

Supplementary Information

Table S1. Values of phylogenetic diversity (calculated as the total sum of branch length) and species richness of coral reef fish species belonging to the family of Labridae for each studied site.

Regions	Phylogenetic diversity	Species richness
Mauritius (Indian Ocean)	11.9	27
Togian (Indonesia)	17.4	60
Moorea (Polynesia)	15.3	44
Panama (Eastern Pacific)	2.8	5
Great Barrier Reef (Western Pacific)	17.7	56
Vanuatu (Western Pacific)	14.4	51