

## Eudorella emarginata (Krøyer, 1846)

Nomenclature			
Phylum	Arthropoda		
Class	Malacostraca		
Order	Cumacea		
Family	Leuconidae		
Common Synonyms (S) Previous Names (PN)	Leucon emarginatus Kroyer 1846 (S)		



Distribution	
Type Locality	
Geographic Distribution	Arctic-Boreal species, recorded from both sides of the Atlantic in colder water and extending into the Arctic. Also recorded from the coast of Argentina (Petrescu 1991) and Puget Sound, WA.
Habitat	Shelf to bathyal (about 10 to 2000 m) on muddy sand and mud bottoms

## **Description**

From Couwelaar 2003, after Jones 1976 (unless otherwise noted)

Size: A large species; length to 12 mm.

**Body:** Slender, elongate, finely haired. All pereon segments visible dorsally.

**Carapace:** Short, subtruncate, smooth except for some serrations above a semicircular excavation which is bounded below by a slightly upturned acute tooth which projects beyond the upper serrations; the excavation is much smaller in male than in female. Serrate lower margin.

Antenna/Antennules: Antenna 1 bent between the second and third segments.

**Mouthparts:** Exopodites present on the 3<sup>rd</sup> maxillipeds. Mandibles broadened at the base.

Pseudorostrum: Directed dorsally in both sexes (characteristic of genus, Watling and McCann 1997)

**Pereopods:** Male, first 4 pairs with exopodites, rarely the first 2 pairs; female, exopodites on the first 3 pairs, rarely the first 2 pairs.

Pleopods: 2 pairs, rarely 1 or none, in male.

**Uropods:** Peduncle of uropod longer than the exopod, about equal to the proximal segment of the endopod, of which the distal segment, including its terminal spine, is much less than half as long.

Telson: No free telson.

Diagnostic	Characteristics	
Diagnostic Characteristics	Photo, Illustrations	Photo, Illustration Credit
		Sars 1899
Antero-ventral corner of carapace with single large sinus (Watling 1991)  Tooth below sinus large, projecting beyond the upper teeth (more pronounced in females)	Carapace, female (lateral view); specimen from 2014 PSEMP Long-term Station 38 Rep 2	Marine Sediment Monitoring Team
	Carapace, male (lateral view); specimen from 2014 PSEMP Long-term Station 38 Rep 2	

Marine 200 µm Sediment Monitoring Team Antennule main flagellum with plumose setae on lateral margin (Watling 1991) Antennule; specimen from 2015 PSEMP Long-term Station 38 Rep 3 Marine 200 µm Sediment Monitoring Team Pereopod 2 terminal article with many more than 12 setae (Watling 1991) P2 terminal article; specimen from 2015 PSEMP Long-term Station 38 Rep 3 Marine Sediment Monitoring Team Uropod exopod distinctly shorter than endopod basal article Uropod endopod terminal seta fused to terminal article

Telson and uropods (dorsal view); specimen from 2014 PSEMP Long-term Station 38 Rep 2

Related Species and Characteristic Differences				
Species Name	Diagnostic Characteristics			
Eudorella pacifica	Body more slender and less robust; uropod exopod same length (or slightly longer than) endopod basal article.			

## Comments

*E. emarginata* is encountered much less frequently by the Marine Sediment Monitoring Program than the common Puget Sound species, *E. pacifica*.

## Literature

- Couwelaar, M. van. 2003. Zooplankton and Micronekton of the North Sea *Eudorella emarginata*. CD-ROM, available online at <a href="http://species-judentification.org/species.php?species\_group=Zmns&menuentry=soorten&id=412&tab=beschrijving">http://species\_judentification.org/species.php?species\_group=Zmns&menuentry=soorten&id=412&tab=beschrijving</a>
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- Kroyer, Henrik. 1846-1849. Naturhistorisk Tidsskrift Udgivet af Henrik Kroyer. Inden Rækkes andet Bind. Kjøbenhavn. Forlaget af universitetsboghandler C. A. Reikel. Indhold af den nye rækkes andet bind. pp. 181, 209. (Version in Danish)
- Petrescu, Iorgu. 1991. Contribution to the knowledge of genus *Eudorella* Norman, 1867 (Crustacea, Cumacea, Leuconidae) with the description of two new species: *Eudorella bacescui* n.sp. and *Eudorella menziesi* n.sp. *Travaux Du Museum D'Histoire Naturelle "Grigore Antipa"* 31: 375-385.
- Sars, G.O. 1899. An account of the crustacean of Norway with short descriptions and figures of all the species. Vol III Cumacea. Bergen Museum. 115 pp.
- Watling, L. 1991. Revision of the Cumacean Family Leuconidae. *Journal of Crustacean Biology*, 11(4): 579.

More Information		
More information about Puget Sound benthic invertebrates is available at: <a href="http://www.ecy.wa.gov/programs/gap/psamp/index.htm">http://www.ecy.wa.gov/programs/gap/psamp/index.htm</a>	Prepared by Dany Burgess (Ecology) and Brooke McIntyre (WCC); reviewed by Jeff Cordell (UW - Seattle). This document is available on the Department of Ecology's website at <a href="https://fortress.wa.gov/ecy/publications/SummaryPages/1603201.html">https://fortress.wa.gov/ecy/publications/SummaryPages/1603201.html</a>	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.