



## *Alitta virens* (M. Sars, 1835)


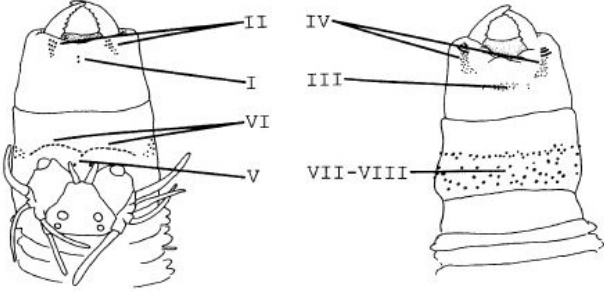
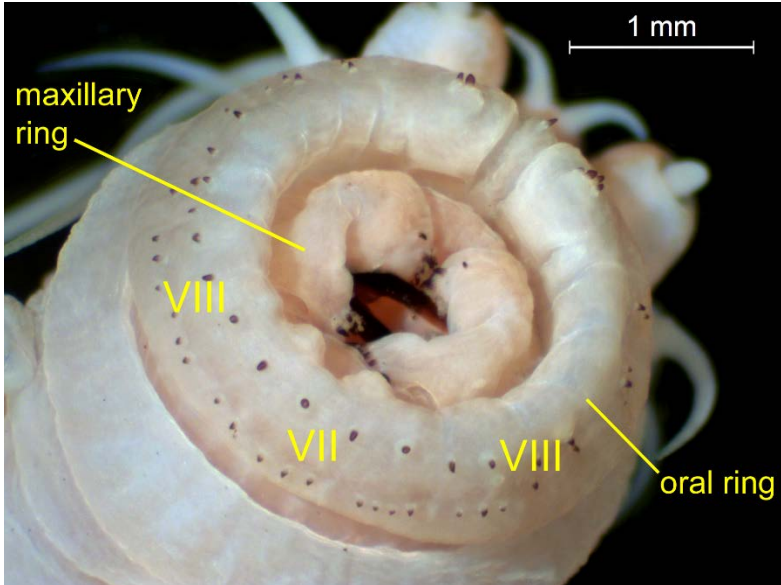
Nomenclature	
Phylum	Annelida
Class	Polychaeta
Order	Phyllodocida
Family	Nereididae
	<b>Synonyms:</b> <i>Nereis virens</i> Sars, 1835 <i>Neanthes virens</i> (M. Sars, 1835) <i>Nereis (Neanthes) varia</i> Treadwell, 1941
Synonyms	<b>Superseded combinations:</b> <i>Nereis (Alitta) virens</i> M Sars, 1835 <i>Nereis (Neanthes) virens</i> Sars, 1835

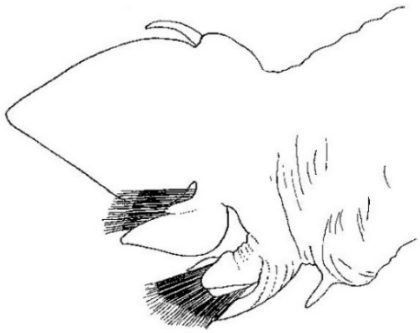
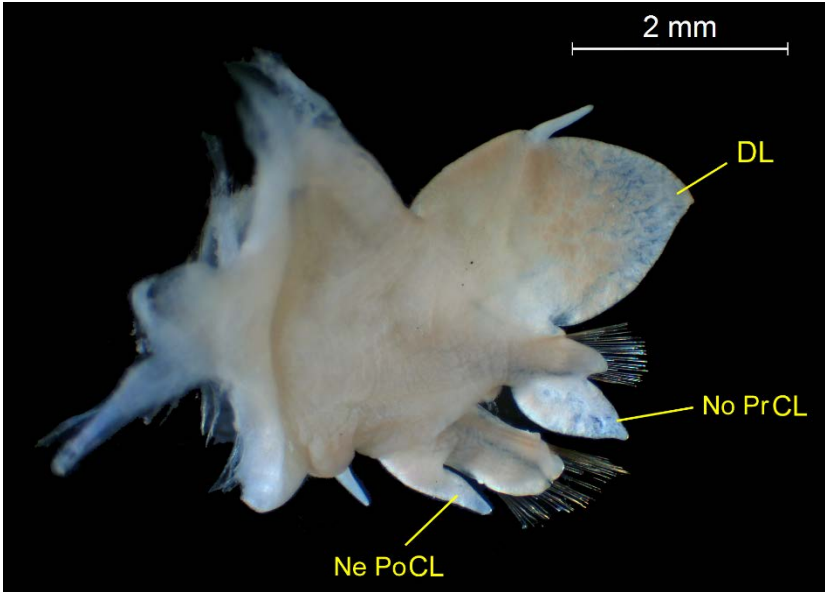
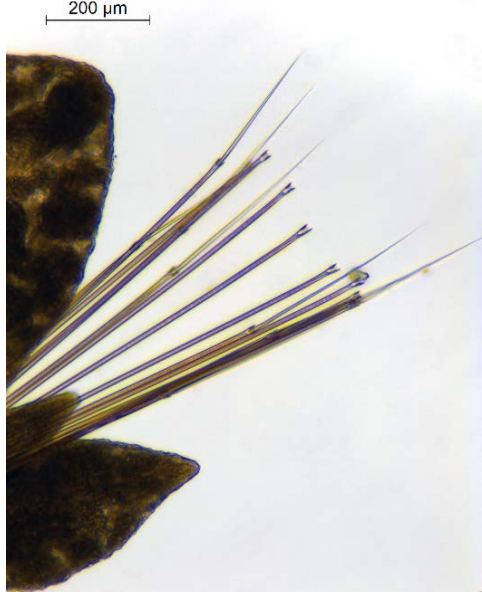


Distribution	
Type Locality	Manger, western Norway (Bakken and Wilson 2005)
Geographic Distribution	Boreal areas of northern hemisphere (Bakken and Wilson 2005)
Habitat	Intertidal, sand and rock (Blake and Ruff 2007)

Description
From Hartman 1968 (unless otherwise noted)
<p><b>Size/Color:</b> Large; length 500-900 mm, width to 45 mm for up to 200 segments (Hartman 1968). Generally cream to tan in alcohol, although larger specimens may be green in color. Prostomium pigmented except for white line down the center (personal observation).</p> <p><b>Body:</b> Robust; widest anteriorly and tapering posteriorly.</p> <p><b>Prostomium:</b> Small, triangular, with 4 eyes of moderate size on posterior half. Antennae short, palps large and thick. Eversible proboscis with sparse paragnaths present on all areas except occasionally absent from Area I (see "Diagnostic Characteristics" section below for definition of areas). Areas VII and VIII with 2-3 irregular rows. 4 pairs of tentacular cirri, the longest extending to at least chaetiger 6.</p> <p><b>Parapodia:</b> First 2 pairs uniramous, reduced; subsequent pairs larger, foliaceous, with conspicuous dorsal cirri.</p> <p><b>Chaetae:</b> Notochaetae all spinigers; neuropodia with spinigers and heterogomph falcigers.</p> <p><b>Pygidium:</b> 2 long, slender anal cirri.</p>

## Diagnostic Characteristics

Diagnostic Characteristics	Photo, Illustrations	Photo, Illustration Credit
<p>2 pairs of moderately-sized eyes</p>	 <p><i>Prostomium and anterior body region (dorsal view); specimen from 2015 PSEMP Urban Bays Station 160 (Bainbridge Basin, WA)</i></p>	<p>Marine Sediment Monitoring Team</p>
<p>Conical paragnaths present on both oral and maxillary rings of proboscis</p> <p>Paragnaths in 2 or 3 irregular rows on Areas VII and VIII</p>	 <p><i>Diagram of paragnaths in a representative nereid (LEFT: dorsal view; RIGHT: ventral view).</i></p>  <p><i>Partially everted proboscis (ventral view); specimen from 2015 PSEMP Urban Bays Station 160</i></p>	<p>Bakken and Wilson 2005, p. 510, figure 3</p> <p>Marine Sediment Monitoring Team</p>

<p>Dorsal ligule of notopodia large, leaf-like, much bigger than other ligules, with minute cirrus on upper edge (Banse and Hobson 1974)</p> <p>Prechaetal notopodial lobe as long as the dorsal notopodial ligule (characteristic of genus; Bakken and Wilson 2005)</p> <p>Postchaetal neuropodial lobe present (characteristic of genus; Bakken and Wilson 2005)</p>	 <p style="text-align: center;"><i>Parapodium from median/posterior segments</i></p>  <p style="text-align: center;"><i>Middle parapodium (anterior view); DL – dorsal ligule; No PrCL – notopodial prechaetal lobe; Ne PoCL – neuropodial postchaetal lobe; specimen from 2015 PSEMP Urban Bays Station 170</i></p>	<p>Hartman 1968, p. 531, figure 3</p> <p>Marine Sediment Monitoring Team</p>
<p>Posterior notopodia with spinigers only (most broken off in photo, right); NO homogomph falcigers</p>	 <p style="text-align: center;"><i>Notochaetae from posterior notopodium; specimen from 2015 PSEMP Urban Bays Station 160</i></p>	<p>Marine Sediment Monitoring Team</p>

## Related Species and Characteristic Differences

Species Name	Diagnostic Characteristics
<i>Alitta brandti</i>	Paragnaths in band of at least 4-5 rows on Areas VII and VIII (see comments below).
<i>Nereis vexillosa</i>	Also attains large body size and can be greenish in color, but dorsal notopodial ligule is greatly elongate and strap-like in posterior chaetigers.

## Comments

*Alitta virens* and *Alitta brandti* (= *Neanthes brandti*) are very closely related, overlapping in geographic range, and similar in appearance, separated in keys only by the arrangement and number of paragnaths, a feature that has been shown to be variable within *A. virens* (Breton et al 2004). This has led some authors to synonymize the two species or lump them together as part of a species complex (Bakken and Wilson 2005; Blake and Ruff 2007). More study is needed to determine whether they are actually genetically distinct taxa. The same may be true for *A. grandis*, another closely-related European species that may be part of the same complex (Khlebovich 1996).

## Literature

- Bakken, T. and R.S. Wilson. 2005. Phylogeny of nereidids (Polychaeta, Nereididae) with paragnaths. *Zoologica Scripta*. 34(5): 507-547.
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- Hartman, O. 1968. Atlas of the errantiate polychaetous annelids from California. *Allan Hancock Foundation Miscellaneous Publications*, University of Southern California. Los Angeles, CA. 828 pp. (p. 531, as *Neanthes virens*)
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- Kozloff, E.N. 1993. *Seashore life of the northern Pacific coast: an illustrated guide to northern California, Oregon, Washington, and British Columbia*. University of Washington Press, Seattle, WA. (p. 135, as *Nereis virens*).

Sars, M. 1835. *Beskrivelser og lagttagelser over nogle moerkelige eller nye i Havet ved den Bergenske Kyst levende Dyr af Polypernes, Acalephernes, Radiaternes, Annelidernes og Molluskernes classer, med en kort Oversigt over de hidtil af Forfatteren sammesteds fundne Arter og deres Forekommen.* Bergen, Thorstein Hallagers Forlag hos Chr. Dahl, R.S., xii + 81 pp., 15 plates., available online at <http://www.biodiversitylibrary.org/item/46907>

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