

Supplementary Material

Taxonomic diversity of fishes from two coral-reef waters of the South China Sea

Yuanjie Li^{A,B,C,D}, Jun Zhang^{A,C,D,}, Zuozhi Chen^{A,C,D,*}, Xuejiao Dai^{A,D}, Pengli Xiong^{A,D} and Wenming Yu^A*

^ASouth China Sea Fisheries Research Institute, Chinese Academy of Fishery Sciences, Key Laboratory for Sustainable Utilization of Open-Sea Fishery, Ministry of Agriculture and Rural Affairs, Guangzhou, 510300, PR China.

^BCollege of Environment and Ecology, Xiamen University, Xiamen, 361005, PR China.

^CSouthern Marine Science and Engineering Guangdong Laboratory (Guangzhou), Guangzhou, 511458, PR China.

^DCollege of Marine Sciences Shanghai Ocean University, Shanghai, 201306, PR China.

*Correspondence to:

Jun Zhang, South China Sea Fisheries Research Institute, Chinese Academy of Fishery Sciences, Key Laboratory for Sustainable Utilization of Open-Sea Fishery, Ministry of Agriculture and Rural Affairs, Guangzhou 510300, PR China Email: zhangjun@scsfri.ac.cn

Zuozhi Chen, South China Sea Fisheries Research Institute, Chinese Academy of Fishery Sciences, Key Laboratory for Sustainable Utilization of Open-Sea Fishery, Ministry of Agriculture and Rural Affairs, Guangzhou, 510300, PR China Email: zzchen2000@163.com

Tables S1. Species lists of reef-dwelling fishes on the Qilianyu Island and Meiji Reef

Order	Family	Genus	Species	Distribution region		
				Meiji Reef	Qilianyu Island	
Aulopiformes	Synodontidae	<i>Synodus</i>	<i>Synodus rubromarmoratus</i>	+		
			<i>Synodus hoshinonis</i>	+		
			<i>Synodus englemani</i>		+	
			<i>Synodus variegatus</i>		+	
			<i>Synodus macrops</i>		+	
Beryciformes	Holocentridae	<i>Myripristis</i>	<i>Myripristis murdjan</i>	+	+	
			<i>Myripristis vittata</i>		+	
		<i>Neoniphon</i>	<i>Neoniphon sammara</i>	+	+	
			<i>Neoniphon opercularis</i>		+	
			<i>Neoniphon argenteus</i>		+	
		<i>Sargocentron</i>	<i>Sargocentron spiniferum</i>	+	+	
			<i>Sargocentron lacteoguttatum</i>		+	
			<i>Dispinus ruber</i>		+	
			<i>Sargocentron tiera</i>	+	+	
			<i>Sargocentron diadema</i>	+	+	
			<i>Sargocentron cornutum</i>	+	+	
			<i>Sargocentron rubrum</i>	+	+	
			<i>Sargocentronc audimaculatum</i>	+	+	
Perciformes	Apodonidae	<i>Apogon</i>	<i>Apogon guamensis</i>	+		
			<i>Apogon hyalosoma</i>	+		
			<i>Apogon kallopterus</i>	+	+	
			<i>Apogon exostigma</i>		+	
	<i>Apogonichthyoides</i>	<i>Apogonichthyoides taeniatus</i>	+			
		<i>Cheilodipterus</i>	<i>Cheilodipterus macrodon</i>	+	+	
		<i>Gymnapogon</i>	<i>Gymnapogon urospilotus</i>		+	
	Caesionidae	<i>Paracaesio</i>	<i>Paracaesio sordida</i>	+		
	Chaetodontidae	<i>Chaetodon</i>	<i>Chaetodon auriga</i>	+		
			<i>Chaetodon trifasciatus</i>		+	
	Labridae	<i>Bodianus</i>	<i>Bodianus bimaculatus</i>		+	
			<i>Cheilinus</i>	<i>Cheilinus celebicus</i>	+	
				<i>Cheilinus diagrammus</i>		+
		<i>Cheilinus oxycephalus</i>			+	
		<i>Cheilinus trilobatus</i>			+	
		<i>Cheilinus chlorourus</i>		+	+	
		<i>Cheilinus rhodochrous</i>		+	+	
		<i>Cheilinus fasciatus</i>		+	+	
		<i>Cheilinus orientalis</i>		+	+	
		<i>Choerodon</i>		<i>Choerodon gymnogenys</i>		+
<i>Halichoeres</i>		<i>Halichoeres trimaculatus</i>		+		
		<i>Halichoeres nebulosus</i>	+			
<i>Hologymnosus</i>		<i>Hologymnosus annulatus</i>		+		
<i>Thalassoma</i>	<i>Thalassoma purpureum</i>	+				
<i>Xyrichtys</i>	<i>Xyrichtys aeneitensis</i>		+			
Lethrinidae	<i>Lethrinus</i>	<i>Lethrinus atkinsoni</i>	+			
		<i>Lethrinus nebulosus</i>	+			
		<i>Lethrinus erythropterus</i>		+		

Order	Family	Genus	Species	Distribution region	
				Meiji Reef	Qilianyu Island
			<i>Lethrinus mahsenoides</i>		+
			<i>Lethrinus kallopterus</i>		+
			<i>Lethrinus rubrioperculatus</i>	+	+
			<i>Lethrinus obsoletus</i>	+	+
			<i>Lethrinus microdon</i>	+	+
			<i>Lethrinus semicinctus</i>	+	+
			<i>Lethrinus miniatus</i>	+	+
	Lutjanidae	<i>Aphareus</i>	<i>Aphareus rutilans</i>		+
		<i>Etelis</i>	<i>Etelis carbunculus</i>		+
			<i>Aprion virescens</i>		+
		<i>Lutjanus</i>	<i>Lutjanus gibbus</i>	+	
			<i>Lutjanus erythropterus</i>	+	
			<i>Lutjanus sebae</i>	+	
			<i>Lutjanus quinquelineatus</i>	+	
			<i>Lutjanus bohar</i>	+	
			<i>Lutjanus fulviflamma</i>	+	+
			<i>Lutjanus kasmira</i>	+	+
		<i>Pristipomoides</i>	<i>Pristipomoides filamentosus</i>		+
	Malacanthidae	<i>Malacanthus</i>	<i>Malacanthus brevirostris</i>		+
	Mullidae	<i>Mulloidichthys</i>	<i>Mulloidichthys vanicolensis</i>	+	+
		<i>Parupeneus</i>	<i>Parupeneus trifasciatus</i>	+	
			<i>Parupeneus heptacanthus</i>		+
			<i>Parupeneus pleurostigma</i>		+
			<i>Parupeneus cyclostomus</i>	+	+
			<i>Parupeneus trifasciatus</i>	+	+
		<i>Upeneus</i>	<i>Upeneus vittatus</i>	+	
	Paraperclidae	<i>Parapercis</i>	<i>Parapercis hexophthalma</i>	+	+
			<i>Parapercis hexophthalma</i>		+
			<i>Parapercis millepunctata</i>		+
	Pentapodidae	<i>Gnathodentex</i>	<i>Gnathodentex aureolineatus</i>	+	+
		<i>Gymnocranius</i>	<i>Gymnocranius elongatus</i>	+	+
			<i>Gymnocranius griseus</i>	+	+
			<i>Gymnocranius japonicus</i>		+
			<i>Gymnocranius grandoculis</i>		+
		<i>Pentapodus</i>	<i>Pentapodus emeryii</i>	+	
			<i>Pentapodus caninus</i>	+	
			<i>Pentapodus aureofasciatus</i>	+	
			<i>Pentapodus nagasakiensis</i>		+
	Pomacanthidae	<i>Centropyge</i>	<i>Centropyge nox</i>		+
	Pomacentridae	<i>Neopomacentrus</i>	<i>Neopomacentrus azysron</i>	+	
		<i>Pomacentrus</i>	<i>Pomacentrus amboinensis</i>		+
			<i>Pomacentrus philippinus</i>		+
			<i>Pomacentrus nagasakiensis</i>		+
			<i>Pomacentrus taeniometopon</i>		+
	Priacanthidae	<i>Priacanthus</i>	<i>Priacanthus hamrur</i>		+
	Scolopsidae	<i>Scolopsis</i>	<i>Scolopsis xenochrous</i>	+	
			<i>Scolopsis inermis</i>	+	

Order	Family	Genus	Species	Distribution region	
				Meiji Reef	Qilianyu Island
			<i>Scolopsis bimaculatus</i>	+	
			<i>Scolopsis Cuvier</i>	+	
			<i>Scolopsis monogramma</i>	+	
			<i>Scolopsis bilineatus</i>	+	
			<i>Scolopsis lineata</i>	+	
			<i>Scolopsis affinis</i>	+	+
			<i>Scolopsis margaritifera</i>	+	
			<i>Scolopsis trilineatus</i>		+
	Scombridae	<i>Rastrelliger</i>	<i>Rastrelliger kanagurta</i>	+	
	Serranidae	<i>Cephalopholis</i>	<i>Cephalopholis leopardus</i>	+	+
			<i>Cephalopholis urodeta</i>	+	+
			<i>Cephalopholis spiloparaea</i>	+	+
			<i>Cephalopholis argus</i>		+
		<i>Epinephelus</i>	<i>Epinephelus coioides</i>	+	
			<i>Epinephelus corallicola</i>		+
			<i>Epinephelus quoyanus</i>		+
			<i>Epinephelus merra</i>	+	+
			<i>Epinephelus miliaris</i>	+	+
		<i>Variola</i>	<i>Aethaloperca rogae</i>		+
			<i>Variola albimarginata</i>		+
	Sparidae	<i>Dentex</i>	<i>Monotaxis grandoculis</i>	+	
Pleuronectiformes	Bothidae	<i>Bothus</i>	<i>Bothus pantherinus</i>		+
Tetraodontiformes	Balistidae	<i>Melichthys</i>	<i>Melichthys vidua</i>		+
			<i>Abalistes stellatus</i>		+
		<i>Pseudobalistes</i>	<i>Pseudobalistes fuscus</i>		+
			<i>Balistapus undulatus</i>	+	+
		<i>Sufflamen</i>	<i>Sufflamen chrysopterum</i>		+
			<i>Sufflamen fraenatus</i>		+
	Tetraodontidae	<i>Arothron</i>	<i>Arothron nigropunctatus</i>	+	
		<i>Canthigaster</i>	<i>Pleuranacanthus sceleratus</i>		+