DISTRIBUTION OF MARINE NON-INDIGENOUS SPECIES IN THE NORTHERN ZONE OF THE CABO VERDE ARCHIPELAGO

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Abstract

Non-indigenous species (NIS) are considered among the main threats to biodiversity worldwide due to their potential negative impacts on native ecosystems. The introduction of these species can result in imbalances in ecosystem functioning and biodiversityloss, making it essential to understand and manage these phenomena. In this context, the present study analyzes the diversity of marine NIS in the northern area of the Cabo Verde Archipelago using Autonomous Reef Monitoring Structures (ARMS). The results revealed the presence of 11 NIS, mainly of Phylum Chordata, Subphylum Tunicata, distributed in five locations in the islands of São Vicente, Santo Antão and Ilhéu dos Pássaros. The highest number of NIS were observed in the Mindelo Marina (11 species), followed by Porto Grande and Ninho de Guincho (6 species each), Ilhéu dos Pássaros (4 species) and Porto Novo (2 species). The two commercial ports and one recreational marina hosted greater richness anddiversity of NIS compared to natural sites, highlighting these areas as the most vulnerable to the introduction of NIS. Significant differences between sampling sites were noted which may be directly related to the influence of environmental, geographical and human interference factors. The proposed recommendations aim to mitigate the impact of NIS, including the use of preventive measures, risk-assessments, ongoing monitoring, control of invasive species and ecosystem restoration. This research contributes to the understanding of marine biological invasions in Cabo Verde and will help to guide management practices.

Keywords: Non-indigenous species, marine biological invasions, ARMS, marine biodiversity, Cabo Verde.

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