



## *Notomastus lineatus* Claparède, 1869

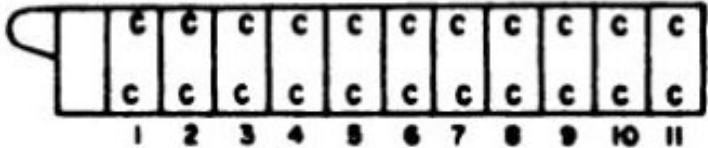
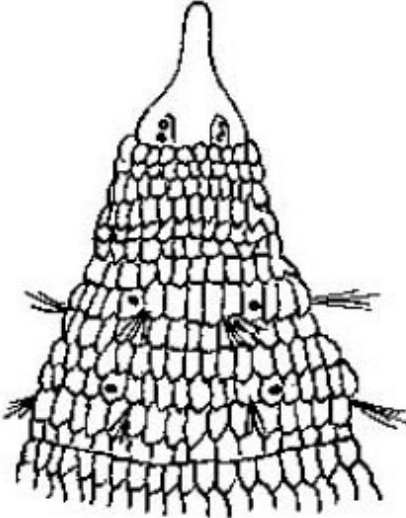
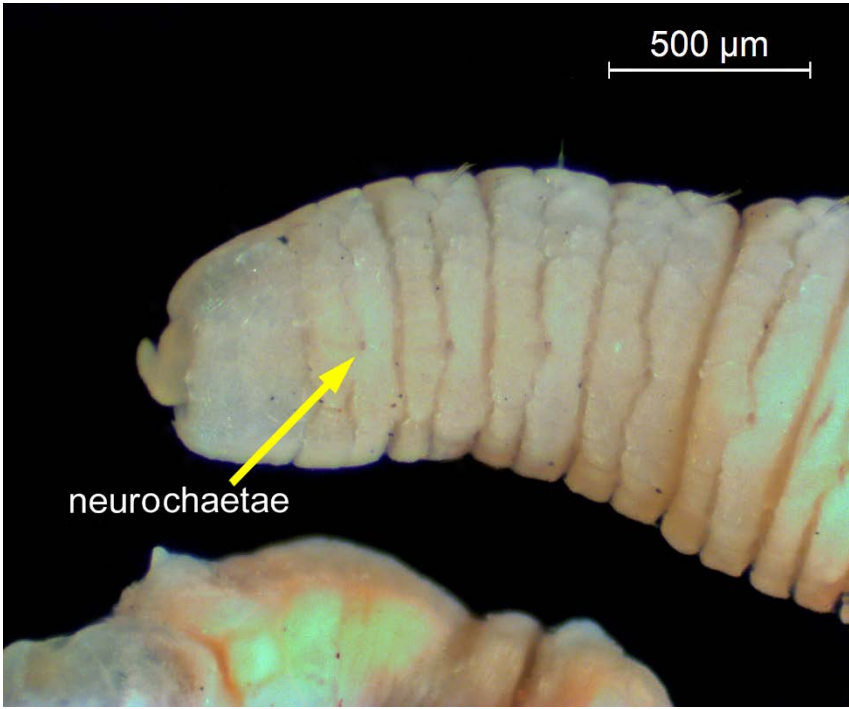
Nomenclature	
Phylum	Annelida
Class	Polychaeta
Family	Capitellidae
Synonyms	<i>Notomastus (Clistomastus) lineatus balanoglossi</i> Eisig, 1887 <i>Notomastus sarsii</i> Claparède, 1864 <i>Notomastus (Clistomastus) lineatus</i> Claparède, 1869 (disused subgenus)

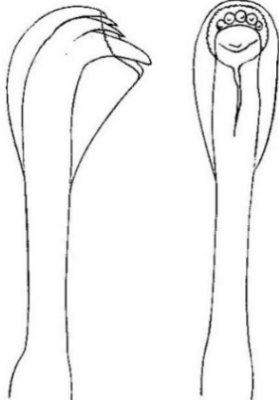
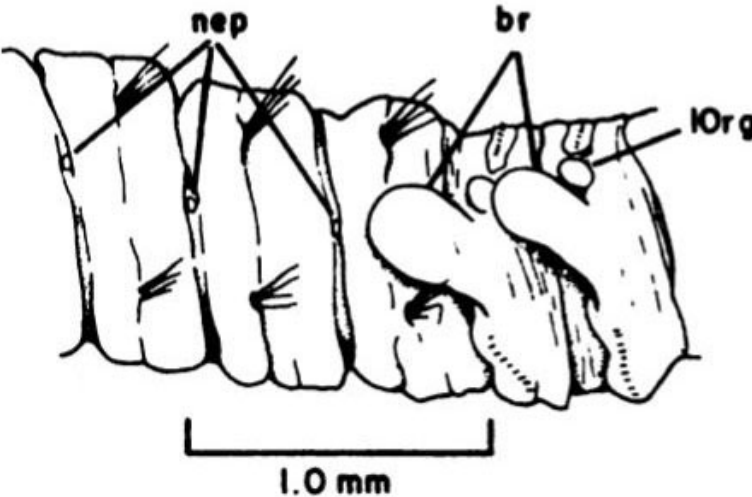
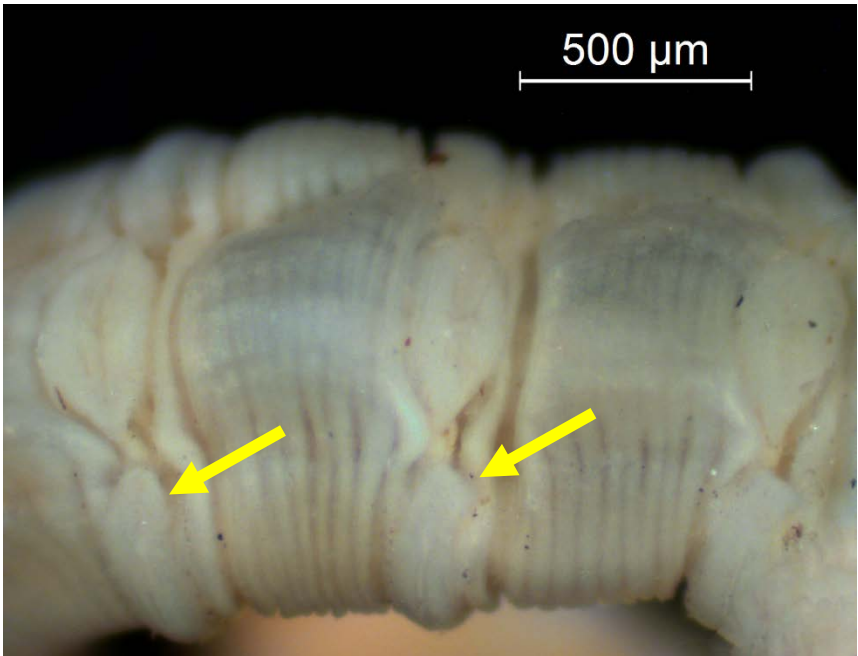


Distribution	
Type Locality	Gulf of Naples (Mediterranean Sea)
Geographic Distribution	Cosmopolitan; Mediterranean Sea, Eastern Pacific from British Columbia, Canada to southern California (Hartman 1969); Puget Sound, WA
Habitat	Shallow subtidal to 298 m; fine to coarse sand, sandy gravel, coral rubble (Ewing 1984).

Description
From Ewing 1984 (unless otherwise noted)
<p><b>Size/Color:</b> 16+ mm (previously reported to 60 mm by Hartman, 1969); width, 2.0 mm. Puget Sound specimens incomplete with up to 24 chaetigers. Deep red in life (Hartman 1969), light brown to tan in alcohol.</p> <p><b>Body:</b> 12 thoracic chaetigers, 11 with capillaries only (characteristic of genus). 1<sup>st</sup> chaetiger biramous. Thorax strongly areolated (integument not smooth; divided by creases into small areas) through chaetiger 6 or 7, less distinctly areolated thereafter. Nephridial apertures visible in segmental groove between each of last 3 thoracic chaetigers. Transition from thorax to abdomen abrupt.</p> <p><b>Prostomium:</b> Conical, broad at base, tapering to cylindrical palpode; with paired patches of eyespots at base. Peristomium achaetous.</p> <p><b>Branchiae/Parapodia:</b> Abdominal notopodial tori short; neuropodia large, superiorly inflated into foliaceous branchial lamellae. Conspicuous ovoid lateral organs present between noto- and neuropodia.</p> <p><b>Chaetae:</b> Thorax with capillaries only, changing in abdomen to hooded hooks. Hooks multidentate with main fang surmounted by 4-5 teeth in a single row.</p>

## Diagnostic Characteristics

Diagnostic Characteristics	Photo, Illustrations	Photo, Illustration Credit
<p>11 thoracic chaetigers with capillaries (characteristic of genus)</p>		<p>Ewing 1984, p. 14-23, figure B</p>
<p>Prostomium with eyespots (Hobson and Banse 1981)</p> <p><i>Note: Eyes may be difficult to see if prostomium is retracted into peristomium</i></p>		<p>Hartman 1969, p. 395, figure 1</p>
<p>Chaetiger 1 biramous, with both notochaetae and neurochaetae (Blake 2000)</p>	 <p style="text-align: center;"><i>Prostomium and anterior thorax, lateral view; voucher specimen AN 1788</i></p>	<p>Marine Sediment Monitoring Team</p>

<p>Hoods of hooded hooks inflated but not voluminous or greatly enlarged; with 4-5 teeth above main fang (Blake 2000)</p>		<p>Hartman 1969, p. 395</p>
<p>Last 3 thoracic chaetigers with nephridial apertures in segmental groove</p> <p><i>Note: This character may be difficult to see</i></p>	 <p><i>Nep – nephridial aperture; br – branchiae; lOrg – lateral organ</i></p>	<p>Ewing 1984, p. 14.23, figure C</p>
<p>Branchiae large, rounded, formed by superior edge of abdominal neuropodia (Hobson and Banse 1981)</p> <p><i>Note: This character seems variable, with some specimens having much smaller branchiae than in the illustration above</i></p> <p>Nephridia absent in abdominal segments</p>	 <p><i>Abdominal region (dorsolateral view); incomplete specimen from 2015 PSEMP Urban Bays Station 158 (Bainbridge Basin, WA)</i></p>	<p>Marine Sediment Monitoring Team</p>

**Methyl green staining:**

Anterior thoracic segments stain solid or slightly mottled blue-green

Abdominal chaetigers exhibit dorsal banding



*Incomplete specimen from 2015 PSEMP Urban Bays Station 158, dorsal view*



*Incomplete specimen from 2015 PSEMP Urban Bays Station 158, ventral view*

**Related Species and Characteristic Differences**

Species Name	Diagnostic Characteristics
<i>Notomastus latericeus</i>	Nephridia large, conspicuous dorsally on abdominal segments (these stain intensely with methyl green); branchiae small, triangular extensions of neuropodia
<i>Notomastus tenuis</i>	Chaetiger 1 uniramous; no distinct methyl green staining pattern; branchiae absent; prostomium with numerous eyespots
<i>Notomastus hemipodus</i>	Chaetiger 1 uniramous; methyl green staining produces distinct mid-ventral "racing" stripes on abdomen; branchiae absent

## Comments

This species may be easily confused with *Notomastus latericeus* which has remarkably similar abdominal neuropodial vesicular structures; however, the latter lacks nephridial apertures in the thorax (Ewing 1984) and the abdominal nephridia stain distinctly with methyl green.

## Literature

Blake, J.A. 2000. Family Capitellidae Grube, 1862. Pp. 47-96. *IN: Blake, James A.; Hilbig, Brigitte; and Scott, Paul Valentich (eds). Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and Western Santa Barbara Channel. 7 - The Annelida Part 4. Polychaeta: Flabelligeridae to Sternaspidae.* Santa Barbara Museum of Natural History, Santa Barbara. (p. 80)

Claparède, Édouard. (1870). Les annélides chétopodes du Golfe de Naples. Supplément. *Mémoires de la Société de physique et d'histoire naturelle de Genève.* 20(2): 365-542.

Ewing, R.M. 1984. Family Capitellidae Grube, 1862. Pp. 14.1–14.47 in J.M. Uebelacker and P.G. Johnson, eds. *Taxonomic guide to the polychaetes of the northern Gulf of Mexico. Vol. II.* Barry A. Vittor & Associates, Inc. Mobile, Alabama.

Hartman, O. 1969. *Atlas of the sedentariate polychaetous annelids from California.* Allan Hancock Foundation, University of Southern California, Los Angeles. 812 pp. (p. 395)

## More Information

To learn more about our Voucher Sheet project, please visit:  
<http://ecologywa.blogspot.com/2017/03/eyes-under-puget-sound-voucher-sheet.html>

More information on Puget Sound marine monitoring is available on our [website](#), including a full list of published [benthic invertebrate voucher sheets](#).

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