



City and County of San Francisco Voucher Sheet

Voucher #: P695

Taxa: Polychaeta: Spionidae

Original Prep. Date: 07 Oct 1999

Prepared By: D. Norris

Species Code: SPI_NORRISI

Species: *Spiophanes norrisi*

Authority: Meißner 2009

Common Synonyms: *Spiophanes bombyx*
(of authors not
Claparede, 1870)

Characters:

- “T” shaped prostomium with long, digitiform anterior horns. No occipital antennae and 4 black eyes (sometimes faded) in a trapezoidal arrangement (a).
- Anterio-dorsal ciliated organs short, extending through setiger 2, and entire (not fragmented) (a).
- Modified inferior saber setae (b) from neuropodia of setiger 10 (shorter than capillary setae and oriented ventrally, see comments).
- Neuropodial hooks from setiger 15 (may start on 14 in juveniles) with a major fang surmounted by several apical teeth (c), the hood often not covering the teeth (d).
- Methyl Green stain is inconspicuous, but stains dark between the rami of the 6th setiger (this is a constant character on our specimens, but is not published character) (e).
- Chaetal spreaders are 0+1 type (see Meißner 2005) on setigers 5, 7 and 8 (d). On setiger 6, the spreader is reduced to a simple slit.

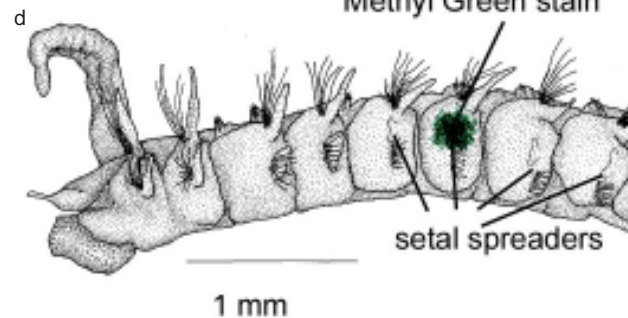
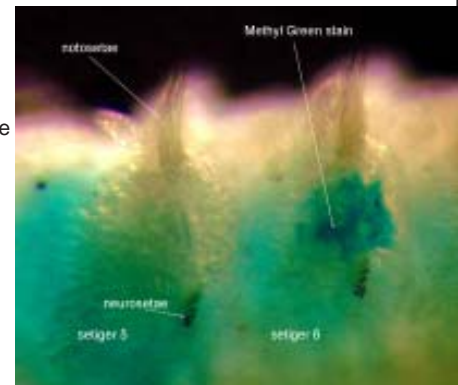
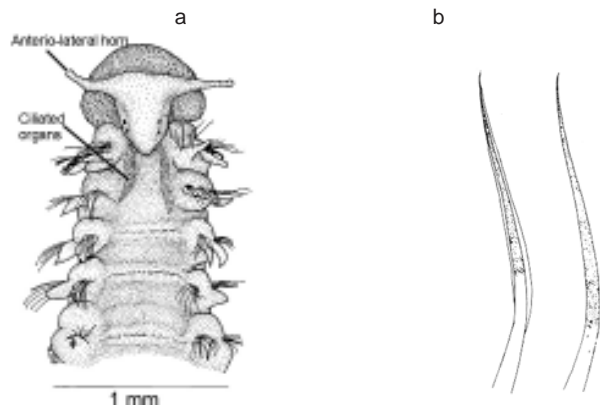
Additional Information:

(Meißner 2005)

DISTRIBUTION: Cosmopolitan: N. Atlantic Ocean (both European and N. American Coasts), Mediterranean, S. Atlantic (S. African Coast), Pacific Ocean (Alaska to California, Chile and Japan). see comments.

HABITAT: intertidal to 119 meters; has been collected at slope depths; prefers shallow, fine, sandy sediment but is

Illustrations:



a & c adapted from Meißner 2005

b & d adapted from Light (1978)

e photographed by D. Norris of specimen in vial 11.

Related Species:

Spiophanes anoculata Hartman, 1960 - lacks eyes, has occipital antennae, nuchal organs elongated and fragmented into segmental ciliated patches for approximately half the length of the specimen. Note this is a deep water species and not likely to show up in our samples.

***Spiophanes norrisi* (continued)**

Comments:

In SWOO samples, this species dominates in sandier sediments.

Meißner (2005) disclosed that there are morphological differences between geographically isolated populations of *S. bombyx*, suggesting that this species may be a complex. She asserted that further genetic and morphological studies are needed to determine the species status of *S. bombyx*. Specimens from our 2007 survey were submitted to Karin for this type of analysis. Our species type are from the California group (adult hooks start on setiger 15, juveniles on 14, sabre setae at setiger 10).

References:

- Blake J. A., 1996. Family Spionidae Grube, 1850. in: Blake J. A., Hilbig B., Scott P. H., eds. *Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and Western Santa Barbara Channel*. Volume 6. Santa Barbara, CA: Santa Barbara Museum of Natural History. Chapter The Annelida, Part 3. pp. 418.
- Hartman O., 1969. Atlas of the Sedentariate Polychaetous Annelids from California. Los Angeles, California: Allen Hancock Foundation, USC. pp. 812.
- Light W. J., 1978. Spionidae (Annelida: Polychaeta) from San Francisco Bay, California: a revised list with nomenclatural changes, new record, and comments on related species from the northeastern Pacific Ocean. *Proceedings of the Biological Society of Washington* 90(1):66-88.
- Meißner K., 2005. Revision of the genus *Spiophanes* (Polychaeta, Spionidae); with new synonymies, new records and descriptions of new species. *Mitt. Mus. Nat.Kd. Berl., Zoo. Reihe* 81(1):3-66.

Voucher Specimens

Vial Number*	Sample Number	Station	Sample Date	Number of Specimens	Comments
01	BSSWE215	06	12 Sep 1994	26	Dyed blue, 1.0 mm sieve size, MGK
03	BSSWA215	06	12 Sep 1994	1	Dyed blue, regenerating head, KML
04	BSSWC215	06	12 Sep 1994	2	Dyed blue, 1 with regen. head, KML
05	BSSWE222	06	28 Feb 1995	1	Dyed blue, 1.0 mm sieve size, MGK, KML
06	BSSWC222	06	28 Feb 1995	1	Dyed blue, 0.5 mm sieve size, incomplete,
07	BSSWC189	28	16 Oct 1992	1	Whole with tube, 1.0 mm sieve size, KL
08	BSSWA079	06	04 Feb 1987	1	Whole with tube, CN
09	NPBS06	R49	Jun 1982	1	
10	BSSWC227	02	11 Sep 1995	3	Complete, 1.0 mm sieve size, KML
11	BSSWA002	02	05 Oct 1982	8	AMN, good condition, few whole, good size range

Revision History:

DATE	TAXONOMIST	COMMENTS
04 Aug 1999	DJN	Original voucher sheet
15 Aug 2003	DJN, SMc	Import into PageMaker and current conventions
04 Nov 2003	DJN	Edits and current conventions
15 Dec 2003	DJN	Corrected typos and references to figures
10 Jun 2007	DJN	Added new information, references and formats
03 Apr 2008	DJN	Added new edits, info
20 Oct 2011	DJN	Corrected synonymy