

Table S4 - Functional distinctiveness of species in unprotected sites, Abrolhos National Marine Park (ANMP) and Marine Extractive Reserve Corumbau (MERCOR) at different levels of protection (NTZ: no-take zone; UP: unprotected zone). Research: species recorded in scientific research (underwater visual census); Fishery: species observed on fishing landing.

Specie	Acronym	Research	Fishery	UP1	UP2	ANMP_NTZ1	ANMP_NTZ2	MERCOR_UP1	MERCOR_UP2	MERCOR_NTZ1
<i>Abudefduf saxatilis</i>	ABUSAX	0.524		0.518	0.526	0.510	0.512	0.514	0.512	0.523
<i>Acanthurus bahianus</i>	ACABAH	0.581		0.520	0.531	0.478	0.522	0.504	0.514	0.510
<i>Acanthurus chirurgus</i>	ACACHI	0.540		0.465	0.469	0.426	0.463	0.448	0.464	0.439
<i>Acanthurus coeruleus</i>	ACACOE	0.551		0.484	0.490	0.449	0.482	0.472	0.485	0.462
<i>Acanthostracion polygonius</i>	ACAPOL	0.544								
<i>Acanthostracion quadricornis</i>	ACAQUA	0.511								
<i>Albula vulpes</i>	ALBVUL	0.435								
<i>Alectis ciliaris</i>	ALECIL	0.484								
<i>Alphester afer</i>	ALPAFE	0.465								
<i>Aluterus monoceros</i>	ALUMON		0.511							
<i>Aluterus scriptus</i>	ALUSCR	0.551								
<i>Amblycirrhitis pinos</i>	AMBPIN	0.449								
<i>Anarchias similis</i>	ANASIM	0.541								
<i>Anisotremus moricandi</i>	ANIMOR	0.595		0.589					0.577	
<i>Anisotremus surinamensis</i>	ANISUR	0.445	0.455	0.436			0.418	0.422		0.416
<i>Anisotremus virginicus</i>	ANIVIR	0.483	0.556	0.456	0.457	0.440	0.453	0.448	0.445	0.454
<i>Apogon americanus</i>	APOAME	0.597								
<i>Apogon pseudomaculatus</i>	APOPSE	0.457								
<i>Archosargus probatocephalus</i>	ARCPRO	0.525	0.520							
<i>Bagre marinus</i>	BAGMAR		0.530							
<i>Balistes capricus</i>	BALCAP	0.454	0.455							
<i>Balistes vetula</i>	BALVET	0.452	0.513		0.405		0.404			
<i>Bodianus pulchellus</i>	BODPUL	0.434								
<i>Bodianus rufus</i>	BODRUF	0.406	0.456							
<i>Bothus lunatus</i>	BOTLUN	0.575								
<i>Bothus ocellatus</i>	BOTOCE	0.528								
<i>Calamus penna</i>	CALPEN		0.534							
<i>Calamus pennatula</i>	CALPENT	0.495	0.528	0.445	0.445		0.437		0.447	0.426

<i>Canthigaster figueiredoi</i>	CANFIG	0.497					0.461		
<i>Cantherhines macrocerus</i>	CANMAC	0.533							
<i>Canthidermis maculata</i>	CANMACu		0.496		0.483		0.499		
<i>Cantherhines pullus</i>	CANPUL	0.561	0.550						
<i>Carangoides bartholomaei</i>	CARBAR	0.476	0.402	0.481	0.464		0.453	0.477	0.485
<i>Carcharhinus brevipinna</i>	CARBRE		0.444						
<i>Caranx crysos</i>	CARCRY	0.451	0.391				0.427		
<i>Caranx hippos</i>	CARHIP	0.489	0.415				0.500		
<i>Caranx latus</i>	CARLAT	0.458	0.391		0.444			0.457	0.465
<i>Caranx ruber</i>	CARRUB	0.496				0.524	0.491	0.512	0.514
<i>Centropyge aurantonotus</i>	CENAUR	0.569							
<i>Centropomus undecimalis</i>	CENUND		0.471						
<i>Cephalopholis fulva</i>	CEPFUL	0.478	0.422	0.465					0.493
<i>Chaetodipterus faber</i>	CHAFAB	0.628							0.462
<i>Chaenopsis ocellata</i>	CHAOCE	0.509		0.525	0.523			0.499	0.510
<i>Chaetodon sedentarius</i>	CHASED	0.493							
<i>Chaetodon striatus</i>	CHASTR	0.485		0.471	0.471	0.463	0.451		0.465
<i>Chilomycterus reticulatus</i>	CHIRET	0.489							
<i>Chilomycterus spinosus</i>	CHISPI	0.640							
<i>Chloroscombrus chrysurus</i>	CHLCHR	0.557			0.556				
<i>Chromis aff. enchrysur</i>	CHRENC	0.482							
<i>Chromis flavicauda</i>	CHRFLA	0.462							
<i>Chromis jubauna</i>	CHRJUB	0.506							
<i>Chromis multilineata</i>	CHRMUL	0.454							
<i>Clepticus brasiliensis</i>	CLEBRA	0.556							
<i>Conodon nobilis</i>	CONNOB		0.489						
<i>Coryphopterus dicrus</i>	CORDIC	0.492							
<i>Coryphopterus glaucofraenum</i>	CORGLA	0.570		0.572	0.580			0.572	0.574
<i>Coryphaena hippurus</i>	CORHIP		0.446						0.599
<i>Coryphopterus thrix</i>	CORTHR	0.533							
<i>Cosmocampus albirostris</i>	COSALB	0.493							
<i>Cryptotomus roseus</i>	CRYROS	0.499							
<i>Ctenogobius saepepallens</i>	CTESAE	0.500							
<i>Cynoscion acoupa</i>	CYNACO		0.465						

<i>Cynoscion guatucupa</i>	CYNGUA	0.551							
<i>Cynoscion virescens</i>	CYNVIR	0.410							
<i>Dactyloscopus crossotus</i>	DACCRO	0.649							
<i>Decapterus macarellus</i>	DECMAC	0.611							
<i>Diapterus rhombeus</i>	DIARHO	0.559							
<i>Diodon holocanthus</i>	DIOHOL	0.497							
<i>Diodon hystrix</i>	DIOHYS	0.531	0.535			0.512			
<i>Diplectrum radiale</i>	DIPRAD	0.653							
<i>Doratonotus megalepis</i>	DORMEG	0.459							
<i>Elacatinus figaro</i>	ELAFIG	0.465	0.469	0.457	0.482	0.474	0.455	0.461	
<i>Elops saurus</i>	ELOSAU	0.465							
<i>Emblemariopsis signifer</i>	EMBSIG	0.467	0.470				0.455	0.462	
<i>Enneanectes altivelis</i>	ENNALT	0.539							
<i>Epinephelus adscensionis</i>	EPIADS	0.456	0.366	0.467					
<i>Epinephelus itajara</i>	EPIITA	0.494			0.518				
<i>Epinephelus marginatus</i>	EPIMAR	0.495							
<i>Epinephelus morio</i>	EPIMOR	0.466	0.365	0.486	0.480	0.489			0.481
<i>Eucinostomus melanopterus</i>	EUCMEL	0.600							
<i>Euthynnus alletteratus</i>	EUTALL	0.436							
<i>Ginglymostoma cirratum</i>	GINCIR	0.656							
<i>Grama brasiliensis</i>	GRABRA	0.496		0.513	0.526	0.515		0.492	
<i>Gymnothorax funebris</i>	GYMFUN	0.515							
<i>Gymnothorax moringa</i>	GYMMOR	0.571							
<i>Gymnothorax vicinus</i>	GYMVIC	0.527				0.513		0.540	
<i>Haemulon aurolineatum</i>	HAEAUR	0.427	0.431	0.413	0.446	0.418	0.410	0.418	0.401
<i>Haemulon parra</i>	HAEPAR	0.446	0.520	0.404	0.399	0.389	0.399	0.394	0.398
<i>Haemulon plumieri</i>	HAEPLU	0.408	0.378	0.363	0.382	0.374	0.372	0.376	0.350
<i>Haemulon squamipinna</i>	HAESQU	0.435							
<i>Haemulon steindachneri</i>	HAESTE	0.401							
<i>Halichoeres brasiliensis</i>	HALBRA	0.401	0.490	0.403	0.384	0.392	0.381	0.391	0.374
<i>Halichoeres dimidiatus</i>	HALDIM	0.400							
<i>Halichoeres penrosei</i>	HALPEN	0.435							
<i>Halichoeres poeyi</i>	HALPOE	0.401	0.403	0.384		0.392	0.381	0.391	0.374
<i>Halichoeres radiatus</i>	HALRAD	0.398							

<i>Halichoeres sazimai</i>	HALSAZ	0.560								
<i>Heteropriacanthus cruentatus</i>	HETCRU	0.434								
<i>Holocentrus adscensionis</i>	HOLADS	0.445	0.488	0.430	0.422	0.449	0.445	0.436	0.442	0.421
<i>Holacanthus ciliaris</i>	HOLCIL	0.506				0.416	0.442		0.449	0.427
<i>Holacanthus tricolor</i>	HOLTRI	0.505								
<i>Hypanus americanus</i>	HYPAME	0.531								
<i>Hypleurochilus fissicornis</i>	HYPFIS	0.634								
<i>Hyporthodus nigritius</i>	HYPNIG	0.594								
<i>Hypleurochilus pseudoaequipinnis</i>	HYPPSE	0.524								
<i>Isopisthus parvipinnis</i>	ISOPAR		0.604							
<i>Kyphosus sectatrix</i>	KYPSEC	0.545								
<i>Labrisomus cricota</i>	LABCRI	0.457								
<i>Labrisomus nuchipinnis</i>	LABNUC	0.450					0.458		0.464	0.461
<i>Lactophrys trigonus</i>	LACTRI	0.529								
<i>Lobotes surinamensis</i>	LOBSUR		0.496							
<i>Lutjanus alexandrei</i>	LUTALE	0.539		0.560	0.550					
<i>Lutjanus analis</i>	LUTANA	0.442	0.347							
<i>Lutjanus buccanella</i>	LUTBUC	0.467								
<i>Lutjanus cyanopterus</i>	LUTCYA	0.469	0.361							
<i>Lutjanus jocu</i>	LUTJOC	0.454	0.352	0.457	0.445	0.476	0.442			0.431
<i>Lutjanus purpureus</i>	LUTPUR		0.442							
<i>Lutjanus synagris</i>	LUTSYN	0.468	0.420	0.454						
<i>Lutjanus vivanus</i>	LUTVIV		0.383							
<i>Lythrypnus brasiliensis</i>	LYTBRA	0.419								
<i>Malacoctenus delalandii</i>	MALDEL	0.515		0.530	0.529	0.551	0.540	0.517	0.528	0.554
<i>Malacanthus plumieri</i>	MALPLU		0.433							
<i>Malacoctenus triangulatus</i>	MALTRI	0.515								
<i>Melichthys niger</i>	MELNIG	0.527								
<i>Microgobius carri</i>	MICCAR	0.517								
<i>Microspathodon chrysurus</i>	MICCHR	0.589						0.534	0.554	0.556
<i>Micropogonias furnieri</i>	MICFUR		0.434							
<i>Mugil curema</i>	MUGCUR		0.567							
<i>Mugil liza</i>	MUGLIZ		0.565							
<i>Mulloidichthys martinicus</i>	MULMAR	0.453								

<i>Muraena pavonina</i>	MURPAV	0.664							0.707	
<i>Mycteroperca acutirostris</i>	MYCACU	0.475								
<i>Mycteroperca bonaci</i>	MYCBON	0.476	0.402	0.481	0.465	0.493	0.453	0.477	0.485	0.444
<i>Mycteroperca interstitialis</i>	MYCINT	0.510	0.440							
<i>Mycteroperca venenosa</i>	MYCVEN		0.418							
<i>Myripristis jacobus</i>	MYRJAC	0.399								
<i>Myrichthys ocellatus</i>	MYROCE	0.536					0.538			
<i>Narcine brasiliensis</i>	NARBRA	0.543					0.545			
<i>Notarius grandicassis</i>	NOTGRA		0.596							
<i>Ocyurus chrysurus</i>	OCYCHR	0.467	0.359	0.486	0.480	0.527	0.490	0.523	0.517	0.481
<i>Odontoscion dentex</i>	ODODEN	0.470								
<i>Ogcocephalus vespertilio</i>	OGCVES	0.481			0.457					
<i>Oligoplites saurus</i>	OLISAU		0.514							
<i>Ophioblennius atlanticus</i>	OPHATL	0.553								
<i>Ophichthus ophis</i>	OPHOPH	0.662								
<i>Ophioblennius trinitatis</i>	OPHTRI	0.522							0.519	
<i>Pagrus pagrus</i>	PAGPAG	0.609								
<i>Pareques acuminatus</i>	PARACU	0.399								0.372
<i>Paroncheilus affinis</i>	PARAFF	0.506								
<i>Paranthias furcifer</i>	PARFUR	0.449								
<i>Parablennius marmoreus</i>	PARMAR	0.531								
<i>Parablennius pilicornis</i>	PARPIL	0.503		0.511	0.508	0.527	0.511			
<i>Paralichthys sp.</i>	PARspp		0.626							
<i>Pempheris schomburgki</i>	PEMSCH	0.533								
<i>Phaeoptyx pigmentaria</i>	PHAPIG	0.489								
<i>Pomacanthus arcuatus</i>	POMARC	0.535	0.593	0.499	0.506	0.463	0.491	0.497	0.491	0.492
<i>Pomacanthus paru</i>	POMPAR	0.514		0.457	0.459	0.421	0.449	0.451	0.454	0.432
<i>Priacanthus arenatus</i>	PRIARE	0.448	0.464							
<i>Priolepis dawsoni</i>	PRIDAW	0.449								
<i>Prognathodes brasiliensis</i>	PROBRA	0.607								
<i>Pronotogrammus martinicensis</i>	PROMAR	0.587								
<i>Pseudocaranx dentex</i>	PSEDEN	0.482			0.490					
<i>Pseudogramma gregoryi</i>	PSEGRE	0.459								
<i>Pseudupeneus maculatus</i>	PSEMAC	0.451	0.464	0.415	0.404		0.409	0.421	0.420	0.385

<i>Psilotris celsus</i>	PSICEL	0.517								
<i>Ptereleotris randalli</i>	PTERAN	0.501								
<i>Rachycentron canadum</i>	RACCAN		0.465							
<i>Rhinobatos percellens</i>	RHIPER		0.522							
<i>Rhomboplites aurorubens</i>	RHOAUR	0.574	0.481							
<i>Rypticus saponaceus</i>	RYP SAP	0.444					0.411			
<i>Sargocentron bullisi</i>	SARBUL	0.433								
<i>Scartella cristata</i>	SCACRI	0.535			0.523		0.528			
<i>Scarus trispinosus</i>	SCATRI	0.508	0.490	0.486	0.475	0.482	0.474	0.473	0.494	0.451
<i>Scarus zelindae</i>	SCAZEL	0.501		0.438	0.432	0.414	0.439	0.423	0.441	0.401
<i>Sciades proops</i>	SCIPRO		0.546							
<i>Scomberomorus brasiliensis</i>	SCOBRA	0.464	0.372							
<i>Scorpaenodes caribbaeus</i>	SCOCAR	0.439								
<i>Scomberomorus cavalla</i>	SCOCAV	0.503	0.373	0.525						
<i>Scorpaena dispar</i>	SCODIS	0.402								
<i>Scorpaena isthmensis</i>	SCOIST	0.548								
<i>Scorpaena plumieri</i>	SCOPLU	0.403								
<i>Scorpaena brasiliensis</i>	SCOrBRA	0.405								
<i>Scorpaenodes tredecimspinosus</i>	SCOTRE	0.411								
<i>Selene vomer</i>	SELVOM		0.477							
<i>Serranus aliciae</i>	SERALI	0.509								
<i>Serranus atrobranchus</i>	SERATR	0.545								
<i>Serranus baldwini</i>	SERBAL	0.423		0.425	0.407		0.424		0.426	
<i>Seriola dumerili</i>	SERDUM	0.525	0.428							
<i>Serranus flaviventris</i>	SERFLA	0.443		0.460	0.448			0.466	0.475	0.463
<i>Serranus phoebe</i>	SERPHO	0.434								
<i>Seriola rivoliana</i>	SERRIV	0.575								
<i>Sparisoma amplum</i>	SPAAMP	0.494	0.493	0.462				0.443	0.468	0.424
<i>Sparisoma axillare</i>	SPAAXI	0.502		0.439	0.433	0.415	0.439	0.424	0.442	0.402
<i>Sparisoma frondosum</i>	SPAFRO	0.501		0.438	0.432	0.414	0.439	0.423	0.441	0.401
<i>Sparisoma radians</i>	SPARAD	0.553		0.542			0.539	0.517		
<i>Sparisoma tuiupiranga</i>	SPATUI	0.549								
<i>Sphyræna barracuda</i>	SPHBAR	0.533	0.441							
<i>Sphoeroides greeleyi</i>	SPHGRE	0.494						0.487		

<i>Sphyraena guachancho</i>	SPHGUA	0.642							
<i>Sphoeroides spengleri</i>	SPHSPE	0.494				0.490			
<i>Sphoeroides testudineus</i>	SPHTES	0.496							
<i>Starksia brasiliensis</i>	STABRA	0.515							
<i>Stegastes fuscus</i>	STEFUS	0.499	0.503	0.502	0.509	0.495	0.486	0.498	0.489
<i>Stegastes pictus</i>	STEPIC	0.511	0.485		0.478	0.489			0.463
<i>Stegastes variabilis</i>	STEVAR	0.581	0.560	0.571	0.531	0.553	0.532	0.540	
<i>Symphurus</i> aff. <i>rhyisma</i>	SYMRHY	0.569							
<i>Synodus foetens</i>	SYNFOE	0.582				0.561			
<i>Synodus intermedius</i>	SYNINT	0.554	0.545						
<i>Synodus synodus</i>	SYNSYN	0.514							
<i>Thalassoma noronhanum</i>	THANOR	0.442							
<i>Thunnus atlanticus</i>	THUATL		0.456						
<i>Trachinotus falcatus</i>	TRAFAL	0.464	0.455						
<i>Trachinotus goodei</i>	TRAGOO		0.556						
<i>Trichiurus lepturus</i>	TRILEP		0.546						
<i>Tylosurus acus acus</i>	TYLACU		0.537						
