**Notomastus tenuis** Moore, 1909

### Nomenclature

<table>
<thead>
<tr>
<th>Phylum</th>
<th>Annelida</th>
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<tbody>
<tr>
<td>Class</td>
<td>Polychaeta</td>
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<tr>
<td>Family</td>
<td>Capitellida</td>
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</tbody>
</table>

**Synonyms**

- *Notomastus angulatus* Chamberlin, 1919
- Accepted, alternate representation: *Notomastus (Clistomastus) tenuis* Moore, 1909 (disused subgenus)

### Distribution

<table>
<thead>
<tr>
<th>Type Locality</th>
<th>San Diego, CA</th>
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<tbody>
<tr>
<td>Geographic Distribution</td>
<td>Eastern Pacific, British Columbia to southern California; Puget Sound, WA</td>
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<tr>
<td>Habitat</td>
<td>Sandy beaches, shallow bays, and estuaries; NOT known to occur in shelf depths (García-Garza et al 2012)</td>
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</table>

### Description

*From García-Garza et al 2012 (unless otherwise noted)*

**Size/Color:** Holotype incomplete with 60 segments, 13 mm long, 1 mm wide. Yellow to light brown in alcohol.

**Body:** 12 thoracic segments, 11 with capillaries only (characteristic of genus). 1st chaetiger uniramous. Body long, slender; transition between thorax and abdomen abrupt (last thoracic chaetiger narrowing, followed by enlarged abdominal chaetigers) and marked by chaetal change. Thorax biannulate, abdomen uniannulate. Epithelium smooth throughout.

**Prostomium:** Conical; patches of eyespots present but may be faded. Peristomium achaetous.

**Branchiae:** Absent (not observed in holotype).

**Parapodia:** Notopodia separated by wide gap; lobes prominent in abdomen, giving body a “nubbly” appearance (Blake 2000). Neuropodia small. Lateral organs from chaetiger 1, between notopodia and neuropodia; oval-shaped in thoracic region and appearing as small protuberances in abdominal region, until end of body. Genital pores on thoracic intersegmental areas 5/6, 6/7, 7/8, 8/9, 9/10.

**Chaetae:** Bilimbate capillaries on thoracic chaetigers; abdominal chaetigers with hooded hooks only, on both rami. Hooks with evident constriction, wide shoulder, moderate hood, and 4 to 5 rows of multidentate subapical teeth above main fang.

**Pygidium:** Simple, no appendages.
<table>
<thead>
<tr>
<th>Diagnostic Characteristics</th>
<th>Photo, Illustrations</th>
<th>Photo, Illustration Credit</th>
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</thead>
<tbody>
<tr>
<td>Thorax with 11 setigers with capillaries only (characteristic of genus)</td>
<td><img src="image1" alt="Thorax and first few abdominal chaetigers (dorsal view); scale bar = 1mm" /></td>
<td>García-Garza et al 2012 (p. 3, Figure E)</td>
</tr>
<tr>
<td>Chaetiger 1 uniramous, notochaetae only</td>
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<td></td>
</tr>
<tr>
<td>Anterior thoracic chaetigers smooth, not areolated</td>
<td></td>
<td>Marine Sediment Monitoring Team</td>
</tr>
<tr>
<td>Transition between thorax and abdomen abrupt</td>
<td>Prostomium and thorax (lateral view); specimen from 2015 PSEMP Urban Bays Station 154 (Bainbridge Basin, WA)</td>
<td></td>
</tr>
</tbody>
</table>
Prostomium, thorax, and anterior abdomen (lateral view); specimen from 2015 PSEMP Urban Bays Station 154

Prostomium with paired groups of 15-20 small eyes (only 1 eyespot visible in specimen pictured right)

Note: This character is not reliable - easier to observe in small specimens and may fade over time

Prostomium (dorsal view); specimen from 2015 PSEMP Urban Bays Station 154

Marine Sediment Monitoring Team
Nephridia absent in abdomen

Abdominal notopodia elevated, prominent

Posterior abdomen (lateral view); specimen from 2015 PSEMP Urban Bays Station 154

Hoods of abdominal hooks inflated but not voluminous

Neuropodial hooded hooks from chaetiger 18 (LEFT) and chaetiger 24 (RIGHT); lateral view

García-Garza et al. 2012 (p. 3, Figures D and H)

Methyl green staining:
Body stains uniformly light green, with no pattern evident (Blake and Ruff 2007)

Variations:
Prechaetal area of some abdominal chaetigers with slightly darker encircling band

Chaetigers 5-11 may stain slightly darker

Specimen from 2015 PSEMP Urban Bays Station 154

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## Related Species and Characteristic Differences

<table>
<thead>
<tr>
<th>Species Name</th>
<th>Diagnostic Characteristics</th>
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<tr>
<td><strong>Notomastus hemipodus</strong></td>
<td>The most similar species to <em>N. tenuis</em> (often confused, as it can co-occur); with only 1 minute pair of eyespots; anterior thoracic chaetigers changing abruptly in size; striking methyl green staining pattern of ventral “racing stripes” in abdomen.</td>
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<tr>
<td><strong>Notomastus lineatus</strong></td>
<td>Chaetiger 1 biramous; MG staining produces dorsal banding on abdominal chaetigers</td>
</tr>
<tr>
<td><strong>Notomastus latericeus</strong></td>
<td>Chaetiger 1 biramous; branchiae long, single, filamentous; distinctive MG staining pattern of dark green nephridial pores in abdomen.</td>
</tr>
<tr>
<td><strong>Decamastus gracilis</strong></td>
<td>Chaetiger 1 biramous; 10 thoracic setigers with capillaries.</td>
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## Comments

Often confused with *Notomastus hemipodus*, but may be easily distinguished by MG staining (see “Related Species…” section above).

*Notomastus tenuis* is encountered infrequently during subtidal Puget Sound sediment monitoring; this may be because it occurs more in shallow, intertidal depths. This is consistent with what has been observed in western British Columbia (Hiroki Tomoe, personal observation).

## Literature


Hartman, O. 1969. *Atlas of the sedentariate polychaetous annelids from California*. Allan Hancock Foundation, University of Southern California, Los Angeles. 812 pp. [pp. 397-398, as *Notomastus (Clistomastus) tenuis*]

More Information

To learn more about our Voucher Sheet project, please visit:

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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