



Podarkeopsis glabrus (Hartman, 1961)

Nomenclature	
Phylum	Annelida
Class	Polychaeta
Order	Phyllodocida
Family	Hesionidae
Synonyms	<i>Oxydromus arenicolus glabrus</i> Hartman, 1961 <i>Gyptis arenicola glabra</i> of Hartman 1968 <i>Podarkeopsis glabra</i> (misspelling)



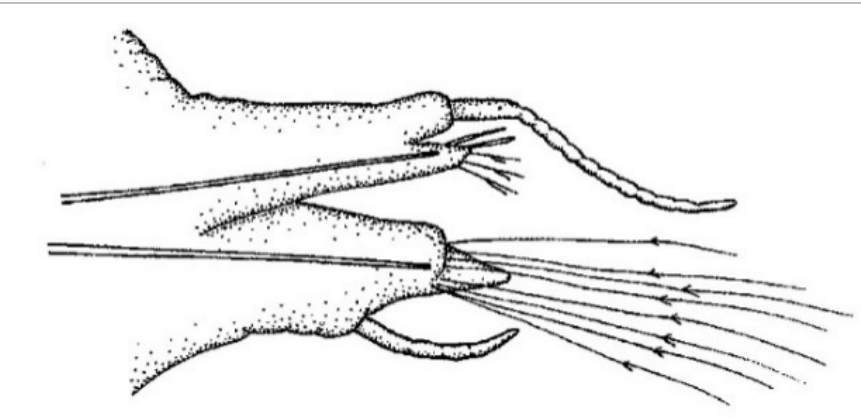
Distribution	
Type Locality	California: Santa Maria Basin, off Purisima Point, Sta. 42 (1); off Point San Luis, Sta. R-1 (3); off Point Conception, Sta. 77 (1); Bodega Harbor (1); Gulf of the Farallones, ca. 30 m, Jul. 1973- Feb. 1974 (5)
Geographic Distribution	Central America; California to Alaska (Hilbig 1994)
Habitat	Shallow subtidal, in mixed mud and silt (Hilbig 1994)

Description	
From Hilbig 1994, pp. 261-263 (as <i>Podarkeopsis glabra</i>)	
Size/ Color: Length to 15 mm, width to 1 mm, segments to 30. Uniformly tan in alcohol.	
Body: Short, wide, depressed except for nearly cylindrical pharyngeal region.	
Prostomium: Wider than long, with 2 palps and 3 antennae; outer antennae about as long as palps, median antenna only one-third as long, inserted at frontal margin of prostomium. Four subequal eyes present posteriorly, moderately large, arranged in a rectangle. Two large nuchal grooves along postectal margin of prostomium. Proboscis wide, smooth, with 10 distal papillae. 8 pairs of tentacular cirri on 3 distinct segments. Dorsal cirri longer than ventral cirri.	
Parapodia: Sesquiramous in chaetigers 1 to 4 (rarely 5), biramous after that; dorsal cirri long, slender, indistinctly articulated; ventral cirri much shorter, just exceeding the neuropodial presetal lobe.	
Chaetae: Notochaetae first present from chaetiger 5; consisting of 2 to 5 acicular spines with weak subdistal serrations (large animals) and 2 to 5 furcate chaetae with unequal tines; shorter tine with basal serrations, longer tine open-ended, longest blades in middle of fascicle; shaft smooth, blade finely serrated, tapering to hook-shaped tip and often with short distal hood. Neurochaetae compound falcigers with long and short blades, the longest in the middle of fascicle and 2 (or more) times longer than the shortest. Smooth shaft and serrated blade, tapering to hooked tip.	

Diagnostic Characteristics

Diagnostic Characteristics (From Hilbig 1994, as <i>P. glabra</i>)	Photo, Illustrations	Photo, Illustration Credit
<p>4 moderately large eyes of similar size</p> <p>Palps biarticulate</p> <p>3 antennae, median one attached frontally</p> <p>Proboscis with 10 terminal papillae</p> <p>8 pairs tentacular cirri on 3 distinct segments</p>	<div data-bbox="500 352 1182 987"> <p style="text-align: center;"><i>Anterior body region (dorsal view); tc – tentacular cirri</i></p> </div> <div data-bbox="430 1039 1295 1837"> <p style="text-align: center;"><i>Anterior body region (dorsal view); specimen from 2014 PSEMP Long Term Station 49 Rep 2 (Budd Inlet, WA)</i></p> </div>	<p>Modified from Hilbig 1994, p. 263</p> <p>Marine Sediment Monitoring Team</p>

Notopodia distinctly smaller than neuropodia; notochaetae present from chaetiger 4-6 (characteristics of genus)



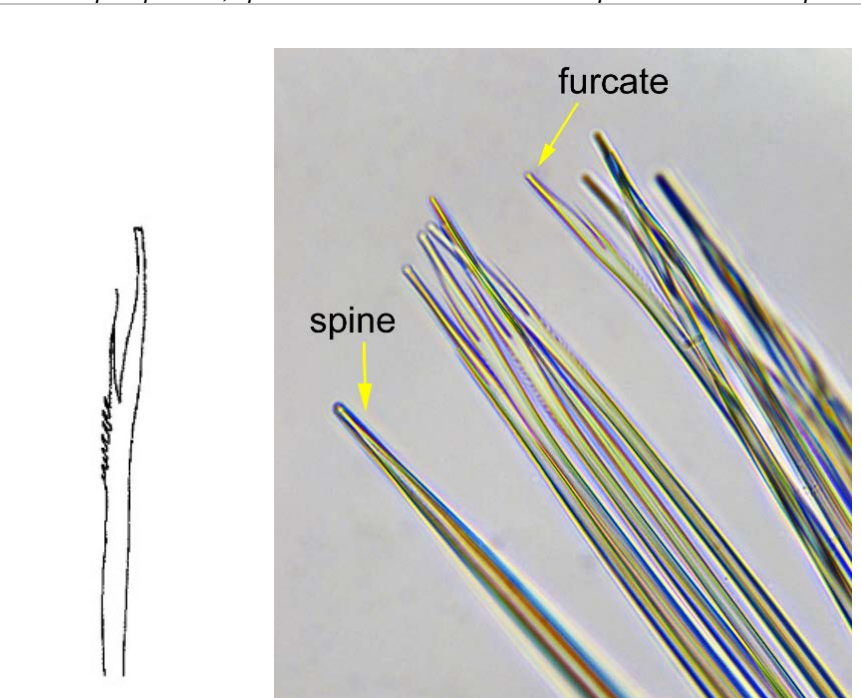
Hilbig 1994, p. 263



Middle parapodium; specimen from 2014 PSEMP Temporal Station 49 Rep 2

Marine Sediment Monitoring Team

Notochaetae including smooth spines and furcates; furcate chaetae with serrations below shorter tine (visible at 400x)


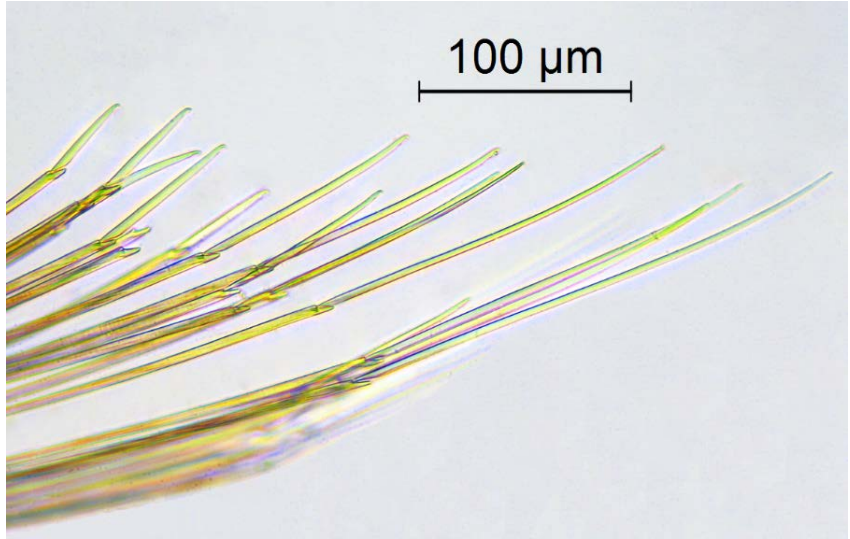


Furcate notoseta

Notochaetae from middle parapodium; specimen from 2014 PSEMP Long Term 49 Rep 2

LEFT: Hilbig 1994, p. 263

RIGHT: Marine Sediment Monitoring Team

<p>Longest (middle) blades of neurochaetae longer than shortest (dorsal and ventral) ones. They vary from being slightly more than twice as long as the shortest ones to much greater lengths (as in photo, right).</p>	 <p>Above: Longest and shortest blade from a neuropodial fascicle</p>  <p>Neurochaetae from middle parapodium; specimen from 2014 PSEMP Long Term 49 Rep 2</p>	<p>Hilbig 1994, p. 263</p> <p>Marine Sediment Monitoring Team</p>
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Related Species and Characteristic Differences	
Species Name	Diagnostic Characteristics
<i>Podarkeopsis brevipalpa</i>	Furcate chaetae of <i>G. brevipalpa</i> are smooth, whereas <i>P. glabrus</i> are serrated at the base of the shorter tine (Hilbig 1994; see comments below).
<i>Podarkeopsis perkinsi</i>	Notochaetae include capillaries; posterior eyes smaller than anterior eyes (Hilbig 1994). <i>Note: This species is known only from off central California.</i>
<i>Oxydromus pugettensis</i>	6 pairs of tentacular cirri; proboscis with more numerous terminal papillae; notopodia more reduced (Blake and Ruff 2007)
<i>Micropodarke dubia</i>	6 pairs of tentacular cirri, notochaetae absent. Ventral “lobes” present, originating slightly posteriorly to the bases of the parapodia (only hesionid in Puget Sound with this character)

Comments

From Hilbig 1994: “*P. brevipalpa* has traditionally accommodated hesionids with 8 pairs of tentacular cirri and furcate notochaetae; it was synonymized with *P. glabra* (as *Oxydromus arenicola glabra* Hartman) by Banse and Hobson (1968). However, a closer examination of the notochaetae of specimens from several locations off California revealed that those specimens possess furcate chaetae with serrations under the shorter tine and thus do not belong to *P. brevipalpa* which is characterized by smooth furcate chaetae (Hartman-Schröder in Banse and Hobson, 1968). Although Banse and Hobson noted this conflict, they did not recognize *P. brevipalpa* and *P. glabra* as separate species.”

Literature

Banse, K. and K. D. Hobson. 1968. Benthic polychaetes from Puget Sound, Washington, with remarks on four other species. *Proceedings of the U.S. National Museum*, Smithsonian Institution Press, Washington, D.C. 125 (3667): 1-53.

Blake, J.A. and R.E. Ruff. 2007. Polychaeta. Pp. 309-410. In: Carlton, J.T. (Ed). *The Light and Smith Manual. Intertidal Invertebrates from Central California to Oregon*. University of California Press, Berkeley. (p. 383-384)

Hartman, O. 1961. Polychaetous annelids from California. *Allan Hancock Pac. Exped.* 25: 1-226.

Hilbig, Brigitte. 1994. Family Hesionidae Sars, 1862. Pp. 243-266. In: Blake, J. A., Hilbig, B. and P. H. Scott (Eds). *Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and the Western Santa Barbara Channel. Volume 4. The Annelida Part 1. Oligochaeta and Polychaeta: Phyllodocida (Phyllodocidae to Paralacydoniidae)*. Santa Barbara Museum of Natural History. Santa Barbara, California.

Pleijel, Fredrik 1998. Phylogeny and classification of Hesionidae (Polychaeta). *Zoologica Scripta*, 27(2): 89-163, 38 figures, 7 tables.

More Information

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