

Eudorella pacifica Hart, 1930

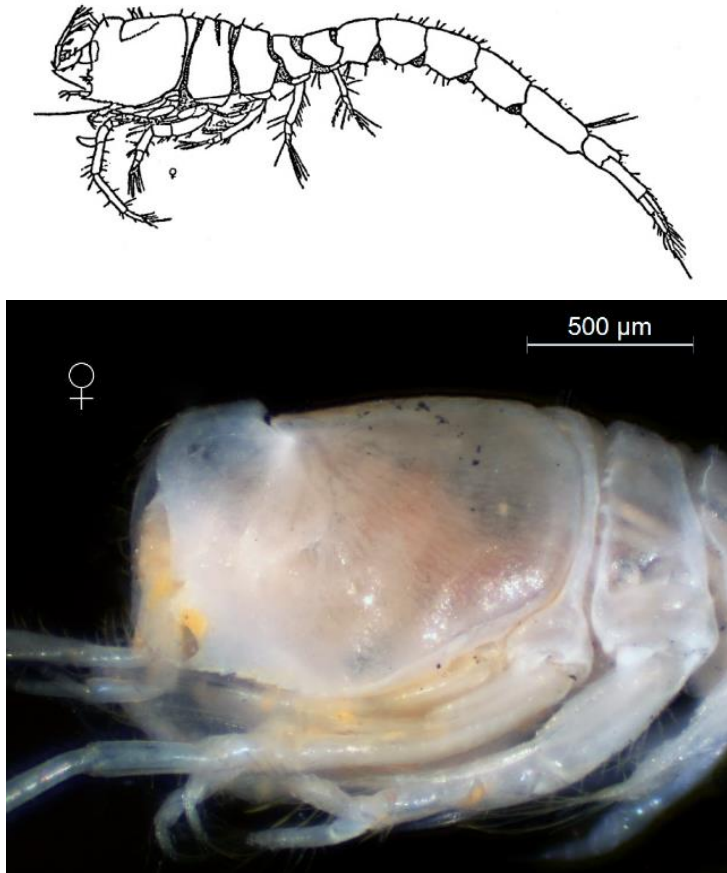

Nomenclature	
Phylum	Arthropoda
Class	Malacostraca
Order	Cumacea
Family	Leuconidae
Common Synonyms (S) Previous Names (PN)	<i>Eudorella tridentata</i> (S)

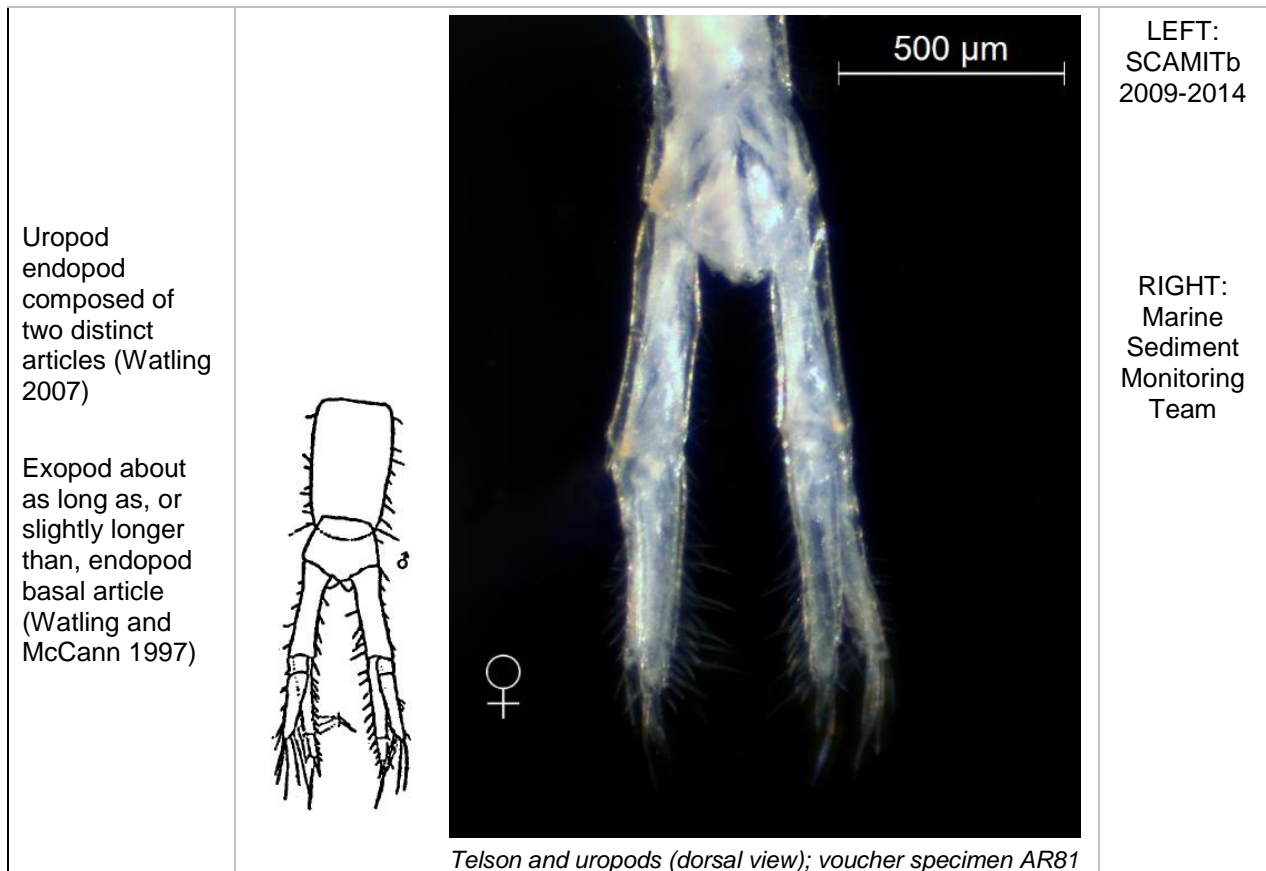


Distribution	
Type Locality	Deep Cove, Vancouver Island, British Columbia, 120 m.
Geographic Distribution	British Columbia (Hart 1930) to San Diego
Habitat	20-732 m (SCAMITa); abundant in muddy sediments (Hart 1969)

Description
From Watling and McCann 1997 (except where noted)
Size: Female 4.5 mm, male 6 mm
Carapace: Sparsely setose. Well-developed sinus on anterior margin within which are 2 downward-pointing teeth. Lower margin formed by 1 large horizontal tooth. Lower margin of carapace serrate for about ½ its length (Hart 1930); posterior section smooth. First perionite very narrow (Watling 2007).
Antenna/Antennules: Antenna geniculate between peduncle articles 2 and 3; with setae along whole margin. Antennule peduncle articles 2 and 3 subequal in length; main flagellum basal article with setae along inner margin; accessory flagellum as long as main flagellum basal article.
Pseudorostrum: Directed dorsally in both male and female (characteristic of genus)
Pereopods: P1 article 5 shorter than article 6. P2 article 5 about 1.4x length of article 4. The dactylus and carpus of P2 are sub-equal in length and each is longer than the propodus (Given 1961).
Pleopods: Male, 2 pairs
Uropods: Exopod much shorter than endopod, only as long as endopod basal article.
Telson: No free telson.

Diagnostic Characteristics

Diagnostic Characteristics	Photo, Illustrations	Photo, Illustration Credit
<p>Carapace with well-developed sinus on anterior margin, formed by 2 downward-pointing teeth at the top and a single large tooth at the bottom</p> <p>First perionite narrow (Watling 2007)</p>	 <p><i>Carapace, female (lateral view); voucher specimen AR81</i></p>	<p>SCAMITb</p> <p>Marine Sediment Monitoring Team</p>
<p>First antenna with conspicuous elbow (Watling 2007)</p>	 <p><i>Antenna 1; voucher specimen AR1894</i></p>	<p>Marine Sediment Monitoring Team</p>



Related Species and Characteristic Differences	
Species Name	Diagnostic Characteristics
<i>Eudorella truncatula</i>	Uropod exopod extending beyond end of endopod basal article; carapace ventral margin continuously curved (Watling and McCann 1997)
<i>Eudorella emarginata</i>	Larger and more robust in appearance; uropod exopod distinctly shorter than endopod basal article

Comments
<p><i>E. pacifica</i> is the most frequently occurring and abundant cumacean species in Puget Sound sediment monitoring stations sampled between 1987 and 2016 (D. Burgess, personal observation).</p> <p>From Hart 1969: This species...was one of the numerically dominant organisms in benthic infauna at the soft-bottom stations in Puget Sound during 1963-1964.</p> <p>From Watling and McCann 1997: This species shows considerable variation, especially with respect to the teeth in the vicinity of the anteroventral corner and associated notch (Barnard and Given, 1961). Additionally, variation in the length of appendage articles and degree of setation has also been seen, both of which undoubtedly led Hart to create the new species <i>E. tridentata</i>. In the Santa Maria Basin area <i>E. pacifica</i> is very common and exhibits varying degrees of calcification as well as size of adults.</p>

Literature

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More Information

<p>More information about Puget Sound benthic invertebrates is available at: http://www.ecy.wa.gov/programs/eap/psamp/index.htm</p>	<p>Prepared by Dany Burgess (Ecology); reviewed by Jeff Cordell (UW - Seattle). This document is available on the Department of Ecology's website at https://fortress.wa.gov/ecy/publications/SummaryPages/1603202.html</p>	<p>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.</p>
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