

Key to Maldanidae

1. Ventral hooks from 5th chaetiger, or later. Hooks on first few neuropodia in double rows. Cephalic plate absent but prostomium "pinched-up" as a crest, dorsally. Collared segments present. Rhodininae.
Rhodine .. 2. (1st chaetiger + jaws with prostomium chaetae small) ^{anteriorly on set 2, set 3.} _{posterior segments with skirts!}

.. Ventral hooks ^(proacanthae) from 1st, 2nd or 3rd chaetiger. Hooks always in single rows. Cephalic plate present or absent. Collared segments present or absent. .. 3.

2. Collar ^{sometimes weakly, shallow} distinctly indented dorsally, with smooth margins. Rear collar ^{set. 2.} has glands inside and out. 3rd chaetiger with distinct glandular band ventrally, behind the parapodia. ^{not visible in preserved material!}
Rhodine loveni Malmgren, 1865. (MCS; H; F) _{post. skirts entire with deep notch dorsally.}
[Northern ?; fine sand and mud, shallow water.] ^{with chaet. staining with R.B.}

.. Collar not indented dorsally, with crenulate margins on the rear segments. Rear collar ^{set. 2.} without glands. 3rd chaetiger with distinct glandular band ventrally, in front of parapodia.

Rhodine gracilior (Tauber, 1879). (MCS; H; G; D)
[Northern ?; fine sand and mud, inshore and offshore.] _{post. skirts crenulate without dorsal notch.}

3. Cephalic plate present, with or without a notched rim. Anal plate or funnel present. .. 4.

.. Cephalic plate and rim absent. Anal plate or funnel present or absent. .. 22.

4. Anal plate present. No anal cirri. Anus placed dorsally, below the plate. No acicular hooks in anterior neuropodia. Maldaninae. .. 5.

.. Anal funnel present, with or without cirri. Anus central. Acicular hooks present in anterior neuropodia. Euclymeninae... 7.

5. Cephalic plate round, with a short, indistinct longitudinal bulge (keel). Cephalic rim may be smooth or serrated, deeply incised laterally. Nuchal slit large, distinctly curved. Anterior edge of 1st chaetiger extends to form a collar.

Asychis biceps (M. Sars, 1861). (MCS; H; F)
[Ubiquitous ?; in mud.]

.. Cephalic plate elongate and high, with distinct longitudinal bulge (keel). Cephalic rim smooth, notched laterally. Nuchal slit short, straight or slightly curved. 1st chaetiger does not extend into a collar. *Maldane*. .. 6.

6. Cephalic plate very convex. Ventral rim of anal plate entire or feebly denticulate.

Maldane sarsi Malmgren, 1865. (MCS; H; F; G; D; U)
[Ubiquitous ?; in mud.]

.. Cephalic plate elongate and feebly convex. Ventral rim of anal plate distinctly denticulate.

Maldane glebifex Grube, 1860. (MCS; F)
[Southern ?; in mud.]

7. Longitudinal rows of vascular cirri in last few segments. Tubes attached to stones. Hooks of first 3 chaetigers are acicular.

Johnstonia clymenoides Quatrefages, 1865. (MCS; F; D)
[Southern ?; Shallow water, in sand and between stones.]

.. Without rows of vascular cirri in posterior segments. .. 9.

9. Cephalic plate reduced. Pygidium disc-shaped to cylindrical, with few cirri, or without cirri. Distinct triangular or parabolic glandular region on 8th chaetiger. First neuropodia with uncini. *Clymenura*.

Clymenura borealis (Arwidsson, 1906). (MCS; H; U)

[Northern ?; all depths.]

Clymenura clypeata (Saint-Joseph, 1894). (MCS; F) - No anal cirri.

[Ubiquitous ?; shallow water, fine sand, often very common.]

Clymenura johnstoni (McIntosh, 1915). (MCS)

Clymenura leiopygos (Grube, 1860). (MCS) - Similar to *C. clypeata* ? (synonymised in Fauvel).

.. Cephalic plate well-developed, with or without well developed cephalic rim. Pygidium funnel-shaped to conical, with or without cirri. No glandular region on 8th chaetiger. .. 10.

10. Pygidium conical, without cirri. Hooks on the front neuropodia slightly reduced. Nuchal slits long, straight.

Microclymene acirrata Aswidsson, 1906. (H)

[Northern, to Skagerrak.]

.. Pygidium funnel-shaped, with numerous cirri. Hooks on the front neuropodia are reduced normal hooks, or acicular. Nuchal slits straight, or curved. .. 11.

11. Cephalic plate with well-developed rim. . Hooks on the front neuropodia are reduced normal hooks, or acicular. Anal funnel with all cirri of similar length, or with one slightly, or distinctly larger ventral cirrus beside shorter ones. .. 12.

.. Cephalic plate with indistinct or absent rim. . Hooks on the front neuropodia acicular. Anal funnel with all cirri of similar length, or with two longer ventral cirri. .. 21.

12. 4th chaetiger extends to form a collar, anteriorly. Anal cirri all of similar length.

Clymenella cincta (Saint-Joseph, 1894). (MCS; F) *Neuropodia 2 sets 1-3 with 1 or 2 stout acicles.*
[Channel; low water, in sand.] *Full of Cl. &.*

Clymenella torquata (Leidy, 1855). (MCS; H) *Neuropodia 2 sets. 1-3 with groups of 5-10 uncini.*
[American, imported to S. North Sea ?]

.. No segment extends to form a collar, anteriorly. Anal cirri all of similar length, or with one slightly, or distinctly larger ventral cirrus beside shorter ones. .. 13.

13. Anal funnel short. Anal cone originates at base of cirri; may or may not protrude. Cephalic rim smooth. Hooks of first 3 chaetigers are acicular. *Praxillella*.. 14.

.. Anal funnel long or short. Anal cone originates at base of cirri; does not protrude. Cephalic rim smooth or crenulate. .. 15. | 7

14. Prostomium conical, ending in a finger-like process.

Praxillella gracilis (M. Sars, 1861). (MCS; F; U)

[Ubiquitous ?; in sand or mud.]

.. Prostomium bluntly conical. .. 15.

15. 18 chaetigers. 3 posterior achaetous segments. Anal cone protrudes considerably. Anus clearly dorsally displaced. Prostomium with ocelli.

Praxillella affinis (M. Sars, 1872). (MCS; H; F; G; D)

[Ubiquitous ?; in mud and sandy mud.]

.. 19 chaetigers. 4 - 5 posterior achaetous segments. Anal cone does not extend far beyond cirri. Anus terminal. Prostomium with or without ocelli. .. 16.

16. 4 - 5 posterior achaetous segments. Nuchal slits extend as far as lateral wing incision. Prostomium without ocelli.

Praxillella praetermissa (Malmgren, 1865). (MCS; H; F; G; D; U)
[Ubiquitous ?; in mud and shelly sand].

.. 5 posterior achaetous segments. Nuchal short, only extending along front third of prostomium. Prostomium with ocelli.

Praxillella quadrilobata (M. Sars, 1856). (H)
[Northern.]

17. Short anal cirri of varying lengths. 19 chaetigers.

Heteroclymene robusta Arwidsson, 1907. (MCS; H; F)
[Western ?; in sand, mud or shell.]

.. Short anal cirri of uniform lengths. 18 - 20 chaetigers. Hooks of first 3 chaetigers are acicular. *Euclymene*. .. 18.

18. Cephalic rim crenulate on posterior edge; incised on either side.

Euclymene lumbricooides (Quatrefages, 1865). (MCS; F; D)
[Shallow water *Zostera* beds and amongst stones. Western ?].

.. Cephalic rim not crenulate; incised on posterior edge and on either side. .. 19.

19. 20 chaetigers. 3 posterior achaetous segments. Nuchal slit extends almost the entire length of prostomium. Anal funnel with about 10 - 30 longer cirri as well as shorter ones and one long ventral cirrus.

Euclymene droebachiensis (M. Sars, 1872). (MCS; H)
[Northern.]

.. 18 - 19 chaetigers. 3 - 5 posterior achaetous segments. Nuchal slit extends only as far as lateral margin. Anal funnel with about 5 - 10 longer cirri as well as shorter ones and one only slightly longer ventral cirrus. .. 20.

20. 18 - 19 chaetigers. 5 posterior achaetous segments. Prostomium without ocelli.

Euclymene lindrothi Eliason, 1962. (MCS; H)
[Recorded from Skagerrak.]

.. 19 chaetigers. 3 posterior achaetous segments. Prostomium with ocelli.

Euclymene oerstedii (Claparede, 1863). (MCS; H; F; D)
[Ubiquitous ?; Shallow water fine sand, often very common]

21. Cephalic rim skin-like, undivided. Anal cirri small, with two longer ventral anal cirri. Hooks of first four chaetigers are acicular.

Proclymene muelleri (M. Sars, 1856). (MCS; H; F; G)
[Northern ?; in sand and mud.]

.. Cephalic rim bulge-like, divided in two. Anal cirri of uniform length.

Isocirrus planiceps (M. Sars, 1872). (H)
[Northern, to Skagerrak.]

22. Anal funnel present. Anal cirri present or absent. 2 or 3 types of dorsal chaetae. Nicomachinae. .. 23.

.. No anal funnel. No anal cirri. 1 or 2 types of dorsal chaetae. Lumbriclymeninae. ..27.

23. No acicular chaetae in anterior neuropodia. Spatulate notochaetae present. Neurochaetae all S-shaped, with a swelling at the inflection.

Micromaldane ornithochaeta Mesnil, 1897. (MCS; F)
[Western ?; Crptofaunal.]

Acicular chaetae present in anterior neuropodia; acicular in chaetigers 1 - 3; hooks with long shafts, later. Spatulate notochaetae absent. ..24.

24. Anal funnel symmetrical or assymmetrical, with cirri. Posterior segments without dorsal process on posterior edge. *Nicomache*. .. 25.

.. Anal funnel distinctly assymmetrical, without cirri. Posterior segments with or without well developed papilla-like dorsal process on posterior edge. *Petaloproctus*.

Petaloproctus tenuis borealis Arwidsson, 1906. (MCS; H; U)
[Northern ?]

Petaloproctus terricola Malmgren, 1865. (MCS; F; D)
[Southern ?; shallow water, mud and muddy sand.]

25. Nuchal slits S-shaped. 1 - 3 achaetous posterior segments. 22 - 23 chaetigers. Adults without ocelli. Anal funnel only very slightly assymmetrical.

Nicomache lumbricalis (Fabricius, 1780). (MCS; H; F; G; D)
[Ubiquitous ?; in sand and muddy sand.]

.. Nuchal slits slightly bent to semicircular. 1 achaetous posterior segment. Adults with ocelli. .. 26.

26. Anal funnel only very slightly assymmetrical. In profile, hooks from mid-body segments have 5 - 6 denticles above main fang.

Nicomache personata Johnson, 1901. (MCS; H; F; G)
[Northern.]

.. Anal funnel assymmetrical, set at an oblique angle to body axis. In profile, hooks from mid-body segments have up to 5 denticles above main fang. 23 chaetigers.

Nicomache trispinata Arwidsson, 1906. (MCS; H; F; G)
[Ubiquitous ?; amongst stones, tubes attached to stones or old shells.]

27. 20 - 29, or more chaetigers. Anterior segments shorter than prostomium/peristomium. Hooks with single hair under main fang.

Praxillura longissima Arwidsson, 1906. (MCS; H)
[Northern.]

Acicular spines in neuropodia of anterior segs.
usually 6 segs (but ranges from 4-14)

.. 19 chaetigers. Anterior segments longer than prostomium/peristomium. Hooks with several hairs under main fang. Pygidium conical, with ventral valve. *Lumbriclymene*. .. 28.

28. Pygidium diagonally truncated. Anus dorsal. Parapodia of 6th chaetiger in middle of segment. Acicular hooks small, slender.

Lumbriclymene minor Arwidsson, 1906. (MCS; H; D)
[Ubiquitous ?; amongst rocks and shells on muddy bottoms.]

.. Pygidium cylindrical to nearly conical. Anus terminal. Parapodia of 6th chaetiger clearly behind middle of segment. Acicular hooks large, stout.

Lumbriclymene cylindricauda M. Sars, 1872. (MCS; H; D)
[Northern]

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