

DEPARTMENT OF

Puget Sound Polychaetes: Family Scalibregmatidae



Family Scalibregmatidae

General characters (from Blake, 2000)

- Body short (not exceeding 60 segments) and stout, or elongate with annulated segments; may be inflated anteriorly.
- Prostomium lacking palps and antennae.
- Eversible pharynx soft and unarmed.
- Parapodia biramous, poorly developed, with widely separated rami; dorsal and ventral cirri and post-setal lamellae, when present, found only in posterior parapodia.
- Branchiae present or absent; when present, having one to many branches.
- Setae all simple and include long thin capillaries; may have acicular spines (first 1-4 parapodia) and lyrate setae.
- Pygidium terminal with 0-7 anal cirri.

Genus-level diagnostic characters for Puget Sound species

- Presence or absence of large curved spines in anterior parapodia.
- Presence or absence and distribution of branchiae.
- Presence and shape of dorsal and ventral cirri.

Genus Asclerocheilus

Asclerocheilus beringianus Uschakov, 1955

(From Blake, 2000)

- Body elongate, narrowing only in far posterior; covered with annulated rings.
- Prostomium reduced, bearing 2 thick frontal horns.
- Parapodia without parapodial lamellae.
- Setae including enlarged curved hirsute spines present in notopodia of setigers 1 and 2, lyrate setae from setiger 3, and capillary setae throughout.
- Branchiae absent.



Whole body, ventrolateral view (I,r)



Prostomium, dorsal view, note frontal horns (I); anterior end, lateral view, prostomium retracted (r)



Anterior end, ventrolateral view, prostomium partially retracted (I); Notopodial spines in setigers 1,2 (r)



Setiger 1 with large, curved, notopodial spines (I,r)



Setiger 3 lyrate notosetae (I); setiger 3 capillary neurosetae (r)

Genus Scalibregma

Scalibregma californicum Blake, 2000

- Previously identified as *Scalibregma inflatum*, described from Norway, which was considered a cosmopolitan species. Blake (2000) referred California specimens to *S. californicum*; *S. californicum* differs from *S. inflatum* in having unidentate, rather than bifurcated, short pointed spines in setiger 1.
- Body elongate, expanded in anterior half, thereafter tapering; pigmented yellow-orange.
- Prostomium T-shaped, with pointed lateral processes; posterior of prostomium visible dorsally; eyes absent.
- Arborescent branched branchiae present on setigers 2-5.
- Parapodia of posterior segments with dorsal and ventral cirri.
- Slender capillary setae present throughout body; setiger 1 with a row of short, inconspicuous spines; lyrate setae present from setiger 2.



Whole body, laterial views (l,r)



Anterior end, dorsal view with T-shaped prostomium (I); branched branchiae on setigers 2-5 (r), note orange pigmentation



Setiger 1 capillary noto- and neurosetae (I,r)



Setiger 1 unidentate spines (I,r)



Lyrate notosetae - setiger 6

Genus Travisia

• Persson and Pleijel (2005) transferred *Travisia* from family Opheliidae to family Scalibregmatidae based on DNA evidence.

Travisia pupa Moore, 1906

- Body large, thick, grub-like; with 25-27 setigers.
- Posterior parapodia without enlarged parapodial lobes.
- Vesicles or beads on body surface not uniform, those of posterior annuli larger, wart-like in appearance.
- "Garlic worm" smells strongly of garlic.



Anterior end, lateral view (I); posterior end, lateral view (r)



Laterial views of body - vesicles of various sizes, parapodial lobes (pl) inconspicuous, branchia (b) present (l,r)

Travisia brevis Moore, 1923

- Body moderate-sized, grub-like, distinctly fusiform; with 24-25 setigers.
- Posterior parapodia with small, tapering parapodial lobes.
- Vesicles or beads on body surface uniform in size.



Whole body, lateral view (I); anterior end, dorsal view (r)



Anterior ventral view, prostomium and mouth (I); posterior lateral view, parapodia (pp) and branchia (br) (r)



Posterior end, ventral view (I); body vesicles of uniform size (r)

Additional species of Scalibregmatidae found in Puget Sound

Travisia forbesii

Literature

- Blake, J.A. 2000. Family Scalibregmatidae Malmgren, 1867. Pages 129-144. IN: Blake, J. A.; B. Hilbig; and P. H. Valentich-Scott (editors). Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and Western Santa Barbara Channel. Volume 7 - The Annelida Part 4. Polychaeta: Fabelligeridae to Sternaspidae. Santa Barbara Museum of Natural History. Santa Barbara, California. ISBN-13: 978-0936494128.
- Persson, J. and Pleijel, F. 2005. On the phylogenetic relationships of *Axiokebuita*, *Travisia* and Scalibregmatidae (Polychaeta). Zootaxa 998: 1-14.

More Information

More information about Puget Sound benthic invertebrates is available at: http://www.ecy.wa.gov/programs/eap/sediment/

This document is available on the Department of Ecology's website at https://fortress.wa.gov/ecy/publications/SummaryPages/1403248.html.

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These notes were compiled by Kathy Welch and Maggie Dutch after a polychaete workshop held on March 21, 2014 at the Department of Ecology.