Egyptian Journal of Aquatic Biology & Fisheries
Zoology Department, Faculty of Science,
Ain Shams University, Cairo, Egypt.
ISSN 1110 – 6131
Vol. 23(5): 235 - 251 (2019)
www.ejabf.journals.ekb.eg

Catalog of Syllidae (Polychaeta) with reference to what was published in the Red Sea and Suez Canal, Egypt

Faiza Ali Abd- Elnaby
National Institute of Oceanography and Fisheries (NIOF) Alexandria, Egypt.
Faiza_abdelnaby@yahoo.com

ARTICLE INFO
Article History:
Received: Nov. 19, 2019
Accepted: Dec. 20, 2019
Online: Dec. 23, 2019

Keywords:
Polychaetes
family Syllidae
Suez Gulf
Suez Canal
Red Sea

ABSTRACT

Thirty-six Syllid species were identified in the Petro Gulf Misr Project (2017, 2018, 2019). 58 sediment samples were collected from the Suez Gulf (Gable El Zeit Area). The data revealed that 36 syllidae species were recorded; 19 of them are considered new recorded species reported for the first time during the present study (Species with*). Of these species, 13 of them were previously reported in the Suez Canal. This research is considered a new addition to the monitoring work of polychaetes in the Gulf of Suez, supplied by data and distribution of Syllidae species in the Suez Canal, Red Sea and Suez Gulf region. Adding notes of description for some.

INTRODUCTION

Syllidae are small-sized polychaetes occurring on all substrates, the Syllidae are the most widespread family, including about 900 distinct species belonging to more than 80 genera with complicated morphological and ecological characteristics (Faulwetter et al. 2011). Many polychaetes studies have been conducted in the Suez Canal, Suez Gulf and Aqaba Gulf (Fauvel, 1927; Ben-Eliahu, 1972; Amoureux et al.; Wehe and Fiege, 2002; Hove et al., 2006). In addition, Egyptian researchers researched the polychaetes in Suez Canal, Suez Gulf and Ghardaqa (e.g. Ghobashy & El-Komi (1981) ; Ghobashy et al. (1980, 1990); El-Komi et al. (1998); Mona (1992); Selim (1997, 2009); Emara (2002); Emara & Belal (2004); Ghobashy & Ghobashy (2005); Abd-Elnaby (2009); Bellal (2001) and Shalla &Holt (1999).The present study represents an addition to the knowledge about Syllidae species in the Red Sea particularly in the Gulf of Suez.

MATERIALS AND METHODS

The present study was funded by Petro Gulf Company under a frame work organized by National Institute of Oceanography and Fisheries. Benthic fauna specimens were obtained in autumn 2018 (9 samples) and in winter 2019 (9 samples), as well as in 2017 (40 samples) to cover the area around Plat structures of the Petro Gulf Misr , Oil Company (Gable El Zeit, Suez Gulf) (Fig.1). Samples were collected with Van Veen grab (25x25 cm), samples were washed through a 0.1 mm mesh sieve

to capture tiny worms and 0.5 mm for the remainder of the fauna. The worms were then fixed and identified at species level with an ethyl alcohol solution of 70 %. A digital camera connected to stereo and compound microscopes provided the images of some species.

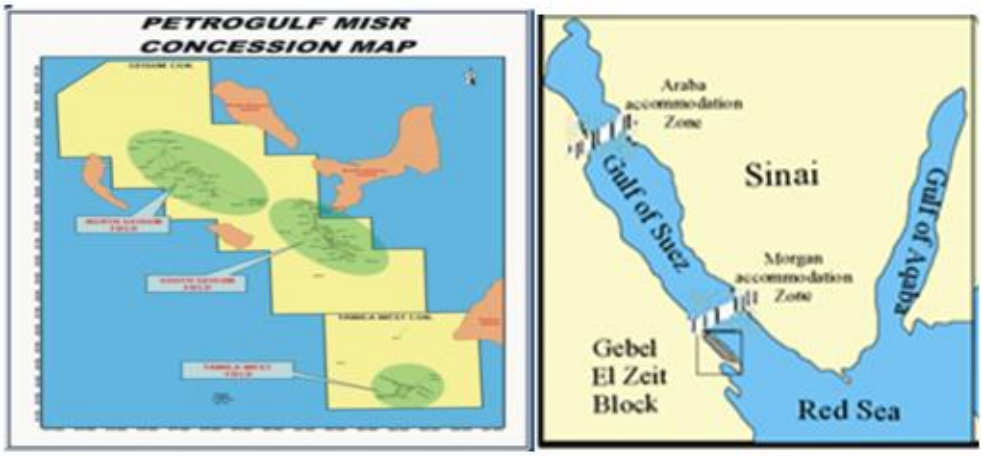


Fig. 1: Map of Gabel El Zeit area

RESULTS AND DISCUSSION

Syllidae group represents one of the most diverse and more complex systematically family of polychaeta (San Martin 2003, 2005). This family is currently divided in to five subfamilies (Eusyllinae, Exogonina, Autolytinae, Syllinae and Anoplosyllinae (Aguado& San Martin 2009).

Knowledge about polychaetes in the Egyptian waters is still relatively poor especially in Suez Canal, Suez Gulf, Gulf of Aqaba and also the Mediterranean Coast of Egypt. The present study revealed many polychaete species are recorded for the first time in Egyptian waters. Only 36 Syllidae species reported in this paper; 13 of them were reported previously in Suez Canal (Ben Eliahu, 1972 ; Amoureux *et al.*, 1978; Wehe & Fiege, 2002). From the 36 syllidae species that reported during the present study (Table 1), 24 species of them reported previously from Red Sea, and 17 species are considered new for Suez Gulf; most of them are Indo-Pacific, or recorded from South Africa before.

This means the ability of these species to move northward to the Gulf of Suez, and then can cross in the future through the Suez Canal and reach to the Mediterranean Sea. 19 new species of them recorded for the first time from Suez Gulf, Egypt (Table 1 species with*). Generally these attempts to propagate more existing Syllidae species have not been studied or published before, to know the species that already exist and focus on their diversity, to make a map of polychaete biodiversity in Egypt in future.

Some of the new recorded species are described in this study.

***Branchiosyllis exilis* (Grvier,1900)**

Branchiosyllis exilis Westheide 1974:60-64 fig.26; Aguado, San Martín and Ten Hove, 2008: 6-10 fig.1 a-f.

Material examined: three specimens collected with sand from Gabel El Zeit area (2018).

Notes: Three speciemens, 2-2.5 mm long with up to 50 segments, Blades falcigerous, bidentate, with long spines on margin, Dorsal chaeta shafts with distal spines, shafts

of most ventral chaeta smooth. Bidentate chaetae becoming unidentate towards posterior end. In posterior chaetigers, first two blades turn out 180, becoming claw-shaped, with short, smooth shafts, remaining six to seven chaetae with distally curved shafts with small spines.

Remarks: This species, originally described from Gulf of Aden, also characterized by the presence of claw-shaped chaetae on posterior chaetigers, It is a widely distributed taxon, considered circumtropical (Aguado, San Martín and Ten Hove, 2008).

Branchiosyllis maculata* (Imajima, 1966)

Typosyllis maculata Imajima,1966: 277 figs. 59 a-m.

Branchiosyllis maculata Licher, 1999: 274.

Material examined: Only one specimen, from sandy bottom Suez Gulf , (Gabe l El Zeit 2018). **Notes:** Incomplete, about 6mm, 45 segments, some articles of dorsal cirri partially black. Two to three most ventrally compound chaetae with short shafts and claw-shaped blades.

Remarks: The specimens agree well with the original description of B. maculate. The claw- shaped chaetae typical of Branchiosyllis, The posterior chaetae from Indonesia have shafts not as curved in their distal part ,the present shafts similar to the present one.

Table 1: Showed the Syllid species recorded during the present study from the Suez Gulf and illustrates their distribution in the Egyptian marine habitats. Species with *(new recorded for the first time through the present study).

Syllidae species	Suez Gulf	Suez Canal	Red Se	Distribution
Branchiosyllis exilis (Grvier,1900)	+	+	+	Circumtropical, also present in the warmest waters of the Mediterranean, Suez Canal, Red Sea (Wehe&Fiege, 2002)
Branchiosyllis maculata (Imajima,1966)*	+	-	-	West Pacific Ocean: Southern Japan; Philippines; Australia; Indonesia (Aguado, San Martín and Ten Hove, 2008)
Brania furcelligera (Augener, 1913)*	+	-	-	Australia (New South Wales, S Australia, W Australia, Queensland). South Africa, New Zealand. Islands of tropical Pacific. (San Martin 2005& Day, 1967).
Brevicirrosyllis weismanni (Langerhans, 1879)	+	-	+	Mediterranean Sea, Red Sea, Atlantic Ocean (Wehe&Fiege, 2002; San Martin, 2003; Abdelnaby &San Martin 2010.
Eusyllis assimilis Marenzeller 1875	+	+	+	Pacific Ocean: New Zealand; Australia; Japan. Indian Ocean, Mediterranean Sea. Atlantic Ocean: East Atlantic, Red Sea, Suez Gulf (Wehe&Fiege, 2002; San Mart´ın & Hutchings, 2006).
Exogone dispar (Webster, 1879)	+	-	+	Mediterranean, Atlantic and Pacific Oceans, Australia, Red Sea. (Mikac and Musco , 2010); South Africa (San Martin ,2005)
Exogone homosetosa Hartmann-Schröder, 1965*	+	-	-	Chile, Australia (W Australia), S. W. Pacific Ocean (San Martin ,2005; Day, 1967)
Exogone simplex Hartmann-Schröder, 1960*	+	+	+	Red Sea, Suez Canal, Egypt (Hurghada). Indian Ocean: Australia (Western Australia). Atlantic Ocean: Angola, Brazil (Paraíba and São), (San Martin ,2005& Wehe&Fiege, 2002 ; Hartmann-Schroder, 1960)
Haplosyllis djiboutiensis (Gravier, 1900)*	+	-	+	Red Sea, Persian Gulf, Korea, Southern Japan, Australia (Lattig et al,2010)

Haplosyllis spongicola (Grube, 1855)	+	+	+	Cosmopolitan (Lattig et al., 2010); Red Sea (Hartmann-Schroder, 1960).
Myrianida convoluta Cognetti,1953*	+	+	+	West Mediterranean, W Italian coasts, Balearic Islands, French coast, Atlantic, Cuba, Red Sea, Pacific O. Western Mediterranean, Eastern Mediterranean, Suez Canal (Ben-Eliahu, 1977; 1972; Wehe&Feige, 2002).
Odontosyllis polycera (Schmarda, 1861) *	+	-	-	Angola, Namibia, South Africa, USA(S California), Panama, Indo-Pacific, New Zealand, Australia, (San Martin , 2006;Day, 1967)
Opisthodonta morena Langerhans, 1879 *	+	-	+	Pacific Ocean: Australia (New South Wales). Indic Ocean: Australia (Western Australia), Red Sea. Mediterranean Sea. Atlantic Ocean: Madeira Island and Brazilian coast.(Wehe&Fiege, 2002&Cinar &Ergen, 2003)
Parexogone hebes (Webster & Benedict, 1884)*	+	-	+	Arctic, North Atlantic up to Mediterranean, English Channel, southern North Sea, Skagerrak and Bay of Kiel and Red Sea. (Wehe&Fiege, 2002)
Pinosyllis heterochaetosa San Martín & Hutchings, 2006 *	+	-	-	Pacific Ocean , Australia: New South Wales, Botany Bay (type Locality (San Mart´ın & Hutchings, 2006; Fukuda & Nogueira, 2013)
Sphaerosyllis annulata Nogueira, San Martín, and Fukuda, 2004	+	-	-	South Brazil, North coast of Egypt (El Burrullus) (Abdelnaby ,2010; Nogueira, San Martín, and Fukuda, 2004)
Sphaerosyllis hirsuta Ehlers, 1897*	+	-	-	Pacific Ocean, Australia (San Martin, 2005)
*Sphaerosyllis p*irifera Claparède, 1868	+	-	+	Atlantic Ocean, Mediterranean Sea (San Martin 2003; Wehe & Fiege, 2002)
Streptosyllis bidentata Southern,1914	+	-	+	Eastern North Atlantic, from Ireland to the Canary Islands. Red Sea, Mediterranean Sea (Balearic Islands) (Wehe&Fiege, 2002)
Syllis armillaris (O.F. Müller, 1776)	+	+	+	Cosmopolitan (Day,1967& Aguado&San Martin, 2007)
Syllis beneliahuae (Campoy & Alquézar, 1982)*	+	-	-	W. Atlantic: Cuba, Costa Rica and Mexico . Southwest Atlantic Ocean: Brazil, Mediterranean Sea Eastern Atlantic Ocean: Spain, Eastern Central Pacific Ocean: Panamá.(San Martin, 2003)
Syllis caeca Monro, 1933*	+	+	+	Adriatic, Balearic Islands, Red Sea, Suez Canal (Ben-Eliahu, 1972; Licher 1999)
Syllis garciai (Campoy, 1982)	+	-	-	Atlantic Ocean, Mediterranean Sea.(Aguado&San Martin, 2007)
Syllis gerlachi (Hartmann-Schro¨der, 1960)	+	-	+	Mediterranean Sea, Red Sea, Atlantic Ocean (Mikac and Musco, 2010; Hartmann-Schroder, 1960; Cinar &Ergen, 2003)
Syllis gracilis Grube, 1840	+	+	+	Tropical Indo-Pacific (Wehe&Fiege, 2002& Day, 1967)
Syllis hyalina Grube, 1863	+	+	+	Cosmopolitan.(San Martin, 2003; Amoureux et al, 1978)
Syllis kabilica Ben-Eliahu, 1977*	+	-	+	Red Sea (Wehe&Fiege, 2002)
Syllis lutea (Hartmann-Schröder, 1960)*	+	+	+	Circumtropical. Red Sea; Japan; Brazil; Cuba; Australia (Queensland; Western Australia), Suez Canal (Wehe&Fiege, 2002)
Syllis pulvinata (Langerhans, 1881)	+	-	+	Mediterranean Sea, Red Sea and Atlantic Ocean (Faulwetter, 2011& Aguado&San Martin, 2007)
Syllis rosea (Langerhans, 1879)*	+	+	+	Red Sea, Mediterranean Sea. Circumtropical (Wehe&Fiege, 2002& San Martin , 2003)

Syllis schulzi (Hartmann-Schröder, 1960)	+	-	+	Red Sea and Mediterranean Sea (Wehe&Fiege, 2002& Dorgham et al, 2013 ; Hartmann-Schroder, 1960)
Syllis variegata Grube 1860	+	+	+	Cosmopolitan, Suez Canal, Australia (Licher, 1999& Wehe&Fiege, 2002).
Syllis picta (Kinberg, 1866)*	+	-	-	Australia (New South Wales, Northern Territory, Western Australia,(Álvarez-Campos et al. 2015)
Syllis ferrani Alós & San Martín, 1987*	+	-	-	Mediterranean Sea: Chafarinas Islands, Cap de Creus (Catalonian coast of Spain), and northern Cyprus, (San Martin, 2003)
Trypanosyllis zebra (Grube, 1860)	+	+	+	Suez Canal, Red Sea, Cosmopolitan in temperate and tropical seas. Tropical Indo-Pacific (Wehe&Fiege, 2002& Aguado&San Martin, 2007)
Westheidesyllis corallicola (Ding & Westheide, 1997)*	+	-	-	Atlantic O., Gulf of Mexico , Cupa (San Martin, 1990; San Mart´ın & Hutchings, 2006)
Total number of species recorded	36	13	24	19 new recorded species for the first time in present study*

***Brania furcelligera* (Augener, 1913)* (Fig 2 A-C)**

Brania furcelligera Day & Hutchings, 1979: 100. San Martin 2005:105, fig 59 a-i.

Material examined: One Specimen was collected from Suez Gulf (Gable El Zeit area 2018, 2019).

Notes: Body small, about 4.5mm, for 42 chaetigers. Prostomium pentagonal, with 4 large eyes, and 2 anterior small eye spots. Antennae long, bowling-pin shaped. Parapodial glands, 2 glands per parapodium. Dorsal cirri similar to dorsal tentacular cirri longer on posterior chaetiger than on anterior chaetigers. Ventral cirri digitiform, shorter (Fig. 2A). Compound setae heterogomph anteriorly, and hemigomph posteriorly; blades unidentate , distally rounded, slightly hooked, Each parapodium with 8 compound chaetae anteriorly , 5 on posterior parapodia; Dorsal simple chaetae from anterior parapodia, unidentate, provided with about 4–5 short marginal serrations of different sizes, posterior dorsal simple chaetae much thicker than anterior ones (Fig. 2C). Ventral simple chaetae posteriorly, sigmoid, smooth and unidentate. Solitary acicula on each parapodium, tip enlarged, rounded, and slightly hollow. Pharynx through 3 segments; pharyngeal tooth conical, located on anterior margin. Proventricle short, through 2.5 segments, with about 18 muscle cell rows. Pygidium small, bilobed, with 2 long anal cirri, longer than median antenna (Fig. 2B).

Remarks: This specimen differs from San Martin 2005 from Australian the author's specimen with medium small anal cirri but her not observed. Specimen was found within fouling collection.

***Brevicirrosyllis weismanni* (Langerhans, 1879)**

Pinosyllis weismanni San Martín et al., 2009:15. Ben- Eliahu 1977:50, fig 20.

Material examined: Two specimens about 9 mm long, 35-40 segments, were ollected from Gabel El Zeit , Suez Gulf in 2018, and one 2019.

This species was reported before by Abd-Enaby and San Martin (2010), was found in Port Said collection and reported in Red Sea (Wehe&Feige, 2002), So it is considered Lesspsian migrant species comes to Mediterranean via Suez Canal.

***Exogone dispar* (Webster, 1879). (Fig. 3 A-C)**

Exogone dispar Campoy 1982: 290, fig. 21; Çinar et al. 2003: 751.

Material examined: This species was collected from Suez Gulf (G. El Zeit), found within sand.

***Exogone homosetosa* Hartmann-Schröder, 1965*. (Fig. 4 A-C)**

Exogone (*Parexogone*) *homosetosa* Hartmann-Schröder, 1965:figs. 296, 297; San Martin, 2005:121 fig 73 a-e.

Material examined: Two specimens were collected from Suez Gulf (Gabel El Zeit).

Notes: Body 3mm long with 38 segments. Antennae inserted close to each other,, Median antenna elongate than the lateral one. Palps long fused along their length, with a slight dorsal furrow. Compound chaetae hetergomph, shafts with subdistal spines, blad bidentate, with subdistal small tooth, long ,strong serration, about 11-12 chaetae anteriorly then become 5 posteriorly. Dorsal simple chaetae smooth, distally blunt, slightly bidentate. Ventral simple chaetae, sigmoid, with short subdistal spines, one acicula distally rounded.

***Exogone simplex* Hartmann-Schröder, 1960*. (Fig. 5 A-C)**

Exogone (Sylline) simplex San Martín 2005: 146, fig. 92.

Material examined: Three Specimens were collected from Suez Gulf with sand, within the project of Petro Gulf Misr company 2018. 2-2.3 mm, with up to 20 segments.

Remarks Specimens from Gulf of Suez, differ from the Australian ones described by San Martín (2005), in that the latter have only three chaetae per parapodium whereas here with 3-5 chaetae and present specimens showed that the proventricle extending for two chaetigers as San Martín's specimens (2005).

***Parexogone hebes* (Webster & Benedict, 1884)* (Fig.6 A-C).**

Exogone hebes Fauvel, 1923: 308 fig. 118 g-p.

Material examined: one specimen was collected from Suez Gulf with sand (2018).

Notes: Body thin about 1cm, with 40 chaetigers. Prostomium rounded pentagonal with eyes, and two ocelli. Palps together conical, longer than the prostomium. Antennae, oval or club-shaped, median antenna long, lateral antennae very small, papilla-like. Tentacular cirri and dorsal cirri even smaller than the lateral antennae (fig.6A,B). Dorsal cirri missing on the second parapodium. Ventral cirri a little longer than the dorsal cirri. 2 aciculae of which one with a terminal button; the other distally bent. Blades of compound chaetae short and unidentate (fig. 6C). Middle and posterior parapodia with one upper bidentate simple chaeta. Pharynx with one anterior tooth.

***Eusyllis assimilis* Marenzeller, 1875* (Fig.7 A-C)**

San Martin 2003:114 fig.52 a-d. 2006: 273 fig.10-12 a-h.

Material examined: material was collected from Suez Gulf 2018 with sand.

Notes: Body incomplete 29 segments, 3mm long, the main characters , dorsal tentacular cirri long, similar to median one (Fig.7 A), parapodia dorsally with cilia. Compound chaeta heterogomph falcigers, two types of compound chaetae present , one with slender, bidentate blades, both teeth similar, and short spines on margin, other with shorter and larger blades, strongly bidentate, anterior parapodia with 3 slender type chaetae and about 16 compound chaetae of broad type(Fig.7 B). Two acicula with rounded tips shafted to left side (Fig.7 C).

***Haplosyllis djiboutiensis* (Gravier, 1900)* (Fig. 19)**

Haplosyllis djiboutiensis Lattig et al., 2009: 18, fig. 12; 2011: 3 fig 1 a-f.

Haplosyllis spongicola Imajima 1966: 220-221, fig. a–h. , Lee & Rho 1994: 132–134, fig. 1, a–f.

Material examined: Two specimens were collected from Suez Gulf Gabel El Zeit 2017.

Remarks: The morphological characters agrees with the description was given by Lattig & Martin (2011).

***Haplosyllis spongicola* (Grube, 1855)(Fig. 18)**

Haplosyllis spongicola Lattig & Martin, 2010: 27 fig 17, 16 a-f.

Material examined: 9 specimens were collected through 2017, 2018 collection

Notes: Body small, 2 mm long, for 25 segments. Scarce round, small, dorsal granules on posterior segments. Chaetae all bidentate, two on anterior parapodia, one at mid-body segments, 2–4 on posterior parapodia .Two aciculae in anterior parapodia (one straight, other with slightly curved tip); one acicula per parapodium posteriorly , broad, with curved upwards-directed tips sometimes protruding out of parapodia. The description agrees with San Martin (2003).

Myrianida convoluta* Cognetti, 1953

Autolytus convolutus Cognetti, 1953:233 figs. 1, 2; Ben Eliahu, 1977: 85-86 fig 12; San Martin 1984: 413-415 fig 111.

Notes: One specimen 1mm, 28 segments, was collected , 2019. Body small 2.5 mm with 30 segments. Parapodia thick in the mid body, six falcigers present on anterior and posterior parapodia, bidentate, proximal tooth thick, curved dorsal bayonet chaetae. Trepan of 8 equal large teeth.

Remarks: Çinar and Gambi (2005), detected 9 teeth on trepan while herein found 8 teeth only.

***Odontosyllis polycera* (Schmarda, 1861)* Fig. (8A, B)**

Odontosyllis polycera Day 1967: 260 fig. 12, San Martin 2006: 298 fig. 35 a-f.

Material examined: Two samples were collected from Suez Gulf (Gabel El ZEit, 017), with sand.

Opisthodonta morena* Langerhans, 1879

Opisthodonta morena Campoy, 1982:307; San Nartin, 2003 54, figs 15,16 a-f. Material examined: One specimen, 4mm with 30 segments was collected 2018. The description agrees with San Martin's (2003). Morphological characters agrees with San Martin (2003).

***Pionosyllis heterochaetosa* San Martin and Hutching 2006* (Fig. 9A-C).**

Pionosyllis heterochaetosa San Martin and Hutching 2006: 331 fig 61 a-f.

Perkinsyllis heterochaetosa Fukuda and Nogueira 2013: 978.

Material examined: Two specimens were collected from Suez Gulf (Gable El Zeit) 2018.

Notes: Body 4mm with 45 segments, Most anterior parapodia with numerous compound chaetae, with short bidentat blades, long shafts, provided with long spines on margin, about 10 in number, then decrease progressively along the body, becoming elongate and more strongly bidentate with long serration on margin. Varying in in the length of distal and subdistal tooth and derogated in length. Acicula distally knobbed, two anteriorly ,one posteriorly.

***Sphaerosyllis hirsute* Ehlers, 1897*. (Fig. 10A-C)**

Sphaerosyllis hirsute San Martin 2005:99 fig 55 a-h ,56 a-h; San Martín & López 2002:141 fig. 4 a-f.

Material examined: One specimen was found within sand at Gabel El Zeit area, 2018. Body small, 2 mm with 29 segments.

***Sphaerosyllis annulata* Nogueira, San Martín, and Fukuda, 2004 (Fig. 12).**

Sphaerosyllis annulata Nogueira, San Martín, and Fukuda, 2004: 50 fig.1 a-h. Abd- Elnaby 2010: 278 fig.2 a-d.

Material examined: One sample was collected from Gulf of Suez (Gabel El Zeit area), 2018. Body small 3mm long with 35 segments. This species recorded before.

***Sphaerosyllis pirifera* Claparède, 1868 (Fig. 13 A-C).**

San Martin 2003: 212 fig. 111 a-h.

Material examined: Five samples were collected from Suez Gulf (Gabel El Zeit area 2019).

***Streptosyllis bidentata* Southern, 1914 (Fig. 14)**

San Martin 2003:127 fig 61 a-g; Campoy, 1982: 314, pl. XXV; Fauvel, 1923: 282, fig. 106 h–r.

Material examined: Four specimens were collected from Suez Gulf (Gabel El Zeit area 2017).

***Syllis armillaris* (O.F. Müller, 1776) (Fig. 15)**

Syllis (Typosyllis) armillaris Fauvel, 1923: 264, figs. 99 a-f.; Ben-Eliahu, 1977: 8, fig.1.

Syllis armillaris San Martin 1984:381, figs. 99,100, Çinar and Ergen, 2003: 778.

Material examined: 8 specimens were collected during 2018, 2017.

Notes: Body 2mm with 65-80 chaetigers, articulation of Medium antennae and lateral one, from 18-20 joints, dorsal cirri with 12-18 joint anteriorly become less in number in the middle and posterior part, chaetae bidentate falcigers, Proventriculus through 7 segments with 35-41 muscle cell rows, Pharynx occupying 8 segments, the margin with 10 papillae, pharyngeal tooth anteriorly.

Remarks: San Martin (2003) recorded 17 joints of medium antenna and from 12-13 for lateral one, dorsal cirri with 19-20 joint anteriorly become 12-17 in middle part of the body, Proventriculus through 6 segments with 37-50 muscle cell rows.

***Syllis beneliahuae* (Campoy & Alquézar, 1982)* (Fig. 16 A, B).**

Syllis beneliahui San Martin, 1984, 2003: 405 figs. 222, a-k, 223 a-g.

Material examined: Two specimens were collected, 2017. Body large 5mm with 50 chaetigers (Fig. 16 A). Chaetae pseudospinigers and falciger withbidentate blades, long anteriorly , more in middle and posterior ones (Fig. 16 B), Proventriculus and pharynx both through 6 segments.

Remarks: The morphology of the specimens found in this survey agrees well with the description of those reported by Capa et al., (2001), and San Martín (2003).

***Syllis garciai* (Campoy, 1982) (Fig.17 A-D).**

Typosyllis garciai Licher 1999: 551 fig 74.

Syllis garciai San Martin 1984: 364 fig 92, 1992: 180 fig 5a-d

Material Examined: Samples were collected from Suez Gulf 2018.

Notes: Body 9mm, with 75 segments. (Fig. 17 A). Anterior parapodia with three pseudospinigers and 10 falcigers; all bidentate, Posterior parapodia with one pseudo-spiniger and four falcigers; bidentate, distal spines on cutting edges of blades reach to the level of proximal tooth(Fig 17 B). Two acicula posteriorly (Fig. 17 C). Dorsal simple seata straight, bidentate with fine serration at side (Fig.17D). Proventricle extend through six segments, with 32 muscle cell rows. Pharynx through seven segments; pharyngeal tooth on anterior margin.

***Syllis gracilis* Grube, 1840**

San Martin 2003: 413 fig. 226 a-k

Material Examined: Two samples were collected from Suez Gulf, 2018.

Notes: Body long and thin, 2mm, with 95 segments.

***Syllis gerlachi* (Hartmann-Schro¨der, 1960)**

Syllis (Typosyllis) gerlachi Hartmann-Schro¨der, 1960: 81, fig. 42-44; Ben-Eliahu 1977:19, fig. 5 a-j.

Notes : Two specimens were found within sand (2017). Medium antenna (13 joints, lateral one 9 joints. Proboscis with distal tooth, pharynx and proventriculus each occupied 7 segments . Setae bidentate falcigers ,acicula 2 anteriorly one posteriorly stake-like, massive .

***Syllis variegata* Grube 1860 (Fig. 22 A, B)**

Syllis variegata San Martı´n 1984, p 354–360, Figs. 88, 89.

Typosyllis variegata: Campoy 1982, p 445, Fig. 65; Licher 1999, p 101–108, Fig.10b, 17d, 49.

Material Examined: 15 samples was collected from Suez Gulf (Gabel El Zeit area) 2018, 2019.

***Syllis (Typosyllis schulzi* Hartmann-Schroder, 1960.**

Ben Eliahu, 1977: 21, fig. 6 a-j

Syllis prolifera Ben Eliahu, 1972: 206. Hamdy, 2008.

Material examined: 12 specimens were collected during 2017, 2018. Body up to 10mm, 30-50 segments. The morphological characters agrees with Ben-Eliahu (1977).

***Syllis rosea* (Langerhans, 1879)* (Fig.23 A, B)**

Syllis rosea San Martín, 2003: 358 fig. 194 a-j. 1984: 335, fig. 80, 81.

Notes: This species represented by two specimens, were collected 2018.

Body long 6mm, up to 80 segments, dorsal cirri with reddish inclusions between chaetigers from middle to near posterior ones (Fig. 23A). Pseudospinigers from segment number3, bidentate become unidentate posteriorly, also falcigers with bidentate tips (Fig. 23 B). Pharynx very long occupying 10 segments, proventriculus , 7 segments (Fig. 23A).

***Syllis lutea* (Hartmann-Schröder, 1960)* (Fig. 20 A-B)**

Syllis (Typosyllis) lutea Ben –Eliahu, 1977: 40, Hartmann-Schroder, 1960:81, figs. 38-41.

Notes: Three specimens, Body 3.5, 4mm long, 40- 48 segments, color yellow, granules in jointes of antennae (Fig. 20 A-B).The description of the present specimens agrees with Ben-Eliahu's description (1977) and (1972) from Suez Canal.

***Syllis pulvinata* (Langerhans, 1881)**

Sllis cf. bouvieri Ben –Eliahu, 1972:209

Syllis pulvinata Cinar and Ergen, 2003: 786.

Material examined. Two specimens were collected during 2017. Body thin, up to 15mm long, with 65-80 segments. Describution agrees with Ben –Eliahu (1977) and San Marin (2003), it collected from Red Sea**.**

***Syllis kabilica* Ben-Eliahu, 1977* (Fig. 25 A-C).**

Syllis kabilica San Martin, 2003: 370 fig. 201 a-f.

Syllis (Typosyllis) alternate kabilica Ben- Eliahu, 1977: 38 fig 14-15 a-g.

Notes: One specimen was collected , 2017. Body 7mm with 90 segments. Color pink orang. Median antenna with 20 joints, lateral ones , 9 joints (Fig. 25 A) . Dorsal cirri (12-15 joints), pharynx massive with strong tooth anteriorly, proventriculus through 6 segments with 32 rows of muscle cells. Dorsum from proventriculus with glandular bands, Heterogompg setae 10 in fascicle, bidentate gradated in length anteriorly, blades of setae in mid and posterior body, broad, bidentate (Fig. 25 C). Acicula 2 anteriorly (Fig. 25 B) with rounded tip shafting slightly to left side, one acicula posteriorly.

***Syllis caeca* Monro, 1933* (Fig.21 A-D).**

Syllis(Langerhansia) sp. Ben –Eliahu 1972:204 fig 3, 4 a-d.

Typosyllis caeca Licher 1999: 64 –66, Fig. 29.

Material Examined: Two specimens were collected from Gable El Zeit (Suez Gulf 2017).

Notes: Body 1.2 mm with up to 37 segments. Thin, slender, elongate; prostomium ovate, distinctly wider than long, without eyes, palps elongate, distally rounded, Antennae, peristomial cirri and dorsal cirri moniliform, articulated, similar in shape; median antenna with 20 articles, lateral antennae with 10 articles, middle dorsal cirri with up to 15 articles, then becoming shorter (7– 9) (Fig.21A). Parapodia

with two aciculae of similar shape, subdistally slightly enlarged; in anterior parapodia; in midbody parapodia one acicula distinctly larger than other(Fig.21B); up to 10 compound chaetae with smooth, heterogomph shafts: 1–2 long spiniger-like chaetae, with extremely long blade, bidentate, with fine serrated margin; 1–3 shorter spiniger-like chaetae, with shorter blades, finely bidentate, with almost fine serrated ventral edge; and 4–5 falcigers, with shorter blade, bidentate, with finely coarsely serrated edge, with secondary tooth long, reaching to tip of blade(Fig.21D). Dorsal simple setae with pointed tip (Fig. 21 C). Pharynx through 7 chaetigers, relatively broad, with small, pointed tooth; proventricle through 7 chaetigers, with 33 muscle cell rows.

Remarks: The morphology of the specimens found in this survey agrees well with the description of those reported by Licher (1999). Differs from Ben-Eliahu (1972) and Arvanitidis (2000) specimens, where they reported that spiniger chaetae without serration while her fine serration are present.

***Syllis ferrani* Alós & San Martín, 1987* (Fig. 26A-D).**

Syllis ferrani Alós & San Martín, 1987: 35-43, figs 1-5. San Martín, 2003: 390-394, figs 213, 214. Çinar & Ergen, 2003:782.

Typosyllis ferrani Licher, 1999: 221-223, fig. 93.

Material examined: specimen was collected from Gulf of Suez (Gabel El Zeit area 2017).

Notes: Body 1.7mm, 100 segments, with reddish colour and two rows of oval pages (Fig. 26A). Aciculae of similar shape, subdistally slightly enlarged; in anterior parapodia numbering 5 acicula (Fig. 26 B); in midbody parapodia one acicula distinctly larger than other (Fig. 26 D). Up to 10 compound chaetae with smooth, heterogomph shafts: 1–2 long spiniger-like chaetae, with extremely long blade, bidentate, with fine serrated margin(Fig. 26 C); 1–3 shorter spiniger-like chaetae, with shorter blades, finely bidentate, with almost fine serrated ventral edge; and 4–5 falcigers, with shorter blade, bidentate, with finely strong serrated edge, with secondary tooth long, reaching to tip of blade. Pharynx through 7 chaetigers, relatively broad, with small, pointed tooth; proventricule through 7 chaetigers, with 33 muscle cell rows.

Remarks: The morphology of the specimens found in this survey fit well with the description of those reported by Licher (1999). Differs from Ben-Eliahu (1972) and Arvanitidis (2000) specimens, where they reported that spiniger chaetae without serration while her fine serration are present.

***Trypanosyllis zebra* (Grube, 1860) (Fig. 24)**

Trypanosyllis zebra San Martin 2003: 311, fig 171 a-f. Cinar and Ergen, 2003: 789.

Material examined: Five specimens were collected 2017-2018, body up to 14 mm long 60-150 segments (Fig. 24). This species migrated from Red Sea into Mediterranean via Suez Canal (Ben Eliahu, 1972).

***Westheidesyllis corallicola* (Ding & Westheide, 1997)*(Fig. 27)**

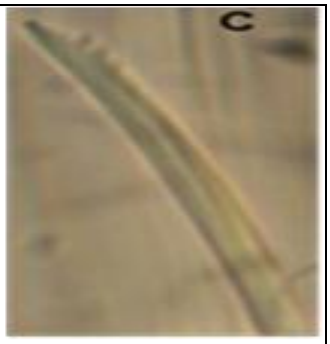
pionosyllis corallicola Ding & Westheide, 1997: 285, fig. 6

Material examined: One specimen was found in sandy sample w collected 2017, from uez Gulf (Gabel El Zeit).

Notes Antennae filiform, long, slender, tentacular cirri similar to antennae , dorsal cirri smooth absent in chaetiger 2, two types, filiform like antennae on some segments, others short exogonid-like, shorter than parapodial lobes. Chaetae homogomph, with poorly bidentate blades, with fine spines, shafts thick with 3-dimensional articulation, dorsal simple chaetae unidentate, thick, with few fine spines on margin, one acicula, pharynx through 4 segment , proventricle through 3 segment.

Fig. (2) *Brania furcelligera* (A). Anterior part of body .

(Fig.2B) posterior part of body



(Fig.2B C). Dorsal simple chaetae from anterior body.

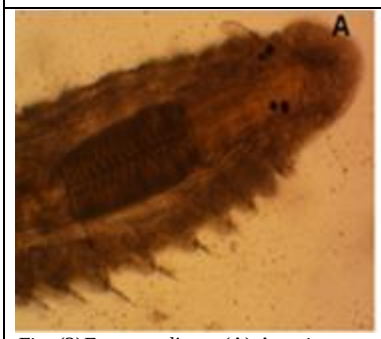
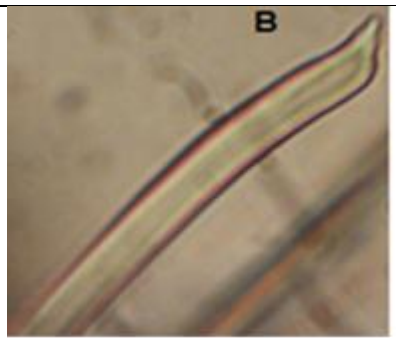
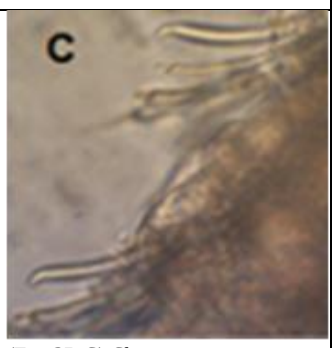


Fig. (3)*Exogone dispar* (A) Anterior part

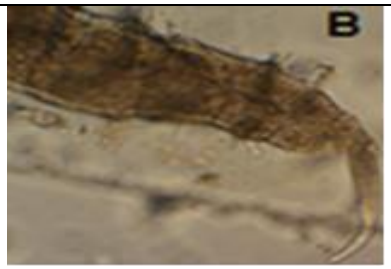


(Fig. 3B) Dorsal simple chaeta



(Fig. 3B C) Chaetae

Fig.(4) *Exogone homosetosa*, (A) Anterior part.



(Fig 4B) Posterior part

(Fig 4 C) Chaetae and dorsal simple chaeta.

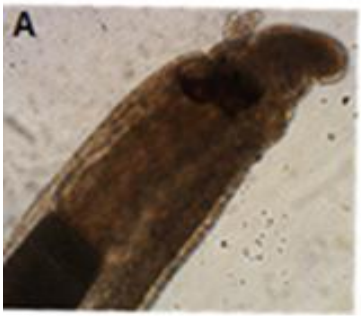
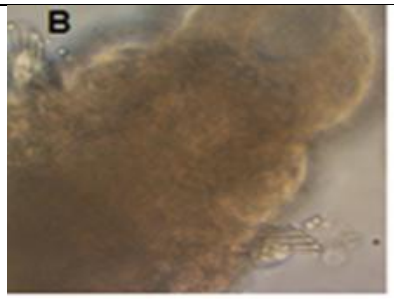


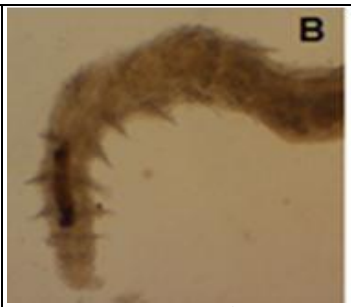
Fig.(5) *Exogone simplex* (A) Anterior par



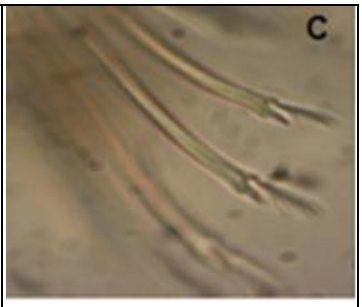
(Fig. 5 B) anterior part with chaetae

(Fig. 5 C) Chaetae and dorsal and ventral chaeta

Fig.(6) *Parexogone hebes* (A) Anterior part of body.

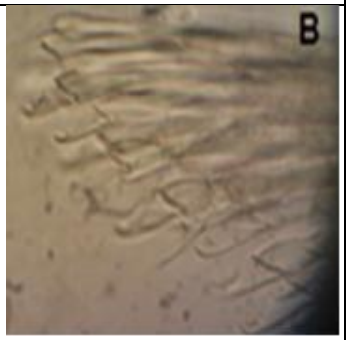


(Fig.6 B) Anterior part of body.

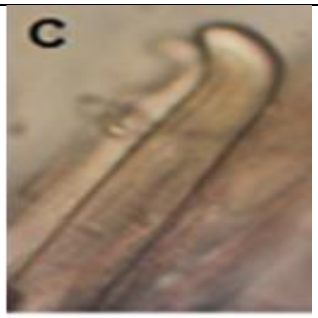


(Fig.6 C) chaetae.

Fig. (7*) Eusyllis assimilis*,(A) Anterior part

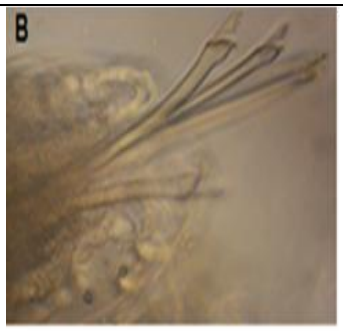


(Fig. 7B) Chaetae



(Fig. 7C) acicula of anterior parapodium

Fig.(8) *Odontosyllis polycera* (A) Anterior part of body



(Fig.8B) Chaetae of posterior parapodium

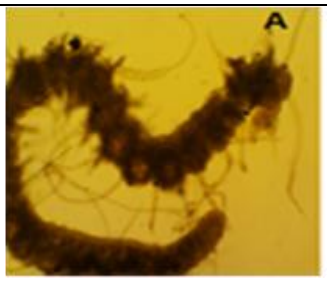
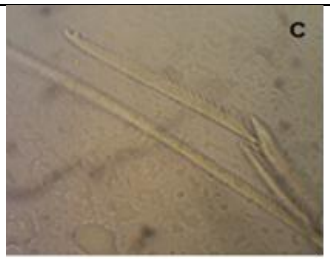


Fig. (9) *Pinosyllis heterochaetosa*,(A) body.

(Fig. 9B) spiniger compound chaetae.



(Fig. 9C) spiniger compound chaetae.

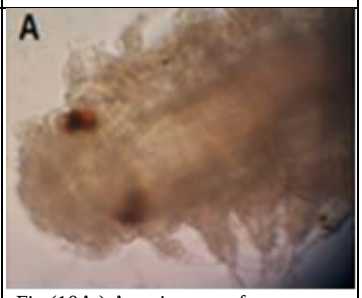
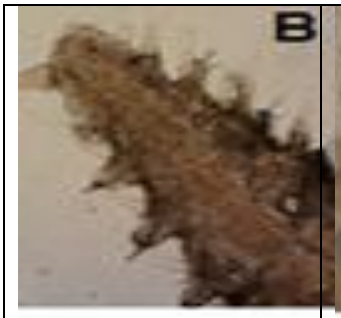


Fig.(10A) Anterior part of *Sphaerosyllis hirsute*



(Fig.10 B) Posterior of *Sph. hirsute*

(Fig.10 C) Chaetae of *Sph. hirsute*

Fig (11) Mid body chaetae of *Syllis Picta*

Fig.(12) *Sphaerosyllis annulata*.

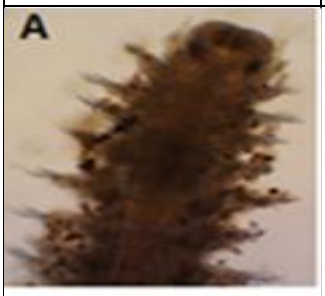
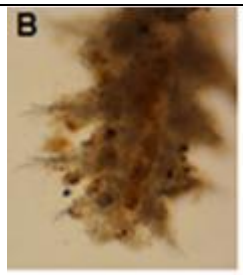


Fig. (13 A) *Sphaerosyllis pirifera*



(Fig. 13 B) Posterior part of *Sph. pirifera*

(Fig. 13 C) Compound chaeta posterior *of Sph. pirifera*

Fig. (14) *Streptosyllis bidentata*

Fig.(15) *Syllis armillaries*

Fig.(16A) *Syllis beneliahuae*

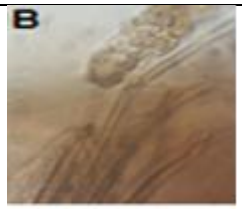
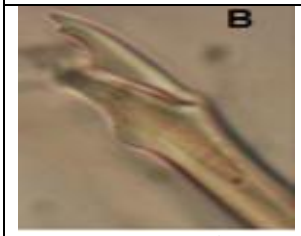
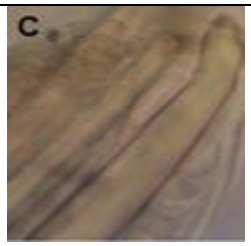


Fig. (16B) setae and acicula of *S. Ben.*

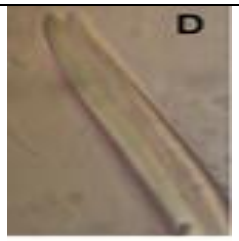
Fig. (17 A) *Syllis garciai*



(Fig.17 B) Compound falciger setae of *S. garciai*



(Fig.17 C) acicula posterior of *S. g.*

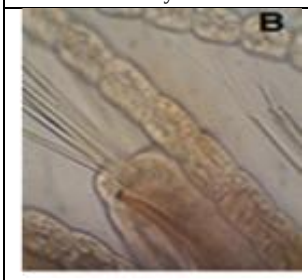
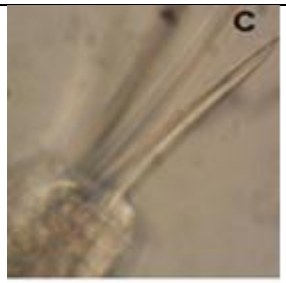
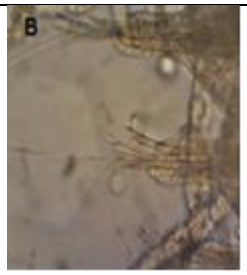
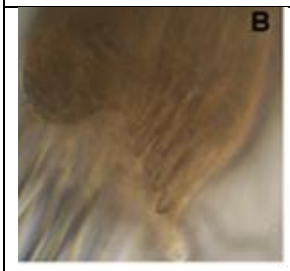
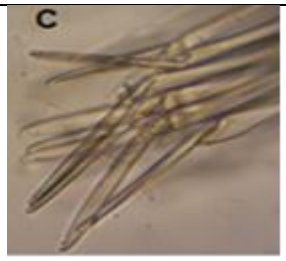


(Fig.17 D) dorsal simple setea of *Syllis garciai*

Fig.(18) *Haplosyllis spongicula*, midbody chaetae.

Fig. (19) *Haplosyllis*

Fig. (21 A) *Typosyllis caeca*

djiboutiensis Chaetae mid boby	Fig. (20 A) *Syllis lutea*	(20B) *Syllis lutea acicula*	
 (Fig.21B) Acicula at midbody of *Typosyllis caeca*	 (Fig.21C) Dorsal simple setae of *Typosyllis caeca*	 (Fig.21D) Chaetae of *Typosyllis caeca*	 Fig. (22 A) *Syllis vareigata*
 (Fig.22B)Anterior acicula of *syllis vareigata*	 Fig. (23 A*) Syllis rosea*	 Fig.(23B) Setae and acicula of *Syllis rosea*	 Fig.(24)*Trypanosyllis zebra*
 Fig. (25 A) *Syllis kabilica*	 (Fig.25 B) Acicula of *Syllis kabilica*	 (Fig.25C) Dorsal Simple setea and compound chaeta of *Syllis kabilica*	 Fig. (26A) Anterior part of *Syllis ferrani*
 (Fig. 26 B) Anterior acicula of *Syllis ferrani*	 (Fig. 26C) Compound chaetae of *Syllis ferrani*	 (Fig. 26 D) Midbody acicula of *Syllis ferrani*	 Fig (27) *Westheidesyllis corallicola*

REFERENCES

Abd-Elnaby, F. A. (2009). New records of Polychaetes from the South Part of Suez Canal, Egypt, World J. Fish Mar. Sci., 1 (1): 7–19.

Abd-Elnaby, F.A.(2010). On Some exogonines (Polychaeta, syllidae, exogoninae) from the north coast of Egypt. Egyptian Journal of Aquatic Research, 36 (2): 277-292.

Abd-Elnaby, F. A. and San Martin, G. (2010). Eusyllinae, Anoplosyllinae, and Exogoninae (Polychaeta:Syllidae) from the Mediterranean coasts of Egypt, together the description of one new species. Life Science Journal, 7(4): 132-139.

Aguado, M.T. and San Martín, G. (2007).Syllidae (Polychaeta) from Lebanon with two new reports for the Mediterranean Sea. Cahiers journal of Biology and Marine science, 48: 207-224.

Aguado, M.T. and San Martín, G. and Ten Hove, H. (2008). Syllidae (Annelida: Polychaeta) from Indonesia collected by the Siboga (1899-1900) and Snellius II (1984) expeditions. Zootaxa, 1973:1-40.

Aguado, M.T. and San Martín, G. (2009). Phylogeny of the Syllidae (Polychaeta) based on morphological data. Zoologica Scripta, 38 379–402http://dx.doi.org/10.1111/j.1463-6409.2008.00380.x.

Alós, C. and San Martín, G. (1987). Descripcion de Syllis ferrani n. sp.: nuevo Syllidae (Annelida: Polychaeta) en el Mediterráneo. Publicaciones del Departamento de Zoología, Universidad de Barcelona Facultad de Biologia, 13: 35-44. http://www.biodiversitylibrary.org/page/46767637.

Amoureux, L.; Rullier, F. and Fishelson, L.; (1978). Syst´ematique et ´ecologie d'ann´elidespolych`etes de la presqu'il du Sinai. Israel J. Zool., 27 (1–2): 57–163.

Álvarez-Campos, P.; Riesgo, A. ; Hutchings, P. and San Martin, G. (2015). The genus Syllis Savigny in Lamarck, 1818 (Annelida, Syllidae) from Australia. Molecular analysis and re-description of some poorly-known species, Zootaxa 4052 (2): 297–331.

Belal, A.A. (2001). Ecological studies on the polychaetes in Suez Bay. Ph. D. Thesis, Faculty of science, Zagazig University. 295pp.

Ben-Eliahu, M. N. (1972). Polychaeta Erantia of the Suez Canal. Israel J. Zool., 24:54–70.

Ben-Eliahu, M. N. (1977). Polychaete cryptofauna from rims of similar intertidal vermetid reefs on the Mediterranean coast of Israel and in the Gulf of Elat: Exogoninae and Autolytinae (Polychaeta Errantia: Syllidae). Israel Journal of Zoology, 26: 59-99., available online at http://www.tandfonline.com/doi/abs/10.1080/00212210.1977.10688441#.VE-6GzTF_Ss

Cinar, M. E. and Ergen, Z. (2003). Eusyllinae and Syllinae (Annelida: Polychaeta)from Northern Cyprus (Eastern Mediterranean Sea) with a checklist of speciesreported from the Levant Sea, Bull. Mar. Sci., 72 (3): 769–793.

Cinar, M. E.; Ergen, Z. and Benli, H. A. (2003). Autolytinae and Exogoninae (Annelida:Polychaeta) from Northern Cyprus (Eastern Mediterranean Sea) witha checklist of species reported from the Levant Sea, Bull. Mar. Sci., 72 (3):741–767.

Campoy, A. (1982). Fauna de España. Fauna de Anélidos Poliquetos de la Península Ibérica. Publicaciones de Biología de la Universidad de Navarra, Série Zoológica, 7 (1). EUNSA (Ediciones de la Universidad de Navarra), Pamplona, 781 pp.

Cognetti, G. (1953). Osservazioni sulla biologia riproduttiva di una nuova specie di Autolytus del Golfo di Napoli. Archivio zoologico italiano, 38: 323-332.

Day, J. H. (1967). Polychaetes of southern Africa, Part 1: Errantia, British Mus.(Nat. Hist.), London, 878 pp.

Day, J. H. and Hutchings, P. A. (1979). An annotated check-list of Australian and New Zealand Polychaeta, Archiannelida and Myzostomida. Records of the Australian Museum, 32: 80–161.

Ding, Z. and Westheide, W.1997. New records and descriptions of tidal and subtidal syllid species (Polychaeta) from the Chinese coast. Bulletin of Marine Science, 60(2): 277-292., http://www.ingentaconnect.com/content/umrsmas/bullmar/1997/00000060/00000002/art00009

El-Komi, M. M.; Emara, A.M. and Mona, M. H. (1998). Ecology and settlement of marine fouling in the Suez Bay, Egypt. Pakistan Journal of Marine Sciences, 7 (1): 11–26.

Emara, A.M. (2002). A comparative study of marine fouling organisms in the northern regions of the Gulf of Suez, Red Sea. Journal of the Egyptian Academy Society for Environmental Development, 3(2): 159–185.

Emara, A. M. and Belal, A. A. (2004). Marine Fouling in Suez Canal, Egypt. Egyptian Journal of Aquatic Research, 30 (A):189–206.

Faulwetter, S.; Chatzigeorgiou, G.; Galil, B. S.; Nicolaidou, A. and Arvanitidis, C. (2011). Sphaerosyllis levantina sp. n. (Annelida) from the eastern Mediterranean, with notes on character variation in Sphaerosyllis hystrix Clapar`ede, 1863, [in:] e-Infrastructures for data publishing in biodiversity science. ZooKeys, V. Smith& L. Penev (eds.), 150: 327–345.

Fauvel, P. (1923). Faune de France. Polych`etes errantes, Le Chevalier, Paris, 488 pp.

Fauvel, P. (1927). "Rapport sur les Annelides Polychetes Errantes", Zoological results of the Cambridge Expedition to the Suez Canal, 1924, The transactions of the. Zoological Society of London 22/4 (1): 441-437.

Fukuda, M.V. and Nogueira, J.M.M. (2013). First occurrence of Perkinsyllis San Martı´n, Lo´pez & Aguado, 2009 (Polychaeta: Syllidae) in Brazil, with descriptions of two new species. Marine Biology Research, 9(10): 972-989, http://dx.doi.org/10.1080/17451000.2013.793807

Ghobashy, A.F.A. and El-Komi, M.M. (1981). Fouling in Lake Timsah. Hydrobiological Bulletin, 14 (3): 169–178.

Ghobashy, A.F.A. and Ghobashy, A.F.M. (2005). Marine fouling studies in Egypt. A. Serpulids. Egyptian Journal of Aquatic Research, 31 (2): 89–102.

Ghobashy, A.F.A., Shalaby, I. M., and Shalla, S.H. (1990). "Serpuloids (tube worms) of LakeTimsah". Proceeding of the Zoological Society A. R. Egypt, 12: 319-338.

Capa, M.; San Martín, G. and López, E. (2001). Autolytinae, Eusyllinae and Exogoninae (Syllidae: Polychaeta) from Coiba National Park, Panamá. Revista de Biologia Tropical, 49 (2): 621–627.

Ghobashy, A. F. A.; El-Komi, M.M. and Ramadan, S.E. (1980). Fouling in the Suez Canal. In: Aritio, L. (Ed.). Proceeding of the 5th International Congress on Marine Corrosion and Fouling: Marine Biology (Barcelona 19–23 May 1980). Madrid (Editorial Garsi), Barcelona (Graficas Orbe, S.L.), pp. 75–92.

Hamdey, R. M. (2008). Ecological studies on benthic polychaetes along Alexandria coast. A Thesis Mr D. in biological oceanography, Faculty of science, Alexandria university, 214pp.

Hartmann-Schröder, G. (1960). Polychaeten aus dem Roten Meer . Sonderdruk S. 69-125.

Hartmann-Schröder, 1974. Mitteilungen aus dem Hamburgischen zoologischen Museum und Institut, 71: 75-85.

Hartmann-Schröder, G. (1965). Die Polychaeten des Sublitorals. IN: Hartmann-Schröder, G. and Gerd Hartmann, Zur Kenntnis des Sublitorals der chilenischen Küste unter besonderer Berücksichtigung der Polychaeten und Ostracoden. (Mit bemerkungen über den Einfluss sauerstoffarmer Strömungen auf die Besiedlung von marien Sedimenten.). Mitteilungen aus dem Hamburgischen zoologischen Museum und Institut, 62: 59-305.

Hove, H.A.; Ben-Eliahu, M.N. and Fiege, D. (2006). Serpulidae of the Gulf of Aqaba, the Gulf of Suez, and the Red Sea: Comparative species richness. Workshop on the high biodiversity of the Gulf of Aqaba: Origins, dimension and protection, 16–20 October 2006, Jerusalem and 22–23 October 2006, Eilat. Book of Abstracts. p. 29.

Imajima, M. (1966). The Syllidae (polychaetous annelids) from Japan. III. Eusyllinae. Publications of the Seto Marine Biological Laboratory. 14(2): 85-116., available online at http://hdl.handle.net/2433/175434 page(s): 114-116, fig. 37a-g.

Lattig, B. ; Martin, D. and San Martin, G. (2009). A Taxonomic Revision Of The Genus Haplosyllis Langerhans, 1887 (Polychaeta: Syllidae: Syllinae) September 2009Zootaxa 2220 (2220):1-40.DOI: 10.5281/zenodo.190035.

Lee, J. W. and Rho, B. J. (1994). Two new species of Syllidae (Annelida, Polychaeta) from Korea. The Korean Journal of Systematic Zoology, 10(1): 55-60.

Licher, F. (1999). Revision der Gattung Typosyllis Langerhans, 1879 (Polychaeta: Syllidae). Morphologie, Taxonomie und Phylogenie. Abhandlungen der Senckenbergischen Naturforschenden Gesellschaft, 551: 1–336.

Mikac, B. and Musco, L. (2010). Faunal and biogeographic analysis of Syllidae (Polychaeta) from Rovinj (Croatia,northern Adriatic Sea). Scientia Marina, 74(2): 353-370.

Nogueira, J.M.M.; San Martín, G. and Fukuda, M.V. (2004). On some exogonines (Polychaeta, Syllidae, Exogoninae) from the northern coast of the State of São Paulo, southeastern Brazil-results of Biota/Fapesp/Bentos Marinho Project. Meiofauna Marina, 13:45-77.

Núñez, J.; San Martín, G. and Brito, M.C. (1992). Exogoninae (Polychaeta, Syllidae) from the Canary Islands. Scientia Marina, 56 (1): 43–52.

San Mart´ın, G. (1984). Estudio biogeografico, faunistico y sistematico de losPoliquetos de la familia Silidos (Syllidae: Polychaeta) en Baleares, Ph. D.thesis no. 187, Publ. Univ. Complut. Madrid, 529 pp.

San Martín, G. 1990. Eusyllinae (Syllidae, Polychaeta) from Cuba and Gulf of Mexico. Bulletin of Marine Science, 46(3): 590-619.

San Mart´ın, G. (2003). Annelida Polychaeta II. Syllidae, Fauna Iber., 21, 21–554.

San Mart´ın, G. (2005). Exogoninae (Polychaeta: Syllidae) from Australia with the description of a new genus and twenty-two species, Rec. Aust. Mus., 57 (1):39–152, http://dx.doi.org/10.3853/j.0067-1975.57.2005.1438.

San Martín, G. and Hutchings, P. (2006). Eusyllinae (Polychaeta: Syllidae) from Australia with the description of a new genus and fifteen new species. Records of the Australian Museum, 58: 257–370.

San Martín, G. and López, E. (2002). New species of Autolytus Grube, 1850, Paraprocerastea San Martín & Alós, 1989, and Sphaerosyllis Claparède, 1863 (Syllidae, Polychaeta) from the Iberian Peninsula. Sarsia, 87(2): 135-143., available online at https://doi.org/10.1080/003648202320205210.

San Martín, G. ; López, E. and Aguado, M.T. (2009). Revision of the genus Pionosyllis (Polychaeta: Syllidae: Eusyllinae), with a cladistics analysis, and the description of five new genera and two new species. Journal of the marine Biological Association of the United Kingdom, page 1-44.

Selim, S. A. (1997). Description and remarks on Suez Canal Serpulids (Polychaeta). J. Egypt. Ger. Soc. Zool., 22 (D): 87–110.

Selim, S. A. (2009). Polychaete fauna of the northern part of the Suez Canal (Port-Said-Toussoum), Egypt. J. Aquat. Res., 35 (1): 69–88.

Shalla, S.H.A. and Holt, T.J. (1999). The Lessepsian migrant Pomatoleios kraussii (Annelida Polychaeta)-Recent formation of dense aggregations in Lake Timsah and the Bitter Lakes (Suez Canal, Egypt). Egyptian Journal of Biology, 1:133–137.

Wehe, T. and Fiege, D. (2002). Annotated checklist of the polychaete species of the seas surrounding the Arabian Peninsula: Red Sea, Gulf of Aden, Arabian Sea, Gulf of Oman, Arabian Gulf. Fauna of Arabia, 19(7): 7-238.

Westheide, W. (1974). Interstitielle Fauna von Galapagos. XI. Pisionidae, Pilargidae, Syllidae. Mikrofauna Meere-bodens, 44: 195-338.