CONCLUSIONS AND RECOMMENDATIONS
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Results from the initial application of the Water Framework Directive (Directive 2000/60/EC), in the Mediterranean ecoregion, i.e. during the first phase of the Intercalibration (IC) exercise (Commission Decision 30/10/08) within the Mediterranean Geographic Intercalibration Group (MED-GIG), have been considered for possible indicators of ecosystem status assessment.

1. Chlorophyll-a has been used, within the MED-GIG, as a proxy-indicator for phytoplankton biomass using annual means of monthly collected data. The boundaries values determined for the status classes required by the WFD namely between “good” and “moderate” status, in the framework of the MED GIG, for different water body types (“types” WFD sensus, Annex. II) can be tested by the non-EU Mediterranean countries to find out if they are relevant.

2. For chlorophyll-measurements, remote sensing could be used mainly in open sea waters. However, in some cases (MERIS) satellite images can be used for Chl-a monitoring in coastal water. This method is not yet mature to be used at large scale in the Mediterranean, but it has to be encouraged because it will provide a tool for continuous monitoring in the future.

3. The use of shoot density and depth lower limit of the Posidonia oceanica meadows has been used as an indicator for the state of the marine environment supported by several data in many Mediterranean countries. Within the MED-GIG some classification indexes, developed using different P. oceanica descriptors, have been tested and some have already been published. Their application is in progress; some EU Mediterranean countries are using them in new national monitoring programmes. Most of these data are in scientific literature and are not regularly reported as result of national monitoring programmes. SPA/RAC is also promoting the implementation of a monitoring programme for vegetation species in the framework of its Marine Vegetation Action Plan. Therefore SPA/RA and MED POL should collaborate on the collection of data from the countries. For this indicator (angiosperms) it was mentioned that in some coastal areas of the Mediterranean (eastern Med – Israel, Lebanon, Syria, and western Med – south-eastern Spain and Morocco), where Posidonia is not found, the angiosperm Cymodocea nodosa could be used (as for the rest of the Mediterranean), but until now, no monitoring data are available concerning this species. In conclusion it was considered that this indicator could be used immediately, only for Posidonia oceanica.

4. For the Macroalgae, a group of benthic organisms forming extensive and obvious habitats in shallow waters, used also as models in stressor-response experiments, the classification systems developed in the framework of MED GIG seem to be well tested and can be used as indicators in all Mediterranean hard substrates. These classification systems distinguish between functional groups and not species, thus their application does not need the presence of trained taxonomists and therefore they can be more easily implemented. Although several scientific groups are working on macroalgae in many Mediterranean
countries, such data are not usually available and not collected in the framework of national monitoring programmes. The application of this index could be recommended for all non-EU countries, however, some issues regarding macroalgal community variability at species and population levels needs to be further clarified and to be checked by groups.

5. The classification systems developed and tested on the macroinvertebrates, within the MED-GIG, can be used as indicators as they are robust methods using 1-2 samplings per year and can give good indication on the state of the marine coastal environment (on the soft bottom ecosystems). It is based on species and abundance lists prepared by expert taxonomists. The macroinvertebrate indicators tested in the framework of MED GIG seem to be well developed and is used as a standard method in soft bottoms in all EU monitoring programmes. However, the need of taxonomic expertise seems to be the major problem for the indicator’s use, since the availability of taxonomists is limited in most Mediterranean countries. The indicator is probably not ready to be applied in the non-EU countries but it can be tested by scientific groups. The need of its use in standard monitoring will eventually prove imperative and will result probably in a new ‘bloom’ of taxonomists.

6. The decisions and recommendations of the meeting will be reported by the MED POL Secretariat to the Review Monitoring Meeting in Rome, as an element to be discussed in the framework of the development of the new MED POL monitoring strategy.
Annex I

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