

of topotypes of *O. prolifera* and *V. spiralis* (genertypes) showed that the Brazilian specimens identified as *Osmundaria* should be assigned to a new genus, with divergence of 8.4% to 9.7% from genuine *Osmundaria* and *Vidalia* from Western Australia. Specimens traditionally assigned to *O. obtusiloba* in Brazil correspond to four different species, distinguished on the basis of morphological features as color, thallus margins and branching pattern, besides *rbcL* divergence ranging from 1.3% to 4.7%. Furthermore, these four species seem to differ in their distribution along the tropical and subtropical coast of Brazil. Our findings support the recognition of new taxa in the red algal tribe Amansieae, contributing to clarify the circumscription of these algae in the Western Atlantic.

3PO.7

ISLET OF BLITVENICA, NEW HOTSPOT FOR MACROALGAE – PRELIMINARY RESEARCH

Petra Lučić (lucic@izor.hr), Boris Antolić (antolic@izor.hr), Ante Žuljević (zuljevic@izor.hr), Ivan Cvitković (cvite@izor.hr), Ante Žunec (zunec@izor.hr) and Marija Despalatović (mare@izor.hr)

Institute of Oceanography and Fisheries, Laboratory for Benthos, Šetalište I. Meštrovića 63, 21000 Split, Croatia

Blitvenica is a small islet, less than 200 m wide, located in the Central Adriatic. Carbonate rocks of the island are exposed to strong wind and waves of the south west directions, and strong near bottom currents. In this study, we present the preliminary results of macroalgae composition in this area. The field sampling was carried out in October 2016 and May 2017. Samples were collected by scuba diving up to 35 m depth on SW part of the islet along the transect in NE-SW direction. Dense vegetation is developed up to 40 m depth. Large biomass was dominated by *Cystoseira* and *Sargassum* taxa. We found up to seven different *Cystoseira* taxa that is unique and unexpected to find on such a small and limited area in the Croatian part of the Adriatic. Some of them develop specific morphology which might be a result of abiotic factors or/and separate evolution. The alien species noted in the fall are *Caulerpa cylindracea*, tetrasporophytes of *Asparagopsis armata*, *Hypnea spinella*, *Womersleyella setacea* and *Lophocladia lallemandii*. *Womersleyella setacea* and *L. lallemandii* were dominant epiphytic algae below 10 m depth. Some rare species for the Adriatic were found: *Antithamnion piliferum*, *Spermothamnion irregulare*, *Ulvella inflata*, *Janczewskia verruciformis*, *Myriotrichia adriatica*, *Padina distromatica* and *Padina pavonicoides*. Such diversity and biomass is probably a result of

upwelling from the area of Jabuka Pit. That is also indicated by developing of nitrophilic species on 30 m depth such as *Ulva* sp. and *Hydroclathrus clathratus*. We consider that the plentiful biodiversity, high abundance and specific composition of macrobenthic flora represent the islet of Blitvenica as the hotspot of macroalgae biodiversity in the Adriatic Sea. Our research will also serve as a basis for the proposal for legal protection of this unique macroalgal area.

3PO.8

A PRELIMINARY GENETIC ASSESSMENT OF THE COASTAL MACROALGAL BIODIVERSITY AROUND THE MALTESE ISLANDS

Angela G. Bartolo^{1, 2} (angiebartolo@gmail.com), Gabrielle Zammit² (gabrielle.zammit@um.edu.mt), Akira F. Peters^{1, 3} (akirapeters@gmail.com) and Frithjof C. Küpper¹ (fkuepper@abdn.ac.uk)

¹School of Biological Sciences, University of Aberdeen, Cruickshank Building, St. Machar Drive, Aberdeen AB24 3UU, Scotland, UK and ²Laboratory of Applied Phycology, Department of Biology, Fourth Floor, Biomedical Sciences Building, University of Malta, MSD2080, Msida, Malta and ³Bezhin Rosko, 40 rue des pêcheurs, 29250 Santec, Brittany, France

The genetic biodiversity of marine algae from the Mediterranean Sea is generally understudied. Moreover, the status of Malta's coastal algal biodiversity is currently unknown, especially since numerous taxa may be morphologically cryptic. This study aims at increasing knowledge about the macroalgal biodiversity around the Maltese islands. Over 200 samples of green, brown and red macroalgae were collected from different locations such as ports, desalination outfall sites, urban wastewater treatment outfall sites, and others. Of these, 38 specimens belonged to the Chlorophyta, 95 to the Phaeophyceae, and 83 to the Rhodophyta. Each macroalgal sample was supplemented with a herbarium specimen that was documented photographically. The Germling Emergence Method was also applied to substratum samples collected from the same locations. This resulted in the growth of germlings from the following groups; 35 Chlorophyta, 68 Phaeophyceae, and 17 Rhodophyta. DNA barcoding has confirmed the presence of diverse genera whose morphotypes were also the most predominant. These include *Cladophora*, *Flabellia*, *Ulva*, *Padina*, *Dictyota*, *Halopteris*, *Sargassum*, *Dictyopteris*, *Zonaria*, *Jania*, *Laurencia* and *Corallina*. The aim of this study is to contribute to the genetic data about Mediterranean macroalgae in general and to identify useful primers that could possibly be applied for faster future DNA barcode identification of Mediterranean macroalgae.