Key to autolytine syllids from Scandinavian waters including Faroes.

- 1. Dorsal cirri absent on at least chaetiger 2–5......2

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*]

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]







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 beginning of chaetiger 1. Live specimens with three black longitudinal lines *Proceraea prismatica* (O.F. Müller, 1776) [Spitsbergen – Iceland – Faroe Islands, in 40–80 m, in gravel with hydroids]

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

7. Nuchal epaulettes extending to maximum end of chaetiger 2. Pharynx with single to several sinuations. Large difference in size between large and small trepan 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. Pharynx with single sinuation. Moderate difference in size between large and small trepan teeth. Live specimens with broad longitudinal red line *Myrianida irregularis* (Imajima & Hartman, 1964) [Spitsbergen – Scandinavia – Faroe Islands, in 70–90 m, among gravel with rich hydroid epifauna, dead *Lophelia*]



8. Cirrophores inflated. Pharynx with several sinutations. Trepan without distinct teeth *Myrianida inermis* (Saint-Joseph, 1887) [Scandinavia – Mediterranean, in 20–80 m, among hydroids, bryozoans, tunicates, in coralligene]

9. 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	
cirros	styles.	10

or9



10. 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]











- 11. Trepan with equal teeth.....12
- Trepan with unequal teeth.....13

12. 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. *Laomeda* 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 edwarsi* (Saint-Joseph, 1887) [Scandinavia – Faroe Islands – Atlantic coast of France, in 1–40 m, among algae, hydroids and bryozoans]



13. 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.