

Coral assessment in selected areas in the Verde Island Passage

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Abstract

The Verde Island Passage is one of the most biologically diverse ecosystems in the world. It provides food, livelihood, and other benefits to communities in and around its waters. However, previous studies conducted here were fragmentary and site-specific. This study addressed this gap by examining the coral genera and distribution along four (4) provinces in the Verde Island Passage: Batangas, Marinduque, Occidental Mindoro, and Oriental Mindoro using the photo transect method. Data were collected during the northeast monsoon, summer, and southwest monsoon seasons. Each province was assigned (2) sites classified into highly impacted (HI) and less impacted (LI) sites. For HI and LI sites, results showed an average of 21.77% and 27.78% coral cover, 12.70% and 11.98% macroalgae cover, 24.87% and 30.01% bare rock, 32.06% and 22.89% sand/rubble, respectively. An average of twenty-five (25) coral genera were found in Batangas but were mostly dominated by *Galaxea sp.* in the highly impacted site and *Porites sp.* in the less impacted site. Marinduque recorded sixteen (16) genera, where *Porites sp.* dominated both highly impacted and less impacted sites. Occidental Mindoro recorded eighteen (18) genera, where *Porites sp.* also dominated both highly impacted and less impacted sites. Lastly, Oriental Mindoro recorded fourteen (14) genera where *Galaxea sp.* dominated the highly impacted site and *Porites sp.* dominated the less impacted site. *Porites sp.* Dominance in most of the sites may be linked to their ability to withstand strong wave action and be more tolerant to stressors and environmental extremes such as sedimentation and temperature increase. In general, most of the sites in all four provinces had good coral cover including several non-MPA sites. This justifies their protection, conservation, and possibly elevation of their status to Marine Protected Areas.

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