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Nota breve | Short note

Laginha coral bay in Mindelo (Cabo Verde): a natural heritage site under threat

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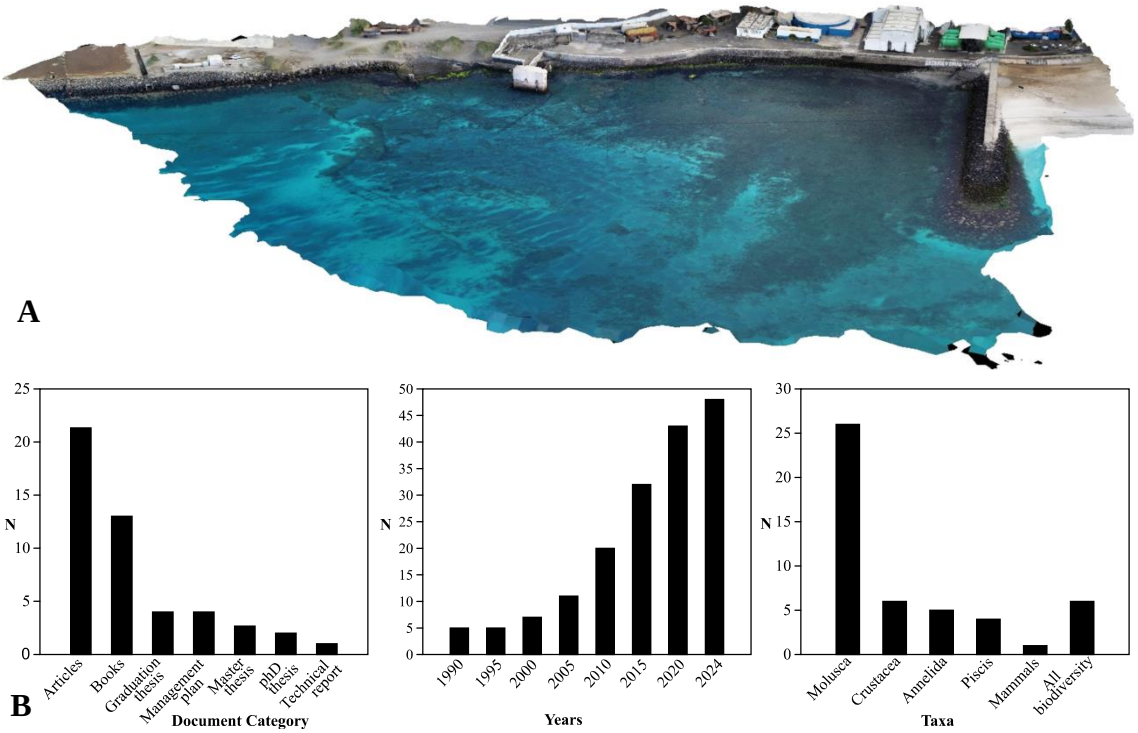
Coral reefs are the shallow-water marine ecosystems with the greatest biological diversity, but they are threatened worldwide by human activities and climate change (Roberts *et al.* 2002). The creation of monitoring programmes makes it possible to outline conservation and recovery strategies for these habitats. The National Coral Reef Management and Conservation Plan (PNGCC) emphasises the urgent need for coral communities conservation in Cabo Verde. One of the habitats listed in the PNGCC is the Laginha Coral Cove (ECL), with a depth of up to 7 metres, on the island of São Vicente (Fig. 1A). The aim of this study was to research, compile and catalog the publications focusing on the marine biodiversity of the ECL. An advanced search using the keywords 'Matiota' and 'Laginha' was carried out on Google Scholar, with a focusing on scientific documents.

Results showed that the number of documents increased annually (Fig. 1B). The inventory of the fauna and flora of the bay by Mascarenhas (2022) contains more than 600 species, including 16 endemic fish species (Wirtz *et al.* 2013), a potentially extinct mollusc *Africonus lugubris* (Tenorio *et al.* 2020) and two crustaceans, the recently described *Typton anaramosae* and the first national record of *Gnathophyllum americanum* (Neves 2020a, b). However, these publications revealed that the seabed of the ECL is dominated by four species of stony corals (Fig. 1C): *Siderastrea radians*, *Favia fragum*, *Porites astreoides* and *Porites porites*, and the hidrocoral, *Millepora alcicornis* (Lopes *et al.* 2014). Seven other species of coral (two genera and two species are endemic), the green turtle *Chelonia mydas* and various invertebrates are also mentioned (Mascarenhas 2022).

Also noteworthy is the record of a small and rare labrid *Doratonotus megalepis*, endemic to Cabo Verde and São Tomé (Freitas & Mascarenhas pers. obs.).



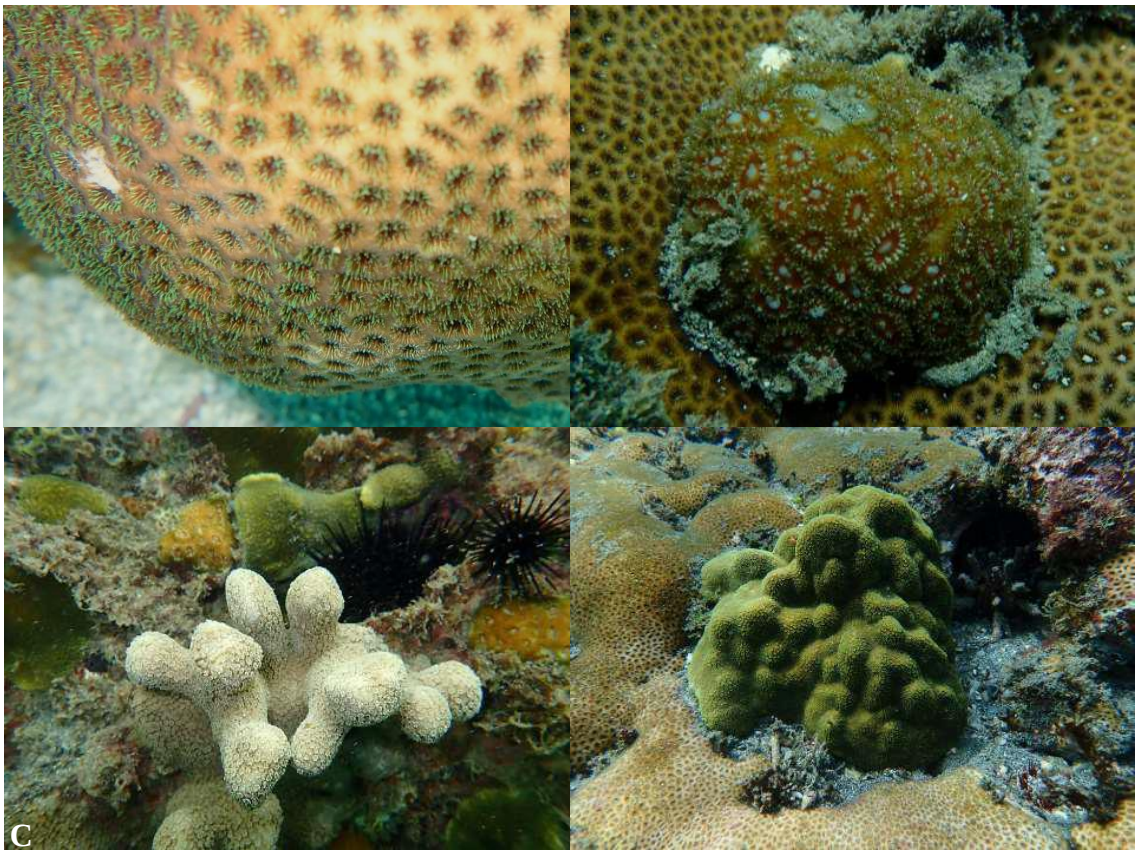


Fig. 1. Data and most common coral species relating to the Laginha coral bay (position on google maps). **A)** Orthophotometric drone image and 3D video (by Jandir Medina); **B)** Graph with number of publications (N) per category, per year (cumulative) and taxa respectively. **C)** The coral species *Siderastrea radians*, *Favia fragum*, *Porites porites* and *Porites astreoides* respectively (photos by Guilherme Mascarenhas).

Most of the publications found focussed on molluscs and crustaceans and were articles. These included studies on the genetic structure and population density assessment of the species *Pinna rudis* (Lopes *et al.* 2019, 2024); the description of new species/ records of crustaceans (Neves, 2020a, b); the ecophysiology of marine molluscs (Lopes-dos-Santos *et al.* 2014); the inventory of Conidae molluscs (Tenorio *et al.* 2008); and the determination of the genetic pattern of zoanthids (López *et al.* 2019). Also worth mentioning are two recent thesis, one using digital observation by photogrammetry (Gigli, 2022) and revealing the impact of burial on corals, and another using underwater video technique to monitor the dynamics and structure of coastal fish communities (Rocha 2024). However, there is a lack of basic studies on these communities supporting this ecosystem and conservation. In this context, we highlight the unpublished report on the underwater trail establishment (Trilha_ECL_2021), an important environmental education tool and the scientific proposal to create a Scientific Interest Site (ProLaginhaAMP_2020).

This work emphasises a significant lack of research into the flora and environmental education of the ECL. It shows that creating a Protected Area as scientific site and reducing or diverting wastewater discharges will be fundamental to safeguard the survival of this stronghold of marine biodiversity.

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