



MARIANO MARCOS STATE UNIVERSITY

Monitoring and Preserving Aquatic Ecosystem Health

Mariano Marcos State University (MMSU) actively monitors and researches aquatic ecosystems to understand and protect their health. Through studies such as "Ecological Factors Affecting Mesophotic Coral Reef Ecosystems: Potential Refuge from Disturbances," MMSU investigates the resilience of deep-water coral reefs to climate-induced stress, assessing biodiversity and examining mesophotic reefs as potential refugia for coral species. This research supports conservation efforts and may guide the design of Marine Protected Areas that include both shallow and deep reef systems.

Additionally, the "HABs Watch" program at MMSU focuses on real-time monitoring of Harmful Algal Blooms (HABs) in local waters. Using high-throughput imaging and molecular methods, MMSU researchers provide early warnings of HAB events, aiming to protect marine biodiversity, fisheries, and human health. Monitoring stations in key locations allow bi-monthly assessments of algae species and potential HAB risks.

These initiatives by MMSU align with efforts to protect and sustain aquatic ecosystems, underscoring the university's commitment to ecological stewardship and local environmental health.

Evidences:

Real time monitoring and early warning for HABs using high throughput imaging and molecular methods Project Report

https://www.mmsu.edu.ph/resources/1sD6gcMr1zM1168TzyBRsZa-f_aNTN7O/view?usp=drive_link

Ecological Factors Affecting Mesophotic Coral Reef Ecosystems Potential Refuge From Disturbances Semi-Annual Progress Report November 2023 to July 2024

https://www.mmsu.edu.ph/resources/1LOyzJsPdw5T9FGJjYb5YC7mT7shUEYxW/view?usp=drive_link