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Inventory and new records of polychaete species from the Cap Bon Peninsula, north-east coast of Tunisia, Western Mediterranean Sea

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Abstract

An inventory of polychaete species is presented from the north-east coast of Tunisia with an historic review of the previous literature from Tunisian coasts. Altogether 40 families, 146 genera, and 238 species are currently known from the area, of which 86 taxa, 4 families (Chrysopetalidae, Pilargidae, Protodrilidae and Saccocirridae) and 40 genera (*Saccocirrus*, *Protodrilus*, *Parathelepus*, *Thelepus*, *Petta*, *Isolda*, *Brada*, *Tharyx*, *Paraprionospio*, *Jasmineira*, *Hypsicomus*, *Euchone*, *Pseudobranchiomma*, *Laonome*, *Galathowenia*, *Lugia*, *Pseudomystides*, *Protomystides*, *Pirakia*, *Mysta*, *Eurysyllis*, *Parapionosyllis*, *Streptosyllis*, *Paraehlersia*, *Sigambra*, *Ancistrosyllis*, *Kefersteinia*, *Chrysopetalum*, *Bhawania*, *Fimbriosthenelais*, *Subadyte*, *Panthalis*, *Dorvillea*, *Scalibregma*, *Paradoneis*, *Cirrophorus*, *Metasychis*, *Websterinereis*, *Euniphysa* and *Mastobranchus*) are new additions to the polychaete fauna of Tunisia. The list, which provides a synthesis of the regional taxonomic work, including coastal areas from Sidi Daoud to the area of Menzel Hurr (Cap Bon Peninsula, Western Mediterranean Sea), can serve as a baseline for future studies.

Keywords: Polychaetes, Tunisian coasts, new species, Western Mediterranean.

Introduction

In the Mediterranean Sea, many polychaete inventories have been produced, especially in the Western area, such as, Fauvel (1940), Bellan (1961, 1964), Laubier (1966), Amoureux (1973), Ramos (1976), Zibrowius (1978) and Castelli *et al.* (2008). There are other studies conducted in the eastern Mediterranean such as Harmelin (1969), Simbora & Nicolaidou (2001), Arvanitidis (2000), Cinar 2005, Ben Eliahu (1995) and Ergen (1976). In Tunisia, there have been a few polychaete studies such as McIntosh (1912), Fauvel (1924 a, b), Zibrowius, (1970-1971), Bellan (1961), Westheide (1971 & 1972) and Cantone *et al.* (1978). Zghal & Ben Amor (1980) listed 222 species. Later, Ben Amor (1984) collected data concerning Tunisian polychaete species and listed 234 species. Recently several ecological studies have been carried out along the Tunisian coast and have added new polychaete species: Zaâbi & Afli (2005, 2006), Zaâbi *et al.* (2009, 2010), Ayari & Afli (2003 & 2008), and Trigui El-Menif *et al.* (2007).

This checklist provides an updated overview of the

polychaete species recorded from the Tunisian coast, from the first catalogue compiled by Zghal & Ben Amor (1980) to the most recent revision produced by Ayari *et al.* (2009). The checklist includes literature records since McIntosh (1912), and includes the results of a taxonomic and ecological study carried out in the Cap Bon Peninsula (Eastern coast of Tunisia). The main objective of this publication is to complete the data on polychaetes and to update the last inventory produced by Ayari *et al.* (2009) of the Tunisian Polychaete fauna.

Materials and Methods

The polychaete fauna was sampled at 52 sites (Fig. 1) during 2006. Aboard the RV *Hannibal*, a Charcot dredge, a Van Veen grab (sampling an area of 0.1 m²) and a cylindrical corer were deployed according to the nature and depth of the substratum. Samples were washed through a 1 mm-mesh sieve and fixed in a solution of 7% sea-water formaldehyde. In the laboratory, samples were rinsed in fresh water and preserved in 70% ethanol and then iden-

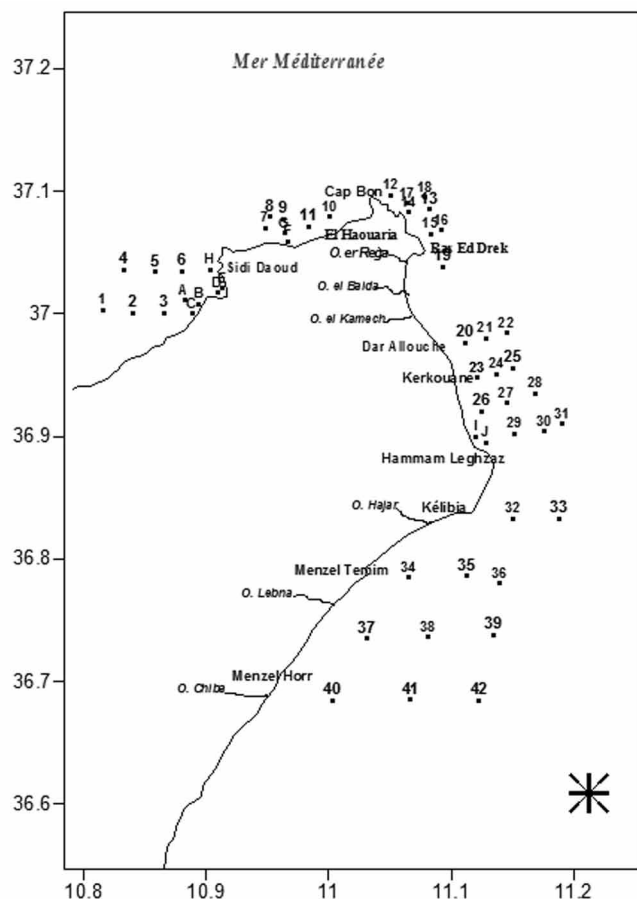


Fig. 1: Location of sampling sites from the Cap Bon Peninsula, Tunisia.

tified to species and counted. The identification guides used for species determination were: Fauvel (1923, 1927), Fauchald (1977, 1992), Pettibone (1966), Zibrowius (1968, 1970-1971), Laubier and Ramos (1973) and Paxton (1986). The list of species is organized according to the new classification scheme proposed by Fauchald & Rouse (1997), Rouse & Fauchald (1997) and Wilson *et al.* (2003). Specimens reported from this taxonomic and ecological survey are deposited at the National Institute of the Sea Sciences and Technology (INSTM) and given a deposit number.

Results

In total, 3048 polychaete individuals were identified to species level or to family level for incomplete specimens in the Capitellidae, Maldanidae and Polynoidae. The current inventory of polychaetes of the Cap Bon Peninsula (North Eastern coast of Tunisia, Western Mediterranean) shows that the area is diverse with 40 families, 146 genera and 238 species (Table 1). Among families, Syllidae ranked first in terms of species richness (23 species), followed by Phyllodocidae and Terebellidae (17 species each). In terms of abundance, Onuphidae ranked highest with 398 individuals (13%), followed by Dorvil-

Table 1. General polychaete inventory from the Cap Bon Peninsula, Tunisia.

Families	Genera	Species
Acoetidae	1	1
Ampharetidae	6	6
Amphinomidae	1	1
Aphroditidae	2	2
Capitellidae	5	11
Chrysopetalidae	2	2
Cirratulidae	6	11
Dorvilleidae	3	3
Eunicidae	5	7
Flabelligeridae	3	4
Glyceridae	1	6
Goniadidae	1	2
Hesionidae	4	4
Lumbrineridae	5	9
Magelonidae	1	2
Maldanidae	5	6
Nephtyidae	2	4
Nereididae	6	11
Oeonidae	2	3
Onuphidae	4	6
Opheliidae	3	3
Orbiniidae	4	6
Oweniidae	2	2
Paralacydoniidae	1	1
Paraonidae	4	11
Pectinariidae	2	2
Phyllodocidae	11	17
Pilargidae	2	2
Polynoidae	4	7
Protodrilidae	1	1
Sabellidae	10	15
Saccocirridae	1	1
Scalibregmatidae	1	1
Serpulidae	4	9
Sigalionidae	5	6
Spionidae	7	11
Sternaspidae	1	1
Syllidae	10	23
Terebellidae	7	17
Trichobranchiidae	1	1
Total	146	238

leidae with 356 individuals (12%) and Paraonidae with 313 individuals (10%).

The highest values for species richness and density were recorded at the shallow coastal stations (2 m depth) which were characterized by a sandy substratum (coarse and fine sand).

The most dominant species of the area was *Protodrilus kefersteini* with 288 individuals (9.63 %), followed by *Aponuphis fauveli* (162 individuals/ 5.42 %) and *Aricidea cerrutii* (134 individuals/ 4.48 %). The highest frequency (34.62 %) was recorded for *Aphelochaeta mari-*

oni and *Euclymene palermitana*.

The present study listed 86 new species belonging to 4 families (Chrysopetalidae, Pilargidae, Protodrilidae and Saccocirridae) and 40 genera for the Tunisian waters. The presence of an asterisk (*) denotes a new species report, two asterisks (**) a new genus report and three asterisks (***) a new family report. Species with a (+) symbol denote a doubtful record in the Mediterranean.

Systematic checklist

SCOLECIDA Rouse & Fauchald, 1997

CAPITELLIDAE Grube, 1862

Capitella cf. *capitata* (Fabricius, 1780)

Material examined: Sta. 36, 64 m, mud.

Deposit number: INSTM 2006. 10. 01. 01

Dasybranchus gajolae Eisig, 1887

Material examined: Sta. 1, 32, 42, 40-66 m, mud and sandy mud

Deposit number: INSTM 2006. 10. 01. 02

Dasybranchus sp.

Material examined: Sta. 21, 26, 38, 25-52 m, sandy mud and sandy gravel.

Deposit number: INSTM 2006. 10. 01. 03

Heteromastus filiformis (Claparède, 1864)

Material examined: Sta. A, B, D, H, 2-17 m, sandy substratum.

Deposit number: INSTM 2006. 10. 01. 04

Mastobranhus trichensis Eisig, 1887 **

Material examined: Sta. D, 5 m, fine sand.

Deposit number: INSTM 2006. 10. 01. 05

Notomastus latericeus Sars, 1851

Material examined: Sta. C, H, 2, 3, 4, 6, 8, 9, 11, 12, 25, 26, 27, 29, 35, 37, 42, 2-66 m, fine sandy substrate to muddy sediment.

Deposit number: INSTM 2006. 10. 01. 06

Notomastus profundus Eisig, 1887

Material examined: Sta. H, 4, 9, 32, 2-60 m, fine sand to sandy mud.

Deposit number: INSTM 2006. 10. 01. 07

Notomastus sp.1

Material examined: Sta. 4, F, 2-60 m, fine to coarse sand.

Deposit number: INSTM 2006. 10. 01. 08

Notomastus sp.2

Material examined: Sta. H, 2 m, fine sand.

Deposit number: INSTM 2006. 10. 01. 09

Notomastus sp.3

Material examined: Sta. 4, 60 m, fine sand.

Deposit number: INSTM 2006. 10. 01. 10

Notomastus sp.4

Material examined: Sta. 3 m, fine sand.

Deposit number: INSTM 2006. 10. 01. 11

MALDANIDAE Malmgren, 1867

Euclymene palermitana (Grube, 1840)

Material examined: Sta. A, C, E, H, 1, 2, 4, 6, 13, 20, 25, 31, 33, 35, 37, 39, 40, 41, 2-74 m, soft (sand, mud) and rocky substratum.

Deposit number: INSTM 2006. 10. 02. 01

Euclymene sp.

Material examined: Sta. 2, 3, 4, 5, 14, 31, 35, 37, 39, 41, 20-68 m, soft and rocky substratum.

Deposit number: INSTM 2006. 10. 02. 02

Praxillella gracilis (Sars, 1872)

Material examined: Sta. 26, 38, 41, 25-52 m, fine sand and muddy sand.

Deposit number: INSTM 2006. 10. 02. 03

Maldane glebifex Grube, 1860

Material examined: Sta. 2, 37, 40, 32-45, fine and coarse sand.

Deposit number: INSTM 2006. 10. 02. 04

Metasychis gotoi (Izuka, 1902) **

Material examined: Sta. 2, 20, 25, 39, 40, 30-68 m, sandy and muddy substratum.

Deposit number: INSTM 2006. 10. 02. 05

Nicomache sp.

Material examined: Sta. 14, 40 m, coarse sand.

Deposit number: INSTM 2006. 10. 02. 06

OPHELIIDAE Malmgren, 1867

Armandia polyophthalma Kükenthal, 1887

Material examined: Sta. B, C, H, 2-4 m, fine and coarse sand.

Deposit number: INSTM 2006. 10. 03. 01

Polyophthalmus pictus (Dujardin, 1839)

Material examined: Sta. E, H, 2-3 m, fine sand.

Deposit number: INSTM 2006. 10. 03. 02

Ophelia limacina (Rathke, 1843) **

Material examined: Sta. C, H, 2 m, fine and coarse sand.

Deposit number: INSTM 2006. 10. 03. 03

ORBINIIDAE Hartman, 1942

Naineris laevigata (Grube, 1855)

Material examined: Sta. E, H, 2-3 m, fine sand.

Deposit number: INSTM 2006. 10. 04. 01

Orbinia sp.

Material examined: Sta. A, C, 17 m, coarse sand.

Deposit number: INSTM 2006. 10. 04. 02

Orbinia cuvieri (Audouin & Milne-Edwards, 1833)

Material examined: Sta. D, 5 m, fine sand.

Deposit number: INSTM 2006. 10. 04. 03

Phylo foetida (Claparède, 1869)

Material examined: Sta. C, 2 m, coarse sand.

Deposit number: INSTM 2006. 10. 04. 04

Scoloplos chevalieri candiensis Harmelin, 1969 *

Material examined: Sta. 8, 9, 11, 19, 20, 30, I, 8-52 m, sandy substratum.

Deposit number: INSTM 2006. 10. 04. 05

Scoloplos armiger (Müller, 1776)

Material examined: Sta. D, 2, 3, 5, 11, 5-45 m, fine and coarse sand

Deposit number: INSTM 2006. 10. 04. 06

PARAONIDAE Cerruti, 1909

Aricidea (Acmira) simplex Day, 1963 *

Material examined: Sta. 39, 68 m, mud.

Deposit number: INSTM 2006. 10. 05. 01

Aricidea (Acmira) assimilis Tebble, 1959

Material examined: Sta. C, 2, 4, 8, 12, 13, 17, 35, 38, 2-60 m, sandy substratum and mud

Deposit number: INSTM 2006. 10. 05. 02

Aricidea (Acmira) cerrutii Laubier, 1966

Material examined: Sta. A, B, C, H, 10, 11, I, 2-33 m, fine and coarse sand.

Deposit number: INSTM 2006. 10. 05. 03

Aricidea (Acmira) catherinae Laubier, 1967*

Material examined: Sta. H, 2 m, fine sand.

Deposit number: INSTM 2006. 10. 05. 04

Aricidea (Aricidea) capensis bansei Laubier & Ramos, 1974*

Material examined: Sta. 11, 30 m, fine sand.

Deposit number: INSTM 2006. 10. 05. 05

Aricidea (Aricidea) fragilis mediterranea Laubier & Ramos, 1974 *

Material examined: Sta. C, 2, 3, 4, 2-3 m, fine and coarse sand.

Deposit number: INSTM 2006. 10. 05. 06

Cirrophorus branchiatus Ehlers, 1908 **

Material examined: Sta. 52 m, muddy sand.

Deposit number: INSTM 2006. 10. 05. 07

Paradoneis armata Glemarec, 1966 **

Material examined: Sta. C, 3, 2-20 m, fine and coarse sand.

Deposit number: INSTM 2006. 10. 05. 08

Paradoneis harpagonea (Storch, 1967) *

Material examined: Sta. A, B, C, D, H, 3, 7, F, G, 20, I, J, 2-30 m, sandy substratum.

Deposit number: INSTM 2006. 10. 05. 09

Paradoneis lyra (Southern, 1914) *

Material examined: Sta. C, H, F, G, 20, I, J, 2, 30 m, sandy substratum.

Deposit number: INSTM 2006. 10. 05. 10

Levinsenia gracilis (Tauber, 1879)

Material examined: Sta. B, 36, 4-64 m, coarse sand and mud.

Deposit number: INSTM 2006. 10. 05. 11

SCALIBREGMATIDAE Malmgren, 1867

Scalibregma inflatum Rathke, 1843 **

Material examined: Sta. H, 2 m, fine sand.

Deposit number: INSTM 2006. 10. 06. 01

PALPATA Rouse & Fauchald, 1997

ACICULATA Rouse & Fauchald, 1997

EUNICIDA sensu Rouse & Fauchald, 1997

AMPHINOMIDAE Lamarck, 1818

Chloeia venusta Quatrefages, 1866

Material examined: Sta. 13, 14, 20, 30-50 m, coarse and muddy sand.

Deposit number: INSTM 2006. 10. 12. 01

DORVILLEIDAE Chamberlin, 1919

Dorvillea atlantica (McIntosh, 1885) **

Material examined: Sta. C, E, 30, 2-40 m, fine and coarse sand.

Deposit number: INSTM 2006. 10. 07. 01

Protodorvillea kefersteini (McIntosh, 1869)

Material examined: Sta. B, C, D, E, H, 4, F, 29, I, J, 2-60 m, fine and coarse sand.

Deposit number: INSTM 2006. 10. 07. 02

Schistomeringos rudolphii (Delle Chiaje, 1828)

Material examined: Sta. A, B, C, D, E, H, J, 2-15 m, fine and coarse sand.

Deposit number: INSTM 2006. 10. 07. 03

EUNICIDAE Savigny, 1818

Eunice schizobranchia Claparède, 1870 *

Material examined: Sta. 2, 22, 45-60 m, fine sand and hard substratum.

Deposit number: INSTM 2006. 10. 08. 01

Eunice torquata Quatrefages, 1865

Material examined: Sta. 15, 22, 23, 29, 26-60 m, soft and hard substratum.

Deposit number: INSTM 2006. 10. 08. 02

Eunice vittata (Delle Chiaje, 1828)

Material examined: A, 2, 4, 8, 10, 11, 13, 15, 15, 17, 18, 20, 21, 22, 25, 26, 27, 28, 29, 30, 31, 33, 34, 37 et J, 17,5-74,4 m, soft and hard substrate.

Deposit number: INSTM 2006. 10. 08. 04

Euniphysa tubifex Crossland, 1904 ** +

Material examined: Sta. 25, 37, 32-60 m, sandy substratum.

Deposit number: INSTM 2006. 10. 08. 03

Lysidice ninetta Audouin & Milne Edwards, 1833

Material examined: Sta. 4, 14, 15, 27, 28, 29, 30, 34, 37, 30-60 m, sandy and gravelly substratum.

Deposit number: INSTM 2006. 10. 08. 05

Marphysa belli Audouin & Milne-Edwards, 1833

Material examined: Sta. 4, 12, 22, 30-60 m, fine sand and hard substratum;

Deposit number: INSTM 2006. 10. 08. 06

Nematonereis unicornis Schmarda, 1961

Material examined: Sta. C, H, 4, 9, 14, 16, 19, 20, 25, 26, 29, 30, 37, 40, 41, 2-60 m, soft and hard substratum.

Deposit number: INSTM 2006. 10. 08. 07

LUMBRINERIDAE Schmarda, 1865

Hilbigneris gracilis (Ehlers, 1868)

Material examined: Sta. A, 17, 21, 30, 34, 39, 17-68 m, sandy and gravelly substratum.

Deposit number: INSTM 2006. 10. 09. 05

Lumbricalus adriatica (Fauvel, 1940)

Material examined: Sta. 27, 35 m, coarse sand.
 Deposit number: INSTM 2006. 10. 09. 01
Lumbrineris coccinea (Renier, 1804)
 Material examined: Sta. 24, 29, 30-44 m, fine sand.
 Deposit number: INSTM 2006. 10. 09. 02
Lumbrineris latreilli Audouin and Milne-Edwards, 1834
 Material examined: Sta. A, C, D, H, 10, 12, 20, 25, 28, 29, 30, 33, 37, 40, 2-74 m, sandy substratum.
 Deposit number: INSTM 2006. 10. 09. 08
Lumbrineris sp.
 Material examined: Sta. 15, 50 m, sandy gravel.
 Deposit number: INSTM 2006. 10. 09. 07
Scoletoma fragilis (O. F. Müller, 1776)
 Material examined: Sta. 15, 50 m, sandy gravel.
 Deposit number: INSTM 2006. 10. 09. 03
Scoletoma funchalensis (Kinberg, 1865)
 Material examined: Sta. 29, 30 m, fine sand.
 Deposit number: INSTM 2006. 10. 09. 04
Scoletoma impatiens (Claparède, 1868)
 Material examined: Sta. A, B, C, H, 2, 3, 5, 14, 15, 20, 29, 30, 37, 2-50 m, sandy and gravelly substratum.
 Deposit number: INSTM 2006. 10. 09. 06
Lumbrineriopsis paradoxa (Saint-Joseph, 1888)
 Material examined: Sta. 4, 60 m, fine sand.
 Deposit number: INSTM 2006. 10. 09. 09

OENONIDAE Kinberg, 1865
Arabella geniculata (Claparède, 1868) *
 Material examined: Sta. 26, 25 m, sandy mud.
 Deposit number: INSTM 2006. 10. 10. 01
Arabella iricolor (Montagu, 1804)
 Material examined: Sta. C, D, H, 25, 32, 2-60 m, sandy substratum.
 Deposit number: INSTM 2006. 10. 10. 02
Drilonereis filum (Claparède, 1868)
 Material examined: Sta. H, 4, 6, 8, 9, 20, 26, 28, 35, 42, 2-66 m, sandy substratum and mud.
 Deposit number: INSTM 2006. 10. 10. 03

ONUPHIDAE Kinberg, 1865
Aponuphis bilineata (Baird, 1870)
 Material examined: Sta. A, B, H, 2, 4, 11, 17, 18, 20, 27, 29, 30, I, J, 34, 37, 2-61 m, sandy and gravelly substratum.
 Deposit number: INSTM 2006. 10. 11. 01
Aponuphis brementi (Fauvel, 1916)
 Material examined: Sta. H, 9, 11, 2-37 m, fine sand.
 Deposit number: INSTM 2006. 10. 11. 02
Aponuphis fauveli (Rioja, 1918)
 Material examined: Sta. A, C, 2, 3, 4, 5, 6, 19, 20, 25, 26, 27, 33, 35, 37, 40, 41, 2-74 m, sandy substratum and sandy mud.
 Deposit number: INSTM 2006. 10. 11. 03
Hyalinoecia tubicola (Müller, 1776)
 Material examined: Sta. 2, 15, 16, 19, 21, 24, 25, 27, 29, 30, 30-60 m, soft and hard substratum.
 Deposit number: INSTM 2006. 10. 11. 04

Nothria conchylega (Sars, 1835)
 Material examined: Sta. 3, 26, 20-25 m, fine sand and sandy mud.
 Deposit number: INSTM 2006. 10. 11. 05
Diopatra neapolitana Delle Chiaje, 1841
 Material examined: Sta. A, B, C, H, 2, 4, 7, 8, 9, 16, 22, 25, 30, 34, 40, 2-60 m, sandy and gravelly substratum.
 Deposit number: INSTM 2006. 10. 11. 06

PHYLLODOCIDA sensu Rouse & Fauchald, 1997
 ACOETIDAE Kinberg, 1856
Panthalis oerstedii Kinberg, 1856 **
 Material examined: Sta. 37, 32, coarse sand.
 Deposit number: INSTM 2006. 10. 13. 01

APHRODITIDAE Malmgren, 1867
Leatmonice hystrix (Savigny in Lamarck, 1818)
 Material examined: Sta. 15, 24, 27, 29, 30, 31, 34, 37, 32-50 m, sandy and gravelly substratum.
 Deposit number: INSTM 2006. 10. 14. 01
Pontogenia chrysocoma (Baird, 1865)
 Material examined: Sta. 22, 24, 30, 40-60 m, sandy and hard substratum.
 Deposit number: INSTM 2006. 10. 14. 02

CHRY SOPETALIDAE Ehlers, 1864 ***
Bhawania goodei Webster, 1884 **
 Material examined: Sta. 29, 30 m, fine sand.
 Deposit number: INSTM 2006. 10. 20. 01
Chrysopetalum debile (Grube, 1855) **
 Material examined: Sta. A, 17 m, coarse sand.
 Deposit number: INSTM 2006. 10. 20. 02

GLYCERIDAE Grube, 1850
Glycera alba (O. F. Müller, 1776)
 Material examined: Sta. 3, 4, 9, 26, 37, 42, 20-66 m, sandy substratum and mud.
 Deposit number: INSTM 2006. 10. 17. 01
Glycera capitata Örsted, 1843 *
 Material examined: Sta. 3, 8, 14, 30, 39, 20-68 m, sandy substratum and mud.
 Deposit number: INSTM 2006. 10. 17. 02
Glycera tridactyla Keferstein, 1862
 Material examined: Sta. H, 3, 20, 24, 39, 2-68 m, sandy substratum and mud.
 Deposit number: INSTM 2006. 10. 17. 03
Glycera lapidum Quatrefages, 1865 *
 Material examined: Sta. C, 5, 21, 22, 30, 31, I, 2-60 m, coarse sand and sandy gravel.
 Deposit number: INSTM 2006. 10. 17. 04
Glycera sp.
 Material examined: Sta. C, 2 m, coarse sand.
 Deposit number: INSTM 2006. 10. 17. 05
Glycera tessellata Grube, 1840
 Material examined: Sta. A, H, 3, 17, 30, 31, 2-58 m, coarse sand and sandy gravel.

Deposit number: INSTM 2006. 10. 17. 06

GONIADIDAE Kinberg, 1866

Goniada maculata Örsted, 1843

Material examined: Sta. 8, 9, 18, 37, 31-61 m, fine and coarse sand.

Deposit number: INSTM 2006. 10. 18. 01

Goniada norvegica Örsted, 1845 *

Material examined: Sta. 29, 30 m, fine sand.

Deposit number: INSTM 2006. 10. 18. 02

HESIONIDAE Grube, 1850

Kefersteinia cirrata (Keferstein, 1862) **

Material examined: Sta. A, B, C, H, 10, 22, 29, J, 2-60 m, fine and coarse sand.

Deposit number: INSTM 2006. 10. 21. 01

Hesione splendida Savigny, 1818

Material examined: Sta. 16, 60 m, hard substratum.

Deposit number: INSTM 2006. 10. 21. 02

Microphthalmus szcelkowi Metschnikow, 1865 *

Material examined: Sta. F, 2 m, coarse sand.

Deposit number: INSTM 2006. 10. 21. 03

Ophiidromus flexuosus (Delle Chiaje, 1827) *

Material examined: Sta. H, 2 m, fine sand.

Deposit number: INSTM 2006. 10. 21. 04

NEPHTYIDAE Grube, 1850

Aglaophamus rubella (Michaelsen, 1897) *

Material examined: Sta. 29, 30 m, fine sand.

Deposit number: INSTM 2006. 10. 25. 01

Nephtys caeca (Fabricius, 1780)

Material examined: Sta. 1, 2, 3, 4, 6, 9, 20, 27, 30, 37, 20-60 m, sandy substratum and mud.

Deposit number: INSTM 2006. 10. 25. 02

Nephtys hombergii Savigny, 1818

Material examined: Sta. 3, 19, 20, 32, 40, 20-58 m, sandy substratum.

Deposit number: INSTM 2006. 10. 25. 03

Nephtys hystricis McIntosh, 1900

Material examined: Sta. 20, 30 m, muddy sand.

Deposit number: INSTM 2006. 10. 25. 04

PARALACYDONIIDAE Pettibone, 1963

Paralacydonia paradoxa Fauvel, 1913

Material examined: Sta. 2, 3, 4, 10, 13, 16, 19, 20, 25, 27, 31, 33, 39, 40, 41, 20-74 m, sandy and gravelly substratum.

Deposit number: INSTM 2006. 10. 19. 01

NEREIDIDAE Johnston, 1865

Websterinereis glauca (Claparède, 1870)

Material examined: Sta. A, E, H, 6, 24, 30, 2-44 m, fine and coarse sand.

Deposit number: INSTM 2006. 10. 22. 01

Composetia costae (Grube, 1840)

Material examined: Sta. 24, 44 m, fine sand.

Deposit number: INSTM 2006. 10. 22. 02

Perinereis macropus (Claparède, 1870)

Material examined: Sta. C, 2 m, coarse sand.

Deposit number: INSTM 2006. 10. 22. 03

Platynereis dumerilii (Audouin & Milne-Edwards, 1833)

Material examined: Sta. H, 2 m, fine sand.

Deposit number: INSTM 2006. 10. 22. 04

Neanthes sp.

Material examined: Sta. C, 21, 27, 41, 2-40 m, sandy to muddy sand and sandy gravel.

Deposit number: INSTM 2006. 10. 22. 05

Neanthes caudata (Delle Chiaje, 1827)

Material examined: Sta. E, 3 m, fine sand.

Deposit number: INSTM 2006. 10. 22. 06

Nereis rava Ehlers, 1864*

Material examined: Sta. 15, 30, 37, 32-50 m, coarse sand and sandy gravel.

Deposit number: INSTM 2006. 10. 22. 07

Nereis sp 1.

Material examined: Sta. 4, F, 2-60 m, fine and coarse sand.

Deposit number: INSTM 2006. 10. 22. 08

Nereis sp 2.

Material examined: Sta. H, 2 m, fine sand.

Deposit number: INSTM 2006. 10. 22. 09

Nereis sp 3.

Material examined: Sta. 4, 60 m, fine sand.

Deposit number: INSTM 2006. 10. 22. 10

Nereis sp 4.

Material examined: Sta. E, 3 m, fine sand.

Deposit number: INSTM 2006. 10. 22. 11

PHYLLODOCIDAE Örsted, 1843

Eteone cf. *longa* (Fabricius, 1780) *

Material examined: Sta. A, 37, 17-32 m, coarse sand.

Deposit number: INSTM 2006. 10. 26. 01

Eteone sp.

Material examined: Sta. C, 2 m, coarse sand.

Deposit number: INSTM 2006. 10. 26. 02

Eulalia viridis (Johnston, 1829)

Material examined: Sta. C, H, 2 m, fine and coarse sand.

Deposit number: INSTM 2006. 10. 26. 03

Eulalia sp.

Material examined: Sta. 14, 40 m, coarse sand.

Deposit number: INSTM 2006. 10. 26. 04

Eumida sanguinea (Örsted, 1843)

Material examined: Sta. 10, 15, 22, 33-60 m, coarse sand and sandy gravel.

Deposit number: INSTM 2006. 10. 26. 05

Hesionura sp.

Material examined: Sta. B, 4 m, coarse sand.

Deposit number: INSTM 2006. 10. 26. 06

Mysta picta (Quatrefages, 1865) **

Material examined: Sta. 14, 15, 27, 40-50 m, coarse to muddy sand and sandy gravel.

Deposit number: INSTM 2006. 10. 26. 07

Pirakia punctifera (Grube, 1860) **

Material examined: Sta. H, 22, 2-60 m, fine sand and rocky substratum.

Deposit number: INSTM 2006. 10. 26. 08

Protomystides bidentata (Langerhans, 1880) **

Material examined: Sta. H, 28, 2-60 m, fine sand.

Deposit number: INSTM 2006. 10. 26. 09

Pseudomystides limbata (Saint-Joseph, 1888) **

Material examined: Sta. J, 15 m, fine sand.

Deposit number: INSTM 2006. 10. 26. 10

Lugia pterophora (Ehlers, 1864) **

Material examined: Sta. Sta. B, 4 m, coarse sand.

Deposit number: INSTM 2006. 10. 26. 11

Nereiphylla rubiginosa (Saint-Joseph, 1888)

Material examined: Sta. 14, 30, 40 m, coarse sand.

Deposit number: INSTM 2006. 10. 26. 12

Phyllodoce laminosa Savigny in Lamarck, 1818

Material examined: Sta. C, 14, 16, 2-60 m, coarse sand and rocky substratum.

Deposit number: INSTM 2006. 10. 26. 13

Phyllodoce madeirensis Langerhans, 1880 *

Material examined: Sta. C, 15, 21, 24, 29, 30, 2-50 m, sandy substratum and sandy gravel.

Deposit number: INSTM 2006. 10. 26. 14

Phyllodoce mucosa Örsted, 1843

Material examined: Sta. 9, 37 m, fine sand.

Deposit number: INSTM 2006. 10. 26. 15

Phyllodoce sp 1.

Material examined: Sta. G, 21, 31, 34, 3-50 m, coarse sand and sandy gravel.

Deposit number: INSTM 2006. 10. 26. 16

Phyllodoce sp 2.

Material examined: Sta. Sta. Sta. B, 4 m, coarse sand.

Deposit number: INSTM 2006. 10. 26. 17

POLYNOIDAE Malmgren, 1867

Harmothoe antilopes McIntosh, 1876 *

Material examined: Sta. 27, 40 m, muddy sand.

Deposit number: INSTM 2006. 10. 15. 0 1

Harmothoe johnstoni (Mcintosh, 1876) *

Material examined: Sta. 11, 30 m, fine sand.

Deposit number: INSTM 2006. 10. 15. 0 2

Harmothoe sp.

Material examined: Sta. A, 7, 10, 12, 29, 32, 17-58 m, sandy and muddy substratum.

Deposit number: INSTM 2006. 10. 15. 03

Harmothoe spinifera (Ehlers, 1864)

Material examined: Sta. 15, 30, 31, 40-50 m, coarse sand and sandy gravel.

Deposit number: INSTM 2006. 10. 15. 0 4

Malmgreniella lunulata (Delle Chiaje, 1830)

Material examined: Sta. H, 10, 17, 37, 2-58 m, fine and coarse sand.

Deposit number: INSTM 2006. 10. 15. 0 5

Subadyte pellucida (Ehlers, 1864) **

Material examined: Sta. 21, 29, 30, 30-40 m, sandy sub-

strate and sandy gravel.

Deposit number: INSTM 2006. 10. 15. 06

Lepidonotus clava (Montagu, 1808)

Material examined: Sta. 21, 22, 38-60 m, gravelly and rocky substratum.

Deposit number: INSTM 2006. 10. 15. 0 7

SIGALIONIDAE Malmgren, 1867

Euthalenessa oculata (Peters, 1855)

Material examined: Sta. 14, 18, 29, 30, 30-61 m, fine and coarse sand.

Deposit number: INSTM 2006. 10. 16. 0 1

Fimbriosthenelais minor (Pruvot & Racovitza, 1895) **

Material examined: Sta. 37, 32 m, coarse sand.

Deposit number: INSTM 2006. 10. 16. 0 2

Pelogenia arenosa (Delle Chiaje, 1830)

Material examined: Sta. C, 30, 31, 2-50 m, coarse sand and sandy gravel.

Deposit number: INSTM 2006. 10. 16. 0 3

Sigalion mathildae Audouin & Milne Edwards in Cuvier, 1830

Material examined: Sta. 5, 40 m, coarse sand.

Deposit number: INSTM 2006. 10. 16. 0 4

Sigalion squamosus Delle Chiaje, 1830 *

Material examined: Sta. D, 3, 5-20 m, fine sand.

Deposit number: INSTM 2006. 10. 16. 0 5

Sthenelais boa (Johnston, 1833)

Material examined: Sta. 8, 11, 19, 21, 30-52 m, fine to muddy sand and sandy gravel.

Deposit number: INSTM 2006. 10. 16. 0 6

PILARGIDAE Saint-Joseph, 1899***

Ancistrosyllis groenlandica McIntosh, 1879**

Material examined: Sta. 35, 53 m, mud.

Deposit number: INSTM 2006. 10. 23. 01

Sigambra tentaculata (Treadwell, 1941) **

Material examined: Sta. 7, 8, 9, 12, 30-37 m, fine sand.

Deposit number: INSTM 2006. 10. 23. 02

SYLLIDAE Grube, 1850

Eurysyllis tuberculata Ehlers, 1864**

Material examined: Sta. 30, 40 m, coarse sand.

Deposit number: INSTM 2006. 10. 24. 15

Eusyllis blomstrandii Malmgren, 1867

Material examined: Sta. 30, 40 m, coarse sand.

Deposit number: INSTM 2006. 10. 24. 01

Exogone verugera (Claparède, 1868)

Material examined: Sta. C, J, 2-15 m, fine and coarse sand.

Deposit number: INSTM 2006. 10. 24. 04

Haplosyllis spongicola (Grube, 1855)

Material examined: Sta. C, 2 m, coarse sand.

Deposit number: INSTM 2006. 10. 24. 16

Paraehlersia ferrugina (Langerhans, 1881) **

Material examined: Sta. H, 2 m, fine sand.

Deposit number: INSTM 2006. 10. 24. 02

Parapionosyllis gestans (Pierantoni, 1903) **

Material examined: Sta. B, C, 2-4 m, coarse sand.

Deposit number: INSTM 2006. 10. 24. 11

Parapionosyllis labronica Cognetti, 1965*

Material examined: Sta. C, 29, 2-30 m, fine and coarse sand.

Deposit number: INSTM 2006. 10. 24. 12

Parapionosyllis minuta (Pierantoni, 1903) *

Material examined: Sta. B, C, D, 2-5 m, fine and coarse sand.

Deposit number: INSTM 2006. 10. 24. 13

Parapionosyllis papillosa (Pierantoni, 1903) *

Material examined: Sta. B, C, G, 2-4 m, coarse sand.

Deposit number: INSTM 2006. 10. 24. 14

Salvatoria limbata (Claparède, 1868) *

Material examined: Sta. B, H, 2-4 m, fine and coarse sand.

Deposit number: INSTM 2006. 10. 24. 05

Sphaerosyllis bulbosa Southern, 1914 *

Material examined: Sta. C, 5, J, 2-40 m, fine and coarse sand.

Deposit number: INSTM 2006. 10. 24. 06

Sphaerosyllis taylori Perkins, 1981*

Material examined: Sta. A, 17 m, coarse sand.

Deposit number: INSTM 2006. 10. 24. 07

Sphaerosyllis hystrix Claparède, 1863

Material examined: Sta. B, H, 2-4 m, fine and coarse sand.

Deposit number: INSTM 2006. 10. 24. 08

Sphaerosyllis sp. *sensu* San Martín, 2003

Material examined: Sta. C, 2 m, coarse sand.

Deposit number: INSTM 2006. 10. 24. 09

Sphaerosyllis pirifera Claparède, 1868 *

Material examined: Sta. C, H, J, 8, 2-31 m, coarse and fine sand.

Deposit number: INSTM 2006. 10. 24. 10

Streptosyllis bidentata Southern, 1914 **

Material examined: Sta. B, H, 2-4 m, fine and coarse sand.

Deposit number: INSTM 2006. 10. 24. 03

Syllis amica Quatrefages, 1866

Material examined: Sta. H, 14, 22, 30, J, 2-60 m, sandy and rocky substratum.

Deposit number: INSTM 2006. 10. 24. 17

Syllis armillaris (O. F. Müller, 1776)

Material examined: Sta. C, H, 3, 14, 15, 29, 30, 2-50 m, sandy substratum and sandy gravel.

Deposit number: INSTM 2006. 10. 24. 18

Syllis garciai (Campoy, 1982) *

Material examined: Sta. C, D, E, H, 2, 4, F, 16, 25, 30, J, 33, 35, 2-74 m, sandy and muddy substratum.

Deposit number: INSTM 2006. 10. 24. 19 *Syllis hyalina* Grube, 1863

Material examined: Sta. B, C, H, 3, 14, 18, 21, 24, 30, J, 2-61 m, sandy substratum and sandy gravel.

Deposit number: INSTM 2006. 10. 24. 20

Syllis krohni Ehlers, 1864

Material examined: Sta. 28, 60 m, Posidonia bed.

Deposit number: INSTM 2006. 10. 24. 21

Syllis prolifera Krohn, 1852

Material examined: Sta. E, H, 2-3 m, fine sand.

Deposit number: INSTM 2006. 10. 24. 22

Syllis variegata Grube, 1860

Material examined: Sta. H, 14, J, 2-40 m, coarse and fine sand.

Deposit number: INSTM 2006. 10. 24. 22

CANALIPALPATA Rouse & Fauchald, 1997 *incertae sedis*

SABELLIDA Levinsen, 1883

OWENIIDAE Rioja, 1917

Galathowenia oculata (Zachs, 1923) **

Material examined: Sta. D, 2, 5-45 m, fine sand.

Deposit number: INSTM 2006. 10. 27. 01

Owenia fusiformis Delle Chiaje, 1844

Material examined: Sta. 3, 8, 9, 21, 37, 20-38 m, sandy substratum and sandy gravel.

Deposit number: INSTM 2006. 10. 27. 02

SABELLIDAE Latreille, 1825

Bispira sp. **

Material examined: Sta. H, 15, 50 m, fine sand.

Deposit number: INSTM 2006. 10. 28. 01

Branchiomma bombyx (Dalyell, 1853)

Material examined: Sta. 22, 60 m, rocky substratum.

Deposit number: INSTM 2006. 10. 28. 02

Megalomma vesiculosum (Montagu, 1815)

Material examined: Sta. C, 7, 33, 2-74 m, sandy substratum.

Deposit number: INSTM 2006. 10. 28. 03

Chone collaris Langerhans, 1881*

Material examined: Sta. C, E, 2-3 m, coarse and fine sand.

Deposit number: INSTM 2006. 10. 28. 04

Chone dunerificta Tovar-Hernández, Licciano, & Giangrande, 2007

Material examined: Sta. H, 4, 5, 21, 28, 29, 2-60 m, sandy substratum and sandy gravel.

Deposit number: INSTM 2006. 10. 28. 05

Chone filicaudata Southern, 1914

Material examined: Sta. 12, 30 m, fine sand.

Deposit number: INSTM 2006. 10. 28. 06

Chone acustica (Claparède, 1870) *

Material examined: Sta. 11, 30 m, fine sand.

Deposit number: INSTM 2006. 10. 28. 07

Euchone rubrocincta (Sars, 1862) **

Material examined: Sta. 2, 30, 40-45, fine and coarse sand.

Deposit number: INSTM 2006. 10. 28. 08

Hypsicomus stichophthalmos (Grube, 1863) **

Material examined: Sta. 31, 50 m, sandy gravel.

Deposit number: INSTM 2006. 10. 28. 09
Jasmineira caudata Langerhans, 1880 **
 Material examined: Sta. 29, 30 m, fine sand.
 Deposit number: INSTM 2006. 10. 28. 10
Laonome kroeyeri Malmgren, 1866 **
 Material examined: Sta. C, 13, 20, 2-60 m, coarse and muddy sand.
 Deposit number: INSTM 2006. 10. 28. 11
Pseudobranchiomma sp.* *
 Material examined: Sta. 15, 50 m, sandy gravel.
 Deposit number: INSTM 2006. 10. 28. 12
Pseudopotamilla reniformis (Bruguière, 1789)
 Material examined: Sta. 9, 13, 22, 24, 37-60 m, sandy and hard substratum.
 Deposit number: INSTM 2006. 10. 28. 13
Sabella discifera Grube, 1874 *
 Material examined: Sta. 13, 60 m, muddy sand.
 Deposit number: INSTM 2006. 10. 28. 14
Sabella pavonina Savigny, 1822
 Material examined: Sta. 13, 15, 22, 29, 34, 36, 30, 60 m, soft and hard substratum.
 Deposit number: INSTM 2006. 10. 28. 15

 SERPULIDAE Rafinesque, 1815
Hydroides helmatus (Iroso, 1921)
 Material examined: Sta. 15, 50 m, sandy gravel.
 Deposit number: INSTM 2006. 10. 29. 14
Hydroides niger Zibrowius, 1971
 Material examined: Sta. 23, 26 m, *Posidonia* bed.
 Deposit number: INSTM 2006. 10. 29. 15
Hydroides pseudouncinatus Zibrowius, 1968
 Material examined: Sta. 14, 28, 34, 30-60 m, coarse sand and sandy gravel.
 Deposit number: INSTM 2006. 10. 29. 16
Serpula concharum Langerhans, 1880
 Material examined: Sta. 21, 29, 30-38, fine sand and sandy gravel.
 Deposit number: INSTM 2006. 10. 29. 17
Serpula vermicularis Linnaeus, 1767
 Material examined: Sta. 16, 21, 24, 29, 34, 30-60 m, soft and hard substratum.
 Deposit number: INSTM 2006. 10. 29. 18
Spirobranchus polytrema (Philippi, 1844)
 Material examined: Sta. 29, 30 m, fine sand.
 Deposit number: INSTM 2006. 10. 29. 19
Vermiliopsis infundibulum (Philippi, 1844)
 Material examined: Sta. A, H, 7, 29, 15, 17, 21, 22, 2-60 m, soft and hard substratum.
 Deposit number: INSTM 2006. 10. 29. 20
Vermiliopsis labiata (O. G. Costa, 1861)
 Material examined: Sta. 22, 34, 30-60 m, sandy gravel and hard substratum.
 Deposit number: INSTM 2006. 10. 29. 21
Vermiliopsis sp.
 Material examined: Sta. 13, 60 m, muddy sand.
 Deposit number: INSTM 2006. 10. 29. 22

SPIONIDA sensu Rouse & Fauchald, 1997
 MAGELONIDAE Cunningham & Ramage, 1888
Magelona mirabilis (Johnston, 1865)
 Material examined: Sta. A, D, 5, 12, 5-40 m, fine and coarse sand.
 Deposit number: INSTM 2006. 10. 30. 01
Magelona rosea Moore, 1907 *
 Material examined: Sta. A, 2, 4, 37, fine and coarse sand.
 Deposit number: INSTM 2006. 10. 30. 02

 SPIONIDAE Grube, 1850
Aonides oxycephala (Sars, 1862)
 Material examined: Sta. H, 7, 2-26 m, fine sand.
 Deposit number: INSTM 2006. 10. 31. 01
Laonice cirrata (M. Sars, 1851)
 Material examined: Sta. D, 1, 3, 10, 18, 5-61 m, sandy and muddy substratum.
 Deposit number: INSTM 2006. 10. 31. 02
Malacoceros sp.
 Material examined: Sta. D, 5 m, fine sand.
 Deposit number: INSTM 2006. 10. 31. 03
Malacoceros fuliginosus (Claparède, 1869)
 Material examined: Sta. B, C, D, E, 25, 2-60 m, coarse and fine to muddy sand.
 Deposit number: INSTM 2006. 10. 31. 04
Paraprionospio coora Wilson, 1990 **
 Material examined: Sta. 26, 25 m, muddy sand.
 Deposit number: INSTM 2006. 10. 31. 05
Prionospio cirrifera Wirén, 1883 *
 Material examined: Sta. A, 23, 17-26 m, coarse sand and *Posidonia* bed.
 Deposit number: INSTM 2006. 10. 31. 06
Prionospio fallax Söderström, 1920
 Material examined: Sta. A, 3, 35, 38, 17-53 m, sandy and muddy substratum.
 Deposit number: INSTM 2006. 10. 31. 07
Prionospio sp.
 Material examined: Sta. 1, 57 m, mud.
 Deposit number: INSTM 2006. 10. 31. 08
Scolecopsis cantabra (Rioja, 1918) *
 Material examined: Sta. B, E, 8, 11, J, 3-31 m, fine and coarse sand.
 Deposit number: INSTM 2006. 10. 31. 09
Spio filicornis (Müller, 1776)
 Material examined: Sta. A, C, 8, 11, 17-31 m, fine and coarse sand.
 Deposit number: INSTM 2006. 10. 31. 10
Spio multioculata (Rioja, 1918)
 Material examined: Sta. 4, 20, 26, 29, 25-60 m, sandy substratum.
 Deposit number: INSTM 2006. 10. 31. 11

TEREBELLIDA sensu Rouse & Fauchald, 1997
 AMPHARETIDAE Malmgren, 1866
Amage adpersa (Grube, 1863)

Material examined: Sta. 2, 9, 10, 16, 34, 37, 30-60 m, soft and hard substratum.

Deposit number: INSTM 2006. 10. 35. 01

Amage gallasii Marion, 1875

Material examined: Sta. 16, 60 m, hard substratum.

Deposit number: INSTM 2006. 10. 35. 02

Ampharete acutifrons Malmgren, 1865 *

Material examined: Sta. 13, 60 m, muddy sand.

Deposit number: INSTM 2006. 10. 35. 03

Amphicteis gunneri (M. Sars, 1835)

Material examined: Sta. 2, 45 m, fine sand.

Deposit number: INSTM 2006. 10. 35. 04

Isolda pulchella Müller in Grube, 1858 **+

Material examined: Sta. 4, 60, fine sand.

Deposit number: INSTM 2006. 10. 35. 05

Melinna palmata Grube, 1870

Material examined: Sta. 9, 39, 40 m, 35-68 m, sandy and muddy substratum.

Deposit number: INSTM 2006. 10. 35. 06

CIRRATULIDAE Ryckholdt, 1851

Aphelochaeta filiformis Keferstein, 1862

Material examined: Sta. 1, 40, 35-57 m, coarse sand and mud.

Deposit number: INSTM 2006. 10. 32. 08

Aphelochaeta marioni (Saint-Joseph, 1894)

Material examined: Sta. C, H, 2, 3, 4, 7, 8, 9, 10, 11, 12, 20, 25, 26, 30, 36, 37, 38, 2-64 m, sandy and muddy substratum.

Deposit number: INSTM 2006. 10. 32. 01

Caulleriella alata (Southern, 1914)

Material examined: Sta. C, D, E, H, 2, 3, I, J, 2-45 m, fine and coarse sand.

Deposit number: INSTM 2006. 10. 32. 02

Caulleriella bioculata (Keferstein, 1862)

Material examined: Sta. A, C, D, H, 2-17 m, fine and coarse sand.

Deposit number: INSTM 2006. 10. 32. 03

Caulleriella killariensis (Southern, 1914) *

Material examined: Sta. C, H, 3, 2-20 m, fine and coarse sand.

Deposit number: INSTM 2006. 10. 32. 04

Caulleriella zetlandica (McIntosh, 1911) *

Material examined: Sta. C, 2 m, coarse sand.

Deposit number: INSTM 2006. 10. 32. 05

Chaetozone caputesocis (Saint-Joseph, 1894) *

Material examined: Sta. 2, 11, 29, 42, 30-66 m, fine sand and mud.

Deposit number: INSTM 2006. 10. 32. 06

Chaetozone gibber Woodham & Chamberlin, 1994 *

Material examined: Sta. E, H, 2, 8, 10, 2-45 m, fine and coarse sand.

Deposit number: INSTM 2006. 10. 32. 07

Cirriformia tentaculata (Montagu, 1808)

Material examined: Sta. 30, 40 m, coarse sand.

Deposit number: INSTM 2006. 10. 32. 08

Dodecaceria concharum Örsted, 1843

Material examined: Sta. A, 3, 8, 17-31 m, fine and coarse sand.

Deposit number: INSTM 2006. 10. 32. 09

Tharyx multibranchis (Grube, 1863) **

Material examined: Sta. C, 2 m, coarse sand.

Deposit number: INSTM 2006. 10. 32. 10

FLABELLIGERIDAE Saint-Joseph, 1894

Brada villosa (Rathke, 1843) *

Material examined: Sta. H, 41, 2-49 m, fine sand.

Deposit number: INSTM 2006. 10. 33. 01

Pherusa flabellata (M. Sars in G. O. Sars, 1872) *

Material examined: Sta. 26, 25 m, sandy mud.

Deposit number: INSTM 2006. 10. 33. 02

Pherusa plumosa (Müller, 1776)

Material examined: Sta. 1, 57 m, mud.

Deposit number: INSTM 2006. 10. 33. 03

Piromis eruca (Claparède, 1869)

Material examined: Sta. 3, 4, 5, 7, 8, 15, 27, 30, 31, 20-60 m, sandy substratum and sandy gravel.

Deposit number: INSTM 2006. 10. 33. 04

PECTINARIIDAE Quatrefages, 1866

Lagis koreni malmgren, 1866

Material examined: Sta. 7, 26 m, fine sand.

Deposit number: INSTM 2006. 10. 36. 01

Petta pusilla Malmgren, 1866 **

Material examined: Sta. 37, 32 m, coarse sand.

Deposit number: INSTM 2006. 10. 36. 02

STERNASPIDAE Carus, 1863

Sternaspis scutata Ranzani, 1817

Material examined: Sta. 26, 42, 25-66 m, mud and sandy mud.

Deposit number: INSTM 2006. 10. 34. 01

TEREBELLIDAE Malmgren, 1867

Amphitritides gracilis (Grube, 1860)

Material examined: Sta. A, 2, 17-45 m, fine and coarse sand.

Deposit number: INSTM 2006. 10. 37. 01

Amphitrite cirrata (O. F. Müller, 1771 in 1776) *

Material examined: Sta. 28, 31, 37, 32-60 m, coarse and sandy gravel.

Deposit number: INSTM 2006. 10. 37. 02

Amphitrite sp.

Material examined: Sta. 29, 30 m, fine sand.

Deposit number: INSTM 2006. 10. 37. 03

Pista cretacea (Grube, 1860)

Material examined: Sta. 7, 26 m, fine sand.

Deposit number: INSTM 2006. 10. 37. 05

Pista cristata (Müller, 1776)

Material examined: Sta. 2, 3, 4, 12, 13, 20, 22, 35, 40, 20-60 m, sandy substratum.

Deposit number: INSTM 2006. 10. 37. 06

Pista unibranchia Day, 1963 *

Material examined: Sta. 2, 11, 13, 30-60 m, fine and muddy sand.

Deposit number: INSTM 2006. 10. 37. 11

Pista cf. *brevibranchiata* Moore, 1923 *+

Material examined: Sta. 22, 60 m, rocky substratum.

Deposit number: INSTM 2006. 10. 37. 04

Pista sp.1

Material examined: Sta. 7, 26 m, fine sand.

Deposit number: INSTM 2006. 10. 37. 07

Pista sp.2

Material examined: Sta. H, 4, 12, 17, 28, 30, 41, 2-60 m, fine to coarse sand and *Posidonia* bed.

Deposit number: INSTM 2006. 10. 37. 08

Pista sp. 3

Material examined: Sta. 29, 30 m, fine sand.

Deposit number: INSTM 2006. 10. 37. 09

Pista sp. 4

Material examined: Sta. 28, 60 m, *Posidonia* bed.

Deposit number: INSTM 2006. 10. 37. 10

Thelepus cincinnatus (Fabricius, 1780) **

Material examined: Sta. 16, 60 m, rocky substratum.

Deposit number: INSTM 2006. 10. 37. 12

Terebella lapidaria Linnaeus, 1767

Material examined: Sta. 14, 15, 24, 40-50 m, sandy substratum and sandy gravel.

Deposit number: INSTM 2006. 10. 37. 13

Terebella sp.

Material examined: Sta. 5, 40 m, coarse sand.

Deposit number: INSTM 2006. 10. 37. 14

Polycirrus haematodes (Claparède, 1864) *

Material examined: Sta. A, 17 m, coarse sand.

Deposit number: INSTM 2006. 10. 37. 15

Polycirrus sp.

Material examined: Sta. 29, 30 m, fine sand.

Deposit number: INSTM 2006. 10. 37. 16

Parathelepus cf. *collaris* (Southern, 1914) **

Material examined: Sta. 2, 45 m, fine sand.

Deposit number: INSTM 2006. 10. 37. 17

TRICHOBRANCHIIDAE Malmgren, 1866

Terebellides stroemi Sars, 1835

Material examined: Sta. 2, 4, 13, 17, 20, 24, 25, 26, 31, 37, 41, 25-60 m, sandy to muddy substratum and sandy gravel.

Deposit number: INSTM 2006. 10. 38. 01

POLYCHAETA *incertae sedis*

PROTODRILIDAE Czerniavsky, 1881***

Proteodrilus purpureus (Schneider, 1868) **

Material examined: Sta. C, 2 m, coarse sand.

Deposit number: INSTM 2006. 10. 39. 01

SACCOCIRRIDAE Czerniavsky, 1881***

Saccocirrus papillocercus Bobretzky, 1872 **

Material examined: Sta. B, C, 2-4 m, coarse sand.

Deposit number: INSTM 2006. 10. 40. 01

Discussion

The polychaete species reported since Fauvel, 1924, mark an increase in species diversity. Cantone *et al.* (1978) reported 73 species of polychaetes in the Tunisian gulf; and Zghal & Ben Amor (1980) recorded 222 species; Zghal and Bouaziz-Azzouna (1984) recorded 232 species; Ayari *et al.* (2009) recorded an increase to 289 species. The present work adds 86 new records for a new total of 375 polychaete species.

This includes the reports of alien species which are grouped into six broad categories, namely established, casual, questionable, cryptogenic, excluded and invasive (Zenetos *et al.*, 2005-2010; Simboursa & Zenetos, 2005). The established species category includes *Metasychis gotoi* and *Pista unibranchia*. The casual category *Isolda pulchella*, exclusive to the Central Mediterranean (Zenetos *et al.*, 2010). A questionable species, *Euniphysa tubifex*, is recorded in the Eastern Mediterranean and cryptogenic species, *Paraprionospio coora*, in the Western Mediterranean (Zenetos *et al.*, 2010). The total number of the alien species reported for this study is eight. Some of them are considered as Lessepsian migrants introduced from the Red Sea to the Mediterranean through the Suez Canal (Cinar, 2007) and their absence from the Tunisian material previously collected supports this hypothesis. The last inventory produced by Ayari *et al.* (2009) show five alien species, four of them considered as established: *Ficopomatus enigmaticus*, *Hydroides dianthus*, *Hydroides diramphus*, *Hydroides elegans*, and *Epidiopatra hupferiana monroi* as casual. Subsequently, the total number of the valid alien species reported for this study increased to ten species, which is about 20.41 % of the alien polychaete species reported from the Western Mediterranean [49 species according to Zenetos *et al.* (2010)].

In total, 375 polychaete species have been reported from the Tunisian coasts which is attributed to the increasing research effort. The work of Simboursa and Zenetos (2005) also remarked on the increasing diversity in polychaete species owing to the increasing research in recent years. This number accounts for 36.54 % of the polychaete species estimated for the whole Mediterranean which is currently 1172 species (Coll *et al.*, 2010 in Zenetos *et al.*, 2010).

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References

- Amoureux, L., 1973. Quelques annélides polychètes de l'Afrique occidentale et équatoriale. *Cahiers O.R.S.T.O.M: Série Océanographique*, 11 (1): 41-65.
- Arvanitidis, C., 2000. Polychaete fauna of the Aegean Sea: inventory and new information. *Bulletin of Marine Science*, 60 (1): 73-96.
- Ayari, R. & Afli, A., 2003. Bionomie benthique du petit golfe de Tunis. *Bulletin de l'Institut Nationale des Sciences et Technologies de la Mer, Salammbô*, 30: 79-90.
- Ayari, R. & Afli, A., 2008. Functional groups to establish the ecological quality of soft benthic fauna within Tunis Bay (Western Mediterranean). *Vie et Milieu*, 58 (1): 67-75.
- Ayari, R., Muir, A., Aissa, P., Paterson, G. & Afli, A., 2009. An updated list of Polychaetous annelids from Tunisian coasts (Western Mediterranean Sea). *Cahier de Biologie Marine*, 50: 1-13.
- Bellan, G., 1961. Résultats scientifiques des campagnes de la 'Calypso'. Campagne 1955 en Méditerranée Nord-Orientale (Suite). 4. Annélides Polychètes. *Annales de l'Institut Océanographique*, 39: 161-178.
- Bellan, G., 1964. Contribution à l'étude systématique, bionomique et écologique des Annélides Polychètes de la Méditerranée. *Recueil des Travaux de la Station Marine d'Endoume*, 49 (33): 1-351.
- Ben Amor, Z., 1984. *Faune des Polychètes de Tunisie*. PhD Thesis. Faculté des sciences de Tunis, 237 pp.
- Ben-Eliahu, M.N., 1995. A list of Polychaeta along the Levant coast. *Haasiana*, 1: 78-93.
- Cantone, G., Fassari, G. & Brigandi, S., 1978. Ricerche sui Policheti della Tunisia. *Animalia*, 5 (1-3): 51-78.
- Castelli, A., Bianchi, C.N., Cantone, G., Çinar, M.E., Gambi, M.C. et al., 2008. Annelida Polychaeta. *Biologia Marina Mediterranea*, 15 (Suppl. 1): 323-373.
- Çinar, M.E., 2005. Polychaetes from the coast of northern Cyprus (eastern Mediterranean Sea), with two new records for the Mediterranean Sea. *Cahiers de Biologie Marine*, 46: 143-159.
- Cinar, M.E., 2007. Re-description of *Timarete punctata* (Polychaeta: Cirratulidae) and its occurrence in the Mediterranean Sea. *Scientia Marina*, 71 (4): 755-764.
- Ergen, Z., 1976. Investigations on the taxonomy and ecology of Polychaeta from Izmir Bay and its adjacent areas. *Ege Üniversitesi Fen Bilimleri İlimi Raporlar Serisi*. 209: 1-73.
- Fauchald, K., 1977. The polychaete worms. Definitions and keys to the orders, families and genera. *Natural History Museum of Los Angeles County, Science Series*, 28: 1-188.
- Fauchald, K., 1992. A review of the genus *Eunice* (Eunicidae: Polychaeta) based upon type material. *Smithsonian Contributions to Zoology*, 523: 1-422.
- Fauchald, K. & Rouse, G., 1997 Polychaete systematics: past and present. *Zoologica Scripta*, 26 (2): 71-138.
- Fauvel, P., 1923. *Faune de France*. 5. *Polychètes errantes*. Paris, Paul Chevalier, 448 pp.
- Fauvel, P., 1924a. *Perinereis macropus* (Claparède) var. *canodanta*, n. var. et genre *Perinereis*. *Bulletin de la Société Zoologique de France*, 49: 389-394.
- Fauvel, P., 1924b. Sur l'*Aricia foetida*, Claparède et ses variétés. *Bulletin de la Société Zoologique de France*, 49: 518-528.
- Fauvel, P., 1927. *Faune de France*. 16. *Polychètes sédentaires addenda aux Errantes, Archiannelides, Myzostomaires*. Paris, Paul Chevalier, 494 pp.
- Fauvel, P., 1940. Annélides Polychètes de la Haute-Adriatique. *Thalassia*, Jena, 4 (1): 1-24.
- Harmelin, J.G., 1969. Contribution à l'étude de l'endofaune des prairies d'*Halophila stipulacea* de Méditerranée Orientale. I.- Annélides Polychètes. *Recueil des Travaux de la Station Marine d'Endoume*, Bulletin, 45 (61): 305-316.
- Laubier, L., 1966. Sur quelques Annélides Polychètes de la région de Beyrouth. *Miscellaneous papers in the natural sciences, American University of Beirut*, 5: 9-23.
- Mcintosh, W.C., 1912. Notes from the Gatty Marine Laboratory, St. Andrews. No. 33. *Annals & Magazine of Natural History*, 8 (10): 117-130.
- Paxton, H., 1986. Revision of the *Rhamphobranchium* complex (Polychaeta: Onuphidae). *Records of the Australian Museum*, 38 (2): 75-104.
- Pettibone, M.H., 1966. Revision of the Pilargidae (Annelida: Polychaeta), including descriptions of new species, and redescrptions of the pelagic *Podarmus ploa* Chamberlain (Polynoidae). *Proceedings of the United States National Museum*, 118 (3525): 155-207.
- Ramos, J.M., 1976. *Lumbrineridae (Polychètes errantes) de Méditerranée*. *Annales de l'Institut Océanographique*, 52 (1): 103-137.
- Rouse, G.W. & Fauchald, K., 1997. Cladistics and Polychaetes. *Zoologica Scripta*, 26 (2): 139-204.
- San Martín, G., 2003. Annelida, Polychaeta II: Syllidae. In: *Fauna Ibérica. Vo. 21*. M.A. Ramos, et al. (Eds). Madrid, Museo Nacional de Ciencias Naturales, 554 pp.
- Simboura, N. & Nicolaidou, A., 2001. The Polychaetes (Annelida, Polychaeta) of Greece: checklist, distribution and ecological characteristics. *Monographs on Marine Sciences*, No. 4. Athens, NCMR, 115 pp.
- Simboura, N. & Zenetos, A., 2005. Increasing polychaete biodiversity in Greek waters over a 70 years span with addition of new records and exotic species. *Mediterranean Marine Science*, 6 (1): 75-88.
- Trigui El-Menif, N., Jaafar Kefi, F., Ramdani, M., Flower, R. & Boumaiza, M., 2007. Habitat and associated fauna of *Lithophaga lithophaga* (Linné, 1758) in the Bay of Bizerta (Tunisia). *Journal of Shellfish Research*, 26 (2): 569-574.
- Westheide, W., 1971. *Apharyngtus punicus* nov. gen. nov. sp., ein aberranter Archiannelide aus dem Mesopsammal der tunesischen Mittelmeerküste. *Mikrofauna des Meeresbodens*, 6: 1-19.
- Westheide, W., 1972. La faune des Polychètes et des Archiannelides dans les plages à Ressac de la côte méditerranéenne de la Tunisie. *Bulletin de l'Institut National Scientifique et Technique d'Océanographie et de Pêche de Salammbô*, 2 (3): 449-466.
- Wilson, R.S., Hutchings, P.A. & Glasby, C.J., 2003. *Polychaetes: an interactive identification guide*. Melbourne, CSIRO Publishing.
- Zaabi, S. & Afli, A., 2005. Structure générale des peuplements d'annélides polychètes dans le secteur nord-est du golfe de

- Tunis. *Bulletin de l'Institut Nationale des Sciences et Technologies de la Mer, Salammbô*, 32: 53-58.
- Zaabi, S. & Afli, A., 2006. Significations écologiques de la variabilité des Polychètes dans le golfe de Tunis. *Bulletin de l'Institut Nationale des Sciences et Technologies de la Mer, Salammbô*, 33: 29-36.
- Zaabi, S., Gillet, P., Afli, A. & Boumaiza, M., 2009. Biodiversity of polychaetous annelids from the peninsula of Cap Bon, northeast coast of Tunisia. *Zoosymposia*, 2: 587-600.
- Zaabi, S., Gillet, P., Afli, A. & Boumaiza, M., 2010. Structure and diversity of polychaetous annelids population along the eastern coast of the Cap Bon Peninsula (north-east coast of Tunisia, western Mediterranean). *Marine Biodiversity Records*, 3 (e100): 1-11. (Published on-line)
- Zenetos, A., Çinar, M.E., Pancucci-Papadopolou, M.A., Harmelin, J.G., Furnari, G. *et al.*, 2005. Annotated list of marine alien species in the Mediterranean with records of the worst invasive species. *Mediterranean Marine Science*, 6 (2): 63-118.
- Zenetos, A., Gofas, S., Verlaque, M., Cinar, M.E., Garcia Raso, J.E. *et al.*, 2010. Alien species in the Mediterranean Sea by 2010. A contribution to the application of European Union's Marine Strategy Framework Directive (MSFD). Part I. Spatial distribution. *Mediterranean Marine Science*, 11 (2): 381-493.
- Zghal, F. & Ben Amor, Z., 1980. Annélides Polychètes de Tunisie. *Bulletin de l'Office National des Pêches de Tunisie*, 4: 1-11.
- Zghal, F. & Bouaziz-Azzouna, A., 1984. Quelques nouvelles récoltes de Polychètes sur les côtes tunisiennes. *Revue de la Faculté des Sciences de Bizerte, Tunis*, 3: 207-214.
- Zibrowius, H., 1968. Etude morphologique systématique et écologique des Serpulidae (Annelida: Polychaeta) de la région de Marseille. *Recueil des Travaux de la Station Marine d'Endoume, Bulletin*, 49: 81-252.
- Zibrowius, H., 1971. Les espèces Méditerranéennes du genre *Hydroides* (Polychaeta, Serpulidae): remarque sur le prétendu polymorphisme de *Hydroides uncinata*. *Tethys*, 2 (3): 691-746.
- Zibrowius, H., 1978. Quelques récoltes de Serpulidae (Annelida Polychaeta) sur les côtes nord de la Tunisie. *Bulletin de l'Office Nationale de Pêche, Tunisie*, 2: 211-222.