No próximo dia 20 de maio, sexta-feira, às 9h30, irá realizar-se o Seminário "*Rugulopteryx okamurae (Dictyotales, Ochrophyta): keys to understand its invasive potential in Europe*", proferido pela investigadora e professora Dr. María Altamirano Jeschke e organizado pelo subgrupo MARBE – Biodiversidade e Ambientes Marinhos do CIBIO-Açores.

RUGULOPTERYX OKAMURAE (DICTYOTALES, OCHROPHYTA): KEYS TO UNDERSTAND ITS INVASIVE POTENTIAL IN EUROPE

María Altamirano, Universidad de Málaga

20 de Maio 2022 | 9h30 | Sala A.024 | Faculdade de Ciências da Universidade dos Açores

In 2015 a new exotic seaweed with invasive behaviour was detected at the Strait of Gibraltar (western Mediterranean), which was morphological and genetically identified as *Rugulopteryx okamurae* (Dictyotales, Ochrophyta). Due to its rapid expansion and remarkable ecological, economic, and social impacts, the species was included in the Spanish Checklist of exotic invasive species. However, distribution models of the species identified other European coasts as favourable for this new invader, where, in fact, has recently been reported, like France and Azores, and Northern Africa coasts. In this talk keys to understand its invasive potential in Europe will be presented, as results of several ongoing research projects performed in Southern Spain. These arguments may provide scientific arguments for the inclusion of *R.*

okamurae **in the list of invasive species of European Union concern, becoming the first seaweed species to be included in that list.** ***Rugulopteryx okamurae*** **exhibits a strong competitive capacity with native species and communities, like seagrasses as** ***Posidonia oceanica*** **and** ***Cymodocea nodosa*****, fucalean and kelp forests and gorgonians, producing intense homogenization of seabottoms, thus threating European marine biodiversity. Efficient and reproductive performance, mainly by parthenogenetic and vegetative structures guarantees the continuous incoming of clonal individuals to the invasive populations with a high dispersal capacity by natural means such as sea currents, but also by means of anthropogenic vectors, like shiphull communities, ballast waters, fisheries and recreational activities. Economic impacts have been estimated to be up to 2x106 € per year in the fishery industry due to reduced captures of several species of economic value, and due to removal of drifted material on the beaches. These, additionally, suffer reduction in their recreational value affecting tourism associated incomes. For all these reasons, the presence of** ***R. okamurae*** **in several European countries together with Northern Africa, becomes a common threat to Mediterranean and Atlantic native biodiversity, which demands joint efforts for an efficient management to minimize its ecological and economic impacts and expansion.**

Maria Altamirano is currently an Associate Professor at the University of Malaga (Spain) and President of the Spanish Society of Phycology. She has a solid knowledge on coastal communities developed over 20 years of marine botany and coastal ecology research. She has focused her research mostly on aquatic photosynthetic organisms such as macroalgae and has carried out research stays in Brazil, Antarctica, Australia, Germany and Japan. She has been principal investigator of various projects related to the study of invasive marine macroalgae. She is currently working on a draft of the national control strategy for *R. okamurae* in Spain and has several running projects on the species.

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