae
Family: Sabellidae
Order: Sabellida
Infraclass: Canalipalpata
Subclass: Sedentaria
Class: Polychaeta
Phylum: Annelida

Diagnostic Characters:

43 chaetigers; 15.4 mm long x 1.2 mm wide (excluding chaetae & radiole base)

- 1) Thorax with 8 chaetigers. Abdomen with 35 chaetigers (Image 1).
- 2) Branchial skeleton retained, Branchial crown with semicircular lobes. 12 pairs of radioles (crown absent, # radioles determined by counting attachment scars) (Images 1 & 2).
- 3) Collar complete, smooth, w/ slight ventral notch (only divided @ faecal groove), lowest dorsally, highest ventrally (close to even, only slight change in size). Collar length about same length of chaetiger 1 (Images 1 & 2).
- 4) 2 pairs of Otocysts; dorsal pair kidney-shaped & very inflated, ventral pair circular & only slightly inflated (vascular coils?) (Image 2).
- 5) Narrow glandular girdle on chaetiger 2; ventrally even with chaetae of chaetiger 2, dipping below chaetae laterally and remaining low dorsally (Image 2).
- 6) Pygidium with digitate caudal appendage (Images 3 & 4).
- 7) Thoracic notochaetae of 2 types: Superior notochaetae unilimbate (or asymmetrically bilimbate), ~5 per fascicle; Inferior notochaetae spatulate with mucron tip, ~7 per fascicle (Image 5).
- 8) Thoracic neurochaetae acicular, long-handled, slightly bent with multiple rows of many fine teeth above main tooth, ~10 per fascicle (Image 6).
- 9) Abdominal notochaetae capillary (or limbate with very narrow wings), ~10 per fascicle (Image 7).
- 10) Abdominal neurochaetae avicular, S-shaped, but with longish handle between bends, with multiple rows of fine teeth above main tooth, ~15 per fascicle (Image 8).





Images 1, 2, 3, 4 & 10 by N. Lee
Images 5-9 by B. Haggin

Pigmentation/MGS:

- 1) Collar—unstained along anterior 1/2 & dorsally, slight stain on inside of collar along dorsal gap. Collar stained laterally, not extending beyond setae and ventrally (Images 1 & 2).
- 2) Chaetiger 1—unstained dorsally, stained laterally (ventral to chaetae) & ventrally. Pair of unstained diagonal patches vento-medially in anterior, followed by a stain band and a large, unstained “dumb-bell” patch posteriorly across ventrum (Images 1 & 2).
- 3) Chaetiger 2—with a solid “Figure 8” stain ventrally with a lateral extension from each lobe of the “8” extending to & connecting just dorsal of the chaetal fascicle (Images 1 & 2).
- 4) Chaetigers 3-8—with an “oval” stain patch ventrally, stain patch with 2 lateral extensions extending to and connecting dorsal of the chaetal fascicle. Dorsal stain approaching midline in posterior thorax (Images 1 & 2).
- 5) Abdominal chaetigers—with a rectangular stain patch encircling each chaetiger. Stain intensity decreasing posteriorly, but continues to pygidium (Images 3 & 4).

Jasmineira sp C
SCAMIT, 2023 §



Voucher Sheet

B. Hagger
April, 2023

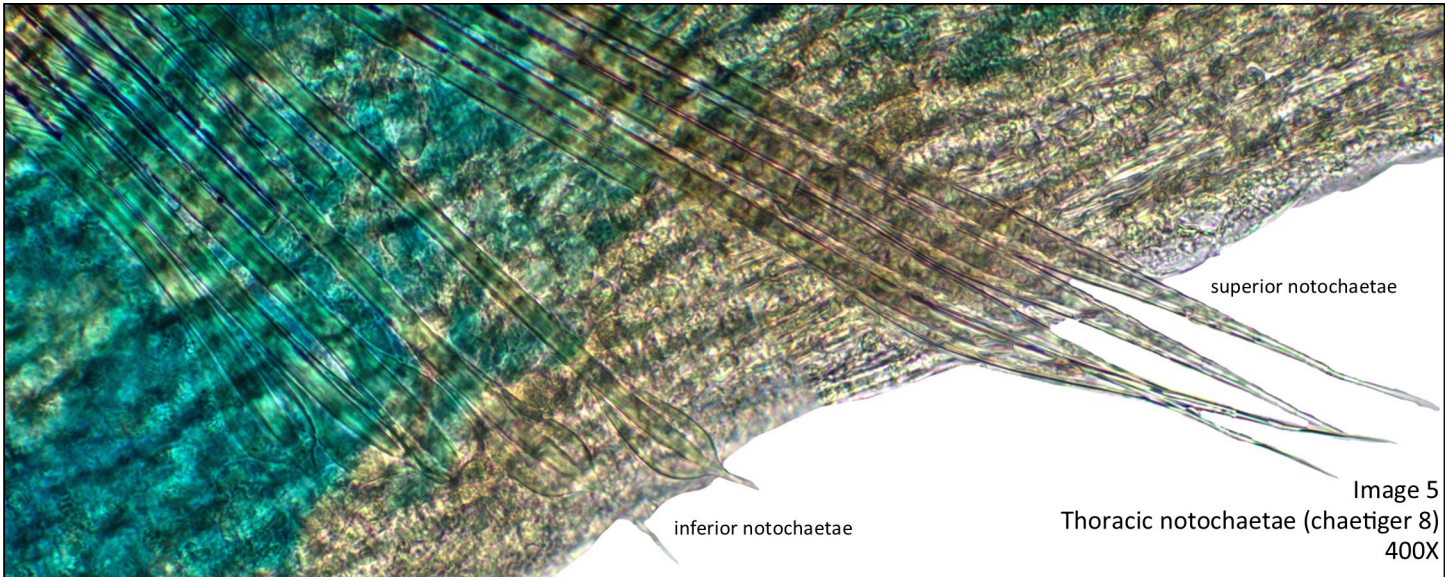


Image 5
Thoracic notochaetae (chaetiger 8)
400X

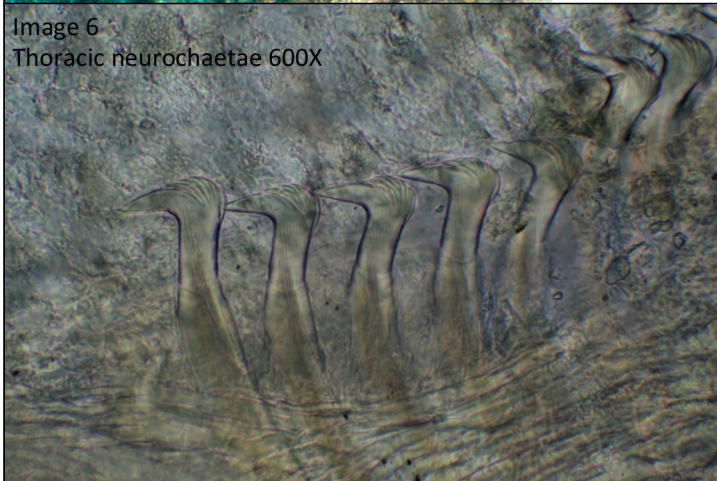


Image 6
Thoracic neurochaetae 600X

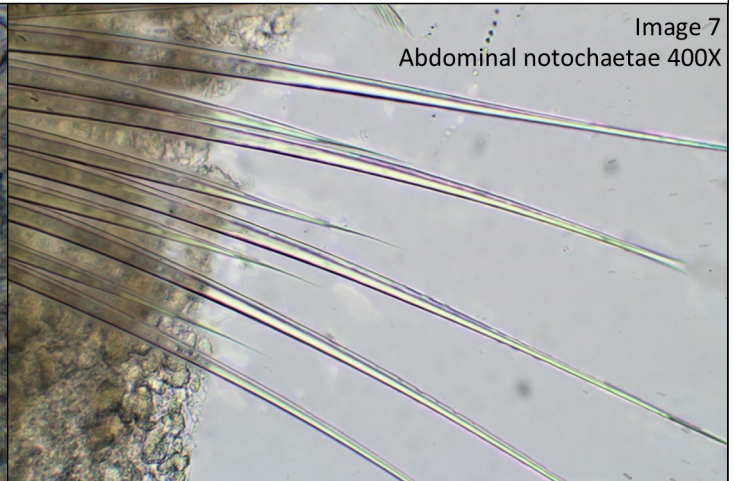


Image 7
Abdominal notochaetae 400X

Material Examined:

B'18-10365—Off west coast of Santa Catalina Island, San Pedro Channel, 548 m (2 inds.) (33.53667N, 118.58933W)
(Images 1-9)

Similar Species:

Jasmineira sp B SCAMIT, 1986 §—*Jasmineira* sp B is similar to *Jasmineira* sp C in having a caudal appendage and retaining a branchial skeleton. The two differ in *Jasmineira* sp B has 1 pair of otocysts (Image 10) while *Jasmineira* sp C has 2 pair of otocysts. *Jasmineira* sp B also has 3 types of thoracic notochaetae (bilimbate, subspatulate & spatulate with a short mucron) while *Jasmineira* sp C has only 2 types of thoracic notochaetae (narrowly bilimbate & spatulate with a mucron tip). The stain pattern also differs between the two species. *Jasmineira* sp B lacks the unstained “dumb-bell” patch in chaetiger 1 that is present in *Jasmineira* sp C and the thoracic stain patches of *Jasmineira* sp B are more rectangular and extend to the chaetal fascicle (Image 10) while the ventral stain patches of *Jasmineira* sp C is more oval and has a slight pinching prior to the chaetal fascicle (Image 2).

Jasmineira sp C
SCAMIT, 2023 §



Voucher Sheet

B. Haggin
April, 2023

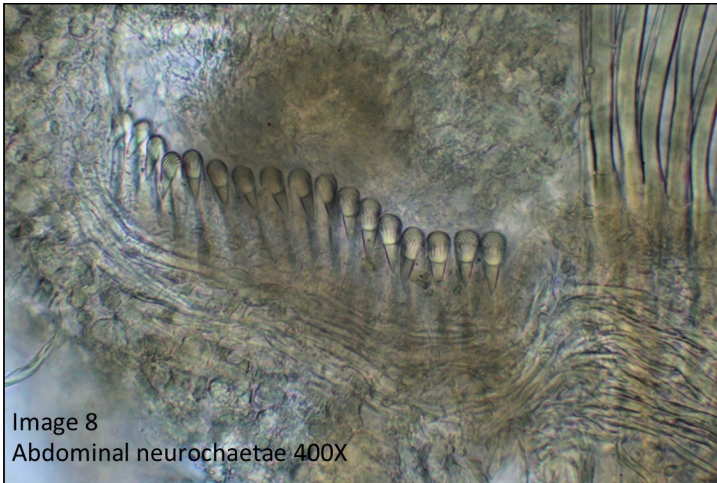


Image 8
Abdominal neurochaetae 400X

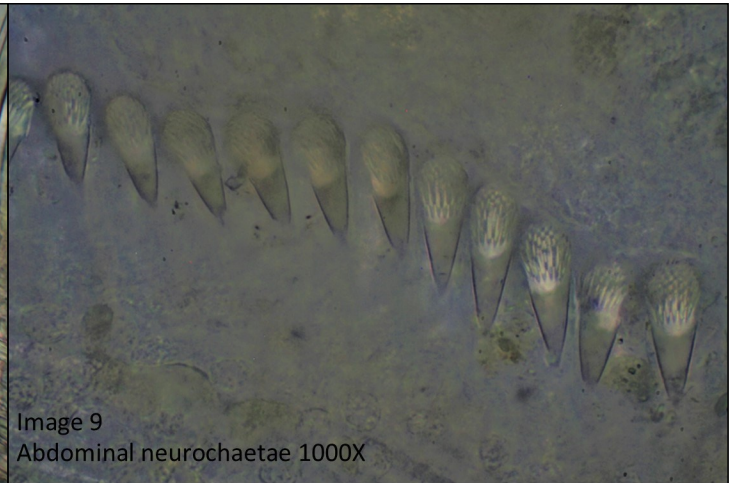


Image 9
Abdominal neurochaetae 1000X

Habitat:

Jasmineira sp C is known from deeper water in the San Pedro Channel. It is found in sediments of clayey silt from 548 m. Also collected in the sample were the polychaetes *Maldane californiensis* Green, 1991; Euclymeninae sp A SCAMIT, 1987 §; *Aricidea (Acmira) rubra* Hartman, 1963; *Cirrophorus branchiatus* Ehlers, 1908; *Subadyte mexicana* Fauchald, 1972; *Prionospio ehlersi* Fauvel, 1928; *Trichobranchus hancocki* (Hartman, 1955); *Leiochrides hemipodus* (Hartman, 1960); *Aphelochaeta* sp LA4 Haggin, 2019 §; *Aphelochaeta* sp LA5 Haggin, 2019 §; *Glycinde armigera* Moore, 1911; an unidentified Ampharetid, an unidentified Polynoid, an unidentified Sabellid, an unidentified *Levinsenia*, and an Oligochaete.

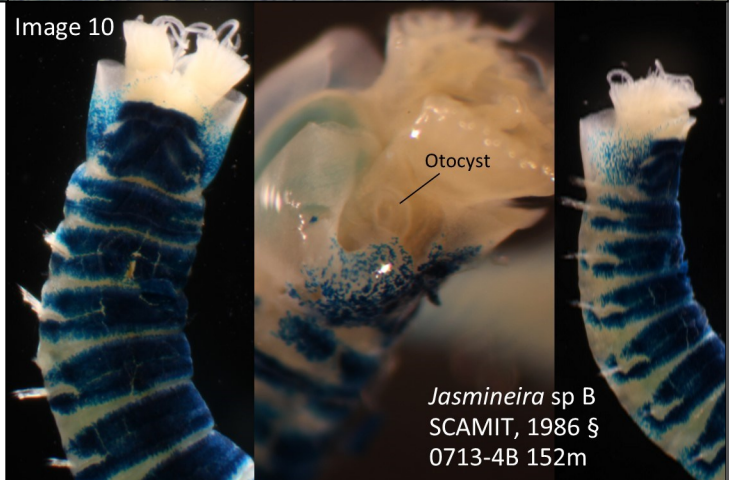


Image 10

Jasmineira sp B
SCAMIT, 1986 §
0713-4B 152m

Discussion:

Cochrane (2000) gave the generic diagnosis of *Jasmineira* as follows:

Small to medium-sized sabellins with few to numerous pairs of radioles; radiolar skeleton with two rows of cells. Inter-radiolar membrane absent; radiolar flanges present. Dorsal lips with dorsal radiolar appendages; dorsal pinnular appendages absent. Ventral lips and parallel lamellae present. Few to many pairs of ventral cirri (*sensu* Krøyer) present. Anterior margin of anterior peristomial ring (hereafter referred to as the peristomium) with narrow, ventral lobe; posterior peristomial ring collar (hereafter named the collar) present. Glandular ridge on chaetiger 2. Chaetiger 1 bearing only elongate narrowly swollen chaetae with a long terminal taper, geniculate at the 'knee' area (often referred to as limbate capillary chaetae, see also Chapter 1.2.5). From chaetiger 2, inferior thoracic notochaetae present in two transverse rows or groups: anterior row(s) of shorter chaetae (also referred to in the literature as limbate capillary chaetae and in need of clarification), posterior row(s) with spatulate or chaetae with broad bilateral swellings. Abdominal fascicles arranged in two transverse rows: anterior row in anterior segments with elongate narrowly swollen chaetae, geniculate at the 'knee' area (often referred to as "limbate capillaries"); posterior row in anterior chaetigers with fine needle-like chaetae (often referred to as "needle-like capillaries"); anterior and posterior rows in posterior chaetigers containing only the latter chaetal type. Thoracic uncini acicular; teeth above main fang of equal size; hood present. Abdominal uncini with main fang surmounted by series of equal-sized teeth; breast reduced to narrow swelling; handles long. Abdominal chaetigers

Jasmineira sp C
SCAMIT, 2023 §



Voucher Sheet
B. Haggin
April, 2023

Discussion (cont.):

number several to many, depending on the taxon and/or size of the individuals.

WoRMS currently lists 18 valid species of *Jasmineira*. None of the described species are from southern California. The closest described species are from Japan, *Jasmineira kikuchii* Nishi *et al.*, 2009 and *Jasmineira pacifica* Annenkova, 1937. SCAMIT Ed. 13 has only 1 provisional species listed.

References:

Capa, M., Giangrande, A., Nogueira, J. M. de M. & Tovar-Hernández, M. A. 2014. Annelida: Polychaetes - Sabellidae Latreille, 1825. IN: Westheide, W. & Purschke, G. (Eds.), *Handbook of Zoology - A Natural History of the Phyla of the Animal Kingdom* 1-22.

Cochrane, S. J. 2000. Taxonomy and Systematics of Selected Marine Soft-Bottom Fan-Worms (Polychaeta: Sabellidae: Sabellinae). *Ph.D. Thesis, University of St. Andrews, Scotland, U.K.*, 296 pp.

Fauchald, K. 1977. The polychaete worms, definitions and keys to the orders, families and genera. *Natural History Museum of Los Angeles County: Los Angeles, CA (USA), Science Series*. 28:1-188.

Harris, L. H. 1986. *Jasmineira* sp B Voucher Sheet. *SCAMIT Newsletter* 5(6): 8-10.

Read, G. & Fauchald, K. (Ed.) 2023. World Polychaeta Database. *Jasmineira* Langerhans, 1880. Accessed through: World Register of Marine Species at: <https://www.marinespecies.org/aphia.php?p=taxdetails&id=129533> on 2023-04-13

SCAMIT. 2021. *A Taxonomic Listing of Benthic Macro- and Megainvertebrates from Infaunal & Epifaunal Monitoring and Research Programs in the Southern California Bight, Edition 13*. Cadien, D. B., Lovell, L. L., Barwick, K. L., Haggin, B. M., eds. 203pp.

Other Literature Consulted:

Fitzhugh, K. 1989. A systematic revision of the Sabellidae-Caobangiidae-Sabellongidae complex (Annelida: Polychaeta). *Bulletin of the American Museum of Natural History* 192: 1-104.

Version History:

Version 1.0—Draft voucher sheet created (31May2019)

Version 2.0—Updated name to *Jasmineira* sp C and author to SCAMIT, 2023 §; Added specimen dimensions; Updated voucher sheet to conform to new SCAMIT guidelines; Updated image text to reduce image clutter; Added ITI- and P-codes; Added Habitat, Discussion and Other Literature Consulted section; Added new images of thoracic and abdominal chaetae; Added comparison images of *Jasmineira* sp B stain pattern (13APR2023)