

Guide and keys for the identification of Syllidae (Polychaeta) from the British Islands (reported and expected species)

Guillermo San Martín

Departamento de Biología (Zoología), Laboratorio de Biología Marina e Invertebrados, Facultad de Ciencias, Universidad Autónoma de Madrid, Canto Blanco, 28049 Madrid, Spain.

guillermo.sanmartin@uam.es

Prepared for NMBAQC workshop 2012
Dove Marine Laboratory, Cullercoats, Tynemouth, UK

Introduction

Syllids are small to medium-size polychaetes (from 2-3 mm long and around 15-30 chaetigers, up to about 140 mm and 200 chaetigers). They are extremely abundant and diverse in benthic marine shallow habitats, but also inhabit deep areas; however, they are absent from fresh water, and they are not an important group in estuaries. They are very common in hard substrata, having an errant life among algae, biogenic concretions, crevices, inside porous rocks, etc., but they also inhabit marine sediments, especially coarse sand, where most species have an interstitial lifestyle. Also, numerous species are associated with other marine organisms, especially sponges and octocorals, mostly in tropical waters.

As they may constitute over 50% (sometimes over 70%) of the polychaete species that live in some substrata, they are very important in benthic studies. However, because of their small size, they are usually overlooked, since most benthic ecology studies are devoted to macrofauna. Furthermore, they are quite difficult to identify because of their small size and the lack of taxonomic studies and monographs with keys and detailed descriptions which allow correct and easy identification, in many areas. Syllids are very easy to recognize to family level, because they have a conspicuous modification of the gut, the **proventriculus**, which constitutes the autapomorphy of the family. The taxonomy and systematics are also complex and difficult, again because of their small size, the numerous taxa (about 74 genera and 700 species), and the difficulty to correctly observe the characters. This paper is directed to participants of the NMBAQC Scheme and to all laboratory staff and students who need to familiarize themselves with the syllid fauna that may be found in benthic studies from British or Irish waters. After

the workshop, the key has been modified and completed with the species found during the workshop. Also, I have included a number between brackets after each species, to a recommended description or descriptions that are in Literature cited section. Comparison of specimens with descriptions and figures is highly recommended. Also, it necessary to remark that fixed specimens lose the pigmentation after sometime, and also that young, small specimens have appendages proportionally shorter than large, mature specimens.

Howson & Picton (1997) listed the following species as likely to be found in British water, which are herein arranged according to recent classifications (Aguado & San Martín, 2009; Aguado et al., 2007, 2012; Nygren, 2004):

Subfamily **Anoplosyllinae** Aguado & San Martín, 2009: *Streptosyllis bidentata* Southern, 1914; *S. websteri* Southern, 1914; *Syllides benedicti* Banse, 1971; *S. longocirrata* Oersted, 1845.

Subfamily **Eusyllinae** Malaquin, 1893: *Eusyllis assimilis* Marenzeller, 1875; *E. blomstrandii* Malmgren, 1867; *E. lamelligera* Marion & Bobretzky, 1875; *Nudisyllis divaricata* (Keferstein, 1862); *N. pulligera* (Krohn, 1852); *Odontosyllis ctenostoma* Claparède, 1868; *O. fulgurans* (Audouin & Milne-Edwards, 1833); *O. gibba* Claparède, 1863; *Opisthodonta longocirrata* Saint-Joseph, 1886; *Pionosyllis compacta* Malmgren, 1867; *Synmerosyllis lamelligera* (Saint-Joseph, 1886).

Subfamily **Exogoninae** Langerhans, 1879

Brania pusilla (Dujardin, 1851); *Erinaceosyllis erinaceus* (Claparède, 1863); *Salvatoria clavata* (Claparède, 1863); *S. limbata* (Claparède, 1868); *S. swedmarki* (Gidholm, 1962); *Exogone dispar* (Webster, 1879); *E. naidina* Örsted, 1845; *E. verugera* (Claparède, 1868); *Parexogone furcifera* (Eliason, 1962); *P. hebes* (Webster & Benedict, 1884); *Prosphaerosyllis tetralix* (Eliason, 1920); *Sphaerosyllis bulbosa* Southern, 1914; *S. hystrix* Claparède, 1863; *S. pirifera* Claparède, 1868 ; *S. taylori* Perkins, 1980.

Subfamily **Syllinae** Grube, 1850 : *Eurysyllis tuberculata* Ehlers, 1864; *Haplosyllis spongicola* (Grube, 1855); *Syllis amica* Quatrefages, 1866; *S. armillaris* (O F Müller, 1771); *S. cornuta* Rathke, 1843; *S. gracilis* Grube, 1840; *S. garciai* (Campoy, 1981); *S. hyalina* Grube, 1863; *S. krohnii* Ehlers, 1864; *S. prolifera* Krohn, 1852; *S. variegata*

Grube, 1860; *S. vittata* Grube, 1840; *Trypanosyllis coeliaca* Claparède, 1868; *T. zebra* (Grube, 1860).

Subfamily **Autolytinae** Langerhans, 1879: *Epigamia alexandri* (Malmgren, 1867); *Myrianida brachycephala* (Marenzeller, 1874); *M. edwardsi* (Saint-Joseph, 1886); *M. inermis* (Saint-Joseph, 1886); *M. langerhansi* (Gidholm, 1967); *M. pinnigera* (Montagu, 1808); *M. prolifera* (O F Müller, 1788); *M. quinquedecimdentata* (Langerhans, 1884); *M. rubropunctata* (Grube, 1860); *Proceraea aurantiaca* Claparède, 1868; *P. cornuta* (Agassiz, 1862); *P. picta* Ehlers; *P. prismatica* (O. F. Müller, 1776); *Procerastea halleziana* Malaquin, 1893; *P. nematodes* Langerhans, 1884.

Incertae sedis : *Amblyosyllis formosa* (Claparède, 1863); *Dioplosyllis cirrosa* Gidholm, 1962; *Palposyllis prosostoma* Hartmann-Schröder, 1977; *Paraehlersia ferrugina* (Langerhans, 1881); *Streptodontha pterochaeta* (Southern, 1914).

Another 18 syllid taxa were also reported, but they are synonyms of other species, invalid, or doubtful species, or even not recognized as Syllidae.

This number of species is quite low for such an area and it is certain that many other species live in the British Islands. In the keys below, I have included all other previously reported species (except non-valid or doubtful ones) plus those that have been reported from nearby areas of the NE Atlantic and that could be also present. Books with keys for syllids of nearby areas include those by Fauvel (1923) (France), Hartmann-Schröder (1996) (Germany), and San Martín (2003) (Iberian Peninsula). A previous NMBAQC workshop (2006) included work on syllids led by Peter Garwood but the resulting key was not published or circulated via the website.

Rouse & Fauchald (1997) placed the Syllidae in the clade “Palpata, Aciculata, Phyllodocida”, considering the Pilargidae and the Sphaerodoridae as the closest families, and also close to the Nereididae and Hesionidae.

Main morphological characters

Body

Usually, the body is cylindrical in section (Figs. 1A, B, E, F), but some genera have flattened, ribbon-like bodies (Fig. 1C). Usually, the surface is smooth (Figs. 1A-C, F),

but some genera have papillae on the dorsum (Fig. 1E), sometimes also on the parapodia and ventral surface.

Prostomium

The prostomium is semicircular to pentagonal or oval; usually there are four eyes, sometimes also a pair of ocular spots. Three antennae, which may be smooth (Figs. 1B, E, F) or articulated (also known as moniliform) (Figs. 1A, C), short or long, one pair of

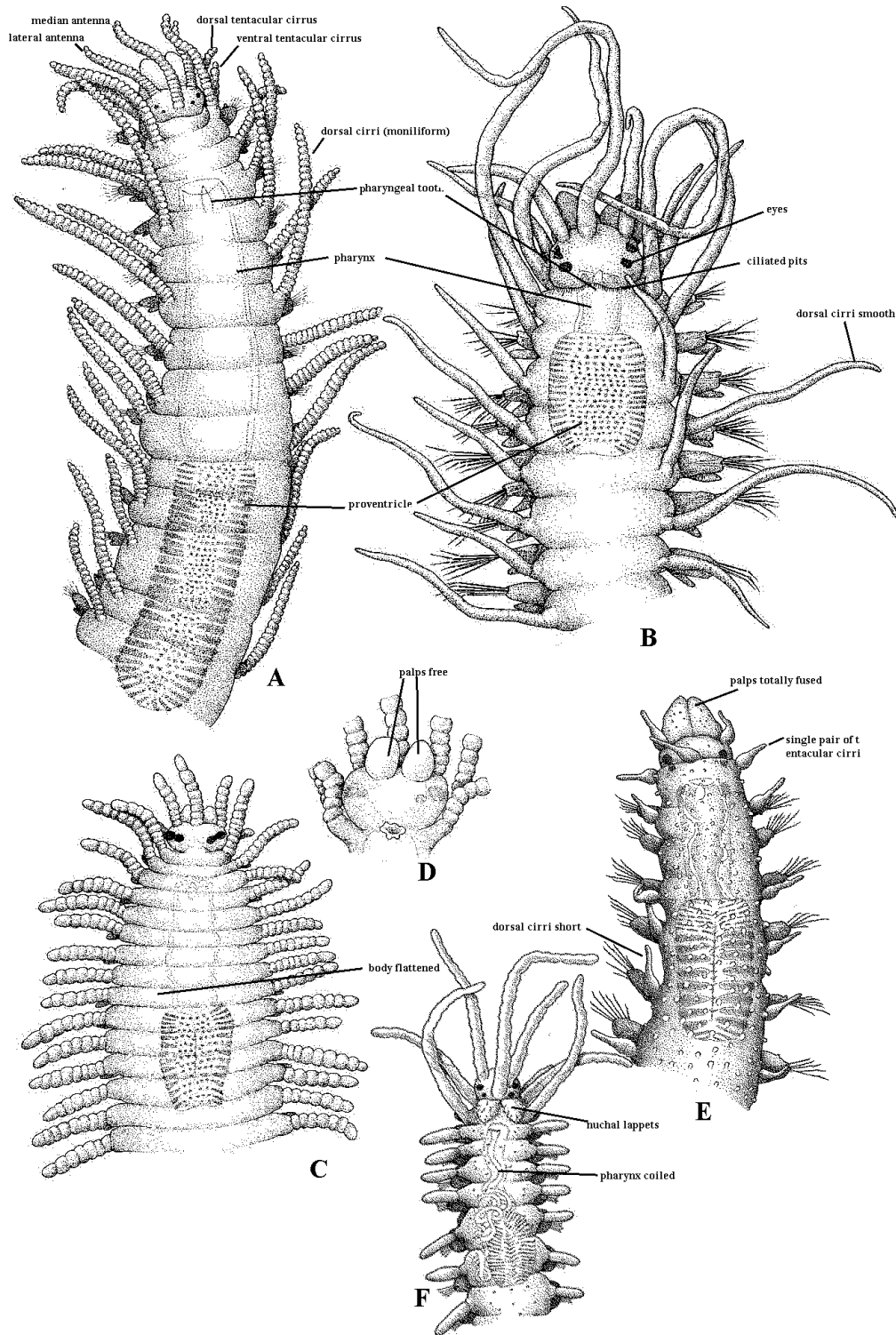


Figure 1.- Anterior end of: A. *Syllis amica* (SF. Syllinae), body cylindrical, smooth surface, two pairs of tentacular cirri, antennae, tentacular and dorsal cirri moniliform, nuchal organs as ciliated pits, palps basally fused. B. *Nudisyllis pulligera* (SF. Eusyllinae), body cylindrical, smooth surface, two pairs of tentacular cirri, antennae, tentacular and dorsal cirri smooth, nuchal organs as ciliated pits, palps free. C. *Trypanosyllis coeliaca* (SF. Syllinae), body flattened, smooth surface, two pairs of tentacular cirri, antennae, tentacular and dorsal cirri moniliform, nuchal organs as ciliated pits, palps free (see figure D). Same species, prostomium in ventral view. E. *Sphaerosyllis pirifera* (SF. Exogoninae), body cylindrical, papillated surface, single pair of tentacular cirri, antennae, tentacular and dorsal cirri smooth and short, nuchal organs as ciliated pits, palps totally fused. F. *Myrianida convoluta* (SF. Autolytinae), body cylindrical, smooth surface, two pairs of tentacular cirri, antennae, tentacular and dorsal cirri smooth, nuchal lappets, palps totally fused, pharynx coiled.

palps, triangular in shape, that may be fully separated from each other (Fig. 1D), basally fused or fused along their entire length (Fig. 1E).

Tentacular (= peristomial) cirri

Usually two pairs (Figs. 1A-D, F), but in some genera only one pair (Fig. 1E); they may be smooth (Figs. 1B, E, F) or articulated (= moniliform) (Fig. 1A, C, D), short or long.

Nuchal organs

Two main kinds are present on syllids, ciliated pits (the most common) (Figs. 1A-E) or nuchal lappets (= nuchal epaulettes) (Fig. 1F).

Parapodia

Unirameous (except on some segments, during reproduction), with dorsal cirri, parapodial lobe, ventral cirri, chaetae, and aciculae (Figs. 2A-D).

Dorsal cirri

May be long or short, alternating between long and short, smooth (Figs. 1B, E, F, 2B-D) or moniliform (Figs. 1A, C, 2A). Typically they are filiform, but may be of different shapes.

Ventral cirri

Present, except in the subfamily Autolytinae, in which they appear to be absent (Fig. 2D) but in fact they are fused to parapodial lobes.

Pharynx

Usually straight but coiled in some genera, sometimes very slender and complex (Fig. 1F).

Pharyngeal armature

The subfamily Anoplosyllinae lack any kind of pharyngeal armature (Fig. 2E), but most genera have a single pharyngeal tooth. Some genera have a crown of denticles on the pharyngeal opening, the trepan, with (Fig. 2G) or without a pharyngeal tooth (Fig. 2F). The trepan can be complete or incomplete, and the denticles can be directed to the anterior part of the body or to posterior part (Fig. 2H).

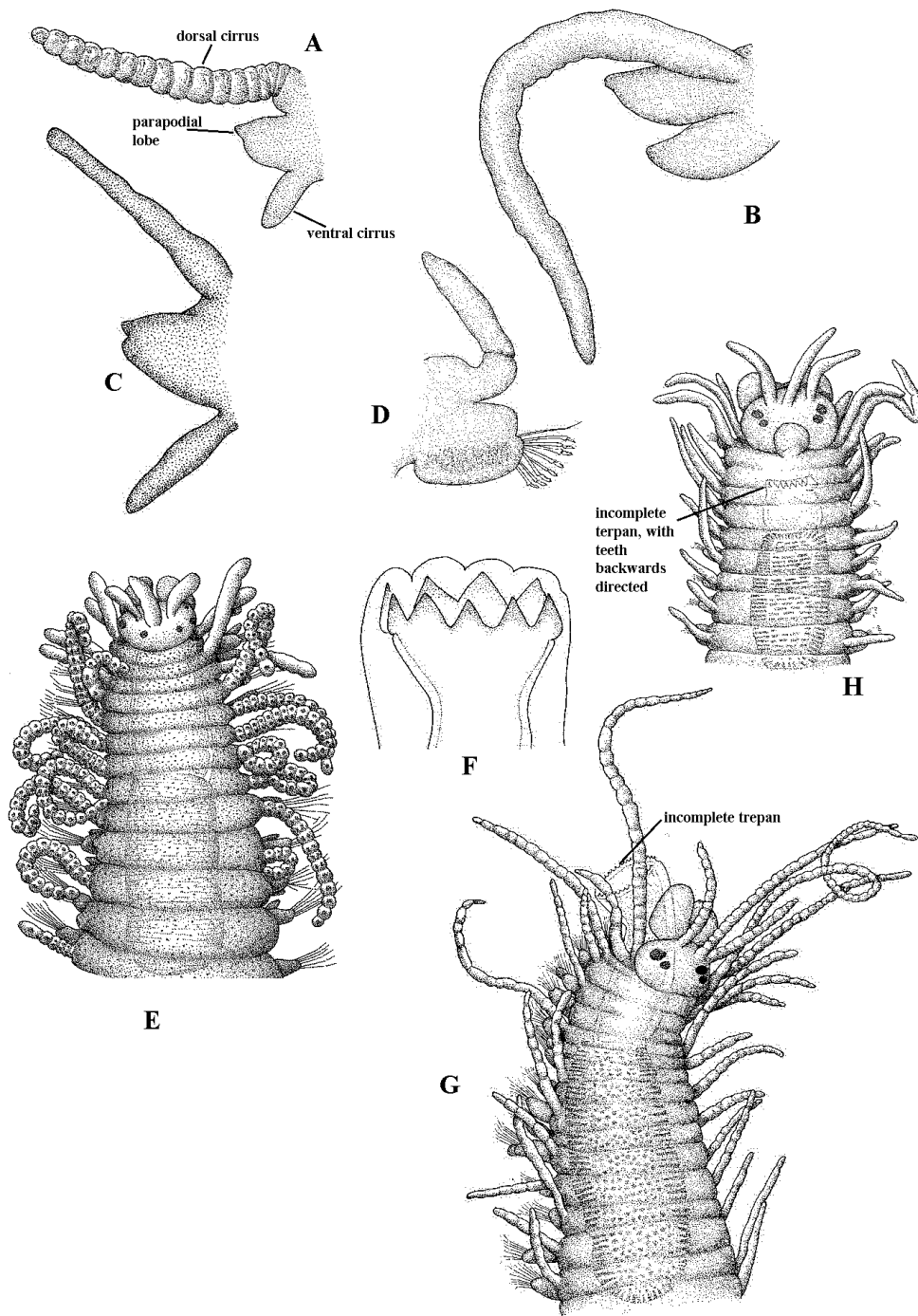


Figure 2.- Lateral view of parapodia of: A, *Syllis amica*, dorsal cirrus moniliform and long. B, *Nudisyllis pulligera*, dorsal cirrus smooth and long. C, *Parapionosyllis brevicirra* (SF. Exogoninae), dorsal cirrus smooth and short. D, *Epigamia labordai* (SF. Autolytinae), dorsal cirrus smooth, short, without ventral cirrus. E, anterior end, dorsal view of *Syllisdes fulvus* (SF. Anoplosyllinae), without any pharyngeal armature. F, trepan, without middorsal tooth of *Myrianida convoluta* (SF. Autolytinae). G, everted pharynx of *Eusyllis assimilis* (SF. Eusyllinae), showing an incomplete trepan and middorsal tooth. H, anterior end of *Odontosyllis fulgurans* (SF. Eusyllinae), with an incomplete trepan, teeth directed to posterior part of body.

Proventriculus

Size (number of segments) and number of muscle cell rows vary between species.

Chaetae

Typically, the chaetae of syllids are compound heterogomph, with capillary dorsal and ventral simple chaetae on posterior parapodia. Many modifications may occur. Some may be elongated and similar to the spinigers of nereidids; these chaetae are known as spiniger-like (Fig. 3D), or pseudospingers. Falcigers are usually bidentate, with both teeth similar (Fig. 3B), the proximal smaller than the distal (Fig. 3F) or the proximal larger than the distal (Fig. 3C). Also there are unidentate blades (Fig. 3A). The blades have a row of marginal spines, which may be long (Fig. 3E) or short (Fig. 3C, F), or even absent: the blade is then smooth.

Sometimes, there may be thick simple chaetae due to loss of blades and enlargement of shafts (Fig. 3G) or by fusion of the blade and shaft (Fig. 3H).

The capillary dorsal and ventral simple chaetae are usually very slender, bifid or entire, with or without subdistal spines. Typically these capillary simple chaetae are present only on posterior parapodia.

Aciculae

Numerous different kinds of tips: straight and pointed (Fig. 3I), acuminate (Fig. 3K), bent in right angle (Fig. 3J), distally rounded (Fig. 3L), and more variations.

Reproduction

Two main ways for reproduction in syllids: Epigamy and Schizogamy.

Epigamy in syllids is quite similar to that of other polychaetes, but long, slender notochaetae appear for swimming (natatory chaetae) (Fig. 4A) in some parapodia (from the midbody backwards). There are two kinds of epigamy: without brooding or brooding eggs. Brooding eggs may be dorsal (by means of capillary notochaetae) or ventral (attached to nephridial opening). In the later, juveniles grow attached to mother's body.

Schizogamy, by means of sexual stolons. There are two kinds of schizogamy: by Scissiparity (forming a single stolon) or Gemmiparity (forming a chain of stolons) (Figs. 5A, B).

Stolons of the Syllinae have no sexual dimorphism, but they are easily distinguished because the male stolons store spermatozoa and the female stolons store oocytes;

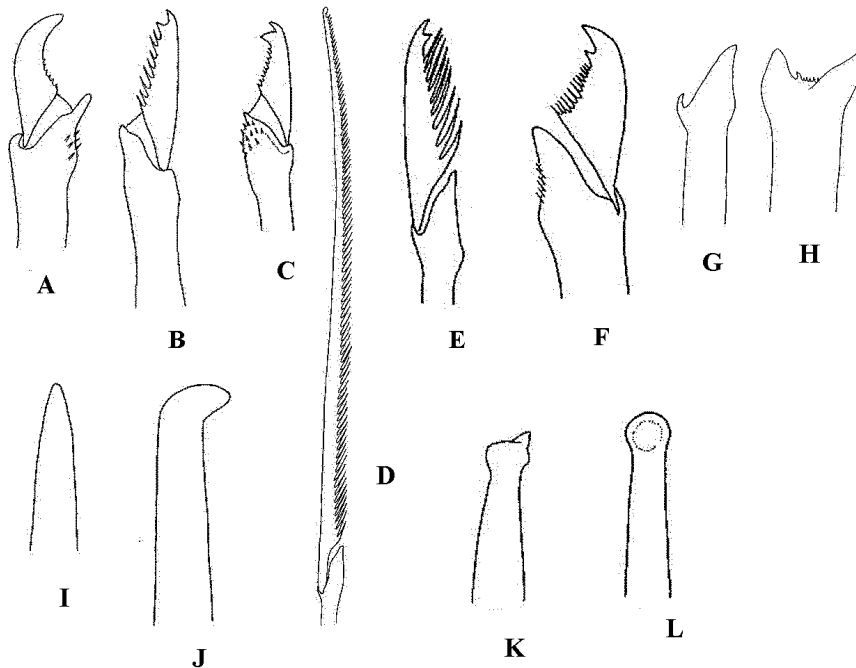


Figure 3.- Compound chaetae of A, *Sphaerosyllis pirifera* (falciger, unidentate, almost smooth on margin); B, *Trypanosyllis coeliaca* (falciger, bidentate with both teeth similar, moderate spines on margin); C, *Eusyllis assimilis* (falciger, bidentate, proximal tooth longer than distal one, short spines); D, *Syllis garciai* (spiniger-like, long spines on margin); E, *Syllis garciai* (falciger, bidentate, both teeth similar, long spines); F, *Syllis krohnii* (falciger, bidentate, proximal tooth shorter than distal one, short spines on margin); G, *Syllis amica* (thick simple chaeta by blade loss and shaft enlargement); H, *Syllis gracilis* (thick simple chaeta by blade and shaft fusion). Aciculae of: I, *T. coeliaca* (straight, pointed); J, *E. assimilis* (distally bent in right angle); K, *S. gracilis* (acuminate); L, *Syllis prolifera* (distally rounded).

there are different kinds of stolons: Acephalous (without “head”) (Fig. 4B), Acerous (= *Tetraglene*) (a “head” without appendages, and with two pairs of eyes) (Fig. 4C), Dicerous (= *Chaetosyllis*) (a bilobed “head” with two pairs of eyes and two antennae) (Fig. 4D, E), Tetracerous (a “head” with two palps and two antennae) (Fig. 4F, G), Pentacerous (= *Ioida*) (a “head” with two pairs of eyes, three antennae, and two palps) (Fig. 4H, I).

Stolons of the Autolytinae have marked sexual dimorphism. Male stolons (*Polybostrichus*) have a “head” with two pairs of eyes, two bifid, elongated palps, three antennae, the median one long and spiralized (Fig. 5C). The female stolon (*Sacconereis*) has a “head” with two pairs of eyes, two short, simple palps, and three antennae (Fig. 5D, E). Both also have two pairs of “tentacular cirri”.

Also viviparity has been reported in some species.

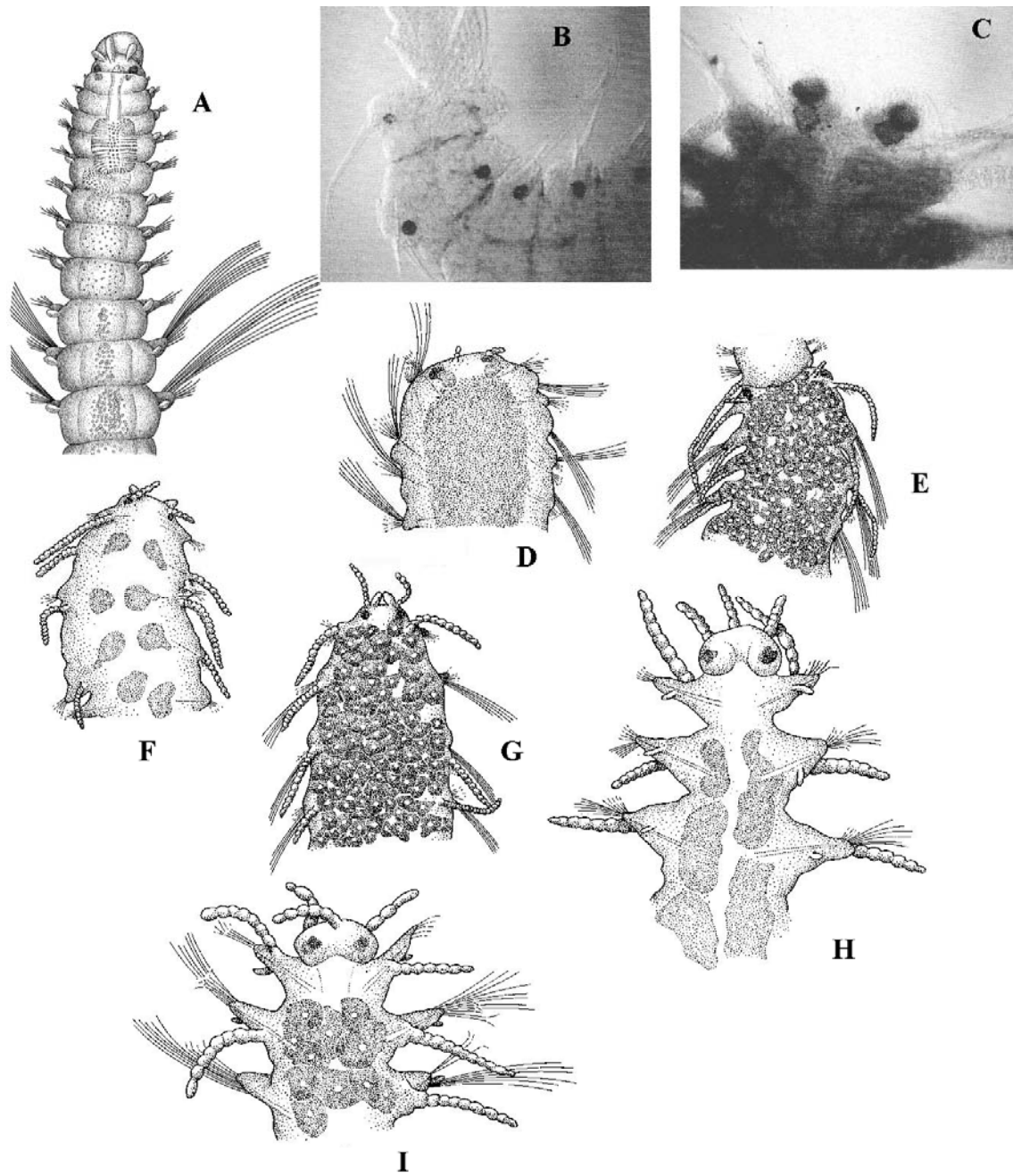
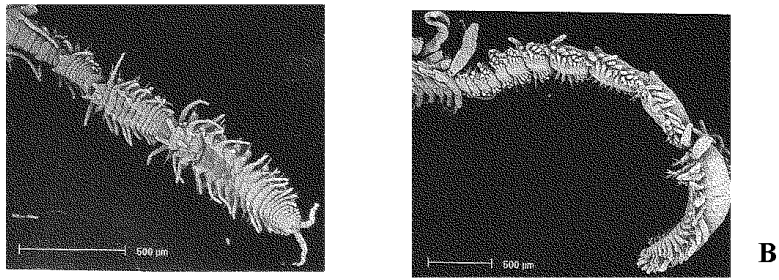
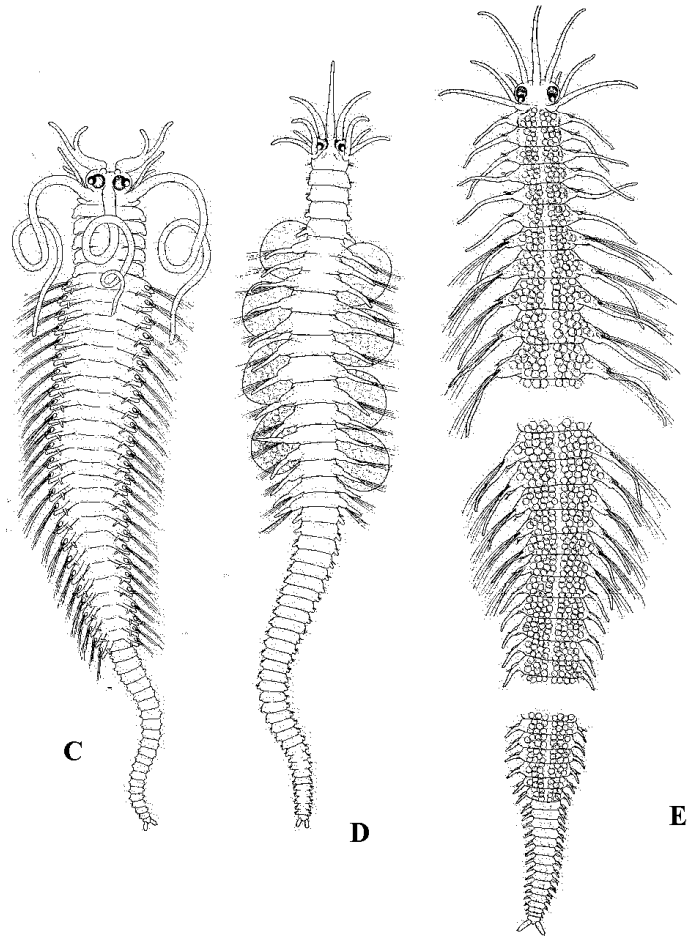


Figure 4.- A, epigamic male of *Exogone naidina*. Anterior end of stolons. B, acephalous (male, still attached to parental), *Haplosyllis spongicola*; C, acerous (male), *Trypanosyllis zebra*; D, dicerous (male), *Syllis prolifera*; E, dicerous (female, still attached to parental), *S. prolifera*; F, tetracerous (male), *Syllis pulvinata*; G, tetracerous (female), *S. pulvinata*; H, pentacerous (male), *Syllis hyalina*; I, pentacerous (female), *S. hyalina*. All, dorsal view, except H, ventral view.



A

B



C

D

E

Figure 5.- A, B, Chain of stolons (*Myriamida* spp.). C, *Polybostrichus*; D, *Sacconereis*, with brooding ventral sac. E, *Sacconereis*.

Key to subfamilies and “incertae sedis” genera

- 1 • Nuchal organs as two occipital lappets. Pharynx more or less sinuous and coiled.
.....2
- Nuchal organs as two ciliated pits (difficult to examine; at least, no occipital lappets or occipital lappets, if present, with transversal ridges) between prostomium and peristomium. Pharynx straight. Pharyngeal armature a mid-dorsal tooth or absent.....4
- 2 • Body composed of few, rhomboidal segments. Ventral cirri well developed. Compound chaetae with elongated, bidentate blades with both teeth similar. Last segment without chaetae, with two pairs of long cirri. Reproduction by epigamy or brooding eggs in gelatinous masses.....*Amblyosyllis*
- Body composed of numerous, cylindrical segments. Ventral cirri absent or fused to parapodial lobes. All segments (except peristomium) chaetigerous.....3
- 3 • Two antennae. Pharynx with mid-dorsal tooth, without trepan. Ventral cirri distinct, fused along ventral side of parapodial lobes. Compound chaetae with long, filiform, unidentate blades. Reproduction unknown.....*Acritagasyllis*
- Three antennae. Pharynx with a trepan, without mid-dorsal tooth. Ventral cirri absent (totally fused with parapodial lobes??). Compound chaetae with short blades, usually with proximal tooth longer than distal one. Reproduction by epigamy or schizogamy.....**Subfamily Autolytinae**
- 4 • Pharynx unarmed.....5
- Pharynx with mid-dorsal tooth, trepan or both.6
- 5 • Palps fused all along their length. Antennae and tentacular cirri minute, papilliform; dorsal cirri very long, coiled over dorsum. Single pair of tentacular cirri. Reproduction by epigamy.....*Anguillosyllis*
- Palps fused basally. Antennae and tentacular cirri more or less club-shaped. Two pairs of tentacular cirri. Reproduction by epigamy or brooding eggs ventrally
..... **Subfamily Anoplosyllinae**
- 6 • Antennae, tentacular cirri and dorsal cirri distinctly articulated, more or less long (two genera with only one spherical article). Reproduction by schizogamy (some viviparous).....**Subfamily Syllinae**
- Appendages smooth or weakly articulated on anterior part of body. Reproduction by epigamy (or unknown in several genera).....7

- 7• Palps fused entirely or at least to mid way along their length. Antennae, tentacular cirri and dorsal cirri short (sometimes papilliform). Eggs brooded dorsally by means of capillary notochaetae, or ventrally, attached to nephridial pores..**Subfamily Exogoninae**
- Palps not totally fused. Appendages long, filiform. No brooding of eggs; reproduction by epigamy (or unknown).....**Subfamily Eusyllinae** (plus some *incertae sedis* genera)

Genus *Amblyosyllis* Grube, 1857

- 1 • Nuchal lappets long, reaching the level of chaetiger 2.....2
- Nuchal lappets short, more or less spherical. Trepan with 6 pentacuspids teeth.....*A. madeirensis* Langerhans, 1879 (1)
- 2 • Trepan with 6 monocuspid teeth, each with a basal spine on each side, more or less developed on larger specimens... ..*A. formosa* (Claparède, 1863) (1)
- Trepan with 6 teeth, each with 11 cusps.....*A. finmarchica* (Malmgren, 1867) (2)

Genus *Acritagasyllis* Lucas, San Martín & Sikorski, 2010

- A. longichaetosa* Lucas, San Martín & Sikorski, 2010 (3)

Genus *Anguillosyllis* Day, 1963

- A. pupa* (Hartman, 1965) (4)

Key to genera of Anoplosyllinae Aguado & San Martín, 2009

- 1 • Aciculae of some anterior parapodia enlarged, with inflated tips.....*Streptosyllis*
- Aciculae not modified, without inflated tips2
- 2 • Dorsal cirri all smooth, more or less club-shaped*Anoplosyllis*
- Dorsal cirri from chaetiger 3 distinctly annulated *Syllides*

Genus *Streptosyllis* Webster y Benedict, 1884

- 1 • Compound chaetae with indistinctly bidentate blades. Enlarged aciculae in chaetigers 2-5 *S. websteri* Southern, 1914 (1)
- Compound chaetae with distinctly bidentate blades. Enlarged aciculae in chaetigers 2-6..... 2
- 2 • Blades of compound chaetae with both teeth similar and close to each other. Aciculae of chaetiger 7 only slightly more slender than those of chaetigers 6.....

-*S. bidentata* Southern, 1914 (1)
- Blades of compound chaetae with proximal teeth longer and well separated. Aciculae of chaetiger 7 distinctly more slender than those of chaetiger 6.....
- *S. campoyi* Brito, Núñez y San Martín, 2000 (1)

Genus *Anoplosyllis* Claparède, 1868

A. edentula Claparède, 1868 (1)

Genus *Syllides* Örsted, 1845

- 1 • Blades of all compound chaetae with short and uniform spines on margin 3
- Blades of some compound chaetae with one or more long basal spines2
- 2 • Longer blades of each parapodium with 2-3 long basal spines.....
-*S. japonica* Imajima, 1966 (1)
- Blades of some compound chaetae with single, long basal spine 4
- 3 • Shafts of compound chaetae distally with 1-2 spines distinctly long and thick. Tips of dorsal simple chaetae enlarged and rounded *S. convoluta* Webster y Benedict, 1884 (1)
- Distal part of shafts with few, thin spines or smooth. Dorsal simple chaetae ending in a blunt tip*S. fulva* (Marion & Bobretzky, 1875) (1)
- 4 • Blades of medium length compound chaetae with a long basal spine. Tips of dorsal simple chaetae blunt *S. bansei* Perkins, 1981 (1)
- Blades of compound chaetae of the longest pair and the second pair with a long basal spine. Tips of dorsal simple chaetae enlarged and rounded, with some minute spines dorsally *S. benedicti* Banse, 1971 (1)

Syllides longocirrata Örsted, 1845 is the type-species of the genus, but it is a poorly known species. Descriptions and later reports of this species actually belong to an undescribed species of another genus (*Streptospinigera* Kudenov, 1983).

Key to genera Autolytinae Langerhans, 1879

- 1 • Antennae, tentacular cirri and dorsal cirri present on chaetiger 1; appendages absent on other chaetigers.....*Procerastea*
 - Dorsal cirri on all chaetigers.....2
- 2 • Large, clavate, dorsal cirri alternate with much smaller, cylindrical or clavate cirri. Nuchal epaulettes on special outgrowths.....*Virchowia*
 - Appendages and nuchal epaulettes different.....3
- 3 • Cirrostyles foliaceous. All chaetae simple. Reproduction by anterior scissiparity.....*Imajimaea*
 - Different characters.....4
- 4 • Reproduction by epigamy.....*Epigamia*
 - Reproduction by schizogamy.....5
- 5 • Trepan in two rows. Bayonet chaetae distally thick. Reproduction by anterior scissiparity.....*Proceraea*
 - Trepan in a single row. Bayonet chaetae distally slender. Reproduction by gemmiparity.....*Myrianida*

Genus *Procerastea* Langerhans, 1884

- 1 • Antennae, tentacular and dorsal cirri club-shaped. Trepan with 15-30 teeth*P. halleziana* Malaquin, 1893 (1, 5)
- Antennae, tentacular and dorsal cirri cylindrical. Trepan with 6-10 teeth*P. nematodes* Langerhans, 1884 (1, 5)

Genus *Virchowia* Langerhans, 1879

- V. clavata* Langerhans, 1879. (1, 5)

Genus *Imajimaea* Nygren, 2004

- I. draculai* (San Martín & López, 2002). (1, 5)

Genus *Epigamia* Nygren, 2004

- Trepan with two sizes of teeth, alternating 1 large and 3-4 much smaller. Blades of compound chaetae with both teeth similar, the proximal one slightly longer than distal one.....*E. alexandri* (Malmgren, 1867) (5)

- Trepan with three sizes of teeth, alternating 1 large with 2 of medium size, or 1 large, 1 small and 1 medium. Blades of compound chaetae with proximal tooth distinctly longer than proximal one.....*E. labordai* (San Martín & López, 2002) (1, 5)

Genus *Proceraea* Ehlers, 1864

- 1 • Without colour pattern.....2
- With colour pattern.....3
- 2 • Blades of compound chaetae with both teeth similar, distal tooth slightly smaller than proximal tooth.....*P. aurantiaca* Claparède, 1868 (5)
 - Blades of compound chaetae with both teeth distinctly different, distal tooth smaller than proximal tooth..... *P. cornuta* (Agassiz, 1862) (5)
- 3 • Colour pattern consisting of 3 lines*P. prismatica* (O. F. Müller, 1776) (5)
 - Colour pattern otherwise.....4
- 4 • Colour pattern on 2 lines and brown squares.....*P. picta* Ehlers, 1864 (5)
 - Dorsum yellow with 2 black longitudinal lines on each side.....
 -*P. scapularis* (Claparède, 1864) (5)

Genus *Myrianida* Milne Edwards 1845

- 1 • Dorsal cirri distinctly flattened..... *M. pinnigera* (Montagu, 1808) (1, 5)
 - Dorsal cirri cylindrical.....2
- 2 • Cirrophores swollen; cirrostyles attached subterminally on cirrophores. Trepan with indistinct teeth..... *M. inermis* (Saint-Joseph, 1886) (5)
 - Cirrophores not swollen; cirrostyles attached terminally on cirrophores. Trepan with distinct teeth.....3
- 3 • Teeth of trepan unequal.....4
 - Teeth of trepan all of equal size.....6
- 4. Colour pattern of 4 red spots on each segment. Trepan with 30-35 unequal teeth, 4-5 large and 26-30 small..... *M. rubropunctata* (Grube, 1860) (5)
 - Different characters.....5
- 5 • Trepan with 22-29 teeth, alternating 1 large and 1-3 short.....
 - *M. brachycephala* (Marenzeller, 1874) (1, 5)
 - Trepan with 4-5 large teeth and 25-39 short..... *M. langerhansi* (Gidholm, 1967) (5)
- 6 • Trepan with 9 or 15-16 teeth. Pharynx very long, with numerous circumvolutions.....
 -*M. convoluta* (Cognetti, 1953) (1, 5)

- Trepan different. Pharynx with few circumvolutions.....7
- 7• Trepan with 12-24 teeth..... *M. quinquedecimdentata* (Langerhans, 1884) (1, 5)
- Trepan with 24-34 teeth.....8
- 8• Cirrophores and cirrostyles unequal..... *M. prolifera* (O F Müller, 1788) (1, 5)
- Cirrophores and cirrostyles equal.....*M. edwarsi* (Saint-Joseph, 1886) (1, 5)

Keys to genera of Exogoninae Langerhans, 1879

Key based on reproductive and morphological characters

- 1 • Females brooding dorsally.....2
 - Females brooding ventrally, developing juveniles, or viviparous4
- 2 • Two pairs of tentacular cirri. Body smooth..... *Salvatoria*
 - Single pair of tentacular cirri. Body with papillae.....3
- 3 • Some dorsal cirri with a retractile cirrostyle. Antennae short. Pharynx relatively long and wide; pharyngeal tooth usually located far from anterior margin. Compound chaetae always with short, unidentate blades.....*Prosphaerosyllis*
 - Antennae and dorsal cirri more or less elongate, without distal cirrostyle. Pharynx relatively slender; pharyngeal tooth usually located near anterior margin. Compound chaetae with elongate blades, bidentate, unidentate and bidentate, or unidentate.....
 -*Erinaceusyllis*
- 4 • Body smooth.....5
 - Body covered with papillae.....*Sphaerosyllis*
- 5 • Two pairs of tentacular cirri..... *Brania*
 - Single pair of tentacular cirri.....6
- 6 • Palps basally fused to half or 2/3 of their length. Dorsal cirri bowling-pin shaped. Distinct parapodial glands.....*Parapionosyllis*
 - Palps fused along their entire length or with terminal notch. Dorsal cirri small, papilliform. Parapodial glands indistinct or minute, apparently absent.....7

7 • Compound chaetae with tapering, elongated, bidentate falcigers, both teeth similar, and, on some species, some compound chaetae on each parapodium with elongate, spiniger-like blade. Some species viviparous.....*Parexogone*

• Different compound chaetae, some with elongated, spiniger-like blades, others with short falcigers, or blades missing, sometimes fused to shafts.*Exogone*

Key based exclusively on morphological features

1 • Two pairs of tentacular cirri.....2
 • Single pair of tentacular cirri.....3

2 • Palps basally fused to half or 2/3 of their length. Dorsal cirri bowling-pin shaped or truncate. Parapodial glands distinct, sometimes inside dorsal cirri. Aciculae distally rounded, apparently hollow at tip. Pharynx slender, with distal soft papillae. Pharyngeal tooth conical, located at opening.....*Brania*

• Palps joined along most or all of their length by a dorsal membrane. Dorsal cirri spindle-shaped, usually elongate. Parapodial glands absent. Aciculae acuminate. Pharynx and proventriculus long and wide; usually without papillae on pharyngeal opening. Pharyngeal tooth rhomboidal to ovate, usually located far from pharyngeal opening.....*Salvatoria*

3 • Body without papillae.....4
 • Body papillated.....6

4 • Palps basally fused to half or 2/3 of their length. Dorsal cirri bowling-pin shaped. Parapodial glands distinct. Dorsal simple chaetae distally serrated.....*Parapionosyllis*

• Palps fused along their entire length or with a distal, short notch. Dorsal cirri small, papilliform. Parapodial glands indistinct. Different dorsal simple chaetae.....5

5 • Compound chaetae with tapering, elongated, bidentate falcigers, both teeth similar, some compound chaetae on each parapodium may have elongate, spiniger-like blades.....*Parexogone*

• Different compound chaetae, some with elongated, spiniger-like blades, others with short falcigers, or blades fused to shafts or missing.....*Exogone*

6 • Prostomium with 4 eyes, no additional eyespots. Proventriculus short, with few large muscular bands. Pharynx slender; pharyngeal tooth small, conical, located on anterior rim on pharynx. Antennae and dorsal cirri flask- to onion-shaped. Aciculae with tip forming a right angle.....*Sphaerosyllis*

- Four eyes and 2 anterior eyespots on prostomium. Proventriculus barrel-shaped, long and relatively wide, with numerous, slender muscular bands. Pharynx relatively large. Aciculae acuminate.....7

7 • Pharynx distinctly wide, without papillae. Pharyngeal tooth rhomboidal to oval, long, usually located far from anterior rim. Antennae and dorsal cirri similar to *Sphaerosyllis*, but typically having an elongate cirrophore and a retractile cirrostyle. Compound chaetae always with short, unidentate falcigers.....***Prosphaerosyllis***

- Pharynx proportionally more slender, sometimes with soft papillae surrounding opening. Pharyngeal tooth small, located near anterior rim. Antennae and dorsal cirri elongate, but sometimes similar to those of *Sphaerosyllis*, always without retractile cirrostyle. Compound chaetae usually with elongate blades bidentate, bidentate and unidentate, or unidentate.....***Erinaceusyllis***

Genus *Salvatoria* McIntosh, 1885

- 1** • Dorsal cirri short, absent from chaetiger 2 ***S. swedmarki*** (Gidholm, 1962) **(1)**
- Dorsal cirri elongated, present on all chaetigers **2**
- 2** • Blades of compound chaetae smooth on margin, unidentate or with a minute subdistal spine; 1-2 compound chaetae on each parapodium with longer blades provided with some basal, long spines..... ***S. limbata*** (Claparède, 1868) **(1)**
- Compound chaetae with bidentate blades***S. clavata*** (Claparède, 1863) **(1)**

Genus *Prosphaerosyllis* San Martín, 1984

- 1** • Antennae, tentacular and dorsal cirri minute, papiliform.....
.....***P. giandoi*** (Somaschini & San Martín, 1994) **(6)**
- Antennae, tentacular and dorsal cirri typical of the genus, with a papilliform cirrostyle and a bulbous cirrophore.....**2**
- 2** • Blades of compound chaetae all short, dorsal ones with long spines, ventral ones smooth or very slightly spinulated.....
.....***P. campoyi*** (San Martín, Acero, Contonente & Gómez, 1982) **(1)**
- Blades of compound chaetae without these long spines.....**3**
- 3** • Dorsal papillae of two lengths, arranged in four longitudinal rows.....
.....***P. tetralix*** (Eliason, 1920) **(1)**
- Dorsal papillae not arranged in longitudinal rows, all similar.....**4**

- 4 • Palps densely papillated. Dorsal papillae small, rounded. Without long papilla on dorsal cirri... *P. laubieri* Olivier, Grant, San Martín, Archambault & McKindsey, 2011 (7)
- Palps with few papillae. Dorsal papilla digitiform.5
- 5 • One long, distinct papilla on dorsal cirri.....
-*P. chauseyensis* Olivier, Grant, San Martín, Archambault & McKindsey, 2011 (7)
- Without papillae on dorsal cirri.....*P. xarifae* (Hartmann-Shröder, 1960) (1)

Género *Erinaceusyllis* San Martín, 2005

- Blades of compound chaetae unidentate..... *E. erinaceus* (Claparède, 1863) (8)
- Blades bidentate.....*E. cryptica* (Ben-Eliahu, 1977) (1)

Genus *Sphaerosyllis* Claparède, 1863

- 1 • Aciculae straight, with a bulbous distal enlargement. Mid body parapodia with simple chaetae by lost of blades and shaft enlargement..... *S. bulbosa* Southern, 1914 (1)
 - Aciculae distally bent in right angle. Without enlarged chaetae 2
 - 2 • Antennae, tentacular, and dorsal cirri minute, bulbous. Blades of mid body and posterior compound chaetae smooth on margin, with a long subdistal spine.....
 -*S. parabolbosa* San Martín & López, 2002 (1)
 - Antennae, tentacular and dorsal cirri not so small, with a longer tip. Blades otherwise...3
 - 3 • Without parapodial glands from chaetiger 4 4
 - With parapodial glands 5
 - 4 • Proventriculus rectangular. Compound chaetae of posterior parapodia with short, hooked, smooth blades..... *S. pirifera* Claparède, 1868 (1)
 - Proventriculus almost squared. Compound chaetae with blades elongated throughout body.....*Shaerosyllis* sp.
 - 5 • Parapodial glands with granular material.*S. glandulata* Perkins, 1981(1) (*)
 - Parapodial glands with fibrillar material (rods).....6
 - 6 • Blades of compound chaetae with distinct dorsoventral gradation in length, especially on anterior parapodia *S. hystrix* Claparède, 1863 (1)
 - Without dorsoventral gradation in length of blades, or very slight; all blades short, those of dorsal compound chaetae with long spines on margin..... *S. taylori* Perkins, 1981 (1) (*)
- (*) Stained specimens of species with fibrillar material can appear as *S. glandulata*; parapodial glands with granular material are small, rounded and sometimes difficult to see, and parapodial glands with fibrillar material are ovate, big, and easy to see.

Genus *Brania* Quatrefages, 1865

- Dorsal cirri truncate, with inclusions of fibrillar material inside *B. pusilla* (Dujardin, 1851) (1)
- Dorsal cirri pin-shaped, with glands on parapodial bases. *B. arminii* Langerhans, 1881(1)

Genus *Parapionosyllis* Fauvel, 1923

- 1 • Peristomium with a gibbosity partially covering the prostomium. Compound chaetae with long blades; longer blades on each parapodium more than 3 times as long as shorter ones (up to 45 µm long to 13 µm in mid body parapodia *P. brevicirra* Day, 1954 (1)
- Without such gibbosity. Shorter chaetae 2
- 2 • Blades of uppermost compound chaetae on each parapodium twice as long as shorter blade, and with long spines on margin *P. elegans* (Pierantoni, 1903) (1)
- Blades of uppermost compound chaetae on each parapodium more than twice as long as shorter blades, without long spines 3
- 3 • Blade of uppermost compound chaetae distinctly longer than others on each parapodium, about 3 times longer than of the most ventral. .. *P. minuta* (Pierantoni, 1903) (1)
- Blade of uppermost compound chaetae longer than other blades on each parapodium but with a gradual and homogeneous gradation in size
..... *P. cabezali* Parapar, San Martín & Moreira, 2000 (1)

Genus *Parexogone* Mesnil & Caullery, 1918

- 1 • Compound chaetae of each parapodium with short blades, all similar or with slight dorso-ventral gradation *P. hebes* (Webster y Benedict, 1884) (1, 8)
- Some compound chaetae (1-3) with long blades, at least on anterior parapodia.....2
- 2 • Dorsal simple chaetae with few (1-3) very long and thin spines (aristae), extending beyond the tips.....*Parexogone longicirris* (Webster & Benedict, 1887) (2)
- Dorsal simple chaetae without aristae 3
- 3. All blades of compound chaetae elongated, slender, unidentate, with long and thin spines on margin. Dorsal simple chaetae unidentate. Aciculae distally rounded, with a thin tip.....*P. campoyi* San Martín, Ceberio & Aguirrezabalaga, 1996 (1)
- Most compound chaetae with short blades, without long spines on margin. Dorsal simple chaetae not so pointed. Aciculae rounded distally 4
- 4 • Lateral antennae minute; median antenna shorter than prostomium and palps together.....*P. caribensis* San Martín, 1991 (1)

- Lateral antennae similar in length to prostomium; median antenna longer than prostomium and palps together *P. convoluta* (Campoy, 1982) (1)

Genus *Exogone* Örsted, 1845

- 1 • Spiniger-like compound chaetae modified, with spinous enlarged shafts and short blades, triangular *E. mompasensis* Martínez, Adarraga & San Martín, 2002 (1)
 - Chaetae not modified 2
- 2 • Simple chaetae and blades of compound chaetae with long, thin spines extending beyond tips *E. sorbei* San Martín, Ceberio & Aguirrezabalaga, 1996 (1)
 - Simple chaetae without these spines 3
- 3 • Blades of falcigers with some long spines, extending beyond distal tooth..... *E. lopezi* San Martín, Ceberio & Aguirrezabalaga, 1996 (1)
 - Without these spines on falcigers 4
- 4 • Compound chaetae of 2-3 most anterior parapodia with blades very different to remaining, very short, unidentate with a long basal spine. *E. naidina* Örsted, 1845 (1)
 - Compound chaetae similar throughout 5
- 5 • Median antenna distinctly longer than lateral antennae...*E. dispar* (Webster, 1879) (1)
 - Median antenna small, similar to lateral antennae.....*E. verugera* (Claparède, 1868) (1)

Key to genera of Syllinae Grube, 1850

- 1 • All chaetae simple, usually thick..... *Haplosyllis*
 - Compound and capillary chaetae present dorsally and ventrally (sometimes some chaetae in mid body appear simple by blade and shaft fusion but typical compound chaetae also present anteriorly).....2
 - 2 • Body small, dorso-ventrally flattened. Antennae, tentacular and dorsal cirri reduced to a single, sphaerical article.....3
 - Body of medium to large size. Antennae, tentacular and dorsal cirri with several articles (moniliform).....4
- 3 • Palps fused. Two rows of dorsal, spherical tubercles, similar to dorsal cirri.....*Eurysyllis*
 - Palps separated. Without dorsal tubercles.....*Plakosyllis*

- 4 • Body cylindrical..... *Syllis*
 - Body dorso-ventrally flattened.....5
- 5 • Dorsum, as well as antennae and dorsal cirri with papillae and longitudinal grooves. Pharynx unarmed.....*Xenosyllis*
 - Without longitudinal grooves on dorsum (minute rows of transversal papillae, difficult to see). Pharynx with a trepan and, occasionally, a tooth..... *Trypanosyllis*

Genus *Haplosyllis* Langerhans, 1879

H. spongicola (Grube, 1855) (9)

Genus *Eurysyllis* Ehlers, 1864

- Compound chaetae short and curved, smooth or with short spines on margin.....
.....*E. tuberculata* Ehlers, 1864 (1)
- Compound chaetae with blades elongated, with long spines on margin of anterior chaetae
.....*E. mercuryi* Lucas, San Martín & Parapar, 2012 (10)

Genus *Plakosyllis* Hartmann-Schröder, 1956

P. brevipes Hartmann-Schröder, 1956 (1)

Genus *Syllis* Lamarck, 1818

- 1 • Thick simple, Y-shaped chaetae chaetae in mid body (enlargement and fusion of shafts and blades)..... *S. gracilis* Grube, 1840 (1)
 - Without these thick simple chaetae 2
- 2 • Aciculae of posterior parapodia distally rounded and hollow. Pharyngeal tooth distinctly back from the pharyngeal opening 3
 - Aciculae different. Pharyngeal tooth located on anterior margin 4
- 3 • Compound chaetae distinctly bidentate, with both teeth similar *S. prolifera* Krohn, 1852 (1)
 - Compound chaetae with unidentate blades or with minute, spine-like proximal tooth.....
.....*S. vivipara* Krohn, 1869 (1)
- 4 • With spiniger-like compound chaetae.....5
 - Without spiniger-like compound chaetae.....12
- 5 • Aciculae of posterior parapodia thick, straight, acute, protruding from the parapodial lobes 6
 - Aciculae otherwise 7

6 • Midbody dorsal cirri elongated. Midbody spiniger-like chaetae distinctly bidentate.....	<i>S. cornuta</i> Rathke, 1843 (11)
• Midbody dorsal cirri fusiform. Midbody spiniger-like chaetae indistinctly bidentate.....	<i>S. mercedesae</i> Lucas, San Martín & Parapar, 2012 (10)
7 • Proximal tooth of spiniger-like and falcigers distinct, forming a small angle with distal teeth (both teeth almost parallel); apparently without eyes.....	
.....	<i>S. caeca</i> (Katzmann, 1973) (11)
• Chaetae different, with eyes.....	8
8 • Midbody dorsal cirri thick, short and fusiform.....	
.....	<i>S. parapari</i> San Martín & López, 2000 (1)
• Dorsal cirri slender, elongated, more or less long.....	9
9 • Posterior aciculae distally bent in right angle. Dorsal simple chaetae truncate. Short spiniger-like chaetae, distally rounded and unidentate from mid body.....	<i>S. rosea</i> (Langerhans, 1879) (1, 11)
• Aciculae acuminate. Dorsal simple chaetae acute. Arrangement and shape of spiniger-like chaetae different.....	10
10 • Spiniger-like chaetae very short, only present on anterior and midbody segments; spiniger-like and falcigers unidentate, sometimes with a long, slender subdistal spine.....	<i>S. oerstedii</i> (Malmgren, 1867)
• Chaetae different.....	11
11 • Blades of falcigers with long spines on margin, especially distally, surpassing level of proximal tooth.....	<i>S. garciai</i> (Campoy, 1982) (1)
• Spines of blades not so long, decreasing distally, not reaching level of proximal tooth.....	<i>S. mauretanic</i> (Licher, 1999) (11)
12 • On mid body, one thick simple chaeta on each parapodium by blade loss and shaft enlargement.....	<i>Syllis amica</i> Quatrefages, 1866 (1)
• Without these chaetae.....	13
13 • Posterior aciculae distally bent in right angle. Dorsal simple chaetae truncate.....	14
• Without these characters.....	15
14 • Proventriculus long, through about 5 segments or more. Two dorsal glands after proventriculus.....	<i>S. pulvinata</i> (Langerhans, 1881) (1)
• Short proventriculus, through 3 segments. Without these glands.....	
.....	<i>S. gerlachi</i> (Hartmann-Schröder, 1960) (1)
15 • Dorsal cirri of midbody short, fusiform	14

• Dorsal cirri elongated, not fusiform.....	16
14 • Dorsal cirri strongly fusiform. Mid body compound chaetae almost unidentate, with a short, small proximal tooth.....	<i>S. armillaris</i> (O.F. Müller, 1771) (1, 11)
• Dorsal cirri not so strongly fusiform. Mid body compound chaetae bidentate.....	<i>S. hyalina</i> Grube, 1863 (1, 11)
16 • Aciculae of posterior parapodia thick, straight, acute, protruding from the parapodial lobes	17
• Aciculae otherwise	20
17 • Blades of compound chaetae unidentate (or slightly bidentate on anterior parapodia).....	18
• Blades distinctly bidentate.....	19
18 • Dorsal cirri long. Blades distally more or less hooked.....	<i>S. fasciata</i> (Malmgren, 1867) (11)
• Dorsal cirri short, slender, delicate. Blades triangular in shape, short.....	<i>S. licheri</i> Ravara, San Martín & Moreira, 2004 (1)
19 • Dorsal cirri short, slender, delicate. Posterior aciculae distally bent, oblique, although pointed. Without colour pattern.....	<i>S. pontxioi</i> San Martín & López, 2000 (1)
• Dorsal cirri longer. Aciculae totally straight. Strong pigmentation on anterior segments, as ∞.....	<i>S. variegata</i> Grube, 1860 (1, 11)
20 • Compound chaetae all unidentate, distally acute. Anterior segments strongly pigmented with a transversal dark band.....	<i>S. vittata</i> Grube, 1840 (1, 11)
• At least, anterior compound chaetae bidentate.....	21
21 • Long dorsal cirri of anterior segments distinctly thicker than remaining. Compound chaetae of posterior segments distinctly enlarged, unidentate or with a small proximal tooth. Anterior segments pigmented by distinct transversal red bands.....	<i>S. krohni</i> Ehlers, 1864 (1, 11)
• Dorsal cirri similarly thick throughout body. Pigment pattern otherwise	21
21 • Posterior compound chaetae unidentate by reduction and loss of distal tooth. Prostomium, peristomium and chaetiger 1 with dark red pigment, sometimes also a small red band on some anterior segments.....	<i>S. torquata</i> Marion & Bobretzky, 1875 (1)
• Without such colour pattern nor such chaetae.....	22
22 • Compound chaetae strongly bidentate. Colour pattern as one rhomboidal red figure on dorsum and a slight line on each border of each segment	<i>S. columbretensis</i> (Campoy, 1982) (1)

- Compound chaetae slightly bidentate Colour pattern forming ∞ on anterior segments..... *S. westheidei* (San Martín, 1982) (1, 11)

Genus *Xenosyllis* Marion & Bobretzky, 1875

X. scabra (Ehlers, 1864) (1).

Genus *Trypanosyllis* Claparède, 1864

- 1 • Body densely papillated.....*T. troll* Ramos, San Martín & Sikorski, 2010 (12)
- Body non-papillated.....2
- 2 • Medium sized. Without colour pattern. Dorsal cirri short
..... *T. coeliaca* Claparède, 1868 (1)
- Large. With colour pattern. Dorsal cirri long.....3
- 3 • Thin reddish transverse stripes on anteriormost segments. Some anterior dorsal cirri distinctly thicker and longer than others. Blades of compound chaetae slightly bidentate.....*T. aeolis* Langerhans, 1879 (1)
- Distinct colour pattern, formed of transverse red stripes. Dorsal cirri long and red, of similar thickness. Blades distinctly bidentate *T. zebra* (Grube, 1860) (1)

Key to genera of Eusyllinae Malaquin, 1893 (and some “incertae sedis” genera)

- 1 • Pharyngeal tooth absent; pharynx with an incomplete trepan formed by few teeth, backwardly directed.....*Odontosyllis*
 - Pharyngeal tooth present.....2
- 2 • Pharynx with mid dorsal tooth and an incomplete arc of small denticles, frontally directed.....3
 - Pharynx without denticles, only the mid dorsal tooth.....4
- 3 • All dorsal cirri long to very long, coiled over dorsum. Pharyngeal armature composed by a mid dorsal tooth and an incomplete arc of few (5-6) denticles.....*Dioplosyllis*
 - Dorsal cirri not so long. Mid dorsal tooth and incomplete (sometimes complete) arc of numerous (around 30-40) pharyngeal denticles..... *Eusyllis*
- 4 • Antennae, tentacular cirri and dorsal cirri of chaetiger 1 long; subsequent dorsal cirri short.....5

• All appendages long.....	6
5 • Body minute; strictly interstitial life. Without enlarged, aciculiform ventral simple chaetae.....	<i>Neopetitia</i>
• Body not so small. Hard substrata. With enlarged, aciculiform, ventral simple chaetae.....	<i>Brevicirrosyllis</i>
6 • Pharyngeal tooth on middle or posterior position or distinctly retarded.....	7
• Pharyngeal tooth located on anterior margin.....	8
7 • A number of anterior parapodia with enlarged aciculae, distally knobbed.....	<i>Streptodonta</i>
• Without these enlarged aciculae.....	<i>Opisthodonta</i>
8 • Segments posterior to proventriculus fused in units of 2-3 segments. Palps completely free.....	<i>Synmerosyllis</i>
• Segments not fused. Palps free or basally fused.....	9
9 • Without eyes. Palps long, fused to prostomium.....	<i>Palposyllis</i>
• With eyes. Palps not so long nor fused to prostomium.....	10
10 • Antennae and anterior dorsal cirri more or less articulated. A digitiform, subcirral papilla, below the bases of dorsal cirri.	<i>Paraehlersia</i>
• All appendages smooth. Without subcirral papillae.....	11
11 • Small to minute size (< 5 mm in length). Palps separated. Pharynx shorter than proventriculus, with a long tooth. Compound chaetae unidentate or with small, spine-like proximal tooth	<i>Nudisyllis</i>
• Medium to large size (> 5 mm in length). Palps fused basally. Pharynx long. Compound chaetae bidentate.....	<i>Pionosyllis</i>

Género *Odontosyllis* Claparède, 1863

1 • Blades of compound chaetae elongated and unidentate	<i>O. gibba</i> Claparède, 1863 (1)
• Blades short and hooked	2
2 • Blades strongly bidentate	<i>O. fulgurans</i> (Audouin & Milne Edwards, 1833) (1)
• Blades unidentate	<i>O. ctenostoma</i> Claparède, 1868 (1)

Género *Dioplosyllis* Gidholm, 1962

D. cirrosa Gidholm, 1962. (1)

Género *Eusyllis* Malmgren, 1867

- 1 • Blades of compound chaetae all short and similar . *E. blomstrandii* Malmgren, 1867 (1, 8)
- Compound chaetae with elongated and short blades on each parapodium 2
- 2 • Ventral cirri of chaetiger 1 similar to remaining ones. Blades of compound chaetae of two distinct different sizes. Aciculae thick, distally curved.....
- *E. assimilis* Marenzeller, 1875 (1)
- Ventral cirri of chaetiger 1 laminar, different to remaining ones. Blades of compound chaetae decreasing gradually in size on each parapodium. Aciculae slender, tricuspid.....
- *E. lamelligera* Marion & Bobretzky, 1875 (1)

Genus *Neopetitia* San Martín, 2003

N. amphophthalma (Siewing, 1956). (1)

Genus *Brevicirrosyllis* San Martín, López & Aguado, 2009

B. weismanni (Langerhans, 1879). (1, 13)

Genus *Streptodonta* San Martín & Hutchings, 2006

- Pharyngeal tooth located very far from anterior margin. Blades of compound chaetae and dorsal simple chaetae with a translucent hood.....*S. pterochaeta* (Southern, 1914) (1)
- Pharyngeal tooth located more anteriorly. Chaetae without hood.....
-*S. exsulis* Ramos, San Martín & Sikorski, 2010 (12)

Genus *Opisthodonta* Langerhans, 1879

- 1 • Some blades of compound chaetae with proximal tooth curved, almost connecting with blade edge. Pharyngeal tooth on anterior 1/3 of pharynx.....2
- Proximal tooth not so curved. Pharyngeal tooth about on half of pharynx.
-*O. morena* Langerhans, 1879 (1)
- 2 • Blades of compound chaetae on mid body and posterior segments with distal tooth somewhat smaller than subdistal one.....
-*O. serratisetosa* López, San Martín & Jiménez, 1997 (1)

- Distal tooth on blades minute or absent.....
.....*Opisthodonta longocirrata* (Saint-Joseph, 1886) (1, 13)

Genus *Synmerosyllis* San Martín, López & Aguado, 2009

- S. lamelligera* (Saint-Joseph, 1886). (1, 13)

Genus *Palposyllis* Hartmann-Schröder, 1977

- Dorsal cirri absent on chaetigers 2. Palps distinctly long. Body with retractile papillae.....*P. prosostoma* Hartmann-Schröder, 1977 (1)
- Dorsal cirri present on chaetigers 2. Palps not so long. Without retractile papillae.....
.....*P. propeweismanni* (Dauvin & Lee, 1983), n. comb. (14)

Genus *Paraehlersia* San Martín, 2003

- Blades of posterior compound chaetae short, with proximal tooth distinctly longer than distal tooth.....*P. ferrugina* (Langerhans, 1881) (1)
- Blades similar throughout, with proximal tooth shorter than distal one.....
.....*P. dionisi* Núñez & San Martín, 1991 (1, 13)

Genus *Nudisyllis* Knox & Cameron 1970

- Long blades of compound chaetae bidentate, with both teeth similar. Short blades unidentate*N. pulligera* (Krohn, 1852) (1, 13)
- All blades unidentate or with minute, spine-like subdistal tooth.....
.....*N. divaricata* (Keferstein, 1862) (1, 13)

Genus *Pionosyllis* Malmgren, 1867

- Small size (up to 10 mm long). Teeth of blades of compound chaetae close to each other.....*P. compacta* Malmgren, 1867 (13)
- Large size (up to 31 mm long. Teeth of blades well separated.....
.....*P. enigmatica* (Wesenberg-Lund, 1950) (1, 13)

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