Scleractinian coral (Cnidaria, Hexacorallia, Scleractinia) diversity of the Mersing Islands, Peninsular Malaysia

ABSTRACT

We present a comprehensive checklist of scleractinian (hard) corals for the Mersing Islands, Malaysia based on surveys conducted at 24 reefs across protected and unprotected marine areas. A total of 261 species of corals from 16 families and one incertae sedis (Pachyseris spp.) were recorded, along with ten records that are new for the east coast of Peninsular Malaysia. Compared against the IUCN Red List, 46.7% of coral species found in the Mersing Islands were of Least Concern (LC), 29.5% as Near Threatened (NT) and 16.4% Vulnerable (V). Only one recorded species, Pectinia maxima (Moll & Best, 1984), was listed as Endangered (EN). Baseline species diversity data are essential for the monitoring and management of marine biodiversity, especially within marine protected areas. With both protected and unprotected coral reef areas in the vicinity of the widely scattered Mersing Islands, the diversity and distribution of coral species can be used as the basis for area-based conservation and management strategies. The diversity and abundance of scleractinian corals of each island or area should be surveyed periodically to ensure the appropriate level of protection is afforded to retain scleractinian biodiversity in this region.