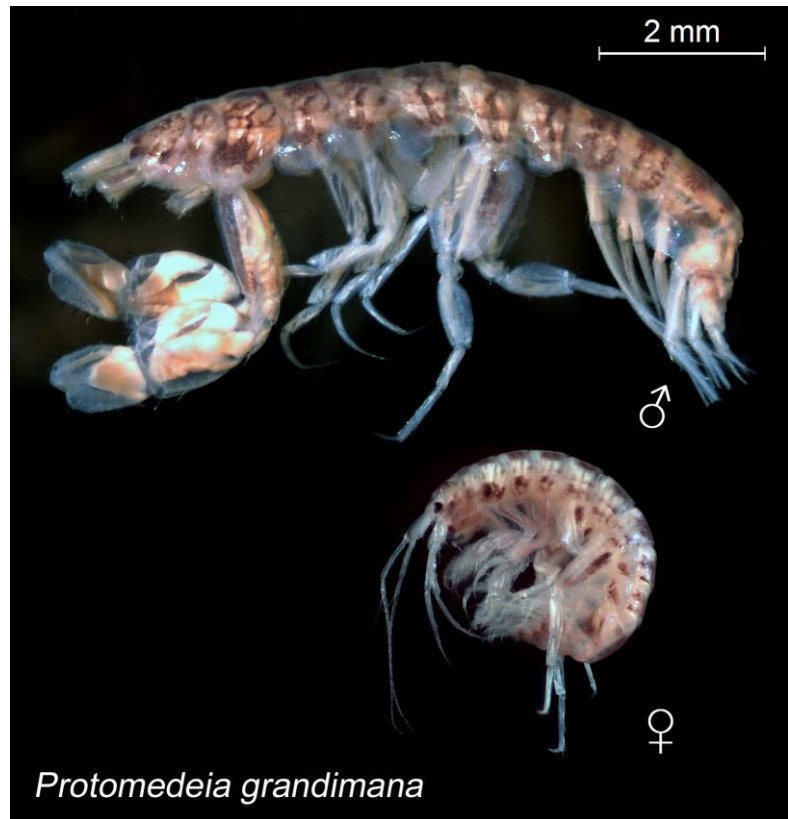


*Protomedeia grandimana* Brügger, 1906

Nomenclature	
Phylum	Arthropoda
Class	Malacostraca
Order	Amphipoda
Family	Corophiidae
Authority	Bruggen, 1906
Original Description	Brügger, E. v.d. 1905.
Common Synonyms (S) Previous Names (PN)	



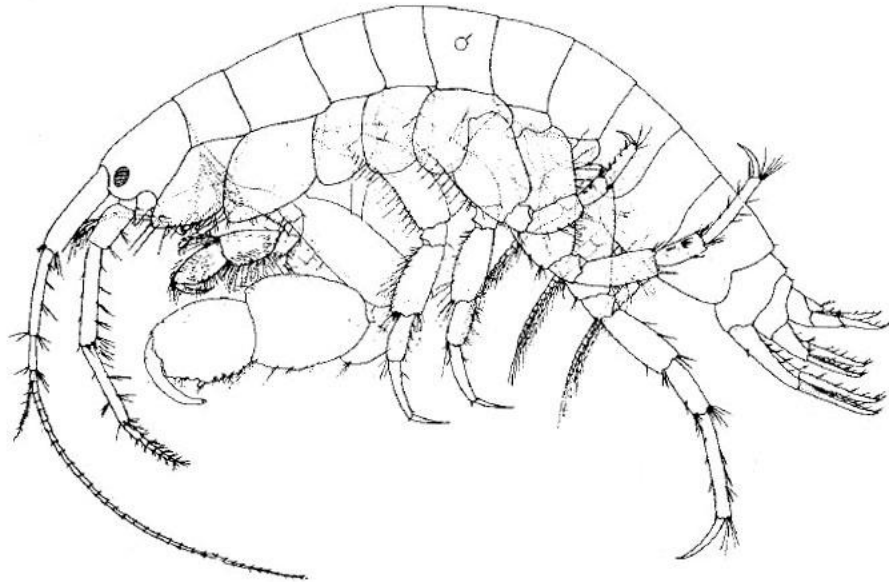
Distribution	
Type Locality	
Geographic Distribution	St. Lawrence Island, Bering Sea (64°N, 169°W) to southern B.C. (48°50'N, 123°50'W); also recorded from the Sea of Okhotsk, U.S.S.R. and from Murman coast, Kara Sea, Spitzbergen. Shoemaker (1955) cautions that many of the localities assigned to this species by Stephensen (1942, pp. 384 and 385) likely apply only to <i>Protomedeia stephenseni</i> (Conlan 1983).
Habitat	A cold-water species occurring at low water to 200m depth on semi-protected coasts. Summer temperatures recorded in the collections of Bousfield, 1961 to 1980, were 9.6 to 15.7° C, salinities 14.3 to 29.0. (Conlan 1983)

Description	
From Conlan 1983	
<p><b>Male:</b> Antenna 1 nearly a third longer than A2, peduncular segment 3 less than half the length of segment 1; antenna 2 weakly setose. Maxilla 1 lacking a setal group at the base of palp. Margins of coxae 1-5 weakly setose. G1, segment 2 not posterodistally produced into a lobe; segment 5 subequal to segment 6; segment 6, hind margin not cusped, palm oblique. G2, segment 2 not anteriorly flanged and lacking a posterior tooth at the junction of the coxa; segment 5 longer and broader than segment 6; segment 6 not distally tapered, hind margin not cusped, palm oblique, bearing a wide medial</p>	

# *Protomedeia grandimana*

protuberance and a small articulating defining spine; dactyl evenly curved and overlapping the palm by up to ½ its length. In old males the palmar defining spine is lost and the dactyl curves inwards along the medial surface of segment 6. P3 and P4, anterior margin of segment 4 densely setose, segment 4 not anterodistally produced over segment 5, dactyl shorter than segment 6. P5, coxa not deeper than coxae 1-4; segment 2 not anteriorly bulged. Epimera lacking lateral ridge. U3, inner ramus nearly as long as outer, spines long and slender.




**Female:** G2, segment 5 shorter and hardly wider than segment 6; segment 6 not distally tapered, palm lacking medial protuberance; dactyl overlapping palm by little more than the unguis. Otherwise similar to male.



## Diagnostic Characteristics

Diagnostic Characteristics	Photo, Illustrations	Photo, Illustration Credit
Maxilla 1 palp lacking a setal group on segment 1		Conlan 1983 (p. 30, fig. 14)

*Protomedeia grandimana*

<p>Antenna 1 a third longer than antenna 2</p>		<p>J. Cordell</p>
<p>Uropod 3, inner ramus nearly as long as the outer ramus</p>		<p>J. Cordell</p>
<p>Gnathopod 2 (♀), palm transverse</p>		

# *Protomedeia grandimana*

J. Cordell

Gnathopod 2 (♂) enlarged, segment 6 not tapered, palm oblique and bearing a broad protuberance and small articulating defining spine (A, arrow) that is lost in older individuals (B)

A



B



## Related Species and Characteristic Differences

Species Name	Diagnostic Characteristics (From Conlan 1983)
<i>Protomedeia stephenseni</i>	Maxilla 1 palp bearing a setal group on segment 1; coxae 1-5, lower margin densely setose, gnathopod 1, palm transverse; gnathopod 2 (♂) hardly enlarged, palm transverse and lacking a protuberance.
<i>Protomedeia prudens</i>	Antenna 1 hardly longer than antenna 2; G2 (♀), palm oblique
<i>Protomedeia fasciata</i>	<i>P. grandimana</i> has stout spines on uropod 3 where <i>P. fasciata</i> has thin setae.

# *Protomedeia grandimana*

## Comments

## Literature

Brüggen, E. v.d. 1905. Die Amphipoden des Katharinenhafens (Murmanküste) und seiner Umgebungen. St. Petersburg, Travaux societe imperiale des naturalistes, 36 (1, 8): 1-10. (p. 226)

Conlan, K.E. 1983. The amphipod superfamily Corophioidea in the northeastern Pacific region. 3. Family Isaeidae: systematics and distributional ecology. National Museums of Canada, National Museums of Natural Sciences, Publications in Natural Sciences: 1-75. (pp. 27-28)

SCAMIT: Southern California Association of Marine Invertebrate Taxonomists [Internet]. c2000-2009 [cited 2013 Feb. 2]. Available from: <http://www.scamit.org/newsletters/2005-02.pdf>

Stebbing, T. R. R. 1906. Amphipoda I. Gammaridea. *Das Tierreich* 21:1-806, figures 1-127. (p. 623)

## More Information

More information about Puget Sound benthic invertebrates is available at:

<http://www.ecy.wa.gov/programs/eap/psamp/index.htm>

Prepared by Julianne Ruffner (Ecology), Cassandra McNeal (University of Washington - Tacoma), and Jeffery Cordell (University of Washington - Seattle) on 2/7/13. This document is available on the Department of Ecology's website at <https://fortress.wa.gov/ecy/publications/SummaryPages/1403231.html>.

If you need this document in a format for the visually impaired, call (360) 407-6764. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call (877) 833-6341.