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Expert Meeting to propose standard methodologies
for the inventory and monitoring of coralligenous/maërl
communities and their main species
Rome, Italy, 7-8 April 2011

**Draft Lists of coralligenous/ maërl populations and of main
species to be considered by the inventory and monitoring**

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Mediterranean Action Plan
Regional Activity Centre for Specially Protected Areas (RAC/SPA)
Boulevard du leader Yasser Arafat
B.P.337 - 1080 Tunis CEDEX
E-mail : car-asp@rac-spa.org

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Draft List of coralligenous/ maërl populations

The composition of the coralligenous in the Mediterranean Mediterranean (sensu of PNUE-PAM-CAR/ASP, 2008) in terms of populations and species has been advanced by Ballesteros (2006). coralligenous bring together the 1666 Mediterranean species: 315 species of algae, 61 species of protozoa and 1290 species of animals with 110 species of fish (Table 1).

Later, the same composition was reported by Relini (2009). Given the diversity of groups within the coralligenous that has spawned a multitude of taxonomic work and given the large number of synonyms exist, a complete inventory of species is very difficult to achieve. The contribution of several coralligenous specialists in the Mediterranean basin would be required for its establishment. In order to best achieve this list (Table 1) is presented for a possible update.

Table I. Approximative number of species reported from the coralligenous communities (Ballesteros, 2006)

Groupes	Totaux	References
Algae	315	Boudouresque 1973
Protozoans	61	Laubier 1966, Hong 1980
Sponges	142	Laubier 1966, Hong 1980, Ros et al. 1984, Ballesteros et al. 1993, Ballesteros & Tomas 1999, Rosell & Uriz 2002
Hydrozoans	55	Laubier 1966, Ros et al. 1984, Ballesteros et al. 1993, Rosell & Uriz 2002
Anthozoans	43	Laubier 1966, Ros et al. 1984, Ballesteros et al. 1993, Ballesteros & Tomas 1999, Ballesteros, unpublished data
Scyphozoans	1	Laubier 1966, Hong 1980
Turbellarians	3	Laubier 1966, Hong 1980
Nemertean	12	Laubier 1966
Polychaetes	191	Martin 1987
Sipunculids	3	Laubier 1966, Hong 1980
Echiurids	2	Laubier 1966
Chitons	7	Hong 1980
Prosobranchs	61	Hong 1980
Opisthobranchs	33	Hong 1980
Bivalves	41	Hong 1980
Cephalopods	3	Ballesteros & Tomas 1999
Mites	6	Laubier 1966
Pycnogonids	15	Hong 1980
Copepods	54	Laubier 1966
Ostracods	10	Laubier 1966
Cirripedes	3	Laubier 1966, Hong 1980
Phyllocarids	1	Hong 1980
Mysids	7	Hong 1980
Cumaceans	3	Laubier 1966, Hong 1980
Tanaidaceans	2	Laubier 1966, Hong 1980
Isopods	14	Laubier 1966, Hong 1980
Amphipods	100	Bellan-Santini 1998
Decapods	56	García-Raso 1988, 1989
Brachiopods	8	Logan 1979
Pterobranchs	1	Laubier 1966
Bryozoans	171	Zabala 1986
Crinoids	2	Tortonese 1965
Ophiuroids	17	Laubier 1966, Tortonese 1965
Echinoids	14	Tortonese 1965, Laubier 1966, Hong 1980, Ros et al. 1984, Munar 1993, Ballesteros et al. 1993, Ballesteros & Tomas 1999
Asteroids	8	Tortonese 1965, Laubier 1966, Munar 1993
Holothurioids	9	Tortonese 1965, Laubier 1966, Hong 1980, Ros et al. 1984, Munar 1993, Ballesteros et al. 1993, Ballesteros & Tomas 1999
Tunicates	82	Ramos 1991
Fishes	110	Whitehead et al. 1984–1986, Ballesteros, unpublished data

Draft List of main species to be considered by the inventory and monitoring

As part of the inventory and monitoring of coral communities/maërl, we propose a list of species to be taken into account. This list is extracted from Ballesteros 2003 and 2006 and completed concerning the taxonomy of certain groups by the observations of Hong (1980). The list brings together the key organisms: builders, Agglomerative, Bioeroders , Species of particular importance (particularly abundant, architecturally important or economically valuable) and invasive species that can colonize the coralligenous.

We also propose, a second list of species studied in the program Medchange¹ to explore the possibility of its inclusion in the list of species to be taken into account.

¹ <http://sudek.esil.univmed.fr/medchange/spip/spip.php?article134>

Algal builders

Rhodophyta

- *Lithophyllum cabiochae* (Boudouresque et Verlaque) Athanasiadis.
- *Lithophyllum pustulatum* (J.V.Lamouroux) Foslie 1904
- *Lithophyllum stictaeforme* (Areschoug) Hauck 1877
- *Lithothamnion sonderi* Hauck 1883
- *Mesophyllum alternans* (Foslie) Cabioch & Mendoza 1998
- *Mesophyllum expansum* (Philippi) Cabioch & Mendoza 2003
- *Mesophyllum macedonis* Athanasiadis 1999
- *Mesophyllum macroblastum* (Foslie) Adey 1970
- *Neogoniolithon mamillosum* (Hauck) Setchell & L.R.Mason 1943
- *Peyssonnelia polymorpha* (Zanardini) F.Schmitz in Falkenberg 1879
- *Peyssonnelia rosa-marina* Boudouresque & Denizot 1973
- *Peyssonnelia rosa-marina* f. *saxicola* Boudouresque & Denizot 1973
- *Sporolithon ptychoides* Heydrich 1897

Animal builders

Foraminiferans

- *Miniacina miniacea* Pallas 1766

Bryozoans

- *Brodiella armata* Hincks 1862
- *Celleporina caminata* Waters 1879
- *Crassimarginatella maderensis* Waters 1898)
- *Cribilaria radiata* Moll 1803
- *Enthalophoroecia deflexa* Couch 1844
- *Mollia patellaria* Moll 1803
- *Myriapora truncata* Pallas 1766
- *Onychocella marioni* Jullien 1882
- *Pentapora fascialis* Pallas 1766
- *Schizomavella* spp.
- *Turbicellepora coronopus* S.V. Wood 1844

Serpulids

- *Filogranula* spp.
- *Hydroides* spp.

- *Serpula concharum* Langerhans 1880
- *Serpula vermicularis* Linnaeus 1767
- *Spirobranchus polytrema* Philippi 1844
- *Spirorbis* spp.

Cirripeds

- *Balanus perforatus* Bruguière 1789
- *Verruca stroemia* O.F. Müller 1776

Molluscs

- *Clavagella melitensis* Broderip 1835
- *Serpulorbis arenarius* Linnaeus 1767
- *Vermetus* sp.

Scleractinians

- *Caryophyllia inornata* Duncan 1878
- *Caryophyllia smithii* Stokes and Broderip 1828
- *Hoplangia durotrix* Gosse 1860
- *Leptopsammia pruvoti* Lacaze-Duthiers 1897

'Agglomerative' animals

Sponges

- *Faciospongia cavernosa* Schmidt 1862
- *Geodia* spp.
- *Spongia virgultosa* Schmidt 1868

bryozoans

- *Beania* spp.,

Alcyonarians

- *Epizoanthus arenaceus* delle Chiaje 1823

Bioeroders

Sponges

- *Aka labyrinthica* Hancock 1849
- *Cliona amplicavata* Rützler 1974
- *Cliona carteri* Ridley 1881
- *Cliona celata* Grant 1826
- *Cliona janitrix* Topsent, 1932
- *Cliona schmidtii* Ridley 1881
- *Cliona viridis* Schmidt 1862
- *Dotona pulchella* Carter 1880 spp. *mediterranea*
- *Pione vastifica* Hancock 1849
- *Spiroxya levispira* Topsent 1898
- *Spiroxya levispira* Topsent 1898

Echinoids

- *Echinus melo* Lamarck 1816
- *Sphaerechinus granularis* (Lamarck, 1816)

Molluscs

- *Gastrochaena dubia* Pennant 1777
- *Hiatella arctica* Linnaeus 1767
- *Lithophaga lithophaga* Linnaeus 1758

- *Petricola lithophaga* Philippson 1788

Polychaetes

- *Polydora flava* Claparède 1870
- *Polydora* sp.
- *Dipolydora* spp.
- *Dodecaceria concharum* Örsted 1843

Sipunculids

- *Aspidosiphon (Aspidosiphon) muelleri muelleri* Diesing, 1851
- *Phascolosoma (Phascolosoma) stephensoni* Stephen 1942

Chlorophyta

- [*Eugomontea* sp.]
- *Ostreobium quekettii* Bornet & Flahault 1889
- *Phaeophila* sp.

Cyanobacteria

- *Calothrix* sp.
- *Hyella caespitosa* Bornet & Flahault 1888
- *Leptolyngbya terebrans* (Bornet & Flahault ex Gomont) Anagnostidis & Komárek 1988
- *Mastigocoleus testarum* Lagerheim ex Bornet & Falhault 1886

Species of particular importance (particularly abundant, architecturally important or economically valuable)

Chlorophyta

- *Halimeda tuna* (J.Ellis & Solander) J.V.Lamouroux 1816

Sponges

- *Crambe crambe* Schmidt 1862
- *Hemimycale columella* Bowerbank 1874

- *Oscarella lobularis* Schmidt 1862
- *Chondrosia reniformis* Nardo 1847
- *Dysidea avara* Schmidt 1862

Hydrozoans

- *Orthopyxis crenata* Hartlaub 1901
- *Halecium petrosum* Stechow 1919
- *Halecium pusillum* Sars 1856

Gorgonians

- *Paramuricea clavata* Risso 1826
- *Eunicella singularis* Esper 1791
- *Eunicella cavolini* Koch 1887
- *Corallium rubrum* Linnaeus 1758

Alcyonarians

- *Alcyonium acaule* Marion 1878

Zoantharians

- *Parazoanthus axinellae* Schmidt 1862

Tunicates

- *Cystodytes dellechiajei* Della Valle 1877
- *Halocynthia papillosa* Linnaeus 1767
- *Microcosmus sabatieri* Roule 1885

Invasive species

Chlorophyta

- *Caulerpa taxifolia* (M.Vahl) C.Agardh 1817
- *Caulerpa cylindracea* Sonder 1845

Rhodophyta

- *Acrothamnion preissii* (Sonder) E.M.Wollaston 1968
- *Asparagopsis taxiformis* (Delile) Trevisan de Saint-Léon 1845
- *Lophocladia lallemandii* (Montagne) F.Schmitz 1893
- *Womersleyella setacea* (Hollenberg) R.E.Norris 1992

List of species considered in MEDCHANGE project

Annelida

- *Filograna implexa* Berkeley 1835
- *Protula* sp.
- *Serpula vermicularis* Linnaeus 1767

Bryozoa

- *Adeonella calveti* Canu & Bassler 1930
- *Beania hirtissima cylindrica* (Hincks, 1886)
- *Beania magellanica* Busk 1852
- *Caberea boryi* Audouin 1826
- *Cellaria* sp.
- *Celleporina caminata* Waters 1879
- *Chartella tenella* Hincks 1887
- *Crisia* sp.
- *Dentiporella sardonica* Waters 1879
- *Disporella hispida* Fleming 1828
- *Gregarinidra gregaria* Heller 1867
- *Idmidronea* sp.
- *Margaretta cereoides* Ellis & Solander 1786
- *Myriapora truncata* Pallas 1766
- *Pentapora fascialis* Pallas 1766
- *Reteporella grimaldii* Jullien 1903
- *Rhynchozoon neapolitanum* Gautier 1962
- *Rhynchozoon pseudodigitatum* Zabala & Maluquer 1988
- *Schizomavella auriculata* Hassall 1842
- *Schizomavella linearis* Hassall 1841
- *Scrupocellaria* sp.
- *Smittina cervicornis* Pallas 1766
- *Smittoidea reticulata* MacGillivray 1842
- *Turbicellepora avicularis* Hincks 1860

Cnidaria

- *Alcyonium acaule* Marion 1878
- *Caryophyllia inornata* Duncan 1878
- *Corallium rubrum* Linnaeus 1758
- *Corynactis viridis* Allman 1846
- *Eunicella cavolini* Koch 1887
- *Hoplantia durotrix* Gosse 1860
- *Leptopsammia pruvoti* Lacaze-Duthiers 1897
- *Paramuricea clavata* Risso 1826
- *Parazoanthus axinellae* Schmidt 1862

Porifera

- *Acanthella acuta* Schmidt 1862
- *Agelas oroides* Schmidt 1864
- *Aplysilla sulfurea* Schulze 1878

- *Aplysina cavernicola* Vacelet 1959
- *Axinella damicornis* Esper 1794
- *Cacospongia mollior* Schmidt 1862
- *Chondrosia reniformis* Nardo 1847
- *Clathrina clathrus* Schmidt 1864
- *Clathrina coriacea* Montagu 1818
- *Cliona viridis* Schmidt 1862
- *Corticium candelabrum* Schmidt 1862
- *Crambe crambe* Schmidt 1862
- *Crella (Grayella) pulvinar* Schmidt 1868
- *Dendroxea lenis* Topsent 1892
- *Dictyonella* sp.
- *Dysidea avara* Schmidt 1862
- *Dysidea fragilis* Montagu 1818
- *Fasciospongia cavernosa* Schmidt 1862
- *Haliclona (Halichoelona) fulva* Topsent 1893
- *Haliclona (Reniera) mediterranea* Griessinger 1971
- *Haliclona (Soestella) mucosa* Griessinger 1971
- *Hemimycale columella* Bowerbank 1874
- *Hexadella pruvoti* Topsent 1896
- *Hexadella racovitzae* Topsent 1896
- *Ircinia fasciculata* Esper 1794
- *Ircinia oros* Schmidt 1864
- *Ircinia variabilis* Schmidt 1862
- *Oscarella* sp.
- *Petrosia ficiformis* Poiret 1789
- *Phorbas tenacior* Topsent 1925
- *Plakina trilopha* Schulze 1880
- *Plakortis* sp.
- *Pleraplysilla spinifera* Schulze 1879
- *Prosuberites longispinus* Topsent 1893
- *Raspaciona aculeata* Johnston 1842
- *Sarcotragus foetidus* Schmidt 1862
- *Scalarispongia scalaris* Schmidt 1862
- *Spirastrella cunctatrix* Schmidt 1868
- *Spongia officinalis* Linnaeus 1759
- *Spongia virgultosa* Schmidt 1868
- *Terpios granulosa* Bergquist 1967

Protozoa

- *Miniacina miniacea* Pallas 1766

Tunicata

- *Aplidium undulatum* Monniot & Gaill 1978
- *Clavelina dellavallei* Zirpolo 1825
- *Clavelina lepadiformis* Müller 1776
- *Clavelina nana* Lahille, 1890
- *Cystodytes dellechiaiei* Della Valle 1877
- *Halocynthia papillosa* Linnaeus 1767
- *Microcosmus sabatieri* Roule 1885

Chlorophyta

- *Flabellia petiolata* (Turra) Nizamuddin 1987
- *Halimeda tuna* (J.Ellis & Solander) J.V.Lamouroux 1816
- *Palmophyllum crassum* (Naccari) Rabenhorst 1868
- *Valonia macrophysa* Kützing 1843

Rhodophyta

- *Lithophyllum stictaeforme* (Areschoug) Hauck 1877
- *Mesophyllum alternans* (Foslie) Cabioch & Mendoza 1998
- *Peyssonnelia* sp.

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