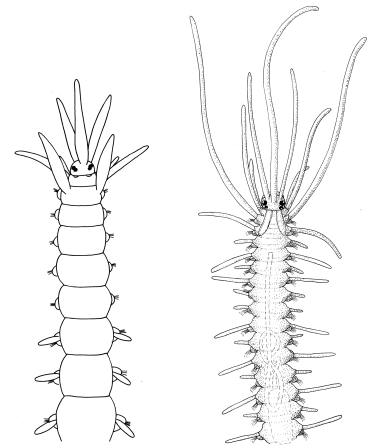


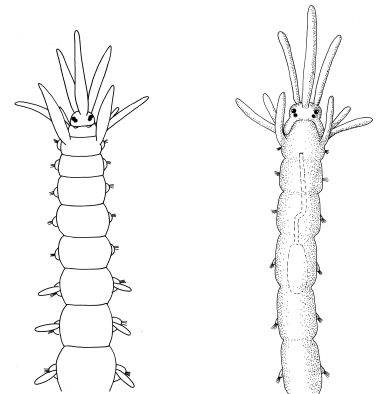
Key to autolytine syllids from waters around British Isles

1. Dorsal cirri absent on at least chaetiger 2–5..... 2
- Dorsal cirri present on all chaetigers..... 4

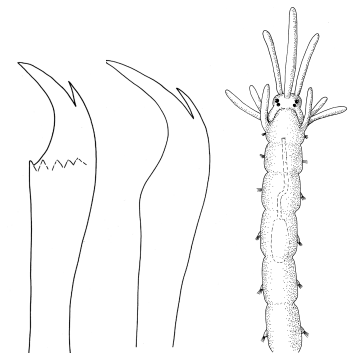


2. Dorsal cirri absent on chaetiger 2–5 only
Imajimaea draculai (San Martín & López, 2002)
[Skagerrak–Northwest of Spain, in 170–320 m, in tubes attached to *Funiculina quadrangularis*]

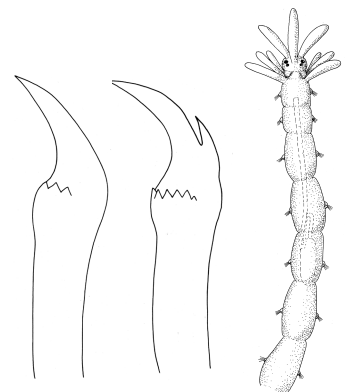
- Dorsal cirri absent from chaetiger 2 on..... 3



3. Chaetiger 1–4 with bidentate chaetae only.
Trepan with 6–10 teeth. Pharynx with indistinct sinuation ***Procerastea nematodes*** Langerhans, 1884
[Scandinavia – Madeira – Mediterranean in 40–50 m, among gravel and shells with hydroids, inside sponges]

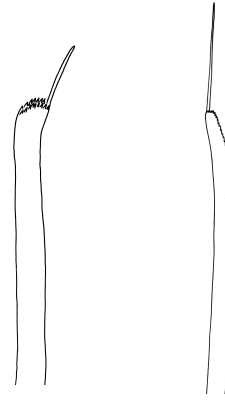


- Chaetiger 1–4 with both unidentate and bidentate chaetae. Trepan with 16–28 teeth. Pharynx with distinct sinuation ***Procerastea halleziana*** Malaquin, 1893 [Scandinavia – Mediterranean, in 1–150 m, among algae, hydroids (e.g. *Tubularia* spp, *Syncoryne eximia*), bryozoans (e.g. *Flustra foliacea*), stones, shells, and gravel]



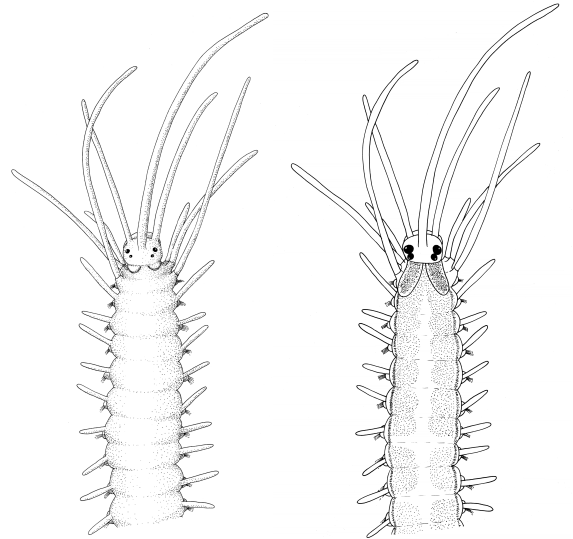
4. Cirrophores present on tentacular cirri and first dorsal cirri only. Bayonet chaeta thick, denticulate at distal end of shaft..... 5

– Cirrophores present on tentacular cirri and all dorsal cirri. Bayonet chaeta thin, denticulate along distal half of shaft..... 7



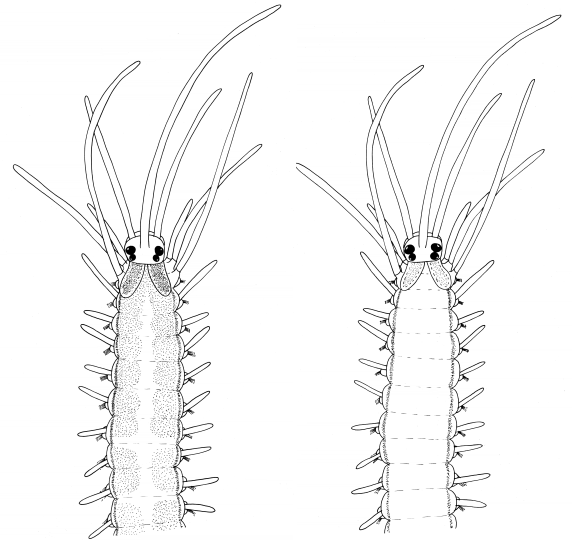
5. Nuchal epaulettes extending to between median and end of tentacular segment. Live specimens with or without two faint brown lines far apart, just above - parapodial lobes ***Proceraea cornuta*** (Agassiz, 1862) [Scandinavia – Faroe Islands – British Isles, in 0-20 m, among various algae with bryozoans and hydroids, in *Mytilus*-habitat]

– Nuchal epaulettes extending to end of chaetiger 1. Live specimens with two distinct dark brown/black longitudinal lines far apart, just above parapodial lobes, with or without additional brown squares on dorsum..... 6



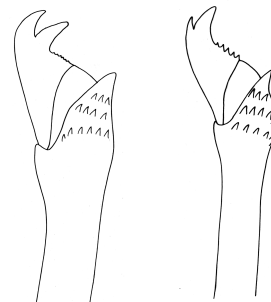
6. Live specimens with two distinct dark brown/black longitudinal lines far apart, just above parapodial lobes, with additional brown squares on dorsum ***Proceraea picta*** Ehlers, 1864 [British Isles – Mediterranean in 5–30 m, shells and gravel with epifauna, in coralligene, among hydroids and algae]

– Live specimens with two distinct dark brown/black longitudinal lines far apart, just above parapodial lobes, without additional brown squares on dorsum ***Proceraea scapularis*** (Claparède, 1864) [British Isles – Mediterranean, in 10–60 m, in coralligene, among hydroids, bryozoans, and algae]



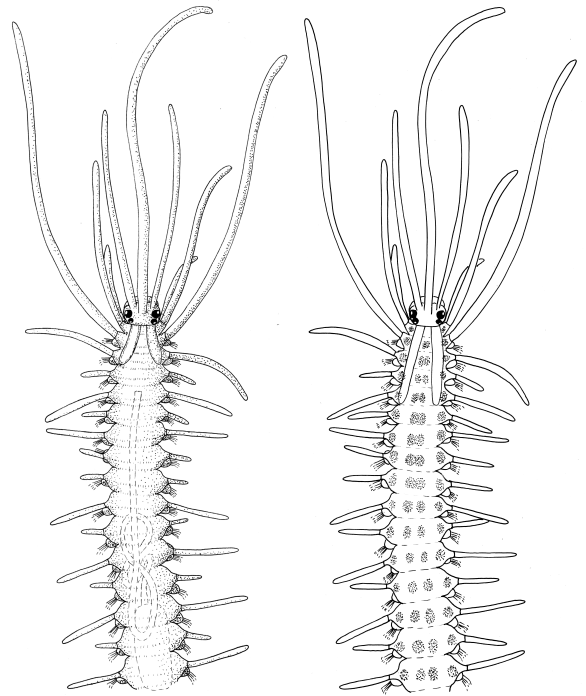
7. Compound chaetae in median chaetigers with distal and subdistal tooth of equal size..... 8

– Compound chaetae in median chaetigers with distal tooth smaller than subdistal tooth..... 9



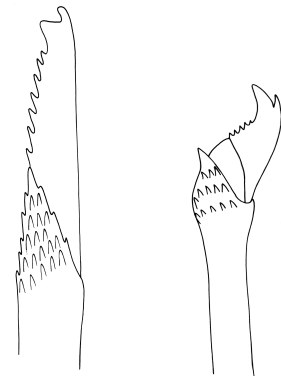
8. Nuchal epaulettes extending to maximum end of chaetiger 2. Cirrophores shorter than parapodial lobes. Pharynx with single to several sinuations. Large difference in size between large and small trepan teeth. Large trepan teeth not fused to adjacent smaller teeth. Live specimens without distinct colour pattern
Epigamia alexandri (Malmgren, 1867) [Spitsbergen – Iceland – Bay of Biscay, in 30–80 m, among shells, stones, and gravel with hydroids]

– Nuchal epaulettes extending to between end of chaetiger 3 and end of chaetiger 4. Cirrophores equal in length to parapodial lobes. Pharynx with single sinuation. Moderate difference in size between large and small trepan teeth. Large trepan teeth sometimes, but not always, fused to adjacent smaller teeth. Live specimens with 4 red dorsal spots across each segment ***Myrianida rubropunctata*** (Grube, 1860) [British Isles – Madeira – Mediterranean, in 10–40 m, among gravel with epifauna, in coralligene]



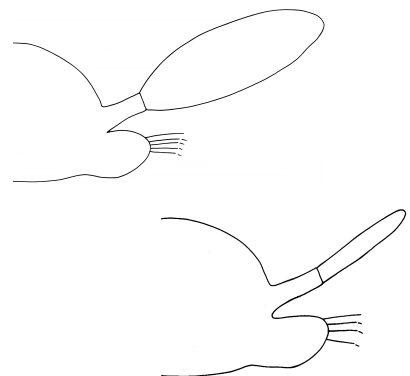
9. All compound chaetae with relatively long chaetal blades (2.5 times longer than wide). Trepan teeth with 3 sizes, in 2 or 3 different rings. Epigamous reproduction ***Epigamia labordai*** (San Martín & Lopéz, 2002) [Northwest of Spain, in 769–780 m]

– Most compound chaetae with relatively short chaetal blades (2 times longer than wide). Trepan variously denticulated, in 1 ring. Schizogamous reproduction..... 10



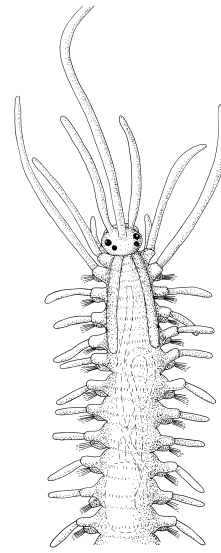
10. Cirrostyles flattened in cross section. Live specimens with orange to red patches on dorsum on every third or fourth segment ***Myrianida pinnigera*** (Montagu, 1808) [British Isles – Mediterranean, in 1–30 m, among algae, sponges, hydroids, tunicates, in coralligene]

– Cirrostyles cylindrical in cross section. Live specimens without red patches on dorsum..... 11

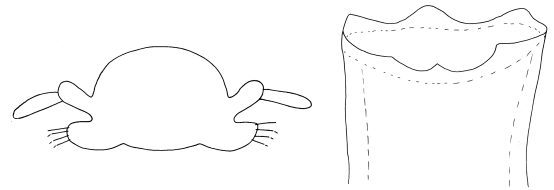


11. Pharynx with several sinuations..... 12

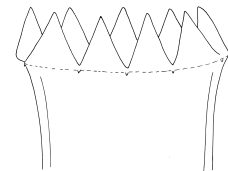
Pharynx with single or two sinuations..... 13



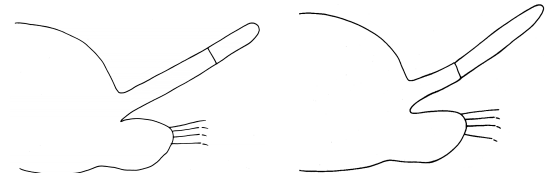
12. Cirrophores inflated, equal in length to parapodial lobes. Trepan without distinct teeth
Myrianida inermis Saint-Joseph, 1887 [Scandinavia – Mediterranean, in 20–80 m, among hydroids, bryozoans, tunicates, in coralligene]



– Cirrophores not inflated, shorter than parapodial lobes. Trepan with 9 equal teeth *Myrianida convoluta* (Cognetti, 1953) [Northwest of Spain – Mediterranean in 0–10 m, among algae, hydroids, bryozoans, sponges, and tunicates]

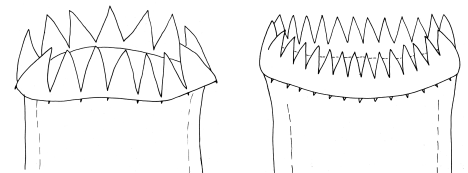


13. Cirrophores on both short and long cirri longer than cirrostyles in median chaetigers *Myrianida sanmartini* new species [North Sea – Portugal, from 1–40 m, among tunicates with hydroids, in mud, shells and detritus]

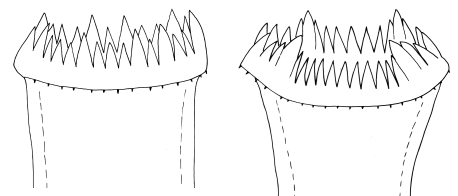


– Cirrophores on at least short cirri shorter than cirrostyles..... 14

14. Trepan with equal teeth..... 15

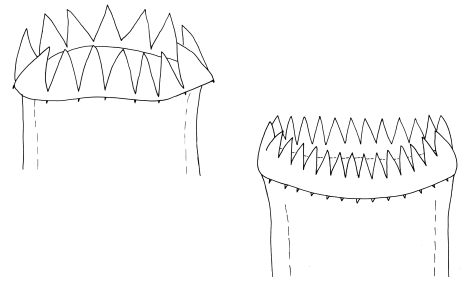


– Trepan with unequal teeth..... 17



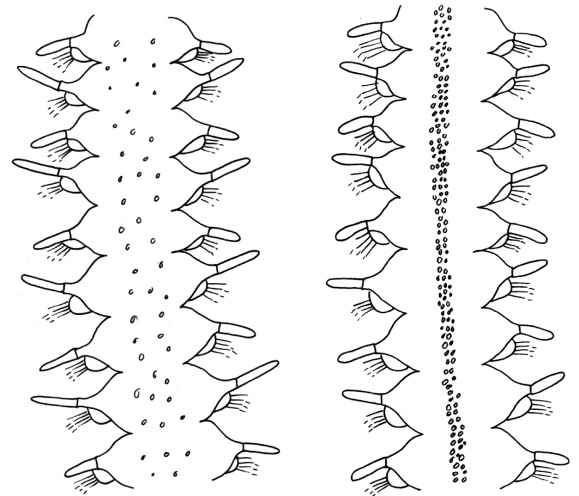
15. Trepan with a thin basal ring, with 12–24 equal teeth. Live specimens with median antenna and pygidial cirri white *Myrianida quindecimdentata* (Langerhans, 1884) [Scandinavia – Madeira – Mediterranean, in 60–280 m, shells and gravel, dead *Lophelia*, in coralligene]

– Trepan with a thick basal ring, with ≥ 24 equal teeth. Live specimens with median antenna and pygidial cirri not white..... 16



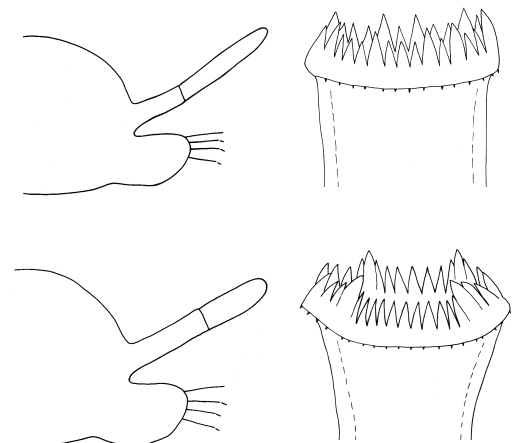
16. Cirri with more or less distinct alternation in length along the body. Cirrophores on long cirri slightly longer than parapodial lobes. Live specimens with at the most faint reddish sides anterior to proventricle. Intestine with scattered white intestinal granular accumulations *Myrianida prolifera* (O.F. Müller, 1788) [Scandinavia – Faroe Islands – Atlantic coast of France, in 1–40 m, in association with hydroids e.g. *Laomedea* and *Lafoea*]

– Cirri with at the most slight alternation in length along the body. Cirrophores on long cirri at the most equal to parapodial lobes. Live specimens with reddish sides anterior to proventricle. With a more or less intense white mid-dorsal line posterior to proventricle from intestinal granular accumulations. *Myrianida edwardsi* (Saint-Joseph, 1887) [Scandinavia – Faroe Islands – Atlantic coast of France, in 1–40 m, among algae, hydroids and bryozoans]



17. Cirrophores on long cirri shorter than cirrostyles. Trepan with 8–10 large teeth and 14–21 smaller, 1 large alternating with 1–3 smaller. Large trepan teeth not fused to adjacent smaller teeth *Myrianida brachycephala* (Marenzeller, 1874) [Scandinavia – Mediterranean, in 1–80 m, among hydroids, bryozoans, tunicates, in coralligene]

– Cirrophores on long cirri longer than cirrostyles. Trepan with 4–5 large teeth and 25–39 smaller, 1 large alternating with 4–13 smaller. Large trepan teeth fused to adjacent smaller teeth *Myrianida langerhansi* (Gidholm, 1967) [Scandinavia – Mediterranean, in 1–60 m, among hydroids, bryozoans, tunicates, in coralligene]



Illustrations of *Procerastea halleziana*, *P. nematodes*, *Myrianida irregularis* and *M. inermis* modified from Gidholm L. 1967. A revision of Autolytinae (Syllidae, Polychaeta) with special reference to Scandinavian species, and with notes on external and internal morphology, reproduction and ecology. Arkiv för Zoologi 19:157–213.