

Biogeographical homogeneity in the eastern Mediterranean Sea. II. Temporal variation in Lebanese bivalve biota

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Supplement. Marine bivalves from Lebanon according to literature (for some species multiple records may be based on the same sample) and new field samplings. The use (or not) of parentheses for taxon authorships has been reported as originally employed in each literature record. The original style (caps v. small, italics v. roman) has been corrected, whilst the original spelling has been maintained and is followed by [sic!] if wrong. Earlier names are available for *Brachidontes pharaonis* (Fischer P., 1870) [*Brachidontes ustulatus* (Lamarck, 1819)], *Loripes lucinalis* (Lamarck, 1818) [*Loripes orbiculatus* Poli, 1791], *Ostrea stentina* Payraudeau, 1826 [*Ostrea capsa* Fischer von Waldheim, 1807], *Solen marginatus* Pulteney, 1799 [*Solen rotundatus* Spengler, 1794] and *Tellina nitida* Poli, 1791 [*Tellina albicans* Gmelin, 1791] (Huber, 2010, and M. Huber, pers. comm.). However, junior synonyms are currently in usage since decades, and therefore the provisions of ICZN (International Commission on Zoological Nomenclature) art. 23.9 may apply. Awaiting for an ICZN formal decision, we hereby prefer to maintain the binomens in use, in agreement with the position held by WoRMS (World Register of Marine Species) in these cases. Abbreviations: A, alien species; v, vv - loose valve(s); c, cc - complete specimen(s).

Family SOLEMYIDAE Gray, 1840

Solemya togata (Poli, 1791)

Literature records:

Solenomya togata Poli - Gruvel & Moazzo 1929: 429; Moazzo 1931: 453; Pallary 1938: 57; Bitar 1996: 123; *Solemya togata* (Poli, 1795 [sic!]) - Bitar & Kouli-Bitar 1998: 40.

Family NUCULIDAE Gray, 1824

Nucula nucleus (Linnaeus, 1758)

Literature records:

Nucula nucleus (L.) - Brusina 1879: 30; *Nucula nucleus* Linné - Gruvel & Moazzo 1929: 426; Moazzo 1931: 450; *Nucula nucleus* Linné var. *minor* Ply 1900 [sic!] - Pallary 1938: 51; *Nucula nucleus* L. - Bitar 1996: 122; *Nucula nucleus* (Linné, 1758) - Bitar & Kouli-Bitar 1998: 40.

Material examined:

(6) Ras El Chakaa: 04/06/2000 - cave sediment, 3-4.5 m: 1 c., 5 vv.; (8) Selaata: 13/10/1999 - tunnel sediment, 7-8 m: 1 c.; (12) Jbail: 17/10/1999 - Tablieh, cave sediment, 16 m: 2 vv.; (19) Saïda: 05/06/2000 - off Nahr El Ouali, sand, 31 m: 2 cc., 7 vv.; (21) El Kassmieh: 25/10/1999 - detritic sand, 44 m: 1 v., 1 c.

Family NUCULANIDAE Adams H. & Adams A, 1858

Nuculana pella (Linnaeus, 1767)

Literature records:

Leda pella Linné - Gruvel & Moazzo 1929: 427; Moazzo 1931: 451; Pallary 1938: 51; *Leda pella* L. - Bitar 1996: 122; *Nuculana pella* (Linné, 1767) - Bitar & Kouli-Bitar 1998: 40.

Material examined:

(6) Ras El Chakaa: 04/06/2000 - cave sediment, 3-4.5 m: 2 vv.; (19) Saida: 05/06/2000 - off Nahr El Ouali, sand, 31 m: 2 vv.

Family ARCIDAE Lamarck, 1809

Anadara natalensis (Krauss, 1848)

Literature records:

Anadara natalensis - Bitar 2013: 8.

Remarks:

Record based on a specimen collected in 1992 at Rmaileh.

Arca noae Linnaeus, 1758

Literature records:

Arca noe [sic!] Linné - Pallary 1912: 174; Pallary 1919: 175; Gruvel & Moazzo 1929: 427; Bitar 1996: 122; *Arco* [sic!] *noe* [sic!] Linné - Moazzo 1931: 451; *Byssoarca noe* [sic!] Linné - Pallary 1938: 50; *Arca noae* (L) - Fadlallah 1975: 69; *Arca noae* Linné, 1758 - Bitar & Kouli-Bitar 1998: 40.

Material examined:

(1) Ramkine Island: 22/10/1999 - sediment (mainly foraminiferous), 13-14 m: 1 v.; (3) Anfeh: 26/10/1999 - 24 m: 1 v.; (7) Chak El Hatab: 05/07/2003 - overhang, 9 m: 1 c.; (12) Jbail: 17/10/1999 - Tablieh, small cave, concretions, 16 m: 1 c.; Tablieh, cave sediment, 16 m: 3 vv.; (15) Beirut: 15/09/2002 - harbour entrance, breakwater, maximum depth 15 m: 1 c.; (19) Saida: 05/06/2000 - off Nahr El Ouali, sand, 31 m: 1 v.; (22) Tyr: 25/10/1999 - Sour, 15 m: 1 c.

Barbatia barbata (Linnaeus, 1758)

Literature records:

Arca bartata [sic!] Linné - Pallary 1912: 174; *Arca barbata* Linné - Pallary 1919: 175; Gruvel & Moazzo 1929: 427; Moazzo 1931: 451; *Arca barbata* Linné var. *minor* Loc. et Caz. - Pallary 1919: 175; *Arca (Barbatia) barbata* Linné - Pallary 1938: 50; *Arca (Barbatia) barbata* Linné var. *minor* Loc. et Caz. 1901 [sic!] - Pallary 1938: 50; *Arca barbata* L. - Bitar 1996: 122; *Barbatia barbata* (Linné, 1758) - Bitar & Kouli-Bitar 1998: 40, 43.

Material examined:

(3) Anfeh: 26/10/1999 - sand, 20 m: 4 vv.; (5) El Heri (marina Beaulieu): 03/06/2000 - from muddy sediment just below small cliff, 3 m: 2 vv.; (6) Ras El Chakaa: 04/06/2000 - cave sediment, 3-4.5 m: 1 v.; (12) Jbail: 17/10/1999 - Tablieh, 17 m: 1 v.; (19) Saida: 05/06/2000 - off Nahr El Ouali, sand, 31 m: 4 vv.; (21) El Kassmieh: 25/10/1999 - detritic sand, 44 m: 4 vv.

Family NOETIIDAE Stewart, 1930

Striarca lactea (Linnaeus, 1758)

Literature records:

Byssoarca (Fossularca) lactea Linné - Pallary 1938: 50; *Arca lactea* (L) - Fadlallah 1975: 69; *Arca lactea* L. - Bitar 1996: 122; *Striarca lactea* (Linné, 1758) - Bitar & Kouli-Bitar 1998: 40, 43.

Material examined:

(1) Ramkine Island: 22/10/1999 - sediment (mainly foraminiferous), 13-14 m: 1 c., 6 vv.; 15 m: 3 cc.; 31/05/2000 - cave roof, 5-7 m: 1 c.; coarse sand, 13 m: 1 v.; (3) Anfeh: 26/10/1999 - sand, 20 m: 1 c., 15 vv.; (5) El Heri (marina Beaulieu): 03/06/2000 - from sand in *Cymodocea* meadow, 4 m: 1 v.; 1-5 m: 1 c.; (6) Ras El Chakaa: 04/06/2000 - cave sediment, 3-4.5 m: 2 vv.; 13/07/2003 - under stones, 12 m: 3 cc.; (7) Chak El Hatab: 05/07/2003 - cave, 14 m: 1 c.; (8) Selaata: 18/10/1999 - cave sediment, 9 m: 13 vv.; 23/10/1999 - cave, 6 m: 1 c.; 14/09/2002 - cave sediment, 22 m: 1 v.; 24/09/2002 - cliff, among calcareous algae, 35 m: 1 c.; 06/07/2003 - cliff, 35 m: 1 c., 3 vv.; (9) Batroun: 16/10/1999 - old town, "Phenician wall", incrustated vertical wall, 9 m: 4 cc.; (11) El Barbara: 08/06/2000 - overhang, 28 m: 2 cc.; (12) Jbail: 17/10/1999 - Tablieh, concretions, 15 m: 5 cc., 1 v.; Tablieh, cave sediment, 16 m: 4 vv.; Tablieh, 17 m: 2 cc.; (14) Aquamarina: 10/07/2003 - under stones, 10-25 m: 1 c.; (15) Beirut: 07/07/2003 - St. George, 10 m: 6 cc.; (19) Saida: 05/06/2000 - off Nahr El Ouali, sand, 31 m: 1 c., 5 vv.; (20) El Zahrani: 06/06/2000 - Harf El Hawieh El Jouani, 14 m: 2 cc.; Harf El Shbak, detritic sand, 24 m: 1 v.; (21) El Kassmieh: 25/10/1999 - with *Madracis* sp., 42-43 m: 4 cc., 31 vv.; (22) Tyr: 25/10/1999 - Sour, shoal, coarse sable between rocks, 12 m: 1 c., 16 vv.

Family GLYCYMERIDIDAE Dall, 1908

Glycymeris bimaculata (Poli, 1795)

Literature records:

Pectunculus philippii Pallary 1912 = *lineatus* Philippi (non Reeve) - Pallary 1938: 51; *Pectunculus philippi* [sic!] Pallary - Bitar 1996: 122; *Glycymeris philippii* Pallary - Bitar & Kouli-Bitar 1998: 40.

Glycymeris nummaria (Linnaeus, 1758)

Literature records:

Pectunculus cor Lamarck - Gruvel & Moazzo 1929: 427; Moazzo 1931: 451; Bitar 1996: 122; *Pectunculus (Pseudaxinea) violacescens* Lamarck - Pallary 1938: 50; *Pectunculus (Pseudaxinea) violacescens* Lamarck var. *alba* Piry - Pallary 1938: 50, 51; *Pectunculus violacescens* Lamarck - Bitar 1996: 122; *Glycymeris violacescens* (Lamarck, 1819) - Bitar & Kouli-Bitar 1998: 40, 43.

Glycymeris pilosa (Linnaeus, 1767)

Literature records:

Pectunculus pilosus Linné - Pallary 1912: 174; Pallary 1919: 175; Gruvel & Moazzo 1929: 427; Moazzo 1931: 451; *Pectunculus (Axinaea) pilosus* Linné - Pallary 1938: 51; *Pectunculus pilosus* L. - Bitar 1996: 122; *Glycymeris glycymeris* (Linné, 1758) *sensu* Bitar & Kouli-Bitar (1998) - Bitar & Kouli-Bitar 1998: 40 (not *Arca glycymeris* Linnaeus, 1758).

Remarks:

Bitar & Kouli-Bitar (1998) listed the Lebanese records of *Glycymeris pilosa* (Linnaeus, 1767) under *Glycymeris glycymeris* (Linné, 1758), while we hereby regard them as distinct species following WORMS and pending genetic analysis.

Glycymeris sp. (juveniles of *G. bimaculata* and/or *G. pilosa*)

Material examined:

(1) Ramkine Island: 31/05/2000 - coarse sand, 13 m: 8 vv.; (8) Selaata: 18/10/1999 - cave sediment, 9 m: 17 vv.; (9) Batroun: 15/07/2003 - 4-7 m: 8 vv.; (19) Saida: 05/06/2000 - off Nahr El Ouali, sand, 31 m: 1 c., 7 vv.

Family MYTILIDAE Rafinesque, 1815

A - *Brachidontes pharaonis* (Fischer P., 1870)

Literature records:

Mytilus variabilis Krauss - Gruvel & Moazzo 1929: 426; Moazzo 1931: 450; *Mytilus (Hormomya) variabilis* Krauss - Pallary 1938: 49; *Brachidontes variabilis* (Krauss) - Spada 1971: 90; *Brachidontes* [sic!] *variabilis* (Krauss) - Fadlallah 1975: 69; *Brachydonates* [sic!] *variabilis* (Krauss) - Shiber & Shatila 1978: 125; Shiber 1980: 147; *Brachidontes variabilis* (Krauss, 1848) - Zibrowius & Bitar 1981: 160; Bogi & Khairallah 1987: 58; *Brachidontes variabilis* - Bitar & Kouli-Bitar 1995a: 19; Bitar & Kouli-Bitar 1995b: 19; Nakhlé et al. 2006: 73; *Brachidontes variabilis* Krauss - Bitar 1996: 122; *Brachidontes pharaonis* (Fischer P., 1870) - Bitar & Kouli-Bitar 1998: 40; *Brachidontes pharaonis* Fischer P., 1870 - Bitar & Kouli-Bitar 1998: 43; *Brachidontes pharaonis* (Fischer, 1870) - Zibrowius & Bitar 2003: 70; *Brachidontes pharaonis* - Bitar & Kouli-Bitar 2001: 72; Bitar et al. 2007: 437; Bitar 2010: 452; Bitar 2013: 8.

Material examined:

(1) Ramkine Island: 22/10/1999 - surface, amidst calcareous algae: 8 cc.; tunnel, 1-5 m: 3 cc.; sediment (mainly foraminiferous), 13-14 m: 2 vv.; concretions, 13-14 m: 1 c.; 15 m: 1 c.; 31/05/2000 - coarse sand, 13 m: 3 vv.; 01/06/2000 - amidst *Dictyopteris* sp. and *Sargassum* sp., surface: 3 cc.; (2) Tripoli: 20/09/2002 - harbour entrance, breakwater jetty, inner side, 1 m: 5 cc.; 08/07/2003 - harbour, surface, with crust of *Spirobranchus kraussii* (Baird, 1865): 3 cc.; (5) El Heri (marina Beaulieu): 03/06/2000 - sortie Est, amidst *Corallina* sp., surface: 7 cc.; from muddy sediment just below small cliff, 3 m: 2 vv.; from sand in *Cymodocea* meadow, 5 m: 1 c.; 1-5 m: 1 c.; (6) Ras El Chakaa: 19/10/1999 - surface: 5 cc.; cave, 3-5 m: 2 cc.; 04/06/2000 - cave sediment, 3-4.5 m: 4 vv.; 21/09/2002 - cave, with freshwater spill, 3-4 m: 4 cc.; (8) Selaata: 18/10/1999 - cave sediment, 9 m: 11 vv.; 23/10/1999 - 0-5 m: 9 cc.; *Cymodocea* meadow, 20 m: 2 cc.; (9) Batroun: 15/10/1999 - next to lab, snorkeling, amidst *Corallina* sp., 2-3 m: 9 cc.; next to lab, snorkeling, 5-7 m: 1 c.; 26/09/2002 - 2-5 m: 1 c.; (10) Kfar Abida: 02/07/1995 - 1 m: 16 cc., 1 v.; (12) Jbail: 17/10/1999 - harbour, 1-2 m: 5 cc.; Tablieh, cave sediment, 16 m: 1 v.; (13) Tabarja: 04/10/2008 - surface: around 100 cc. (photo Ghazi Bitar); (15) Beirut: 02/06/2000 - harbour, 1-8 m: 1 c.; 16/09/2002 - harbour, quay 60, surface, with crust of *Spirobranchus kraussii* (Baird, 1865): 102 cc.; harbour, quay 60, 5-7 m: 1 c.; 25/09/2002 - airport, on boulders, 6 m: 34 cc., 1 v.; airport, pillar jetty, 3-10 m: 97 cc., 4 vv.; 07/07/2003 - harbour entrance, breakwater, on *Thaisella sacellum* (Gmelin, 1791): 2 cc.; 09/07/2003 - harbour, outer side of the main jetty, 5-9 m: 2 cc., 1 v.; 16/07/2003 - airport, pillar jetty, surface, with crust of *Spirobranchus kraussii* (Baird, 1865): 5 cc.; (17) Khaldeh: 07/06/2000 - Villamar, surface: 1 c., 1 v.; (18) Saadiyat: 29/10/1991 - amidst *Dendropoma* sp., surface: 3 cc.; (22) Tyr: 08/11/1992: 2 cc.; 25/10/1999 - Sour, shoal, coarse sable between rocks, 12 m: 8 vv.

***Lioberus agglutinans* (Cantraine, 1835)**

Literature records:

Amygdalum agglutinans (Cantraine, 1835) - Bitar & Kouli-Bitar 1998: 43.

Material examined:

(3) Anfeh: 26/10/1999 - sand, 20 m: 2 vv.; (11) El Barbara: 08/06/2000 - overhang, 28 m: 1 v.; (12) Jbail: 17/10/1999 - Tablieh, 17 m: 1 v.; (13) Tabarja: 10/07/2003 - 10-25 m: 1 c.; 11/07/2003 - 12-18 m: 3 cc., 9 vv.; (15) Beirut: 02/06/2000 - harbour: 1 c.; (20) El Zahrani: 06/06/2000 - Harf El Hawieh El Jouani, 11 m, among coralline algae: 7 c., 50 vv.; Harf El Hawieh El Jouani, 14 m: 4 vv., 1 c. and 1 v. (photo Ghazi Bitar).

A - Lioberus ligneus (Reeve, 1858)**Material examined:**

(1) Ramkine Island: 22/10/1999 - sediment (mainly foraminiferous), 13-14 m: 3 vv.; 31/05/2000 - coarse sand, 13 m: 1 v.; (20) El Zahrani: 06/06/2000 - Harf El Hawieh El Jouani, 11 m, among coralline algae: 1 c., 2 v.

Lithophaga lithophaga (Linnaeus, 1758)**Literature records:**

Lithodomus lithophagus Linné var. *minor* P. - Pallary 1919: 175; *Lithodomus lithophagus* Linné - Gruvel & Moazzo 1929: 426; Moazzo 1931: 450; *Lithodomus lithophagus* L. - Gruvel 1931: 124; *Lithodomus lithophagus* Linné var. *minor* P. - Pallary 1938: 50; *Lithophaga lithophaga* (L.) - Fadlallah 1975: 69; *Lithophaga lithophaga* [sic!] L. - Bitar 1996: 122; *Lithophaga lithophaga* (Linné, 1758) - Bitar & Kouli-Bitar 1998: 40, 43.

Material examined:

(1) Ramkine Island: 31/05/2000 - cave, 5-7 m: 1 v.; (6) Ras El Chakaa: 19/10/1999 - cave, 3-5 m: 1 c., 2 vv.; encrusted wall, 5-7 m: 1 v.; 04/06/2000 - cave, 5-6 m: 1 c., 1 v.; (8) Selaata: 18/10/1999 - tunnel roof, 5-6 m: 2 cc.; cave, 7 m: 1 v.; 23/10/1999 - cave, 6 m: 1 v.; 14/09/2002 - cave, 21 m: 5 cc., 1 v.; 24/09/2002 - concretions, 12 m: 1 c.; (9) Batroun: 15/10/1999 - next to lab, snorkeling, 3 m: 1 v.; 16/10/1999 - old town, "Phenician wall", incrustated vertical wall, 9 m: 2 cc.; (10) Kfar Abida: 30/05/2000 - tunnel, small cave, 7-8 m: 2 cc.; (11) El Barbara: 08/06/2000 - overhang, 26 m: 3 cc., 1 v.; (12) Jbail: 17/10/1999 - Tablieh, small cave, concretions, 16 m: 1 c.; (19) Saida: 05/06/2000 - Harf El Rijmeh, rocky bottom, 12 m: 1 c.; (20) El Zahrani: 06/06/2000 - Harf El Hawieh El Jouani, 14 m: 2 c., 1 v.; Harf El Shbak, overhang, 24 m: 1 c.; (21) El Kassmieh: 25/10/1999 - with *Madraxis* sp., 42-43 m: 1 c.; detritic sand, 44 m: 1 v.; (22) Tyr: 25/10/1999 - Sour, 15 m: 1 c.; (23) El Bayada: 14/10/2009 - overhang, 3 m: 1 c. (photo Ghazi Bitar).

Modiolus barbatus (Linnaeus, 1758)**Literature records:**

Modiola barbata Linné - Pallary 1912: 174; Gruvel & Moazzo 1929: 426; Moazzo 1931: 450; *Modiola barbata* Linné var. *minor* P. - Pallary 1919: 175; *Modiola barbata* Linné var. *minor* P. - Pallary 1938: 50; *Modiola barbata* L. - Bitar 1996: 122; *Modiolus barbatus* (Linné, 1758) - Bitar & Kouli-Bitar 1998: 40.

Material examined:

(3) Anfeh: 26/10/1999 - sand, 20 m: 1 v.; (6) Ras El Chakaa: 04/06/2000 - cave sediment, 3-4.5 m: 1 v.; (15) Beirut: 16/07/2003 - airport, under pillar jetty, 3-11 m: 8 cc.

Musculus costulatus (Risso, 1826)**Literature records:**

Musculus costulatus (Risso, 1826) - Bitar & Kouli-Bitar 1998: 43.

Material examined:

(8) Seelata: 18/10/1999 - cave sediment, 9 m: 5 vv.; (9) Batroun: 16/10/1999 - old town, "Phenician wall", concretions, 9 m: 2 cc., 1 v.; (10) Kfar Abida: 02/07/1995 - 1 m: 3 cc.; (17) Khaldeh: Villamar, 07/06/2000 - surface: 1 c.

Musculus subpictus (Cantraine, 1835)

Material examined:

(12) Jbail: 17/10/1999 - Tablieh, cave sediment, 16 m: 1 v.

Mytilaster minimus (Poli, 1795)

Literature records:

Mytilus minimus Poli - Puton 1856: 222; Pallary 1912: 173; Pallary 1919: 175; Gruvel 1931: 124; Bitar 1996: 122; *Mytilus minimus* Poli var. *blondeli* H. Martin [sic!] - Pallary 1919: 175; *Mytilus (Mytilaster) minimus* Poli - Gruvel & Moazzo 1929: 426; Moazzo 1931: 450; *Mytilus (Mytilaster) minima* [sic!] Poli - Pallary 1938: 50; *Mytilus (Mytilaster) minima* [sic!] Poli var. *blondeli* (H. Martin) Monts 1879 [sic!] - Pallary 1938: 50; *Brachiodontes* [sic!] *minimus* (Poli) - Fadlallah 1975: 69; *Mytilaster minimus* (Poli, 1795) - Bitar & Kouli-Bitar 1998: 40.

Material examined:

(10) Kfar Abida: 02/07/1995 - 1 m: 2 cc., 4 vv.; (18) Saadiyat: 29/10/1991 - amidst *Dendropoma* sp., surface: 6 cc. (24) Nakoura: 10/08/2002 - amidst *Corallina* sp., 3 m: 5 vv. (photo Ghazi Bitar).

Mytilus galloprovincialis Lamarck, 1819

Literature records:

Mytilus galloprovincialis Lk. - Gruvel & Moazzo 1929: 426; *Mytilus galloprovincialis* L. - Gruvel 1931: 124; *Mytilus galloprovincialis* Lamarck - Pallary 1938: 50; Bitar, 1996: 122; *Mytilus galloprovincialis* Lamarck, 1819 - Bitar & Kouli-Bitar 1998: 40; *Mytilus galloprovincialis* - Bitar 2010: 452.

Family PINNIDAE Leach, 1819

Pinna nobilis Linnaeus, 1758

Literature records:

Pinna nobilis Linné var. *nana* P. - Pallary 1919: 175; *Pinna nobilis* Linné - Gruvel & Moazzo 1929: 427; Moazzo 1931: 451; *Pinna nobilis* L. - Gruvel 1931: 124; Bitar 1996: 122; *Pinna nobilis* Linné var. *nana* P. - Pallary 1938: 49; *Pinna nobilis* Linné var. *dilatata* P. - Pallary 1938: 49; *Pinna nobilis* Linné, 1758 - Bitar & Kouli-Bitar 1998: 40; *Pinna nobilis* - Bitar 2010: 452.

Material examined:

(3) Anfeh: 26/10/1999 - sand in *Cymodocea* meadow, 24 m: 1 c. (photo Ghazi Bitar); (6) Ras El Chakaa: 21/09/2002 - coarse sand, 20 m: 1 c.

Family PTERIIDAE Gray, 1847

A - *Pinctada imbricata radiata* (Leach, 1814)

Literature records:

Meleagrina occa Reeve = *M. savignyi* Monterosato - Pallary 1911: 42; *Meleagrina occa* Reeve var. *minor* P. - Pallary 1912: 173; Pallary 1919: 175; *Meleagrina occa* Reeve var. *viridis* P. - Pallary 1919: 175; *Meleagrina occa* Reeve - Gruvel & Moazzo 1929: 427; Gruvel 1931: 123; Moazzo 1931: 451; Bitar 1996: 122; *Meleagrina albina* Lamarck - Pallary 1938: 48; *Meleagrina albina* Lamarck var. *minor* - Pallary 1938: 48; *Meleagrina albina* Lamarck var. *viridis* P. - Pallary 1938: 48; *Pinctada radiata* (Leach) - Spada 1971: 90; Shiber 1980: 147; *Pinctada radiata* (Leach, 1814) - Zibrowius & Bitar 1981: 160; 2003: 70; Bitar & Kouli-Bitar 1998: 40, 43; Bariche 2012: 130; *Pinctada radiata* - Bitar & Kouli-Bitar 1995b: 19; 2001: 72; Bitar et al. 2007: 437; Bitar 2010: 452; *Meleagrina albida* [sic!] Lamarck - Bitar 1996: 122; *Pinctada radiata* Leach - Bitar 1996: 122; *Pinctada imbricata radiata* - Bitar 2013: 8.

Material examined:

(1) Ramkine Island: 22/10/1999 - under big boulders, 13 m: 1 c.; 31/05/2000 - coarse sand, 13 m: 1 c.; 01/06/2000 - 3-5 m: 1 v.; (5) El Heri (marina Beaulieu): 03/06/2000 - 4 m: 1 c.; 03/10/2010 - on rocks, 3-4 m: 1 c. (photo Ghazi Bitar); (6) Ras El Chakaa: 19/10/1999 - 4-6 m: 1 c.; (8) Selaata: 23/10/1999 - amidst *Corallina* sp., 1 m: 1 c.; (9) Batroun: 16/10/1999 - old town, "Phenician wall", 8 m: 1 v.; 20/10/1999 - snorkeling, 2-4 m: 1 c.; snorkeling, 3-5 m: 1 v.; (15) Beirut: 21/10/1999 - Harf El Kalb, overhang with corals, 34 m: 1 c.; 15/09/2002 - harbour entrance, breakwater, maximum depth 15 m: 1 c.; 25/09/2002 - airport, pillar jetty, 3-10 m: 3 cc.; 07/07/2003 - harbour entrance, breakwater: 1 c.; 09/07/2003 - harbour, outer side of the main jetty, 19 m: 1 v.; (16) Raoucheh: 17/09/2002 - boulders and rock, 7-9 m: 1 v.; (19) Saida: 05/06/2000 - off Nahr El Ouali, sand, 31 m: 1 v.; (20) El Zahrani: 06/06/2000 - Harf El Hawieh El Jouani, 14 m: 2 vv.

Remarks:

Records referring to *Meleagrina albina* Lamarck [currently *Pinctada albina* (Lamarck, 1819)] are misidentifications. *Meleagrina occa* var. *minor* Pallary, 1912 and *Meleagrina albina* var. *minor* Pallary, 1938 were both listed as varieties of the taxon currently identified in the Mediterranean Sea as *Pinctada imbricata radiata* (Leach, 1814). It is here listed as such following the trinomial usage in Bouchet (2013) and pending further molecular analysis to solve the puzzling taxonomy of the *Pinctada imbricata* Röding, 1798 complex.

Family MALLEIDAE Lamarck, 1818**A - *Malleus regula* (Forsskål in Niebuhr, 1775)****Literature records:**

Malleus (Malvufunda [sic!]) regula Forsskål var. *minor* Ply - Pallary 1938: 49; *Fundella lioyi* de Gregorio 1885 [sic!] - Pallary 1938: 49; *Malleus regula* (Forsskål, 1775) - Zibrowius & Bitar 1981: 160; *Malleus regula* - Bitar & Kouli-Bitar 1995b: 19; Bitar 2013: 8; *Malleus regula* Forskal - Bitar 1996: 122; *Fundella lioyi* de Gregorio - Bitar 1996: 122; *Malleus regulus* [sic!] (Forsskæl, 1775) - Bitar & Kouli-Bitar 1998: 40, 43; *Malleus regulus* [sic!] (Forsskal, 1775) - Zibrowius & Bitar 2003: 70; *Malleus regulus* [sic!] - Bitar & Kouli-Bitar 2001: 72; *Malvufundus regulus* [sic!] - Bitar et al. 2007: 437.

Material examined:

(1) Ramkine Island: 22/10/1999 - overhang, 8 m: 8 cc., 3 vv.; under big boulders, 13 m: 1 c.; 31/05/2000 - cave, 5-7 m: 10 cc., 4 v.; coarse sand, 13 m: 2 cc., 2 vv.; (6) Ras El Chakaa: 19/10/1999 - cave, 3-5 m: 1 c.; overhangs, 7 m: 1 c.; 04/06/2000 - cliff, 4-11 m: 1 c.; (7) Chak El Hatab: 05/07/2003 - cave, 14 m: 2 cc.; (8) Selaata: 18/10/1999 - small caves and overhangs, 3-8 m: 1 c.; cave sediment, 9 m: 3 vv.; 23/10/1999 - on *Cystoseira* sp., 0.5 m: 1 c.; amidst *Chama pacifica* Broderip, 1835, 4-6 m: 1 c.; cave, 9 m: 1 c.; 24/09/2002 - cliff, among calcareous algae, 35 m: 1 c., 1 v.; 06/07/2003 - cliff, 35 m: 1 c.; (9) Batroun: 15/10/1999 - next to lab, snorkeling, on *Chama pacifica* Broderip, 1835, 2-4 m: 1 c., 1 v.; 16/10/1999 - old town, "Phenician wall", concretions, 9 m: 5 cc., 1 v.; 26/09/2002 - calcareous algae, 6 m: 1 c.; (10) Kfar Abida: 30/05/2000 - 5-12 m: 1 c.; tunnel, 7-8 m: 7 cc.; (12) Jbail: 17/10/1999 - Tablieh, cave sediment, 16 m: 2 vv.; (13) Tabarja: 10/07/2003 - 10-25 m: 1 c.; (14) Aquamarina: 10/07/2003 - artificial slope, 15-25 m: 20 cc., 6 vv.; (15) Beirut: 25/09/2002 - airport, pillar jetty, 3-10 m: 9 cc., 7 vv.; 07/07/2003 - harbour entrance, outer side, breakwater, 10 m: 1 c.; 09/07/2003 - harbour, outer side of the main jetty, 5-8 m: 2 cc.; 16/07/2003 - airport, pillar jetty, 3-11 m: 9 cc.; (16) Raoucheh: 17/09/2002 - boulders and rock, 7-9 m: 9 cc.; (19) Saida: 05/06/2000 - Harf El Rijmeh, rocky bottom, 12 m: 2 cc.; off Nahr El Ouali, sand, 31 m: 1 v.; (20) El Zahrani: 06/06/2000 - Harf El Shbak, overhang, 24 m: 1 c., 1 v.; (21) El Kassmieh: 25/10/1999 - detritic sand, 44 m: 2 vv.; (22) Tyr: 25/10/1999 - Sour, shoal, coarse sable between rocks, 12 m: 1 c.; 30/07/2012 - overhang, 2 m: 1 c. (photo Ghazi Bitar).

Family PECTINIDAE Rafinesque, 1815

Flexopecten hyalinus (Poli, 1795)

Literature records:

Chlamys hyalina Poli var. *succinea* Risso 1826 - Pallary 1938: 48; *Chlamys hyalina* Poli - Bitar 1996: 122; *Lissopecten hyalinus* (Poli, 1795) - Bitar & Kouli-Bitar 1998: 40.

Material examined:

(19) Saida: 05/06/2000 - Harf El Rijmeh, rocky bottom, 10 m: 1 c.

Mimachlamys varia (Linnaeus, 1758)

Literature records:

Chlamys varia Linné - Pallary 1912: 173; Pallary 1919: 175; Gruvel & Moazzo 1929: 427; Moazzo 1931: 451; Pallary 1938: 48; *Chlamys varia* L. - Gruvel 1931: 124; Bitar 1996: 122; *Chlamys varia* (L.) - Spada 1971: 90; *Chlamys varia* (Linné, 1758) - Bitar & Kouli-Bitar 1998: 40.

Material examined:

(5) El Heri (marina Beaulieu): 03/06/2000 - from muddy sediment just below small cliff, 3 m: 1 v.; (6) Ras El Chakaa: 13/07/2003 - under stones, 12 m: 1 c.; (8) Selaata: 18/10/1999 - cave sediment, 9 m: 3 vv.; (9) Batroun: 15/07/2003 - 4-7 m: 1 v.; (14) Aquamarina: 10/07/2003 - under stones, 10-25 m: 1 c.; (21) El Kassmieh: 25/10/1999 - detritic sand, 44 m: 4 vv.

Pecten jacobaeus (Linnaeus, 1758)

Literature records:

Pecten jacobaeus Linné - Gruvel & Moazzo 1929: 427; Moazzo 1931: 451; Pallary 1938: 48; *Pecten jacobæus* [sic!] L. - Gruvel 1931: 124; *Pecten jacobæus* [sic!] L. - Bitar 1996: 122; *Pecten jacobæus* [sic!] (Linné, 1758) - Bitar & Kouli-Bitar 1998: 40.

Talochlamys multistriata (Poli, 1795)

Literature records:

Hinnites multistriatus (Poli) - Fadlallah 1975: 69; *Hinnites multistriatus* Poli - Bitar 1996: 123; *Crassadoma multistriata* (Poli, 1795) - Bitar & Kouli-Bitar 1998: 40.

Family SPONDYLIDAE Gray, 1826

Spondylus gaederopus Linnaeus, 1758

Literature records:

Spondylus gaederopus [sic!] Linné - Pallary 1912: 173; *Spondylus gaederopus* Linné - Pallary 1919: 175; Gruvel & Moazzo 1929: 427; Moazzo 1931: 450; Pallary 1938: 48; *Spondylus gaederopus* L. - Bitar 1996: 122; *Spondylus gaederopus* Linné, 1758 - Bitar & Kouli-Bitar 1998: 40, 43.

A - *Spondylus spinosus* Schreibers, 1793

Literature records:

Spondylus spinosus (Schreibers, 1793) - Zibrowius & Bitar 2003: 70; *Spondylus spinosus* - Bitar et al. 2007: 437; Bitar 2010: 452; Bitar 2013: 8; *Spondylus spinosus* Schreibers, 1793 - Bariche 2012: 131; *Spondylus groschi sensu* Bitar (2013) - Bitar 2013: 8 (not *Spondylus groschi* Lamprell & Kilburn, 1995); *Spondylus* cf. *multisetosus sensu* Bitar (2013) - Bitar 2013: 8.

Material examined:

(8) Selaata: 18/10/1999 - tunnel roof, 5-6 m: 1 v.; 23/10/1999 - 5-10 m: 1v.; 14/09/2002 - cave, 21 m: 1 c.; 24/09/2002 - concretions, 12 m: 1 v.; (9) Batroun: 04/07/2003 - 6 m: 1 v.; (15) Beirut: 15/09/2002 - harbour entrance, breakwater, maximum depth 15 m: 1 c.; 16/09/2002 - harbour jetty, outer side, 10 m: 1 c.; 25/09/2002 - airport, pillar jetty, 3-10 m: 6 cc.; 07/07/2003 - harbour entrance, outer side, breakwater, 10 m: 1 v.; 13/12/2008 - overhang, 3-5 m: 10 cc. (photo Ghazi Bitar).

Remarks:

Records referring to *Spondylus groschi* Lamprell & Kilburn, 1995 and *Spondylus* cf. *multisetosus* in Bitar (2013) were based on one specimen and on a worn loose valve that fall within the variability of *Spondylus spinosus* Schreibers, 1793.

A - *Spondylus* sp. (not *S. gaederopus* and *S. spinosus*)

Material examined:

(15) Beirut: 09/07/2003 - harbour, outer side of the main jetty, 19 m: 1 c.

Spondylus sp. (juveniles) (not *S. gaederopus*)

Material examined:

(1) Ramkine Island: 22/10/1999 - sediment (mainly foraminiferous), 13-14 m: 1 v.; 31/05/2000 - coarse sand, 13 m: 1 v.; (6) Ras El Chakaa: 04/06/2000 - cave sediment, 3-4.5 m: 1 v.; (8) Selaata: 18/10/1999 - cave sediment, 9 m: 4 vv.; 24/09/2002 - cave sediment, 22 m: 1 v.; (10) Kfar Abida: 30/05/2000 - tunnel, small cave, 7-8 m: 1 v.; (12) Jbail: 17/10/1999 - Tablieh, cave sediment, 16 m: 1 v.; (21) El Kassmieh: 25/10/1999 - detritic sand, 44 m: 2 vv.; (22) Tyr: 25/10/1999 - Sour, shoal, coarse sable between rocks, 12 m: 2 vv.

Family ANOMIDAE Rafinesque, 1815

Anomia ephippium Linnaeus, 1758

Literature records:

Anomia ephippium Linné - Pallary 1912: 173; Pallary 1919: 175; Gruvel & Moazzo 1929: 427; Moazzo 1931: 450; Pallary 1938: 48; *Anomia ephippium* (L) - Fadlallah 1975: 69; *Anomia ephippium* L. - Bitar 1996: 122; *Anomia ephippium* Linné, 1758 - Bitar & Kouli-Bitar 1998: 40.

Material examined:

(15) Beirut: 15/09/2002 - harbour entrance, breakwater, maximum depth 15 m: 1 c.; (22) Tyr: 02/04/1988 - beach: 4 vv. (photo Ghazi Bitar).

Family LIMIDAE Rafinesque, 1815

Lima lima (Linnaeus, 1758)

Literature records:

Radula lima Linné - Pallary 1912: 173; Pallary 1919: 175; Gruvel & Moazzo 1929: 427; Moazzo 1931: 451; Pallary 1938: 48; *Radula lima* L. - Bitar 1996: 122; *Lima lima* (Linné, 1758) - Bitar & Kouli-Bitar 1998: 40, 43.

Material examined:

(1) Ramkine Island: 22/10/1999 - 15 m: 1 v.; 31/05/2000 - cave sediment, 13 m: 1 v.; (5) El Heri (marina Beaulieu): 03/06/2000 - from muddy sediment just below small cliff, 3 m: 1 v.; (6) Ras El Chakaa: 04/06/2000 - cave sediment, 3-4.5 m: 1 v.; (8) Selaata: 06/07/2003 - under stones, 6-7 m: 1 c.; (19) Saida: 05/06/2000 - off Nahr El Ouali, sand, 31 m: 2 vv.; (21) El Kassmieh: 25/10/1999 - detritic sand, 44 m: 1 v.

Limaria tuberculata (Olivi, 1792)

Literature records:

Radula inflata Chemnitz - Gruvel & Moazzo 1929: 427; Moazzo 1931: 451; Pallary 1938: 48; Bitar 1996: 122; *Limaria tuberculata* (Wood S., 1839) [sic!] - Bitar & Kouli-Bitar 1998: 40.

Limatula cfr. *gwyni* (Sykes, 1903)

Material examined:

(21) El Kassmieh: 25/10/1999 - detritic sand, 44 m: 1 v.

Family OSTREIDAE Rafinesque, 1815

A - Dendostrea folium (Linnaeus, 1758)

Material examined:

(5) El Heri: 23/06/2012 - on ropes at low depth: 100 cc. and 100 vv.

Ostrea edulis Linnaeus, 1758

Literature records:

Ostrea edulis L. - Fadlallah 1975: 70; *Ostrea edulis* L. - Bitar 1996: 122; *Ostrea edulis* Linné, 1758 - Bitar & Kouli-Bitar 1998: 40.

Ostrea stentina Payraudeau, 1826

Literature records:

Ostrea stentina Payraudeau - Gruvel & Moazzo 1929: 426; Moazzo 1931: 450; *Ostrea stentina* Payraudeau [sic!] - Gruvel 1931: 123; *Ostrea stentina syriaca* Piry - Pallary 1933: 152; *Ostrea (Ostreola) stentina* Payraudeau var. *syriaca* Piry - Pallary 1938: 48, plate II figures. 15, 16; *Ostrea stentina* Payraudeau - Bitar 1996: 122; *Ostreola stentina* (Payraudeau, 1826) - Bitar & Kouli-Bitar 1998: 40.

Material examined:

(2) Tripoli: 19/09/2002 - harbour, on quay wall, in very turbid waters, 2-3 m [some on *Infundibulops erythraeus* (Brocchi, 1821)]: 47 cc., 35 vv.; 20/09/2002 - harbour entrance, breakwater jetty, inner side, 1 m: 6 cc., 2 vv.; 08/07/2003 - harbour, on quay wall, 2-5 m: 16 cc., 17 vv.; (15) Beirut: 02/06/2000 - harbour, 3-8 m: 13 cc., 25 vv.; muddy sediment, 10 m: 3 vv.; 15/09/2002 - harbour entrance, breakwater, maximum depth 15 m: 5 cc., 2 vv.; 16/09/2002 - harbour, quay 60, surface, with crust of *Spirobranchus kraussii* (Baird, 1865): 1 c.; harbour, quay 60, on *Thaisella sacellum* (Gmelin, 1791), 3-8 m: 11 cc.; 25/09/2002 - airport, pillar jetty, 3-10 m: 1 c.; 09/07/2003 - harbour, outer side of the main jetty, max 14 m: 20 cc., 15 vv.

Family LUCINIDAE Fleming, 1828

Ctena decussata (Costa O.G., 1829)

Literature records:

Jagonia reticulata Poli - Pallary 1919: 176; Gruvel & Moazzo 1929: 428; Moazzo, 1931: 452; Bitar 1996: 123; *Jagonia decussata* Costa = *reticulata* Poli (non Linné) var. *parva* - Pallary 1938: 56; *Ctena decussata* (O.G. Costa, 1829) - Bitar & Kouli-Bitar 1998: 41, 43.

Material examined:

(1) Ramkine Island: 22/10/1999 - sediment (mainly foraminiferous), 13-14 m: 2 cc., 1 v.; 31/05/2000 - coarse sand, 13 m: 2 cc., 2 vv.; (5) El Heri (marina Beaulieu): 03/06/2000 - from sand in *Cymodocea* meadow, 5 m: 1 v.; (6) Ras El Chakaa: 04/06/2000 - cave sediment, 3-4.5 m: 5 vv.; (8) Seelata: 18/10/1999 - cave sediment, 9 m: 1 c., 9 vv.; (12) Jbail: 17/10/1999 - Tablieh, cave sediment, 16 m: 1c., 1 v.; (19) Saida: 05/06/2000 - off Nahr El Ouali, sand, 31 m: 2 vv.; (21) El

Kassmieh: 25/10/1999 - detritic sand, 44 m: 1 c., 3 vv.; (22) Tyr: 25/10/1999 - Sour, shoal, coarse sand between rocks, 12 m: 1 c., 4 vv.

Loripes lucinalis (Lamarck, 1818)

Literature records:

Lucina lactea Lamk. [sic!] - Puton 1856: 222; *Loripes leucoma* (Turt.) - Brusina 1879: 30; *Loripes lacteus* Poli [sic!] - Pallary 1912: 174; Pallary 1919: 176; *Loripes lacteus* Poli [sic!] var. *desmaresti* [sic!] Payraudeau - Pallary 1912: 174; Pallary 1919: 176; *Loripes lacteus* Linné - Gruvel & Moazzo 1929: 428; Moazzo 1931: 452; *Loripes leucoma* Turton = *lacteus* auct. - Pallary 1938: 56; *Loripes leucoma* Turton = *lacteus* auct. var. *desmaresti* [sic!] Payraudeau 1826 - Pallary 1938: 56; *Loripes lacteus* L. - Bitar 1996: 123; *Loripes lacteus* (Linné, 1758) - Bitar & Kouli-Bitar 1998: 41.

Material examined:

(1) Ramkine Island: 31/05/2000 - coarse sand, 13 m: 1 v.; (5) El Heri (marina Beaulieu): 03/06/2000 - from muddy sediment just below small cliff, 3 m: 1 v.; (8) Seelata: 18/10/1999 - cave sediment, 9 m: 10 vv.; (12) Jbail: 17/10/1999 - Tablieh, cave sediment, 16 m: 1 v.; (22) Tyr: 25/10/1999 - Sour, shoal, coarse sable among rocks, 12 m: 5 vv.

Remarks:

Early Mediterranean records of *Loripes lacteus* are to be referred to *Loripes lucinalis* (Lamarck, 1818) as the type material of *Tellina lactea* Linnaeus, 1758 belong to a distinct species (S. Gofas, pers. comm.).

Loripinus fragilis (Philippi, 1836)

Literature records:

Loripes fragilis Philippi - Pallary 1938: 56; Bitar 1996: 123; *Anodontia fragilis* (Philippi, 1836) - Bitar & Kouli-Bitar 1998: 41.

Material examined:

(5) El Heri (marina Beaulieu): 03/06/2000 - from muddy sediment just below small cliff, 3 m: 1 v.; (6) Ras El Chakaa: 04/06/2000 - cave sediment, 3-4.5 m: 1 c., 4 vv.; (8) Selaata: 18/10/1999 - cave sediment, 9 m: 1 v.; (19) Saida: 05/06/2000 - off Nahr El Ouali, sand, 31 m: 1 v.; (22) Tyr: 25/10/1999 - Sour, shoal, coarse sable between rocks, 12 m: 5 vv.

Lucinella divaricata (Linnaeus, 1758)

Material examined:

(8) Selaata: 18/10/1999 - cave sediment, 9 m: 2 vv.

Megaxinus unguiculinus Pallary, 1904

Literature records:

Megaxinus unguiculinus Pallary, 1904 - Bitar & Kouli-Bitar 1998: 41.

Material examined:

(8) Selaata: 18/10/1999 - cave sediment, 9 m: 1 c.

Remarks:

The Lebanese record of *Megaxinus unguiculinus* Pallary, 1904 by Bitar & Kouli-Bitar (1998) was based on the original record of *Megaxinus transversus* Bronn by Pallary (1938: 56), listed again by Bitar (1996: 123). However, this record must be considered as doubtful since the locality of Beyrouth is given as uncertain by Pallary himself [see also absence of Lebanese records in Van Aartsen & Carrozza (1992) and Mienis (2006)].

Family THYASIRIDAE Dall, 1900

Thyasira flexuosa (Montagu, 1803)

Literature records:

Axinus plexuosus [sic!] Mtg - Gruvel & Moazzo 1929: 428; Moazzo 1931: 452; *Thyasira* (*Axinulus*) *flexuosus* [sic!] Montagu - Pallary 1938: 53; *Thyasira flexuosa* Montagu - Bitar 1996: 123; *Thyasira flexuosa* (Montagu, 1803) - Bitar & Kouli-Bitar 1998: 41.

Family CHAMIDAE Lamarck, 1809

A - *Chama asperella* Lamarck, 1819

Material examined:

(1) Ramkine Island: 22/10/1999 - sediment (mainly foraminiferous), 13-14 m: 2 vv.; (12) Jbail: 17/10/1999 - Tablieh, cave sediment, 16 m: 1 v.; (15) Beirut: 16/07/2003 - airport, under pillar jetty, 3-11 m: 1 c.

Chama gryphoides Linnaeus, 1758

Literature records:

Chama gryphoides Lamarck [sic!] - Pallary 1919: 176; *Chama gryphoides* [sic!] Linné - Gruvel & Moazzo 1929: 426; Moazzo 1931: 450; *Chama gryphoides* Linné - Pallary 1938: 53; *Chama gryphoides* L. - Bitar 1996: 122; *Chama gryphoides* Linné, 1758 - Bitar & Kouli-Bitar 1998: 41, 43.

A - *Chama pacifica* Broderip, 1835

Literature records:

Chama pacifica Broderip, 1834 [sic!] - Zibrowius & Bitar 2003: 70; Bariche 2012: 124; *Chama pacifica* - Bitar et al. 2007: 437; Bitar 2010: 452; Bitar 2013: 8; *Chama pacifica* Broderip, 1835 - Crocetta & Russo 2013: 92-96.

Material examined:

(1) Ramkine Island: 31/05/2000 - 3 m: 2 vv.; coarse sand, 13 m: 8 vv.; 01/06/2000 - sand, 13-14 m: 1 v.; 14/07/2003 - cave, 7 m: 2 vv.; cave, 15 m: 2 cc.; (3) Anfeh: 26/10/1999 - 10 m: 1 c.; (6) Ras El Chakaa: 19/10/1999 - cave, 3-5 m: 1 v.; (7) Chak El Hatab: 05/07/2003 - cave, 14 m: 1 v.; (8) Selaata: 18/10/1999 - tunnel roof, 5-6 m: 1 c.; small caves, 5-6 m: 2 cc.; cave sediment, 9 m: 6 vv.; 23/10/1999 - overhang, 6-7 m: 1 c.; 02/05/2001 - 30 m: 2 vv.; 14/09/2002 - cave, 21 m: 3 cc., 3 vv.; 06/07/2003 - cave, 20 m: 7 cc., 6 vv.; (10) Kfar Abida: 30/05/2000 - cave, 7-8 m: 1 c.; (11) El Barbara: 08/06/2000 - overhang, 26/28 m: 2 cc., 8 vv.; (12) Jbail: 17/10/1999 - Tablieh, cave sediment, 16 m: 1 v.; (15) Beirut: 02/06/2000 - harbour: 1 v.; 15/09/2002 - harbour entrance, breakwater, maximum depth 15 m: 1 c.; maximum depth 20 m: 1 c.; 16/09/2002 - harbour jetty, outer side, 10 m: 3 cc.; 25/09/2002 - airport, pillar jetty, 3-10 m: 3 cc.; (18) Saadiyat: 28/12/2010 - rocky bottom, 4 m: 1 c. (photo Ghazi Bitar); (20) El Zahrani: 06/06/2000 - Harf El Hawieh El Jouani, 14 m: 1 v.; Harf El Shbak, overhang, 24 m: 3 cc.; (21) El Kassmieh: 25/10/1999 - detritic sand, 44 m: 15 vv.

Chama sp. (juveniles)

Material examined:

(1) Ramkine Island: 22/10/1999 - sediment (mainly foraminiferous), 13-14 m: 1 v.; 31/05/2000 - cave, 5-7 m: 4 cc., 5 vv.; coarse sand, 13 m: 2 vv.; (6) Ras El Chakaa: 19/10/1999 - cave sediment, 3-4.5 m: 3 vv.; 04/06/2000 - cave, 5-6 m: 1 v.; (7) Chak El Hatab: 05/07/2003 - on crabbed gastropod shell, 6/10 m: 1 c.; (8) Selaata: 18/10/1999 - small caves, sediment, 5-6 m: 1 v.; cave sediment, 9 m: 7 vv.; (9) Batroun: 16/10/1999 - old town, "Phenician wall", concretions, 9 m: 1 c.; 26/09/2002 - 2-5 m: 1 c.; (12) Jbail: 17/10/1999 - Tablieh, small cave, concretions, 16 m: 1 c.; (15)

Beirut: 16/07/2003 - airport, under pillar jetty, 3-11 m: 1 c.; 02/06/2000 - harbour, 1-2 m: 1 c., 1 v.; (19) Saida: 05/06/2000 - off Nahr El Ouali, sand, 31 m: 2 vv.; (20) El Zahrani: 06/06/2000 - Harf El Shbak, detritic sand, 24 m: 1 v.; (21) El Kassmieh: 25/10/1999 - detritic sand, 44 m: 23 vv.; (22) Tyr: 25/10/1999 - Sour, shoal, coarse sable between rocks, 12 m: 2 vv.

Pseudochama gryphina (Lamarck, 1819)

Literature records:

Chama gryphina Lamarck - Gruvel & Moazzo 1929: 426; Moazzo 1931: 450; Pallary 1938: 53; Bitar 1996: 122; *Pseudochama gryphina* (Lamarck, 1819) - Bitar & Kouli-Bitar 1998: 41.

Family KELLIIDAE Forbes & Hanley, 1848

Bornia geoffroyi (Payraudeau, 1826)

Material examined:

(21) El Kassmieh: 25/10/1999 - detritic sand, 44 m: 1 v.

Bornia sebetia (Costa O.G., 1829)

Literature records:

Kellya (Bornia) sebetia da Costa [sic!] var. *minor* Ply - Pallary 1938: 51; *Kellya (Bornea [sic!]) sebetia* da Costa [sic!] - Bitar 1996: 122; *Bornia sebetia* (Costa O.G., 1829) - Bitar & Kouli-Bitar 1998: 41.

Material examined:

(8) Selaata: 18/10/1999 - cave sediment, 9 m: 1 v.

Kellia suborbicularis (Montagu, 1803)

Literature records:

Kellia suborbicularis (Mont.) - Brusina 1879: 30.

Family MONTACUTIDAE Clark W., 1855

Kurtiella bidentata (Montagu, 1803)

Material examined:

(5) El Heri (marina Beaulieu): 03/06/2000 - from muddy sediment just below small cliff, 3 m: 1 c.

Family CARDITIDAE Férussac, 1822

Cardita calyculata (Linnaeus, 1758)

Literature records:

Cardita calyculata Linné - Pallary 1912: 174; Pallary 1919: 175; Gruvel & Moazzo 1929: 427; Moazzo 1931: 452; *Cardita (Mytilocardia) calyculata* Linné - Pallary 1938: 51; *Cardita (Mytilocardia) calyculata* Linné var. *major* Ply - Pallary 1938: 51; *Beguinea [sic!] calyculata* (L.) - Fadlallah 1975: 70; *Cardita calyculata* L. - Bitar 1996: 122; *Cardita calyculata* (Linné, 1758) - Bitar & Kouli-Bitar 1998: 41, 43.

Material examined:

(1) Ramkine Island: 22/10/1999 - sediment (mainly foraminiferous), 13-14 m: 1 c.; 31/05/2000 - cave, 5-7 m: 1 c.; coarse sand, 13 m: 6 vv.; (3) Anfeh: 26/10/1999 - sand, 20 m: 1 v.; (6) Ras El Chakaa: 04/06/2000 - cave sediment, 3-4.5 m: 1 c.; (19) Saida: 05/06/2000 - Harf El Rijmeh, rocky bottom, 10 m: 1 c.; off Nahr El Ouali, sand, 31 m: 1 c., 2 vv.; (21) El Kassmieh: 25/10/1999 - detritic sand, 44 m: 1 v.; (22) Tyr: 25/10/1999 - Sour, shoal, coarse sable between rocks, 12 m: 1 c., 1 v.

Cardites antiquatus (Linnaeus, 1758)

Literature records:

Venericardia antiquata Linné - Gruvel & Moazzo 1929: 427; Moazzo 1931: 451; *Venericardia antiquata* var. *minor* Loc. et Caz. - Pallary 1919: 175; *Venericardia (Cardites) antiquata* Linné var. *minor* Loc. et Caz. 1900 - Pallary 1938: 51; *Venericardia antiquata* L. - Bitar 1996: 122; *Venericardia antiquata* (Linné, 1758) - Bitar & Kouli-Bitar 1998: 41.

Material examined:

(1) Ramkine Island: 22/10/1999 - sediment (mainly foraminiferous), 13-14 m: 1 v.; 31/05/2000 - coarse sand, 13 m: 1 v.; (19) Saida: 05/06/2000 - off Nahr El Ouali, sand, 31 m: 4 vv.; (21) El Kassmieh: 25/10/1999 - detritic sand, 44 m: 1 v.; (22) Tyr: 25/10/1999 - Sour, 15 m: 1 c.

Coripia corbis (Philippi, 1836)

Material examined:

(1) Ramkine Island: 31/05/2000 - coarse sand, 13 m: 1 c., 15 vv.; (8) Seelata: 18/10/1999 - cave sediment, 9 m: 3 vv.; (19) Saida: 05/06/2000 - off Nahr El Ouali, sand, 31 m: 1 v.; (21) El Kassmieh: 25/10/1999 - detritic sand, 44 m: 3 vv.

Coripia jozinae (Van Aartsen, 1985)

Material examined:

(1) Ramkine Island: 31/05/2000 - coarse sand, 13 m: 4 vv.; (6) Ras El Chakaa: 04/06/2000 - cave sediment, 3-4.5 m: 1 v.; (8) Seelata: 18/10/1999 - cave sediment, 9 m: 2 vv.; (19) Saida: 05/06/2000 - off Nahr El Ouali, sand, 31 m: 1 c.; (21) El Kassmieh: 25/10/1999 - detritic sand, 44 m: 2 vv.

Glans trapezia (Linnaeus, 1767)

Literature records:

Cardita (Glans) trapezia Linné - Pallary 1919: 175; Pallary 1938: 51; *Cardita (Glans) trapezia* Linné var. *rosea* Monts. - Pallary 1919: 175; *Cardita trapezia* Linné - Gruvel & Moazzo 1929: 428; Moazzo 1931: 452; *Cardita (Glans) trapezia* Linné var. *rosea* Monts. 1879 [sic!] - Pallary 1938: 51; *Cardita trapezia* L. - Bitar 1996: 122; *Glans trapezia* (Linné, 1767) - Bitar & Kouli-Bitar 1998: 41; *Glans trapezia* (Linné, 1758 [sic!]) - Bitar & Kouli-Bitar 1998: 43.

Material examined:

(1) Ramkine Island: 31/05/2000 - coarse sand, 13 m: 3 vv.; (3) Anfeh: 26/10/1999 - sand, 20 m: 1 v.; (6) Ras El Chakaa: 04/06/2000 - cave sediment, 3-4.5 m: 3 vv.; (8) Selaata: 18/10/1999 - cave sediment, 9 m: 1 v.; (15) Beirut: 21/10/1999 - Harf El Kalb, overhang with corals, 34 m: 1 c.; (19) Saida: 05/06/2000 - off Nahr El Ouali, sand, 31 m: 2 cc., 30 vv.; (20) El Zahrani: 06/06/2000 - Harf El Hawieh El Jouani, 14 m: 1 v; Harf El Shbak, detritic sand, 24 m: 3 vv.; (21) El Kassmieh: 25/10/1999 - detritic sand, 44 m: 19 vv.; (22) Tyr: 25/10/1999 - Sour, shoal, coarse sable between rocks, 12 m: 9 vv.

Family ASTARTIDAE d'Orbigny, 1844

Digitaria digitaria (Linnaeus, 1758)

Material examined:

(19) Saida: 05/06/2000 - off Nahr El Ouali, sand, 31 m: 2 vv.; (21) El Kassmieh: 25/10/1999 - detritic sand, 44 m: 2 vv.

Gonilia calliglypta (Dall, 1903)

Material examined:

(8) Seelata: 18/10/1999 - cave sediment, 9 m: 1 v.

Goodallia triangularis (Montagu, 1803)

Literature records:

Astarte (*Goodalia* [sic!]) *triangularis* Montagu - Pallary 1938: 51; *Astarte triangularis* Montagu - Bitar 1996: 122; *Goodallia triangularis* (Montagu, 1803) - Bitar & Kouli-Bitar 1998: 41.

Material examined:

(1) Ramkine Island: 31/05/2000 - coarse sand, 13 m: 7 vv.; (8) Seelata: 18/10/1999 - cave sediment, 9 m: 2 cc., 1 v.; (19) Saida: 05/06/2000 - off Nahr El Ouali, sand, 31 m: 1 v.

Family CARDIIDAE Lamarck, 1809

Acanthocardia tuberculata (Linnaeus, 1758)

Literature records:

Cardium tuberculatum Linné - Pallary 1912: 174; Pallary 1919: 175; Gruvel & Moazzo 1929: 426; Moazzo 1931: 449; *Cardium tuberculatum* Linné var. *alba* Monts. - Pallary 1912: 174; Pallary 1919: 175; *Cardium* (*Rudicardium*) *tuberculatum* Linné - Pallary 1938: 52; *Cardium* (*Rudicardium*) *tuberculatum* Linné var. *alba* Monts 1879 [sic!] - Pallary 1938: 52; *Cardium tuberculatum* L. - Bitar 1996: 121; *Acanthocardia tuberculata* (Linné, 1758) - Bitar & Kouli-Bitar 1998: 41, 43.

Material examined:

(4) Chekka: 03/10/2007 - from sand in *Cymodocea* meadow, 3-4 m: 1 c. (photo Ghazi Bitar); (4) Chekka: 05/10/2007 - from sand in *Cymodocea* meadow, 3-4 m: 1 c., 1 v. (photo Ghazi Bitar); (15) Beirut: 25/09/2002 - airport, breakwater, 17 m: 1 v.; (16) Raoucheh: 17/09/2002 - fine sand, 10 m: 2 cc.

A - *Afrocardium richardi* (Audouin, 1826)

Material examined:

(1) Ramkine Island: 22/10/1999 - sediment (mainly foraminiferous), 13-14 m: 1 v.; (8) Selaata: 18/10/1999 - cave sediment, 9 m: 1 v.; (15) Beirut: 16/09/2002 - harbour, quay 60, 5-7 m: 1 c.

Cerastoderma spp. *glaucum* (Bruguière, 1789) complex

Literature records:

Cardium edule Linné - Pallary 1912: 174; Pallary 1919: 175; Gruvel & Moazzo 1929: 426; Moazzo 1931: 449; *Cardium edule* Linné var. *paludosa* B.D.D. - Pallary 1919: 175, 176; *Cardium edule* L. - Gruvel 1931: 124; Bitar 1996: 121; *Cardium* (*Cerastoderma*) *edule* Linné - Pallary 1938: 52; *Cardium* (*Cerastoderma*) *edule* Linné var. *paludosa* B.D.D. 1887 [sic!] - Pallary 1938: 52; *Cardium* (*Cerastoderma*) *edule* Linné var. *quadrata* B.D.D. 1887 [sic!] - Pallary 1938: 52; *Cardium* (*Cerastoderma*) *edule* Linné var. *lamarckii* [sic!] Reeve 1844 [sic!] - Pallary 1938: 52; *Cerastoderma glaucum* (Poiret, 1789) - Bitar & Kouli-Bitar 1998: 41, 43.

Remarks:

Bitar & Kouli-Bitar (1998) regarded the Lebanese records of *Cerastoderma edule* (Linnaeus, 1758) as misidentifications of *Cerastoderma glaucum* (Poiret, 1789), and recorded this latter species for El Arida. Despite several papers on the genus *Cerastoderma* in the Atlanto-Mediterranean area arrived to divergent conclusions (Brock & Christiansen 1989, André et al. 1999, Tarnowska et al. 2012), the definitive taxonomy of the genus and the correct identification of the Mediterranean specimens are far from being elucidated, and thus we hereby prefer to keep literature records under “*Cerastoderma* spp. *glaucum* (Bruguière, 1789) complex”.

A - *Fulvia fragilis* (Forsskål in Niebuhr, 1775)

Material examined:

(4) Chekka: 03/10/2007 - from sand in *Cymodocea* meadow, 3-4 m: 2 cc. (photo Ghazi Bitar); 03/10/2007 - from sand in *Cymodocea* meadow, 5 m: 1 c. (photo Ghazi Bitar); (15) Beirut: 09/07/2003 - harbour, outer side of the main jetty, 19 m: 1 c.

Parvicardium exiguum (Gmelin, 1791)

Literature records:

Cardium exiguum [sic!] Gmelin - Fadlallah 1975: 69; *Cardium exiguum* [sic!] Gmelin - Bitar 1996: 121; *Parvicardium exiguum* (Gmelin, 1791) - Bitar & Kouli-Bitar 1998: 41.

Parvicardium scriptum (Bucquoy, Dautzenberg & Dollfus, 1892)

Literature records:

Parvicardium ovale (Sowerby G.B. III [sic!], 1840) *sensu* Bitar & Kouli-Bitar (1998) - Bitar & Kouli-Bitar 1998: 43 (not *Cardium ovale* Sowerby G.B. II, 1840).

Material examined:

(5) El Heri (marina Beaulieu): 03/06/2000 - from muddy sediment just below small cliff, 3 m: 1 v.; (6) Ras El Chakaa: 04/06/2000 - cave sediment, 3-4.5 m: 1 v.; (8) Selaata: 13/10/1999 - tunnel sediment, 7-8 m: 1 v.; 18/10/1999 - cave sediment, 9 m: 2 vv.; (12) Jbail: 17/10/1999 - Tablieh, cave sediment, 16 m: 2 vv.

Remarks:

Parvicardium pinnulatum (Conrad, 1831) [= *Parvicardium ovale* (Sowerby G.B. II, 1840)] is a distinct Atlantic species (Van Aartsen & Goud 2000).

Papillicardium papillosum (Poli, 1795)

Literature records:

Cardium (Papillicardium) papillosum Poli - Pallary 1938: 52; *Cardium papillosum* (Poli) - Bitar 1996: 121; *Plagiocardium papillosum* (Poli, 1795) - Bitar & Kouli-Bitar 1998: 41.

Material examined:

(1) Ramkine Island: 22/10/1999 - sediment (mainly foraminiferous), 13-14 m: 1 v.; (3) Anfeh: 26/10/1999 - sand, 20 m: 1 v.; (5) El Heri (marina Beaulieu): 03/06/2000 - from muddy sediment just below small cliff, 3 m: 1 v.; (12) Jbail: 17/10/1999 - Tablieh, cave sediment, 16 m: 1 v.; (19) Saida: 05/06/2000 - off Nahr El Ouali, sand, 31 m: 1 v.; (21) El Kassmieh: 25/10/1999 - detritic sand, 44 m: 5 vv.

Family MACTRIDAE Lamarck, 1809

A - *Maetra lilacea* Lamarck, 1818

Material examined:

(16) Raoucheh: 17/09/2002 - fine sand, 10 m: 1v.

A - *Maetra olorina* Philippi, 1846

Literature records:

Maetra olorina Philippi - Gruvel & Moazzo 1929: 428; Moazzo 1931: 452; Pallary 1938: 55; Bitar 1996: 123; *Maetra olorina* Philippi, 1846 - Bitar & Kouli-Bitar 1998: 41; *Maetra olorina* - Bitar & Kouli-Bitar 2001: 72; Bitar 2013: 8.

Mactra spp. *stultorum* (Linnaeus, 1758) complex

Literature records:

Mactra lactea Lamk. non Poli - Puton 1856: 222; *Mactra stultorum* Lin. - Puton 1856: 222; *Mactra stultorum* Lin. var. *compressa* - Puton 1856: 222; *Mactra corallina* Linné - Pallary 1912: 174; Pallary 1919: 176; Gruvel & Moazzo 1929: 428; Moazzo 1931: 452; *Mactra corallina* Linné var. *compressa* Puton = var. *paulucciae* Arad. Et Ben. - Pallary 1912: 174; *Mactra corallina* Linné var. *compressa* Turton [sic!] - Pallary 1919: 176; *Mactra corallina* Linné - Pallary 1938: 55; *Mactra corallina* Linné var. *lactea* Lamarck 1818 [sic!] - Pallary 1938: 55; *Mactra corallina* Linné var. *trigona* Ptry - Pallary 1938: 55; *Mactra corallina* Linné var. *paulucciae* Aradas et Benoit 1870 [sic!] - Pallary 1938: 55; *Mactra corallina* Linné var. *compressa* Puton 1855 [sic!] - Pallary 1938: 55; *Mactra corallina* L. - Bitar 1996: 123; *Mactra stultorum* (Linné, 1758) - Bitar & Kouli-Bitar 1998: 41, 43.

Material examined:

(15) Beirut: 25/09/2002 - airport, breakwater, 17 m: 1 c; (16) Raoucheh: 17/09/2002 - fine sand, 10 m: 1 v.

Remarks:

Genetic data indicate that different morphs previously ascribed to *Mactra stultorum* (Linnaeus, 1758) comprise a complex of species (Livi et al. 2006, Guarniero et al. 2010) and thus we hereby prefer to keep all literature records and material examined under “*Mactra* spp. *stultorum* (Linnaeus, 1758) complex”.

Spisula subtruncata (da Costa, 1778)

Material examined:

(12) Jbail: 17/10/1999 - Tablieh, cave sediment, 16 m: 1 v.

Family MESODESMATIDAE Gray, 1840

Donacilla cornea (Poli, 1791)

Literature records:

Mesodesma cornea Poli - Pallary 1938: 54; Bitar, 1996: 123; *Donacilla cornea* (Poli, 1795 [sic!]) - Bitar & Kouli-Bitar 1998: 41.

Family SOLENIDAE Lamarck, 1809

Solen marginatus Pulteney, 1799

Literature records:

Solen vagina Lin. *sensu* Puton 1856: 222 (not *Solen vagina* Linnaeus, 1758); *Solen marginatus* Pennant [sic!] - Pallary 1912: 174; Pallary 1919: 176; Gruvel & Moazzo 1929: 428; Moazzo 1931: 452; Bitar 1996: 123; *Solen marginatus* Pennant [sic!] = *vagina* auct. var. *minor* Ptry 1914 - Pallary 1938: 54; *Solen marginatus* Pulteney, 1799 - Bitar & Kouli-Bitar 1998: 41.

Remarks:

Early Mediterranean records under *Solen vagina* are to be referred to *Solen marginatus* Pulteney, 1799.

Family PHARIDAE Adams H. & Adams A., 1856

Ensis ensis (Linnaeus, 1758)

Literature records:

Ensis ensis Linné var. *minor* Requier - Pallary 1912: 174; Pallary 1919: 176; *Ensis ensis* Linné var. *minor* Requier 1848 - Pallary 1938: 54; *Ensis ensis* (Linné) - Bitar 1996: 123; *Ensis ensis* (Linné, 1758) - Bitar & Kouli-Bitar 1998: 41.

Ensis minor (Chenu, 1843)

Literature records:

Ensis siliqua Linné - Gruvel & Moazzo 1929: 428; Moazzo 1931: 452; Pallary 1938: 54; *Ensis siliqua* L. - Bitar 1996: 123; *Ensis siliqua* (Linné, 1758) - Bitar & Kouli-Bitar 1998: 41.

Remarks:

Early Mediterranean records under *Ensis siliqua* are to be referred to *Ensis minor* (Chenu, 1843).

Pharus legumen (Linnaeus, 1758)

Literature records:

Pharus legumen Linné - Gruvel & Moazzo 1929: 428; Moazzo 1931: 453; *Pharus legumen* Linné Requier 1848 var. *minor* [sic!] - Pallary 1938: 54; *Pharus legumen* L. - Bitar 1996: 123; *Pharus legumen* (Linné, 1758) - Bitar & Kouli-Bitar 1998: 41.

Family TELLINIDAE Blainville, 1814

Angulus incarnatus (Linnaeus, 1758)

Literature records:

Tellina depressa Gmel. - Puton 1856: 222; *Tellina incarnata* Linné - Gruvel & Moazzo 1929: 428; Moazzo 1931: 453; *Tellina (Tellinula) incarnata* (Linné) Poli [sic!] - Pallary 1938: 57; *Tellina incarnata* L. - Bitar 1996: 123; *Tellina incarnata* Linné, 1758 - Bitar & Kouli-Bitar 1998: 41.

Arcopella balaustina (Linnaeus, 1758)

Material examined:

(12) Jbail: 17/10/1999 - Tablieh, cave sediment, 16 m: 1 v.

Gastrana fragilis (Linnaeus, 1758)

Literature records:

Fragilia (= *Gastrana*) *fragilis* Linné - Pallary 1938: 57; *Fragilia* (= *Gastrana*) *fragilis* Linné var. *syriaca* Piry - Pallary 1938: 57; *Fragilia fragilis* L. - Bitar 1996: 123; *Gastrana fragilis* (Linné, 1758) - Bitar & Kouli-Bitar 1998: 41.

Moerella distorta Poli, 1791

Literature records:

Tellina (Tellinella) distorta Poli - Pallary 1938: 56; *Tellina distorta* Poli - Bitar 1996: 123; *Tellina distorta* Poli, 1791 - Bitar & Kouli-Bitar 1998: 41.

Peronaea planata (Linnaeus, 1758)

Literature records:

Tellina planata Linné - Pallary 1912: 174; *Tellina (Permidia [sic!]) planata* Linné - Pallary 1938: 56; *Tellina planata* - Bitar 1996: 123; *Tellina planata* Linné, 1758 - Bitar & Kouli-Bitar 1998: 41.

Material examined:

(8) Selaata: 06/07/2003 - boundary between sandy and rocky bottom, 7 m: 1 c., 1 v.; (15) Beirut: 25/09/2002 - airport, breakwater, 17 m: 2 cc., 2 vv.; 16/07/2003 - airport, under pillar jetty, 11 m: 1 c.; (22) Tyr: 26/04/2001 - beach: 1 v. (photo Ghazi Bitar).

Psammotreta cumana (Costa O.G., 1829)

Literature records:

Tellina (Macoma) cumana O.G. Costa - Pallary 1938: 56; *Tellina cumana* da Costa [sic!] - Bitar 1996: 123; *Macoma cumana* (Costa O.G., 1829) - Bitar & Kouli-Bitar 1998: 41.

Tellina nitida Poli, 1791

Literature records:

Tellina nitida Poli - Puton 1856: 222; Pallary 1912: 174; Gruvel & Moazzo 1929: 428; Moazzo 1931: 453; *Tellina (Permidia [sic!]) nitida* Poli - Pallary 1938: 56; *Tellina nitiada [sic!]* Poli - Bitar 1996: 123; *Tellina nitida* Poli, 1791 - Bitar & Kouli-Bitar 1998: 41.

Tellina pulchella Lamarck, 1818

Literature records:

Tellina (Tellinella) pulchella Lamarck - Pallary 1938: 56-57; *Tellina pulchella* Lamarck - Bitar 1996: 123; *Tellina pulchella* Lamarck, 1818 - Bitar & Kouli-Bitar 1998: 41.

Material examined:

(19) Saida: 05/06/2000 - off Nahr El Ouali, sand, 31 m: 1 v.

Family DONACIDAE Fleming, 1828

Donax semistriatus Poli, 1795

Literature records:

Donax (Serrula) semistriata [sic!] Poli - Pallary 1938: 54; Bitar 1996: 122; *Donax (Serrula) semistriata [sic!]* Poli sous-var. *minor* - Pallary 1938: 54; *Donax semistriatus* Poli, 1795 - Bitar & Kouli-Bitar 1998: 41.

Material examined:

(16) Raoucheh: 17/09/2002 - fine sand, 10 m: 2 c., 2 vv.

Donax trunculus Linnaeus, 1758

Literature records:

Donax trunculus Lin. - Puton 1856: 222; *Donax trunculus* Linné - Pallary 1912: 174; Pallary 1919: 176; Gruvel & Moazzo 1929: 426; Moazzo 1931: 450; *Donax (Serrula) trunculus* Linné - Pallary 1938: 54; *Donax (Serrula) trunculus* Linné var. *minor* Piry - Pallary 1938: 54; *Donax trunculus* L. - Spada 1971: 90; Bitar 1996: 122; *Donax trunculus* Linné, 1758 - Bitar & Kouli-Bitar 1998: 41, 43.

Donax variegatus (Gmelin, 1791)

Literature records:

Donax variegatus Gmelin - Gruvel & Moazzo 1929: 426; Moazzo 1931: 450; Bitar 1996: 122; *Donax (Capsella) variegatus* Gmelin - Pallary 1938: 54; *Capsella variegata* (Gmelin, 1791) - Bitar & Kouli-Bitar 1998: 41.

Material examined:

(23) El Bayada: 12/07/2003 - 5 m: 1 v.

Donax venustus Poli, 1795

Literature records:

Donax venustus Poli - Pallary 1919: 176; Bitar 1996: 122; *Donax (Serrula) venustus* Poli - Pallary 1938: 54; *Donax venustus* Poli, 1795 - Bitar & Kouli-Bitar 1998: 41.

Material examined:

(16) Raoucheh: 17/09/2002 - fine sand, 10 m: 1 v.

Family SEMELIDAE Stoliczka, 1870

Abra alba (Wood W., 1802)

Literature records:

Syndesmia alba S. [sic!] Wood - Pallary 1938: 57; *Syndosmia alba* S. [sic!] Wood - Bitar 1996: 123; *Abra alba* (Wood W., 1802) - Bitar & Kouli-Bitar 1998: 41.

Material examined:

(5) El Heri (marina Beaulieu): 03/06/2000 - from muddy sediment just below small cliff, 3 m: 5 cc., 9 vv.; (6) Ras El Chakaa: 04/06/2000 - cave sediment, 3-4.5 m: 6 vv.; (8) Selaata: 13/10/1999 - tunnel sediment, 7-8 m: 1 v.; 18/10/1999 - tunnel sediment, 7-8 m: 2 vv.; cave sediment, 9 m: 3 vv.; (12) Jbail: 17/10/1999 - Tablieh, cave sediment, 16 m: 3 vv.; (19) Saida: 05/06/2000 - off Nahr El Ouali, sand, 31 m: 1 v.

Abra segmentum (Récluz, 1843)

Literature records:

Lutricularia ovata Philippi - Pallary 1938: 57; Bitar 1996: 123; *Abra segmentum* (Récluz, 1843) - Bitar & Kouli-Bitar 1998: 41.

Scrobicularia cottardi (Payraudeau, 1826)

Literature records:

Syndesmia cottardi orientalis Ply - Pallary 1933: 152; *Syndosmia cottardi* Payraudeau var. *orientalis* Ply - Pallary 1938: 57, plate II: figure 17; *Syndosmia cottardi* Payr - Bitar 1996: 123; *Scrobicularia cottardi* (Payraudeau, 1826) - Bitar & Kouli-Bitar 1998: 41.

Family SOLECURTIDAE d'Orbigny, 1846

Solecurtus strigilatus (Linnaeus, 1758)

Literature records:

Solecurtus strigillatus [sic!] Linné - Gruvel & Moazzo 1929: 428; Moazzo 1931: 452; Pallary 1938: 54; *Solecurtus strigillatus* [sic!] L. - Bitar 1996: 123; *Solecurtus strigilatus* (Linné, 1758) - Bitar & Kouli-Bitar 1998: 41.

Family VENERIDAE Rafinesque, 1815

Callista chione (Linnaeus, 1758)

Literature records:

Meretrix chione Linné - Pallary 1938: 53; *Meretrix chione* L. - Bitar 1996: 122; *Callista chione* (Linné, 1758) - Bitar & Kouli-Bitar 1998: 41.

Chamelea gallina (Linnaeus, 1758)

Literature records:

Venus gallina Lin. - Puton 1856: 222; *Venus gallina* Linné - Pallary 1912: 174; Gruvel & Moazzo 1929: 427; Moazzo 1931: 451; *Venus (Chamelea) gallina* Linné - Pallary 1919: 176; *Venus (Chamelea) gallina* Linné - Pallary 1938: 53; *Venus gallina* L. - Bitar 1996: 122; *Chamelea gallina* (Linné, 1758) - Bitar & Kouli-Bitar 1998: 41.

Material examined:

(4) Chekka: 03/10/2007 - from sand in *Cymodocea* meadow, 3 m: 3 cc. (photo Ghazi Bitar); 05/10/2007 - from sand in *Cymodocea* meadow, 3 m: 2 vv. (photo Ghazi Bitar); (8) Seelata: 18/10/1999 - cave sediment, 9 m: 2 vv.

Dosinia lupinus (Linnaeus, 1758)

Literature records:

Dosinia lupinus Poli [sic!] - Pallary 1938: 53; Bitar 1996: 122; *Dosinia lupinus* (Linné, 1758) - Bitar & Kouli-Bitar 1998: 41.

Material examined:

(12) Jbail: 17/10/1999 - Tablieh, cave sediment, 16 m: 1 v.

A - *Gafrarium savignyi* (Jonas, 1846)

Literature records:

Gafrarium pectinatum (Linné, 1758) *sensu* Bitar & Kouli-Bitar 1998: 43; *Gafrarium pectinatum sensu* Bitar & Kouli-Bitar 2001: 72; *sensu* Bitar 2013: 8.

Material examined:

(5) El Heri (marina Beaulieu): 03/06/2000 - 1-5 m: 1 v.; (22) Tyr: 11/09/2010 - amidst rocks, 3 m: 1 c. (photo Ghazi Bitar); (23) El Bayada: 12/07/2003 - 5 m: 1 v.; (24) Nakoura: 22/09/2002 - 5 m: 1 v.

Gouldia minima (Montagu, 1803)

Literature records:

Gouldia minima Montagu - Pallary 1938: 53; Bitar 1996: 122; *Gouldia minima* (Montagu, 1803) - Bitar & Kouli-Bitar 1998: 41.

Material examined:

(1) Ramkine Island: 31/05/2000 - coarse sand, 13 m: 2 cc., 3 vv.; 01/06/2000 - sand, 13-14 m: 1 c.; (5) El Heri (marina Beaulieu): 03/06/2000 - from sand in *Cymodocea* meadow, 4 m: 1 c.; (6) Ras El Chakaa: 04/06/2000 - cave sediment, 3-4.5 m: 1 c.; (8) Selaata: 18/10/1999 - cave sediment, 9 m: 2 vv.; (19) Saida: 05/06/2000 - off Nahr El Ouali, sand, 31 m: 1c., 12 vv.; (21) El Kassmieh: 25/10/1999 - detritic sand, 44 m: 10 vv.

Irus irus (Linnaeus, 1758)

Literature records:

Venerupis irus Linné - Pallary 1919: 176; Gruvel & Moazzo 1929: 428; Moazzo 1931: 452; Pallary 1938: 53, 54; *Venerupis irus* Linné var. *rosea* [sic!] Requier 1848 - Pallary 1938: 54; *Venerupis irus* Linné var. *flava* Monts 1878 - Pallary 1938: 54; *Irus irus* (L.) - Fadlallah 1975: 70; *Irus irus* L. - Bitar 1996: 123; *Irus irus* (Linné, 1758) - Bitar & Kouli-Bitar 1998: 41, 43.

Material examined:

(12) Jbail: 17/10/1999 - Tablieh, cave sediment, 16 m: 1 v.

Lajonkairia lajonkairii (Payraudeau, 1826)

Literature records:

Lajonkairieia [sic!] *lajonkairiei* [sic!] Payraudeau - Pallary 1919: 176; *Lajonkairieia* [sic!] *lajonkairiei* [sic!] Payraudeau - Gruvel & Moazzo 1929: 428; Moazzo 1931: 452; Pallary 1938: 53; *Lajonkairieia* [sic!] *lajonkairiei* [sic!] Payraudeau - Bitar 1996: 123; *Lajonkairia lajonkairii* (Payraudeau, 1826) - Bitar & Kouli-Bitar 1998: 41, 43.

Material examined:

(19) Saida: 05/06/2000 - off Nahr El Ouali, sand, 31 m: 1 v.; (21) El Kassmieh: 25/10/1999 - concretions, 42 m: 1 c.

Petricola lithophaga (Retzius, 1788)

Literature records:

Petricola lithophaga Retzius - Gruvel & Moazzo 1929: 429; Moazzo 1931: 453; Bitar 1996: 123; *Petricola (Rupellaria) lithophaga* Retzius - Pallary 1938: 53; *Petricola lithophaga* (Philippson [sic!], 1788) - Bitar & Kouli-Bitar 1998: 41.

Material examined:

(15) Beirut: 02/06/2000 - harbour, 1-8 m: 1 c.; 16/09/2002 - harbour, quay 60, surface, with crust of *Spirobranchus kraussii* (Baird, 1865): 1 c.

A - *Petricola fabagella* Lamarck, 1818

Material examined:

(15) Beirut: 02/06/2000 - harbour, 1-8 m: 1 c.; 25/09/2002 - airport, breakwater, surface, with crust of *Spirobranchus kraussii* (Baird, 1865): 1 c.

Pitar rudis (Poli, 1795)

Literature records:

Pitaria rudis (L.) [sic!] - Fadlallah 1975: 70; *Pitaria rudis* L. [sic!] - Bitar 1996: 123; *Pitar rudis* (Poli, 1795) - Bitar & Kouli-Bitar 1998: 41.

Material examined:

(21) El Kassmieh: 25/10/1999 - detritic sand, 44 m: 1 v.

Polititapes aureus (Gmelin, 1791)

Literature records:

Tapes aureus Gmelin - Gruvel & Moazzo 1929: 426; Moazzo 1931: 450; Bitar 1996: 121; *Tapes aureus* Gmelin var. *minor* - Pallary 1938: 53; *Paphia aurea* (Gmelin, 1791) - Bitar & Kouli-Bitar 1998: 41, 43.

Material examined:

(19) Saida: 05/06/2000 - off Nahr El Ouali, sand, 31 m: 1 v.

Venerupis corrugata (Gmelin, 1791)

Literature records:

Tapes pullastra Mtg - Gruvel & Moazzo 1929: 426; Moazzo 1931: 450; *Tapes pullastra* Montagu - Bitar 1996; *Venerupis pullastra* (Montagu, 1803) - Bitar & Kouli-Bitar 1998: 41.

Remarks:

Venerupis corrugata (Gmelin, 1791) and *V. geographica* (Gmelin, 1791) are hereby conservatively treated as different species on the basis of differences in sculpture and general shape, following Gofas et al. (2011).

Venerupis decussata (Linnaeus, 1758)

Literature records:

Tapes decussatus Linné - Gruvel & Moazzo 1929: 426; Moazzo 1931: 449; *Tapes decussatus* L. - Gruvel 1931: 124; Bitar 1996: 122; *Tapes (Amygdala) decussatus* Linné - Pallary 1938: 53; *Tapes decussata* [sic!] (Linné, 1758) - Bitar & Kouli-Bitar 1998: 41.

Venerupis geographica (Gmelin, 1791)

Literature records:

Tapes geographicus Linné [sic!] var. *minor alba* - Pallary 1912: 174; *Tapes geographicus* Linné [sic!] var. *minor alba* P. - Pallary 1919: 176; *Tapes geographicus* [sic!] Linné var. *catenifera* Philippi - Pallary 1919: 176; *Tapes geographicus* L. [sic!] - Gruvel & Moazzo 1929: 426; Moazzo 1931: 450;

Tapes (Pullastra) geographicus Linné [sic!] var. *minor-alba* Monts [sic!] - Pallary 1938: 53; *Tapes geographicus* L. [sic!] - Bitar 1996: 122; *Venerupis geographica* (Gmelin, 1791) - Bitar & Kouli-Bitar 1998: 41; *Venerupis geographici* [sic!] (Gmelin, 1791) - Bitar & Kouli-Bitar 1998: 43.

Material examined:

(8) Seelata: 18/10/1999 - cave sediment, 9 m: 1 v.

Remarks:

See remarks above, under *Venerupis corrugata* (Gmelin, 1791).

Venus verrucosa Linnaeus, 1758

Literature records:

Venus verrucosa Linné var. *minor* Loc. et Caz. - Pallary 1919: 176; *Venus verrucosa* Linné - Gruvel & Moazzo 1929: 427; Moazzo 1931: 451; *Venus verrucosa* L. - Gruvel 1931: 124; Bitar 1996: 122; *Venus (Clausina) verrucosa* Linné - Pallary 1938: 53; *Venus (Clausina) verrucosa* Linné var. *minor* Loc. et Caz. 1900 - Pallary 1938: 53; *Venus verrucosa* Linné, 1758 - Bitar & Kouli-Bitar 1998: 41, 43.

Material examined:

(3) Anfeh: 26/10/1999 - on sand, 5 m: 1 v.; (5) El Heri (marina Beaulieu): 03/06/2000 - on sand, 3 m: 3 cc.; (8) Seelata: 18/10/1999 - cave sediment, 9 m: 2 vv.; (9) Batroun: 15/07/2003 - 4-7 m: 1 v.; (14) Aquamarina: 10/07/2003 - artificial slope, 15-25 m: 2 cc.; (21) El Kassmieh: 25/10/1999 - detritic sand, 44 m: 2 vv.; (24) Nakoura: 22/09/2002 - 5 m: 1 v.

Family MYIDAE Lamarck, 1809

A - Sphenia rueppellii Adams A., 1851

Material examined:

(10) Kfar Abida: 30/05/2000 - tunnel, small cave, 7-8 m: 1 c.; (14) Aquamarina: 11/07/2003 - in epifauna crust on crabbed gastropod shell, 14/23 m: 1 c.; (15) Beirut: 02/06/2000 - harbour, 1-8 m: 1 c.; 15/09/2002 - harbour jetty, inner side, maximum depth 21 m: 3 cc.; 07/07/2003 - harbour entrance, outer side, breakwater, 10 m: 1 c.

Family CORBULIDAE Lamarck, 1818

Corbula gibba (Olivi, 1792)

Literature records:

Corbula gibba Olivi - Gruvel & Moazzo 1929: 428; Moazzo 1931: 453; Bitar 1996: 123; *Corbula (Agina) gibba* Olivi - Pallary 1938: 56; *Corbula (Agina) gibba* Olivi var. *minor* Piry - Pallary 1938: 56; *Corbula gibba* (Olivi, 1792) - Bitar & Kouli-Bitar 1998: 41.

Material examined:

(6) Ras El Chakaa: 04/06/2000 - cave sediment, 3-4.5 m: 6 vv.; (8) Selaata: 18/10/1999 - cave sediment, 9 m: 3 vv.; 24/09/2002 - cave sediment, 22 m: 2 cc., 12 vv.; (19) Saida: 05/06/2000 - off Nahr El Ouali, sand, 31 m: 1 v.; (21) El Kassmieh: 25/10/1999 - detritic sand, 44 m: 1 v.

Family GASTROCHAENIDAE Gray, 1840

Rocellaria dubia (Pennant, 1777)

Literature records:

Gastrochaena dubia Pennant - Pallary 1938: 56; Bitar, 1996: 123; *Gastrochaena dubia* (Pennant, 1777) - Bitar & Kouli-Bitar 1998: 41.

Family HIATELLIDAE Gray, 1824

Hiatella arctica (Linnaeus, 1767)

Material examined:

(21) El Kassmieh: 25/10/1999 - detritic sand, 44 m: 1 c., 3 vv.

Family PHOLADIDAE Lamarck, 1809

Barnea candida (Linnaeus, 1758)

Literature records:

Pholas candida Linné - Gruvel & Moazzo 1929: 428; Moazzo 1931: 452; *Pholas candida* L. - Bitar 1996: 123; *Barnea candida* (Linné, 1758) - Bitar & Kouli-Bitar 1998: 41.

Pholas dactylus Linnaeus, 1758

Literature records:

Pholas dactylus Linné - Pallary 1938: 56; *Pholas dactylus* L. - Bitar 1996: 123; *Pholas dactylus* Linné, 1758 - Bitar & Kouli-Bitar 1998: 41.

Family THRACIIDAE Stoliczka, 1870

Thracia phaseolina (Lamarck, 1818)

Material examined:

(12) Jbail: 17/10/1999 - Tablieh, cave sediment, 16 m: 3 vv.

Family LATERNULIDAE Hedley, 1918

A - *Laternula anatina* (Linnaeus, 1758)

Literature records:

Laternula subrostrata (Lamarck, 1818) - Bogi & Khairallah 1987: 57, 59 (figure 2); *Laternula anatina* - Bitar 2013: 8.

Family PANDORIDAE Rafinesque, 1815

Pandora inaequalvis (Linnaeus, 1758)

Literature records:

Pandora inaequalvis Linné - Pallary 1938: 57; *Pandora inaequalvis* L. - Bitar 1996: 123; *Pandora inaequalvis* (Linné, 1758) - Bitar & Kouli-Bitar 1998: 41.

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