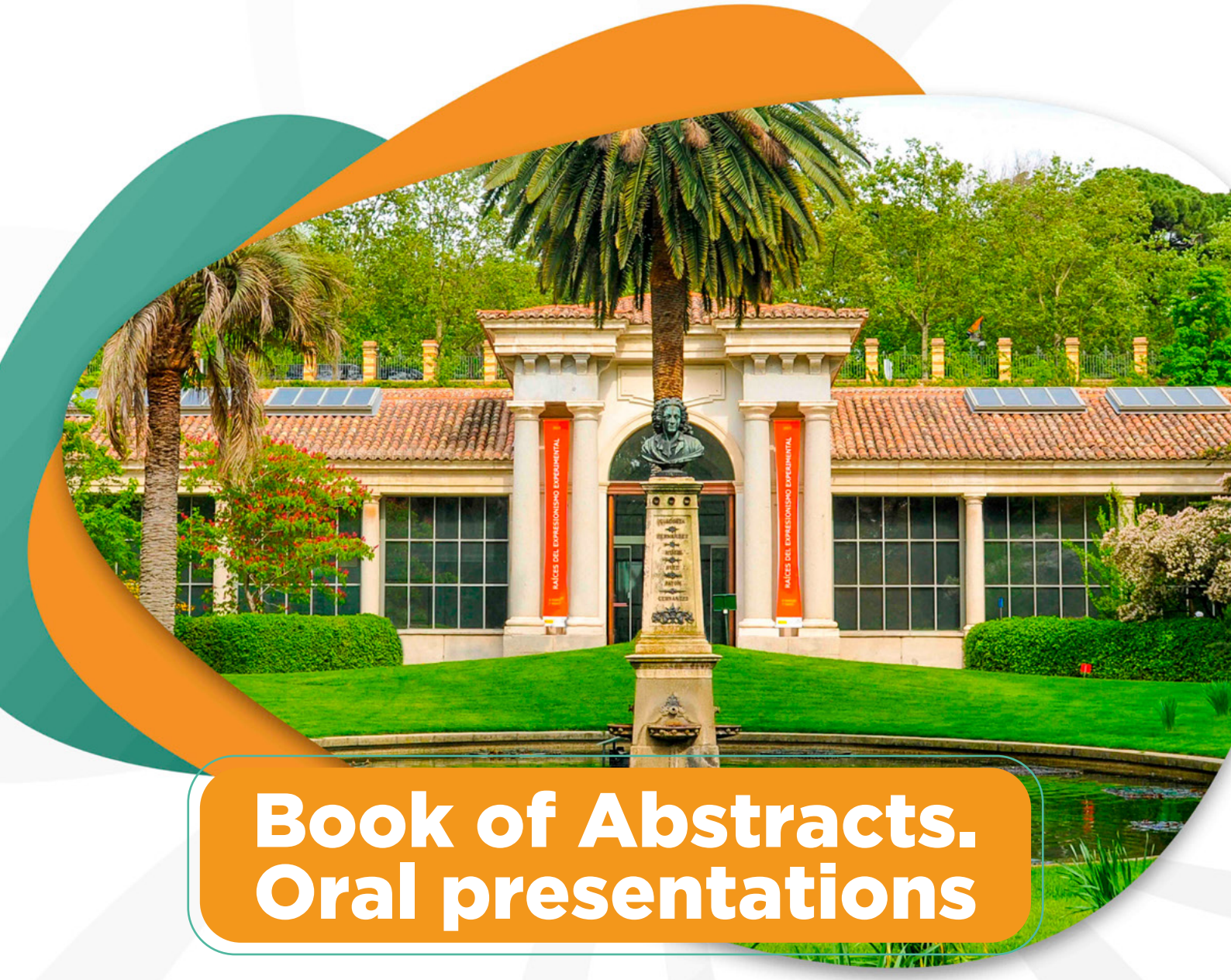
IBC 2024

XX International Botanical Congress Madrid Spain



Book of Abstracts. Oral presentations

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segetal flora in globe artichoke (*Cynara cardunculus* L. s.l.) cropping system. The data was collected in Sardinian fields of globe artichoke through random located georeferenced plots (1×1 m). Two different cropping systems were analyzed: conventional and organic. Based on floristic surveys, it was possible to make an inventory of 115 plant species classified as native or non-native (neophytes and archaeophytes). The most frequent and often also the most abundant species were three natives (*Calendula arvensis* (Vaill.) L., *Convolvulus arvensis* L., *Lolium rigidum* Gaudin), one archaeophyte (*Avena fatua* L. s.l.), and three neophytes (*Glebionis coronaria* (L.) Spach, *Oxalis pes-caprae* L., *Veronica persica* Poir). Our results showed that organic farming often has positive effects on species richness, improving the diversity of plant communities, reconciling the sustainability of agricultural systems and the provision of ecosystem services. However, a higher coverage of plant species was observed in the conventional systems compared to the organic. In the conventional systems the composition of the segetal flora is shaped by high nutrient availability, herbicide resistance and biogeographic origin. Such traits are often linked to species that are highly competitive and difficult to control.

S.203.5 Biological invasions in Marine Protected Areas (MPAs): trends in non-indigenous macrophytes in Italian MPAs

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Non-indigenous species (NIS), widely recognized as one of the main drivers of global change, may in time become invasive, determining significant environmental impacts, such as biodiversity loss and ecosystem services degradation. The impact of NIS on marine habitats within Marine Protected Areas (MPAs), whose major aim is biodiversity conservation, can be significant even highly detrimental. Therefore, monitoring NIS distribution is crucial in these areas for planning effective conservation strategies. Currently, in Italy have been established 29 MPAs that protect about 700 kilometres of coastline and are mainly concentrated in the two great islands, Sicily (7) and Sardinia (6). Of them, 11 are Specially Protected Areas of Mediterranean Importance (SPAMI). In Italy, 73 alien macrophytes (10 Chlorophyta, 16 Ochrophyta, 46 Rhodophyta, 1 Tracheophyta) is currently reported. Our research revealed differences among the MPAs with respect to the number of marine alien macrophytes, which could be linked to different reasons such as differences in the number of conducted studies or differences in geographical position. For instance, 12 marine alien macrophytes have been reported for the MPA Egadi Islands, 6 for the MPA Capo Carbonara, 2 for the MPA Miramare and 8 for the MPA Portofino. The research has also shown that data on fauna and terrestrial flora are more numerous than those on marine flora and that the last ones are not often updated. Despite their fundamental role in the conservation of marine biodiversity, MPAs are not immune to biological invasions, evidencing that protection does not hinder the introduction and spreading of NIS. Management actions within MPAs should include the planning of regular monitoring activities which will allow early detections and to follow the spread of species already present. This work represents an important starting point for the creation of a regularly updated list of alien macrophytes within the Italian MPAs.

S.203.6 Towards an updated catalog of the alien vascular flora of Spain

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Invasive alien species poses one of the main threats to biodiversity conservation, ranking as the second leading cause of native species extinction worldwide. The Mediterranean Basin, particularly Spain, has emerged as one of the most impacted regions

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