



The Island Biogeography Theory predicts a balance between species immigration and extinction rates, holding a stable number of species on islands. Beyond that, this theory predicts a variation of species richness with island area and isolation. That is, the species richness will be higher according to less isolation and the larger the area. In addition, other theories incorporated the geological age of the islands and the sea level fluctuation through climatic oscillations. Although there are well-studied theories about species richness, it is still unknown how these theories predict the diversity of species traits on islands. In a recent study, published in the *Journal of Biogeography*, Debora Ferrari and colleagues explored different metrics to test the Island Biogeography Theory and its derivations in the light of functional diversity of reef fishes on 72 tropical oceanic islands. It was observed that the functional diversity of reef fishes has a strong longitudinal gradient between the Pacific, Eastern Pacific and Atlantic islands. This longitudinal dissimilarity suggests that historical and evolutionary processes played an important role in shaping the functional diversity of reef fish assemblages on tropical oceanic islands. In addition, islands' features such as present and past area, as well as the isolation from the Quaternary refugia, explained the patterns of functional diversity found in oceanic islands, following the pattern of the classical Island Biogeography Theory and its derivations.

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