

***Rugulopteryx okamurae* (Dictyotales, Ochrophyta): the first invasive alien seaweed of Union concern and what we know about it in Spain**

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The Strait of Gibraltar was the site where an invasive *Rugulopteryx okamurae* event was first recorded in 2015, with Spain being the first country to suffer the environmental and socioeconomic impacts of this species. Since then, the species has expanded its distribution range both towards the Mediterranean and the Atlantic, which has led to its inclusion in the list of species of Union concern in 2021. So far, the species is present in Spain, Morocco, French Mediterranean coast, Southern Portugal, Azores, Madeira and Canary Islands, in chronological order of its expansion. Efficient management of the species requires a thorough knowledge of the species biology, ecology and interaction with native communities, as well as an economic estimate of its impact. This communication, which opens a workshop focused on *R. okamurae*, will review the response of the Spanish administration to the invasion of the species as well as the advances made to understand the high invasiveness of the species. Different research projects have focused on identifying the temporal and spatial invasiveness windows. Time of maximal invasiveness has been identified through the study of the vegetative and reproductive phenology of the species on two different communities, *Posidonia oceanica* meadow and a photophilous algae community, to identified moments of maximal recruitment and production. Spatial windows have been identified with distribution models at different scales. In addition, results on the socioeconomic impact of the species on the fishing sector and for the management of the affected beaches will be shown.