

Figure S1: Maximum likelihood estimates of the regional speciation ( $s$ ), extinction ( $x$ ), and range expansion ( $d$ ) GeoSSE model parameters.

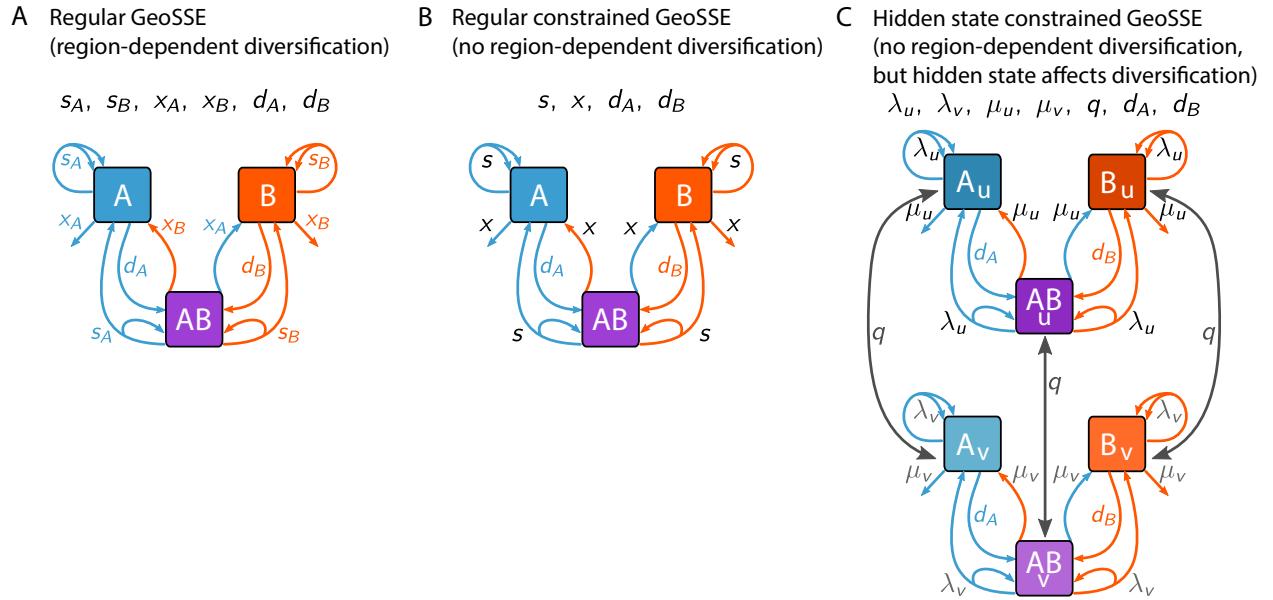


Figure S2: Schematic summary showing transitions among the geographic states induced by processes in the GeoSSE and character-independent-models.

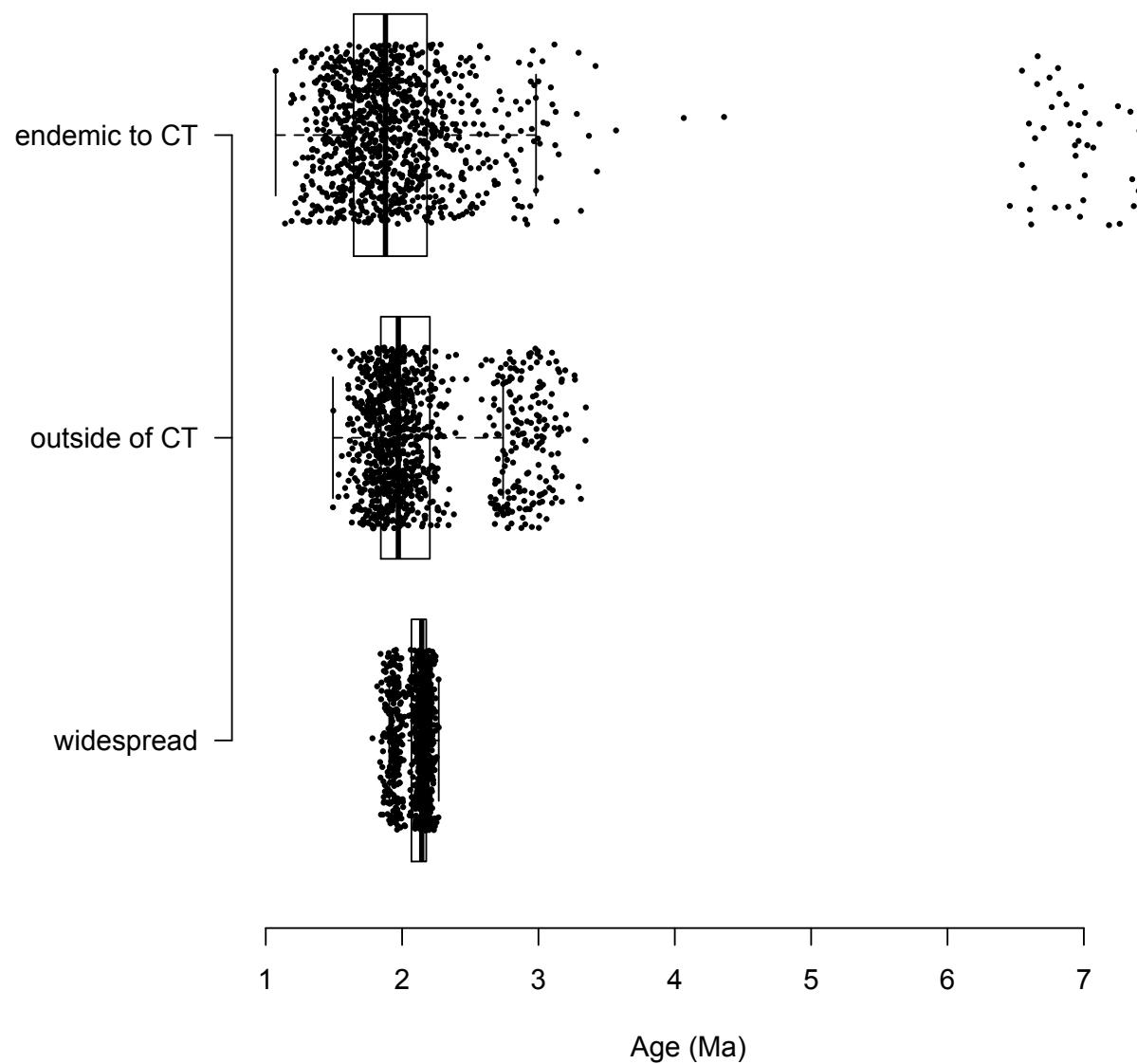


Figure S3: Species ages based on phylogenetic tip length of CT, non-CT, and widespread species for shuffled geographic states with the same tip frequencies as Hughes et al. (2013) (analysis #8).

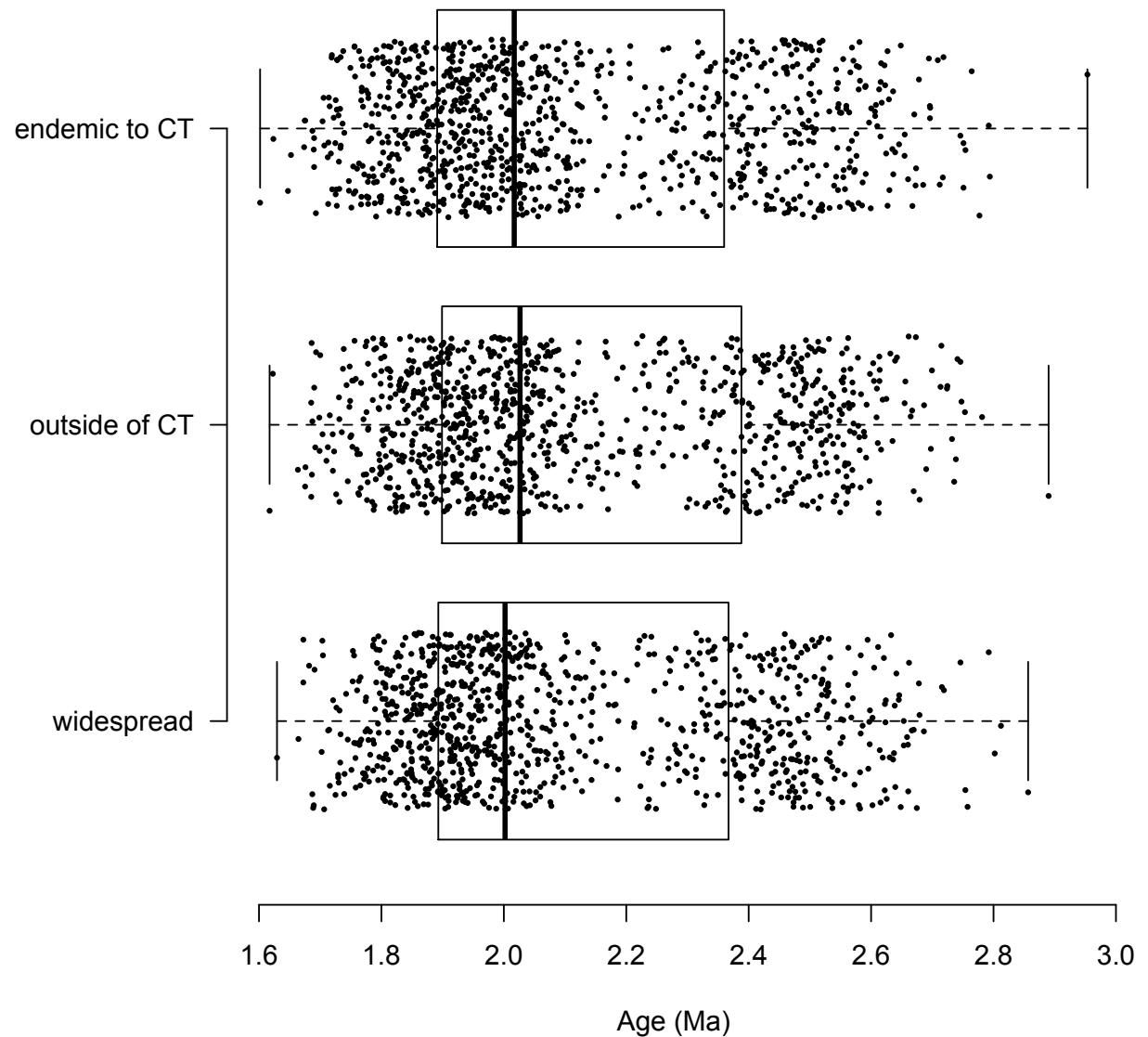


Figure S4: Species ages based on phylogenetic tip length of CT, non-CT, and widespread species for neutral traits simulated without regional differences in speciation, extinction, or dispersal (analysis #9).

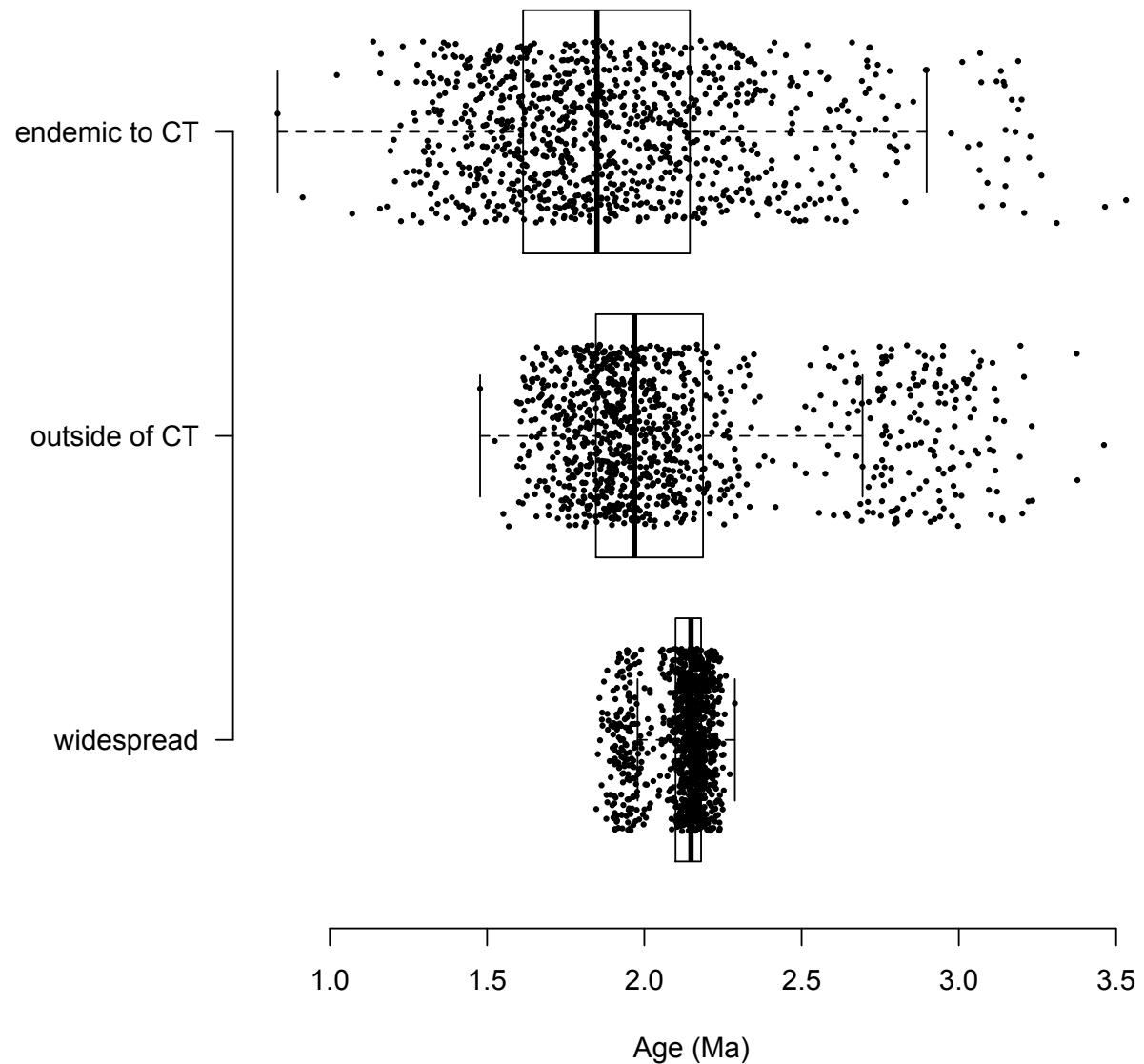


Figure S5: Species ages based on phylogenetic tip length of CT, non-CT, and widespread species for neutral traits obtained by fitting real geographic states to the three-state Mk model (analysis #10).

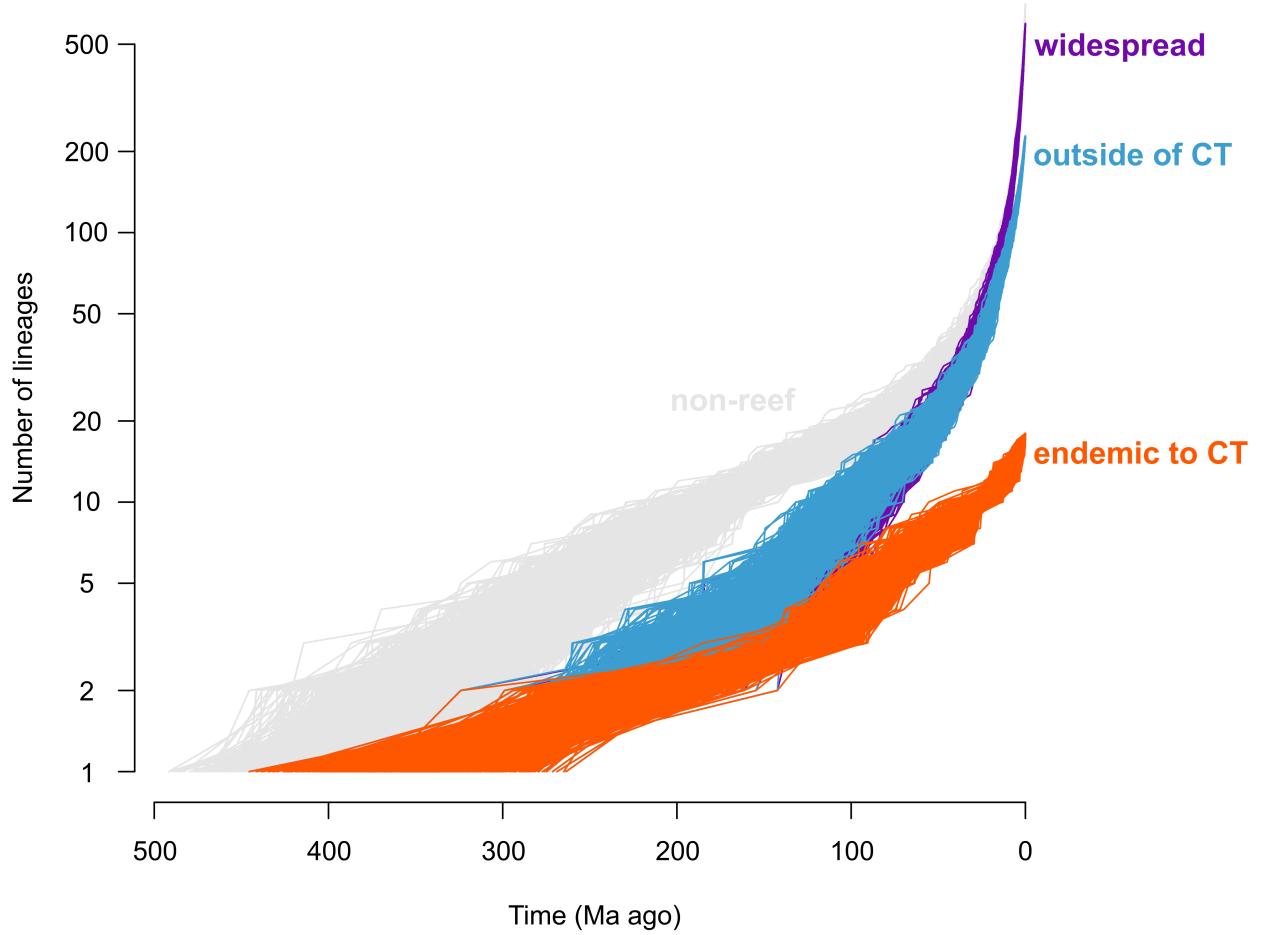


Figure S6: Lineages-through-time plots partitioned by region for all scleractinian corals.

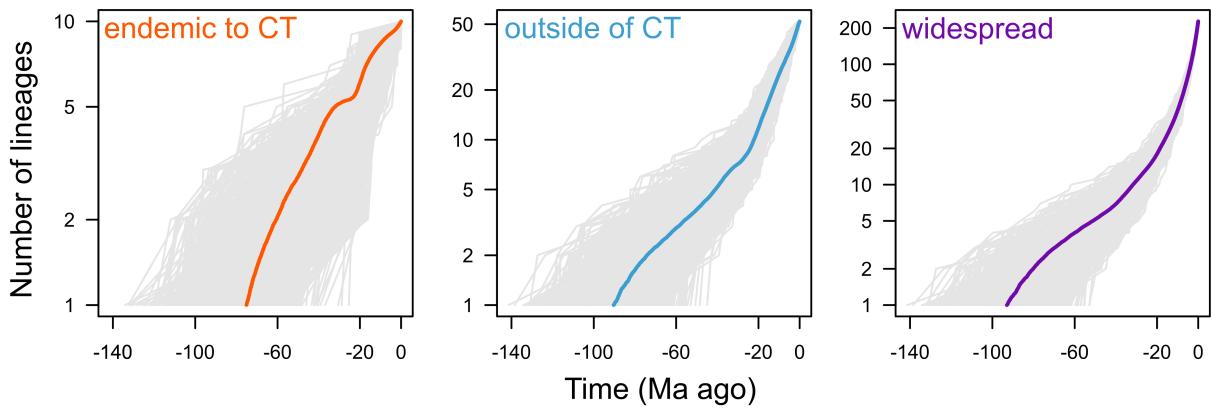


Figure S7: Averaged lineages-through-time plot of each region compared to 1000 sets of shuffled geographic states (gray).

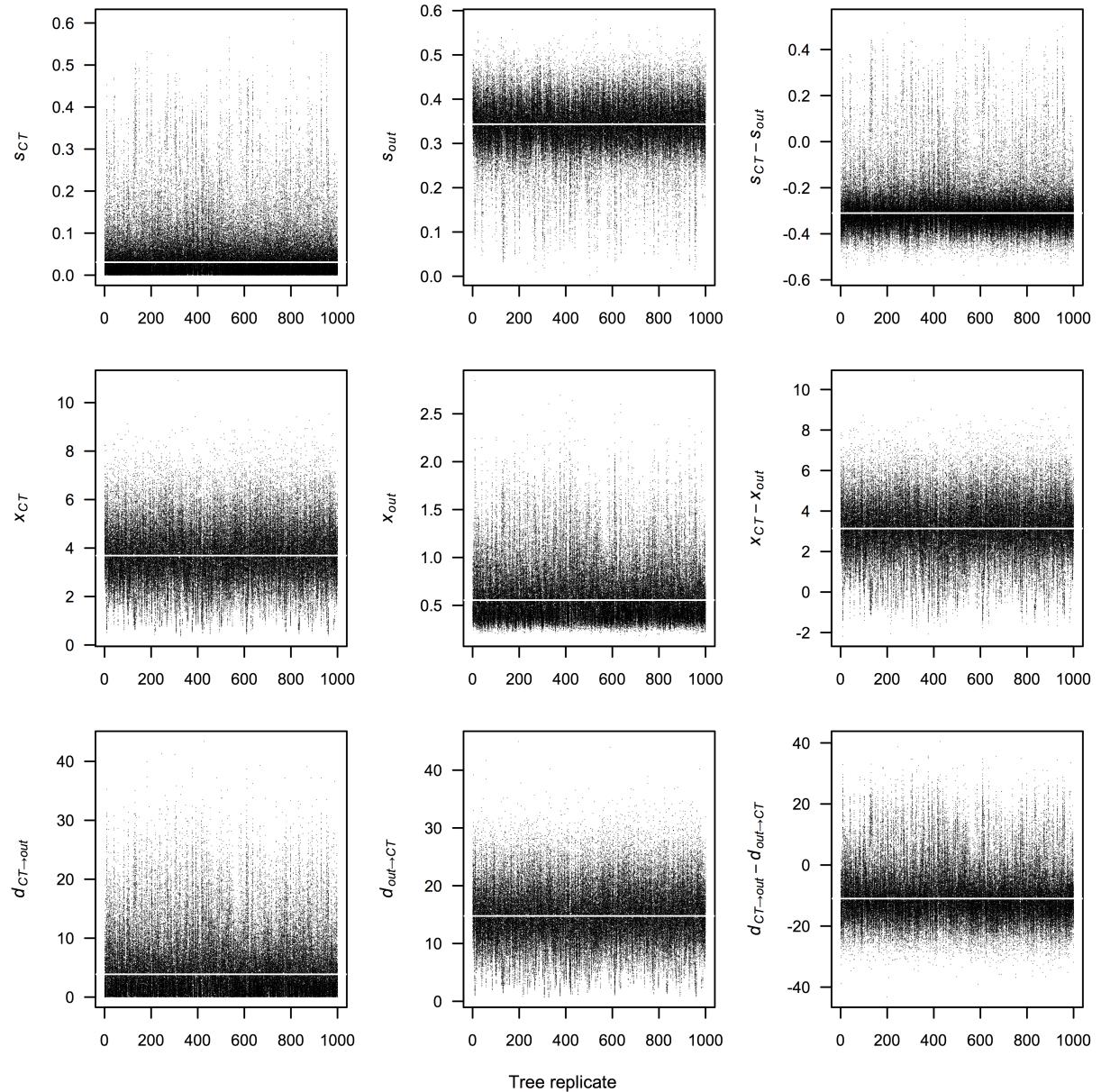


Figure S8: GeoSSE estimated parameters computed with MCMC for 1000 randomly resolved trees, showing variability among trees (1000 steps per tree) for analysis #1 (CT vs. out).

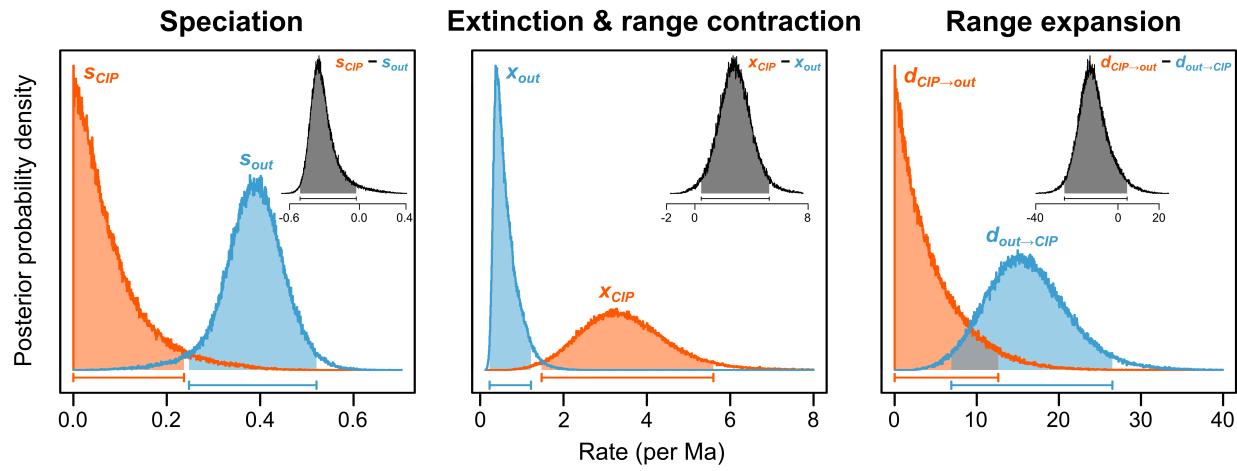


Figure S9: GeoSSE parameter estimates computed with MCMC for Acroporid trees in analysis #2 (CIP vs. out).

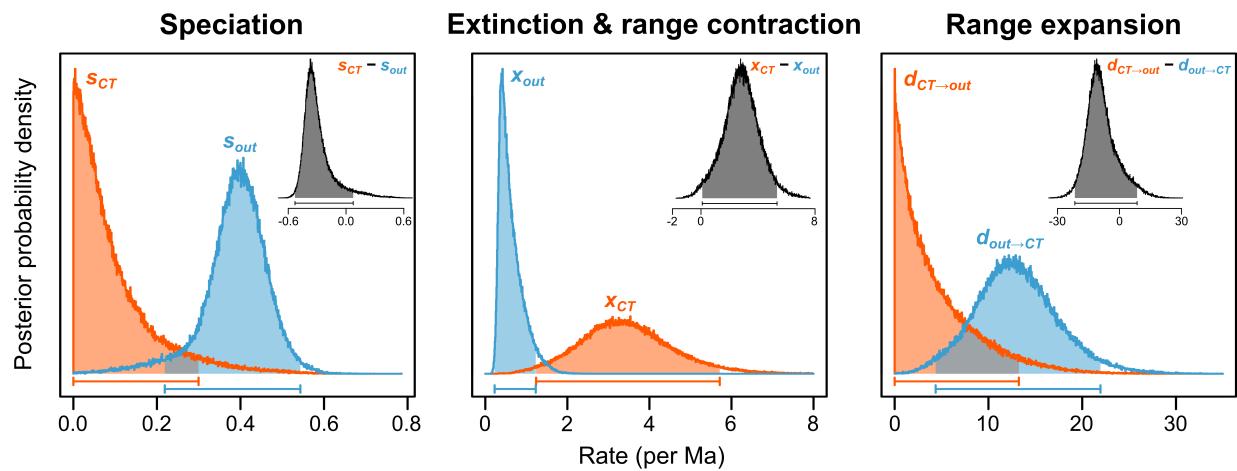


Figure S10: GeoSSE parameter estimates computed with MCMC for Acroporid trees based on the Coral Geographic in analysis #3.

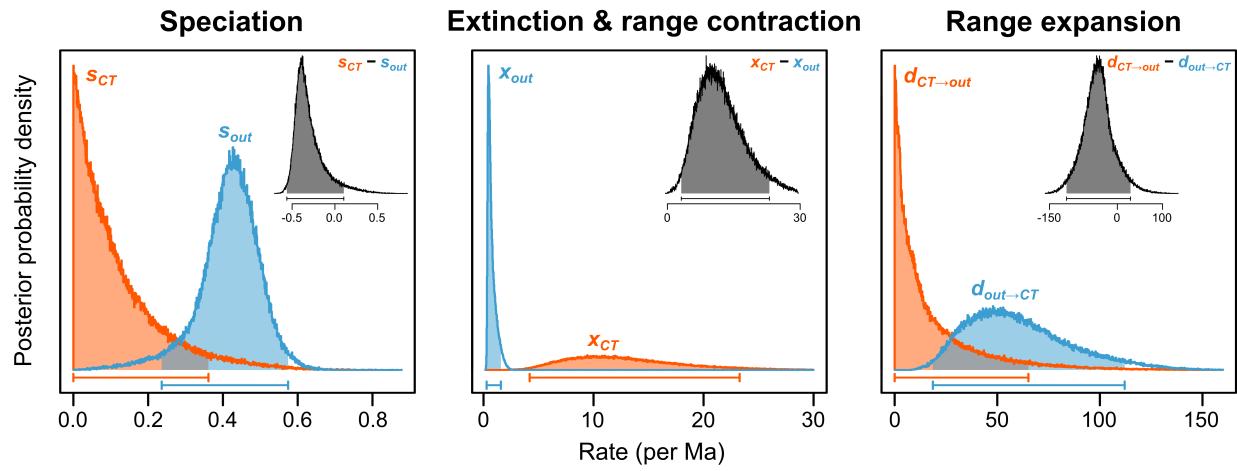


Figure S11: GeoSSE parameter estimates computed with MCMC for Acroporidæ trees based on a broad uniform prior (rates between 0 and 100/Ma) in analysis #4.

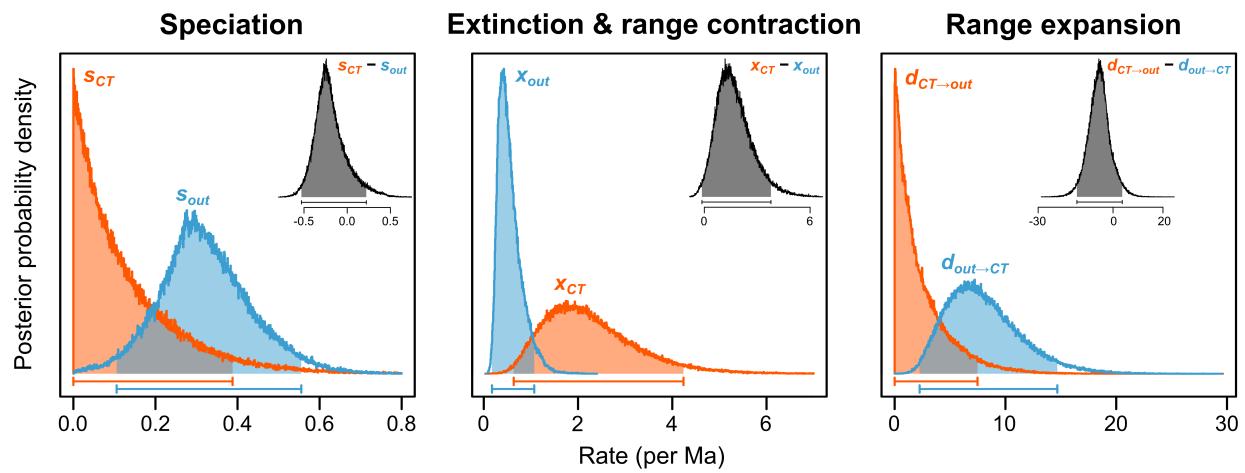


Figure S12: GeoSSE parameter estimates computed with MCMC for posterior trees based on Acroporidæ molecular data in analysis #5.

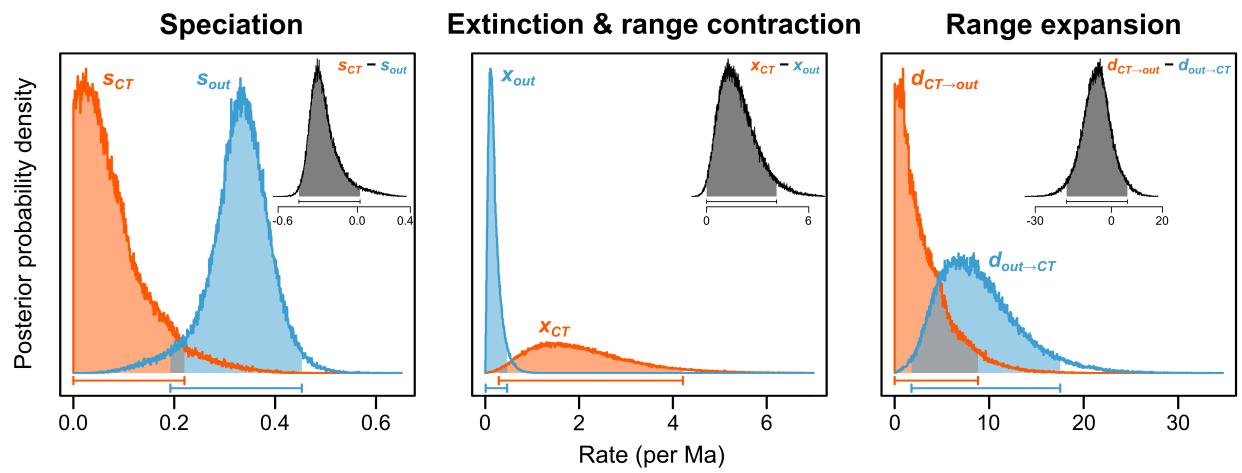


Figure S13: GeoSSE parameter estimates computed with MCMC for trees of the clade *Acropora + Isopora* in analysis #6.

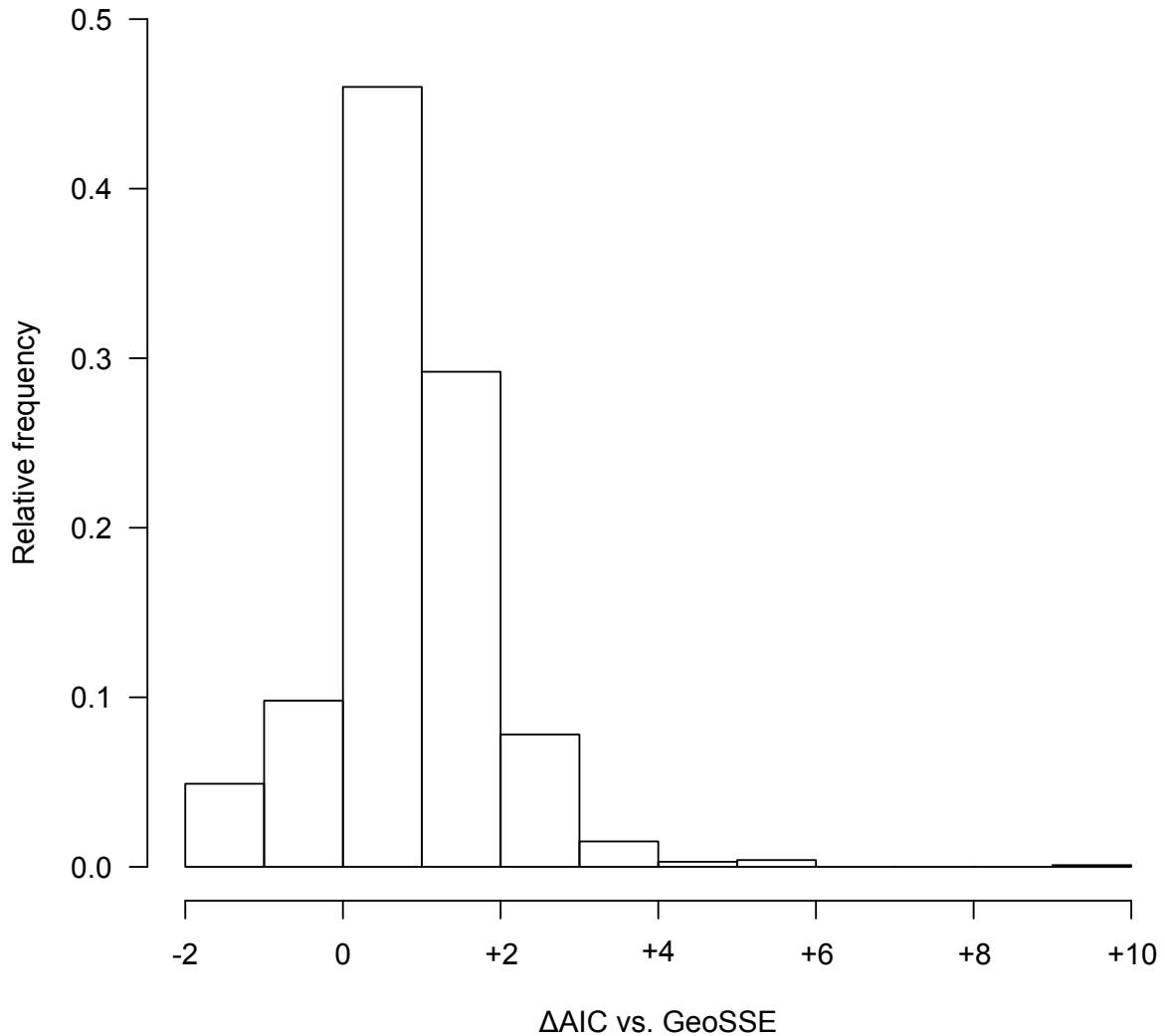


Figure S14:  $\Delta\text{AIC}$  of the character-independent model in which rates of speciation and extinction do not depend on geographic range, compared against the GeoSSE model (Fig. S2).

**Table S1.** List of 1547 species used to reconstruct the phylogeny of Scleractinia, detailing GenBank accession numbers—for 12S ribosomal RNA (12S), 16S ribosomal RNA (16S), ATP synthase F0 subunit 6 (AT6), cytochrome c oxidase subunit I (COI), control region (CTR), cytochrome b (CYB), NADH dehydrogenase subunit 5 (ND5), internal transcribed spacers 1 and 2 (ITS), and Pax-C (PAC)—as well as morphological data sources. Remarks list taxonomic and geographic data sources, other than Hughes et al. (2013) and the Coral Geographic (Veron et al. 2009, 2011).

Family	Species	Reef	Molecular	Morphology	Remarks
Acroporidae	<i>Acropora abrolhosensis</i>	Yes	ND5:EU533959	[S1]	A. horrida group [S1]; range information updated [S2]
Acroporidae	<i>Acropora abrotanoides</i>	Yes	CTR:FJ899068	[S1]	A. robusta group [S1]
Acroporidae	<i>Acropora aculeus</i>	Yes		[S1]	A. latistella group [S1]
Acroporidae	<i>Acropora acuminata</i>	Yes	ND5:EU533969	[S1]	A. muricata group [S1]
Acroporidae	<i>Acropora akajimensis</i>	Yes		[S1]	A. selago group, junior synonym of A. donei [S1]
Acroporidae	<i>Acropora anthocercis</i>	Yes	ND5:EU533970	[S1]	A. hyacinthus group [S1]
Acroporidae	<i>Acropora appressa</i>	Yes		[S1]	
Acroporidae	<i>Acropora arabensis</i>	Yes		[S1]	A. nasuta group, sister species to A. valida [S1]
Acroporidae	<i>Acropora aspera</i>	Yes	CTR:EU918267 CYB:FJ391987 ITS:AF538387 PAC:EU918786	[S1]	A. aspera group [S1]
Acroporidae	<i>Acropora austera</i>	Yes	CTR:EU918228 CYB:FJ391989 PAC:EU918779	[S1]	A. rudis group [S1]
Acroporidae	<i>Acropora awi</i>	Yes		[S1]	A. echinata group [S1]
Acroporidae	<i>Acropora batunai</i>	Yes	CTR:EU918250 ND5:EU533971 PAC:EU918871	[S1]	A. echinata group [S1]
Acroporidae	<i>Acropora bifurcata</i>	Yes		[S1]	A. hyacinthus group, junior synonym of A. hyacinthus [S1]
Acroporidae	<i>Acropora branchi</i>	Yes		[S1]	
Acroporidae	<i>Acropora bushyensis</i>	Yes	ND5:EU533975	[S1]	A. lovelli group [S1]
Acroporidae	<i>Acropora cardenae</i>	Yes		[S1]	A. elegans group [S1]
Acroporidae	<i>Acropora carduus</i>	Yes	ND5:EU533976	[S1]	A. echinata group [S1]
Acroporidae	<i>Acropora caroliniana</i>	Yes	CTR:EU918274 PAC:EU918845	[S1]	A. loripes group [S1]
Acroporidae	<i>Acropora cerealis</i>	Yes	CTR:EU918248 CYB:AF099652 ND5:EU533979 ITS:AF538595 PAC:EU918916	[S1]	A. nasuta group [S1]
Acroporidae	<i>Acropora cervicornis</i>	Yes	12S:EF597094 COI:AY451340 CTR:EU918257 CYB:AF099654 ND5:EU533960 ITS:AY676203 PAC:EU918781	[S1]	A. cervicornis group [S1]
Acroporidae	<i>Acropora chesterfieldensis</i>	Yes	CTR:EU918262 ND5:EU533981 PAC:EU918852	[S1]	A. loripes group [S1]
Acroporidae	<i>Acropora clathrata</i>	Yes		[S1]	A. divaricata group [S1]
Acroporidae	<i>Acropora convexa</i>	Yes		[S1]	A. aspera group, junior synonym of A. millepora [S1]
Acroporidae	<i>Acropora cophodactyla</i>	Yes		[S1]	A. humilis group, junior synonym of A. humilis [S1]
Acroporidae	<i>Acropora copiosa</i>	Yes		[S1]	A. muricata group, junior synonym of A. muricata [S1]
Acroporidae	<i>Acropora cytherea</i>	Yes	12S:AF333054 16S:L75995 CTR:AY083876 CYB:FJ391995 ITS:U82723 PAC:AF344361	[S1]	A. hyacinthus group [S1]
Acroporidae	<i>Acropora dendrum</i>	Yes	ND5:EU533983	[S1]	A. selago group, sister species to A. loisetteae [S1]
Acroporidae	<i>Acropora derawanensis</i>	Yes	CTR:EU918263 ND5:EU533984 PAC:EU918875	[S1]	A. horrida group [S1]
Acroporidae	<i>Acropora desalwii</i>	Yes		[S1]	A. loripes group [S1]

Family	Species	Reef	Molecular	Morphology	Remarks
Acroporidae	<i>Acropora digitifera</i>	Yes	12S:AF333051 AT6:AB033199 CTR:EU918261 CYB:AB033184 ITS:DQ251773 PAC:EU918791	[S1]	A. humilis group [S1]
Acroporidae	<i>Acropora divaricata</i>	Yes	CTR:AY026432 ND5:EU533985 PAC:AF344365	[S1]	A. divaricata group [S1]
Acroporidae	<i>Acropora donei</i>	Yes	AT6:AB033195 CYB:AB033180 PAC:AB458810	[S1]	A. selago group [S1]
Acroporidae	<i>Acropora downingi</i>	Yes		[S1]	A. robusta group, sister species to A. polystoma [S1]
Acroporidae	<i>Acropora echinata</i>	Yes	CYB:FJ391985 ND5:EU533986	[S1]	A. echinata group [S1]
Acroporidae	<i>Acropora efflorescens</i>	Yes		[S1]	A. hyacinthus group, junior synonym of A. cytherea [S1]
Acroporidae	<i>Acropora elegans</i>	Yes	ND5:EU533990	[S1]	A. elegans group [S1]
Acroporidae	<i>Acropora elegantula</i>	Yes		[S1]	A. latistella group [S3]
Acroporidae	<i>Acropora elseyi</i>	Yes	ND5:EU533991 PAC:AF344368	[S1]	A. echinata group [S1]
Acroporidae	<i>Acropora exquisita</i>	Yes		[S1]	Closest to A. pectinatus [S3]
Acroporidae	<i>Acropora fastigata</i>	Yes		[S1]	A. humilis group [S1]
Acroporidae	<i>Acropora fenneri</i>	Yes		[S1]	A. elegans group [S3]
Acroporidae	<i>Acropora filiformis</i>	Yes		[S1]	A. horrida group [S3]
Acroporidae	<i>Acropora florida</i>	Yes	AT6:AB033197 CTR:AY026435 CYB:AB033182 ND5:EU533993 ITS:AF538590 PAC:AF344370	[S1]	A. florida group [S1]
Acroporidae	<i>Acropora forskali</i>	Yes		[S1]	A. nasuta group [S3]
Acroporidae	<i>Acropora gemmifera</i>	Yes	AT6:AB033198 CTR:EU918277 CYB:AB033183 ITS:AF538574 PAC:AF344378	[S1]	A. humilis group [S1]
Acroporidae	<i>Acropora glauca</i>	Yes		[S1]	A. lovelli group [S1]; range information updated [S2]
Acroporidae	<i>Acropora globiceps</i>	Yes	CTR:EF206433	[S1]	A. humilis group, sister species to A. humilis [S1]
Acroporidae	<i>Acropora gomezi</i>	Yes		[S1]	
Acroporidae	<i>Acropora grandis</i>	Yes	ND5:EU533994 PAC:AF344381	[S1]	A. muricata group [S1]
Acroporidae	<i>Acropora granulosa</i>	Yes	ND5:EU533995 PAC:EU918828	[S1]	A. loripes group [S1]
Acroporidae	<i>Acropora haimei</i>	Yes		[S1]	A. selago group [S3]
Acroporidae	<i>Acropora halmaherae</i>	Yes		[S1]	A. horrida group [S1]; range information [S4]
Acroporidae	<i>Acropora hemprichii</i>	Yes	16S:AF550359	[S1]	A. rudis group, sister species to A. austera [S1]
Acroporidae	<i>Acropora hoeksemai</i>	Yes		[S1]	A. divaricata group [S1]
Acroporidae	<i>Acropora horrida</i>	Yes	ND5:EU533998 PAC:FJ899058	[S1]	A. horrida group [S1]
Acroporidae	<i>Acropora humilis</i>	Yes	16S:L75996 CTR:EU918282 CYB:EF363316 ITS:HM450603 PAC:HM450539	[S1]	A. humilis group [S1]
Acroporidae	<i>Acropora hyacinthus</i>	Yes	12S:AF333053 CTR:AY083877 CYB:FJ391988 ND5:EU534002 ITS:HM450635 PAC:HM450555	[S1]	A. hyacinthus group [S1]
Acroporidae	<i>Acropora indonesia</i>	Yes	ND5:EU534003	[S1]	A. hyacinthus group [S1]; range information updated [S2]
Acroporidae	<i>Acropora inermis</i>	Yes		[S1]	A. horrida group, junior synonym of A. horrida [S1]
Acroporidae	<i>Acropora insignis</i>	Yes		[S1]	A. selago group [S3]
Acroporidae	<i>Acropora intermedia</i>	Yes	CTR:AY026451 ND5:EU533965 PAC:AF209781	[S1]	A. robusta group, senior synonym of A. nobilis [S1]
Acroporidae	<i>Acropora irregularis</i>	Yes		[S1]	A. robusta group, junior synonym of A. abrotanoides [S1]

Family	Species	Reef	Molecular	Morphology	Remarks
Acroporidae	<i>Acropora jacquelineae</i>	Yes	CTR:EU918284 ND5:EU534012 PAC:EU918873	[S1]	A. loripes group [S1]
Acroporidae	<i>Acropora japonica</i>	Yes		[S1]	A. humilis group [S3]
Acroporidae	<i>Acropora khayranensis</i>	Yes		[S1]	A. muricata group [S5]; range information [S4]
Acroporidae	<i>Acropora kimbeensis</i>	Yes	CTR:EU918214 PAC:EU918911	[S1]	A. nasuta group [S1]
Acroporidae	<i>Acropora kirstyae</i>	Yes	CTR:EU918215 ND5:EU534015 PAC:EU918860	[S1]	A. horrida group [S1]
Acroporidae	<i>Acropora kosurini</i>	Yes		[S1]	A. divaricata group [S1]
Acroporidae	<i>Acropora lamarckii</i>	Yes		[S1]	A. hyacinthus group [S3]
Acroporidae	<i>Acropora latistella</i>	Yes	CTR:AY026443 CYB:AF099656 PAC:AF344384	[S1]	A. latistella group [S1]
Acroporidae	<i>Acropora lianae</i>	Yes		[S1]	A. loripes group [S1]
Acroporidae	<i>Acropora listeri</i>	Yes	ND5:EU533966 PAC:AF344385	[S1]	A. robusta group [S1]
Acroporidae	<i>Acropora loisetteae</i>	Yes	CTR:EU918222 PAC:EU918771	[S1]	A. selago group [S1]; range information updated [S2]
Acroporidae	<i>Acropora lokani</i>	Yes	CTR:EU918270 PAC:EU918838	[S1]	A. loripes group [S1]
Acroporidae	<i>Acropora longicyathus</i>	Yes	CTR:EU918220 ND5:EU534017 ITS:U82735 PAC:EU918813	[S1]	A. echinata group [S1]; range information updated [S6]
Acroporidae	<i>Acropora loripes</i>	Yes	CTR:EU918227 ND5:EU534020 PAC:EU918890	[S1]	A. loripes group [S1]
Acroporidae	<i>Acropora lovelli</i>	Yes		[S1]	A. lovelli group [S1]; range information updated [S2]
Acroporidae	<i>Acropora lutkeni</i>	Yes	ND5:EU534023	[S1]	A. nasuta group [S1]
Acroporidae	<i>Acropora macrostoma</i>	Yes		[S1]	A. selago group, junior synonym of A. tenuis [S1]
Acroporidae	<i>Acropora maryae</i>	Yes		[S1]	A. loripes group [S3]
Acroporidae	<i>Acropora massawensis</i>	Yes		[S1]	A. robusta group, junior synonym of A. polystoma [S1]
Acroporidae	<i>Acropora microclados</i>	Yes	ND5:EU534024	[S1]	A. hyacinthus group [S1]
Acroporidae	<i>Acropora microphtalma</i>	Yes	CTR:EU918203 CYB:FJ391986 ND5:EU534026 PAC:EU918879	[S1]	A. horrida group [S1]
Acroporidae	<i>Acropora millepora</i>	Yes	CTR:EU918207 CYB:AF099653 ND5:EU534029 ITS:AF540616 PAC:EU918802	[S1]	A. aspera group [S1]; range information updated [S2]
Acroporidae	<i>Acropora minuta</i>	Yes		[S1]	A. robusta group [S3]
Acroporidae	<i>Acropora mirabilis</i>	Yes		[S1]	A. florida group [S1]
Acroporidae	<i>Acropora monticulosa</i>	Yes	CTR:EF206487	[S1]	A. humilis group [S1]
Acroporidae	<i>Acropora multiacuta</i>	Yes	CTR:EF206546	[S1]	A. humilis group [S1]
Acroporidae	<i>Acropora muricata</i>	Yes	12S:AF177042 CYB:AF099651 ITS:AY722743 PAC:HM450571	[S1]	A. muricata group, senior synonym of A. formosa, type species of Acropora [S1]
Acroporidae	<i>Acropora nana</i>	Yes	ND5:EU534031	[S1]	A. latistella group, senior synonym of A. nana [S1]; range information updated [S2]
Acroporidae	<i>Acropora nasuta</i>	Yes	AT6:AB033200 CTR:EU918229 CYB:AB033185 ND5:EU534032 ITS:AB361200 PAC:EU918920	[S1]	A. nasuta group [S1]
Acroporidae	<i>Acropora natalensis</i>	Yes		[S1]	A. divaricata group, junior synonym of A. solitaryensis [S1]
Acroporidae	<i>Acropora navini</i>	Yes		[S1]	A. echinata group [S3]
Acroporidae	<i>Acropora ocellata</i>	Yes		[S1]	A. nasuta group, senior synonym of A. lutkeni [S1]
Acroporidae	<i>Acropora orbicularis</i>	Yes		[S1]	A. divaricata group, junior synonym of A. clathrata [S1]
Acroporidae	<i>Acropora pagoensis</i>	Yes		[S1]	A. selago group [S1]; range information [S4]

Family	Species	Reef	Molecular	Morphology	Remarks
Acroporidae	<i>Acropora palmata</i>	Yes	12S:EF597092 COI:AB441246 CTR:AF507217 CYB:AB441331 ND5:EU533962 ITS:AY676258 PAC:EU918782	[S1]	A. cervicornis group [S1]
Acroporidae	<i>Acropora palmerae</i>	Yes		[S1]	A. robusta group [S1]; range information updated [S2]
Acroporidae	<i>Acropora paniculata</i>	Yes		[S1]	A. hyacinthus group [S1]
Acroporidae	<i>Acropora papillare</i>	Yes	CTR:EU918211 ITS:AF354812 PAC:EU918796	[S1]	A. aspera group [S1]
Acroporidae	<i>Acropora paragemmifera</i>	Yes		[S1]	A. humilis group [S5]; range information [S4]
Acroporidae	<i>Acropora parahemprichii</i>	Yes		[S1]	A. rудis group [S3]
Acroporidae	<i>Acropora parapharaonis</i>	Yes		[S1]	A. muricata group [S3]
Acroporidae	<i>Acropora parilis</i>	Yes		[S1]	A. horrida group, junior synonym of A. horrida [S1]
Acroporidae	<i>Acropora pectinatus</i>	Yes		[S1]	Closest to A. exquisita [S3]
Acroporidae	<i>Acropora pharaonis</i>	Yes		[S1]	A. muricata group [S1]
Acroporidae	<i>Acropora pichoni</i>	Yes	CTR:EU918206 ND5:EU534033 PAC:EU918816	[S1]	A. elegans group, sister species to A. elegans [S1]
Acroporidae	<i>Acropora pinguis</i>	Yes		[S1]	A. robusta group, junior synonym of A. robusta [S1]
Acroporidae	<i>Acropora plana</i>	Yes		[S1]	A. selago group, junior synonym of A. tenuis [S1]
Acroporidae	<i>Acropora plantaginea</i>	Yes		[S1]	A. humilis group [S1]
Acroporidae	<i>Acropora plumosa</i>	Yes		[S1]	A. plumosa group [S1]
Acroporidae	<i>Acropora polystoma</i>	Yes	ND5:EU533964	[S1]	A. robusta group [S1]
Acroporidae	<i>Acropora prostrata</i>	Yes		[S1]	A. aspera group, junior synonym of A. millepora [S1]
Acroporidae	<i>Acropora proximalis</i>	Yes		[S1]	A. horrida group [S3]
Acroporidae	<i>Acropora pruinosa</i>	Yes		[S1]	A. nasuta group [S3]
Acroporidae	<i>Acropora pulchra</i>	Yes	CTR:EU918230 ND5:EU533967 ITS:AF540600 PAC:EU918789	[S1]	A. aspera group [S1]
Acroporidae	<i>Acropora rambleri</i>	Yes		[S1]	A. loripes group, junior synonym of A. speciosa [S1]
Acroporidae	<i>Acropora retusa</i>	Yes	CTR:EF206535	[S1]	A. humilis group [S1]
Acroporidae	<i>Acropora ridzwanii</i>	Yes		[S1]	A. plumosa group [S7]; range information [S4]
Acroporidae	<i>Acropora robusta</i>	Yes	CTR:FJ899064 PAC:FJ899050	[S1]	A. robusta group [S1]
Acroporidae	<i>Acropora rongelapensis</i>	Yes	CTR:EU918210 PAC:EU918827	[S1]	A. loripes group [S8]
Acroporidae	<i>Acropora rosaria</i>	Yes		[S1]	A. loripes group [S1]
Acroporidae	<i>Acropora roseni</i>	Yes		[S1]	A. aspera group [S1]
Acroporidae	<i>Acropora rудis</i>	Yes		[S1]	A. rудis group [S1]
Acroporidae	<i>Acropora rufus</i>	Yes		[S1]	A. horrida group [S3]
Acroporidae	<i>Acropora russelli</i>	Yes		[S1]	A. elegans group [S1]
Acroporidae	<i>Acropora samoensis</i>	Yes	CTR:AY364095 CYB:FJ391994	[S1]	A. humilis group [S1]
Acroporidae	<i>Acropora sarmentosa</i>	Yes	CTR:AY026455 ND5:EU534034 PAC:AF344415	[S1]	A. florida group [S1]
Acroporidae	<i>Acropora scherzeriana</i>	Yes		[S1]	A. humilis group, junior synonym of A. gemmifera [S1]
Acroporidae	<i>Acropora schmitti</i>	Yes		[S1]	A. humilis group, junior synonym of A. digitifera [S1]
Acroporidae	<i>Acropora secale</i>	Yes		[S1]	A. nasuta group [S1]
Acroporidae	<i>Acropora sekiseiensis</i>	Yes		[S1]	A. horrida group, junior synonym of A. horrida [S1]
Acroporidae	<i>Acropora selago</i>	Yes	CTR:AB361179 ND5:EU534035 ITS:AB361225 PAC:AY083874	[S1]	A. selago group [S1]
Acroporidae	<i>Acropora seriata</i>	Yes		[S1]	A. nasuta group [S3]
Acroporidae	<i>Acropora simplex</i>	Yes		[S1]	A. loripes group [S1]
Acroporidae	<i>Acropora sirikitiae</i>	Yes		[S1]	A. divaricata group [S2]; range information [S2]
Acroporidae	<i>Acropora solitaryensis</i>	Yes	ND5:EU534039	[S1]	A. divaricata group [S1]

Family	Species	Reef	Molecular	Morphology	Remarks
Acroporidae	<i>Acropora spathulata</i>	Yes	CTR:EU918209 ND5:EU534040 ITS:AF228260 PAC:EU918811	[S1]	A. aspera group [S1]; range information [S4]
Acroporidae	<i>Acropora speciosa</i>	Yes	CTR:EU918245 PAC:EU918833	[S1]	A. loripes group [S1]
Acroporidae	<i>Acropora spicifera</i>	Yes	CTR:AY083881 ND5:EU534041 ITS:AF538557 PAC:AY083868	[S1]	A. aspera group [S1]; range information updated [S2]
Acroporidae	<i>Acropora squarrosa</i>	Yes		[S1]	A. loripes group, sister species to A. loripes [S1]
Acroporidae	<i>Acropora stoddarti</i>	Yes		[S1]	A. divaricata group, junior synonym of A. divaricata [S1]
Acroporidae	<i>Acropora striata</i>	Yes		[S1]	A. selago group [S1]
Acroporidae	<i>Acropora subglabra</i>	Yes	ND5:EU534042	[S1]	A. echinata group [S1]
Acroporidae	<i>Acropora subulata</i>	Yes		[S1]	A. latistella group [S1]; range information updated [S2]
Acroporidae	<i>Acropora suharsonoi</i>	Yes		[S1]	A. loripes group [S1]
Acroporidae	<i>Acropora sukarnoi</i>	Yes		[S1]	A. robusta group [S1]; range information updated [S2]
Acroporidae	<i>Acropora tanegashimensis</i>	Yes		[S1]	A. hyacinthus group, sister species to A. hyacinthus [S1]
Acroporidae	<i>Acropora tenella</i>	Yes	CTR:EU918240 PAC:EU918820	[S1]	A. elegans group [S1]
Acroporidae	<i>Acropora tenuis</i>	Yes	12S:AF338425 16S:AF338425 AT6:AF338425 COI:AF338425 CTR:AF338425 CYB:AF338425 ND5:AF338425 ITS:AF538482 PAC:AY083897	[S1]	A. selago group [S1]
Acroporidae	<i>Acropora teres</i>	Yes		[S1]	A. muricata group [S3]
Acroporidae	<i>Acropora tizardi</i>	Yes		[S1]	A. nasuta group, junior synonym of A. cerealis [S1]
Acroporidae	<i>Acropora torihalimeda</i>	Yes		[S1]	A. elegans group [S1]
Acroporidae	<i>Acropora torresiana</i>	Yes		[S1]	A. humilis group [S3]
Acroporidae	<i>Acropora tortuosa</i>	Yes	CTR:EU918238 PAC:EU918880	[S1]	A. horrida group [S1]
Acroporidae	<i>Acropora tumida</i>	Yes		[S1]	A. nasuta group, junior synonym of A. valida [S1]
Acroporidae	<i>Acropora turaki</i>	Yes		[S1]	A. echinata group [S1]; range information updated [S2]
Acroporidae	<i>Acropora tutuilensis</i>	Yes		[S1]	A. robusta group, junior synonym of A. abrotanoides [S1]
Acroporidae	<i>Acropora valenciennesi</i>	Yes		[S1]	A. muricata group [S1]; range information updated [S6]
Acroporidae	<i>Acropora valida</i>	Yes	CTR:EU918235 CYB:AF099658 ND5:EU534047 ITS:HM450655 PAC:HM450591	[S1]	A. nasuta group [S1]
Acroporidae	<i>Acropora variabilis</i>	Yes		[S1]	A. nasuta group, junior synonym of A. valida [S1]
Acroporidae	<i>Acropora variolosa</i>	Yes		[S1]	A. rudis group, sister species to A. rudis [S1]
Acroporidae	<i>Acropora vaughani</i>	Yes	CTR:EU918224 PAC:EU918897	[S1]	A. horrida group [S1]
Acroporidae	<i>Acropora vermiculata</i>	Yes		[S1]	A. florida group, junior synonym of A. sarmentosa [S1]
Acroporidae	<i>Acropora verweyi</i>	Yes		[S1]	A. verweyi group [S1]; range information updated [S2]
Acroporidae	<i>Acropora walindii</i>	Yes	CTR:EU918234 PAC:EU918867	[S1]	A. elegans group, sister species to A. tenella [S1]
Acroporidae	<i>Acropora wallaceae</i>	Yes		[S1]	A. humilis group, junior synonym of A. samoensis [S1]
Acroporidae	<i>Acropora willisae</i>	Yes		[S1]	A. loripes group [S1]
Acroporidae	<i>Acropora yongei</i>	Yes	ND5:EU534048	[S1]	A. selago group [S1]
Acroporidae	<i>Alveopora allingi</i>	Yes			Alveopora monophly assumed
Acroporidae	<i>Alveopora catalai</i>	Yes			Alveopora monophly assumed; closest to A. allingi & A. gigas [S3]
Acroporidae	<i>Alveopora daedalea</i>	Yes	12S:EF597088 16S:AF265592 COI:AB441245 CYB:AB441330 ITS:AY722746		Alveopora sp. in GenBank; type species of Alveopora

Family	Species	Reef	Molecular	Morphology	Remarks
Acroporidae	<i>Alveopora excelsa</i>	Yes			Alveopora monophyly assumed
Acroporidae	<i>Alveopora fenestrata</i>	Yes			Alveopora monophyly assumed; closest to <i>A. marionensis</i> & <i>A. verrilliana</i> [S3]
Acroporidae	<i>Alveopora gigas</i>	Yes			Alveopora monophyly assumed; closest to <i>A. allingi</i> & <i>A. catalai</i> [S3]
Acroporidae	<i>Alveopora japonica</i>	Yes			Alveopora monophyly assumed; closest to <i>A. tizardi</i> [S3]
Acroporidae	<i>Alveopora marionensis</i>	Yes			Alveopora monophyly assumed; closest to <i>A. fenestrata</i> & <i>A. verrilliana</i> [S3]
Acroporidae	<i>Alveopora minuta</i>	Yes			Alveopora monophyly assumed; closest to <i>A. viridis</i> [S9]
Acroporidae	<i>Alveopora ocellata</i>	Yes			Alveopora monophyly assumed
Acroporidae	<i>Alveopora spongiosa</i>	Yes			Alveopora monophyly assumed; closest to <i>A. daedaea</i> [S3]
Acroporidae	<i>Alveopora tizardi</i>	Yes			Alveopora monophyly assumed
Acroporidae	<i>Alveopora verrilliana</i>	Yes			Alveopora monophyly assumed
Acroporidae	<i>Alveopora viridis</i>	Yes			Alveopora monophyly assumed
Acroporidae	<i>Anacropora forbesi</i>	Yes	COI:AB441251 CYB:AB441336	[S1]	
Acroporidae	<i>Anacropora matthai</i>	Yes	12S:AY903295 16S:AY903295 AT6:AY903295 COI:AY903295 CTR:AY903295 CYB:AY903295 ND5:AY903295	[S1]	
Acroporidae	<i>Anacropora pillai</i>	Yes		[S1]	
Acroporidae	<i>Anacropora puertogalerae</i>	Yes		[S1]	
Acroporidae	<i>Anacropora reticulata</i>	Yes		[S1]	
Acroporidae	<i>Anacropora spinosa</i>	Yes		[S1]	
Acroporidae	<i>Anacropora spumosa</i>	Yes		[S1]	
Acroporidae	<i>Astreopora acroporina</i>	Yes		[S1]	Range information [S10]
Acroporidae	<i>Astreopora cenderawasih</i>	Yes		[S1]	Range information [S10]
Acroporidae	<i>Astreopora cucullata</i>	Yes		[S1]	Closest to <i>A. scabra</i> [S3]
Acroporidae	<i>Astreopora eliptica</i>	Yes		[S1]	Range information [S4]
Acroporidae	<i>Astreopora expansa</i>	Yes	ITS:AB780780	[S1]	Closest to <i>A. myriophthalma</i> [S3]
Acroporidae	<i>Astreopora gracilis</i>	Yes	ITS:AB780838	[S1]	Closest to <i>A. myriophthalma</i> [S3]
Acroporidae	<i>Astreopora incrustans</i>	Yes	ITS:AB780794	[S1]	Closest to <i>A. moretonensis</i> [S3]
Acroporidae	<i>Astreopora listeri</i>	Yes	ITS:AY722742	[S1]	Closest to <i>A. randalli</i> & <i>A. myriophthalma</i> [S3]
Acroporidae	<i>Astreopora macrostoma</i>	Yes		[S1]	Closest to <i>A. ocellata</i> [S3]
Acroporidae	<i>Astreopora montiporina</i>	Yes		[S1]	Range information [S10]
Acroporidae	<i>Astreopora moretonensis</i>	Yes		[S1]	Closest to <i>A. incrustans</i> [S3]
Acroporidae	<i>Astreopora myriophthalma</i>	Yes	12S:AF177046 AT6:AB033186 COI:AB441253 CYB:AB441338 ITS:AB780803	[S1]	
Acroporidae	<i>Astreopora ocellata</i>	Yes		[S1]	Closest to <i>A. macrostoma</i> [S3]
Acroporidae	<i>Astreopora randalli</i>	Yes		[S1]	Closest to <i>A. listeri</i> [S3]
Acroporidae	<i>Astreopora scabra</i>	Yes		[S1]	Closest to <i>A. cucullata</i> [S3]
Acroporidae	<i>Astreopora suggesta</i>	Yes		[S1]	Closest to <i>A. gracilis</i> [S3]
Acroporidae	<i>Enigmopora darveliensis</i>	Yes			Closest to <i>Acropora</i> prior to elevation of <i>Isopora</i> [S7]; range information [S4]
Acroporidae	<i>Isopora brueggemanni</i>	Yes	12S:AF333048 AT6:AB033193 COI:AB441247 CYB:AB441332 ND5:EU534004 ITS:DQ251738	[S1]	Range information updated [S2]
Acroporidae	<i>Isopora crateriformis</i>	Yes		[S1]	
Acroporidae	<i>Isopora cuneata</i>	Yes	12S:AF333049 CTR:AY026429 ND5:EU534006 ITS:AY722738 PAC:EU918925	[S1]	
Acroporidae	<i>Isopora cylindrica</i>	Yes		[S1]	
Acroporidae	<i>Isopora elizabethensis</i>	Yes		[S1]	
Acroporidae	<i>Isopora meridiana</i>	Yes		[S1]	Junior synonym of <i>Acropora brueggemanni</i> [S1]

Family	Species	Reef	Molecular	Morphology	Remarks
Acroporidae	<i>Isopora palifera</i>	Yes	12S:AF177044 16S:AF265593 AT6:AB033194 COI:AB441248 CYB:AB441333 ND5:EU534010 ITS:DQ251736	[S1]	
Acroporidae	<i>Isopora togianensis</i>	Yes	12S:AF33050 COI:AB441249 CYB:AB441334 ND5:EU534008 ITS:DQ251734	[S1]	Morphological coding updated [S11]
Acroporidae	<i>Montipora aequituberculata</i>	Yes	12S:AF33045 AT6:AB033187 CTR:AY313548 CYB:AB033172 ITS:AY722772 PAC:AY313465	[S1]	
Acroporidae	<i>Montipora altasepta</i>	Yes	AT6:AB033190 CTR:AY313572 CYB:AB033175 PAC:AY313461	[S1]	
Acroporidae	<i>Montipora angulata</i>	Yes	CTR:AY313563 ITS:AY722773 PAC:AY313462	[S1]	
Acroporidae	<i>Montipora aspergillus</i>	Yes		[S1]	
Acroporidae	<i>Montipora australiensis</i>	Yes		[S1]	
Acroporidae	<i>Montipora cactus</i>	Yes	12S:AY903296 16S:AY903296 AT6:AY903296 COI:AY903296 CTR:AY903296 CYB:AY903296 ND5:AY903296 PAC:AY313472	[S1]	
Acroporidae	<i>Montipora calcarea</i>	Yes		[S1]	
Acroporidae	<i>Montipora caliculata</i>	Yes		[S1]	
Acroporidae	<i>Montipora capitata</i>	Yes	16S:HQ246709 AT6:HQ246686 COI:HQ246613 CTR:HQ246520 CYB:HQ246516 ITS:HQ246481 PAC:AY313478	[S1]	
Acroporidae	<i>Montipora capricornis</i>	Yes	CTR:AY313583 PAC:AY313480	[S1]	
Acroporidae	<i>Montipora cebuensis</i>	Yes		[S1]	
Acroporidae	<i>Montipora circumvallata</i>	Yes	16S:AF550368	[S1]	
Acroporidae	<i>Montipora cocosensis</i>	Yes		[S1]	
Acroporidae	<i>Montipora confusa</i>	Yes	CTR:AY313551 PAC:AY313482	[S1]	
Acroporidae	<i>Montipora corbettensis</i>	Yes		[S1]	
Acroporidae	<i>Montipora crassituberculata</i>	Yes		[S1]	
Acroporidae	<i>Montipora cryptus</i>	Yes		[S1]	
Acroporidae	<i>Montipora danae</i>	Yes	CTR:AY313549 PAC:AY313493	[S1]	
Acroporidae	<i>Montipora delicatula</i>	Yes	CTR:AY313566 PAC:AY313499	[S1]	
Acroporidae	<i>Montipora digitata</i>	Yes	12S:AF177045 16S:L75993 AT6:AB033188 CTR:AY313579 CYB:AB033173 PAC:AY313501	[S1]	
Acroporidae	<i>Montipora dilatata</i>	Yes	16S:HQ246702 AT6:HQ246678 COI:HQ246605 CTR:HQ246554 CYB:HQ246508 ITS:HQ246477	[S1]	
Acroporidae	<i>Montipora echinata</i>	Yes		[S1]	
Acroporidae	<i>Montipora efflorescens</i>	Yes	AT6:AB033189 CYB:AB033174	[S1]	
Acroporidae	<i>Montipora effusa</i>	Yes		[S1]	

Family	Species	Reef	Molecular	Morphology	Remarks
Acroporidae	<i>Montipora flabellata</i>	Yes	16S:HQ246698 AT6:HQ246674 COI:HQ246601 CTR:HQ246561 CYB:HQ246504 ITS:HQ246475	[S1]	
Acroporidae	<i>Montipora florida</i>	Yes	CTR:AY313562 PAC:AY313504	[S1]	
Acroporidae	<i>Montipora floweri</i>	Yes		[S1]	
Acroporidae	<i>Montipora foliosa</i>	Yes	CYB:FJ392003	[S1]	
Acroporidae	<i>Montipora foveolata</i>	Yes		[S1]	
Acroporidae	<i>Montipora friabilis</i>	Yes		[S1]	
Acroporidae	<i>Montipora gaimardi</i>	Yes	CTR:AY313565 PAC:AY313507	[S1]	
Acroporidae	<i>Montipora grisea</i>	Yes		[S1]	
Acroporidae	<i>Montipora hemispherica</i>	Yes		[S1]	
Acroporidae	<i>Montipora hirsuta</i>	Yes		[S1]	
Acroporidae	<i>Montipora hispida</i>	Yes	CTR:AY313553 CYB:FJ392005 PAC:AY313510	[S1]	
Acroporidae	<i>Montipora hodgsoni</i>	Yes		[S1]	
Acroporidae	<i>Montipora hoffmeisteri</i>	Yes	CTR:AY313580 PAC:AY313546	[S1]	
Acroporidae	<i>Montipora incrassata</i>	Yes	16S:HQ246710 AT6:HQ246687 COI:HQ246614 CTR:HQ246593 CYB:HQ246517 ITS:HQ246494	[S1]	Montipora cf. incrassata in GenBank
Acroporidae	<i>Montipora informis</i>	Yes		[S1]	
Acroporidae	<i>Montipora kellyi</i>	Yes		[S1]	
Acroporidae	<i>Montipora lobulata</i>	Yes		[S1]	
Acroporidae	<i>Montipora mactanensis</i>	Yes		[S1]	
Acroporidae	<i>Montipora malampaya</i>	Yes		[S1]	
Acroporidae	<i>Montipora meandrina</i>	Yes		[S1]	
Acroporidae	<i>Montipora millepora</i>	Yes		[S1]	
Acroporidae	<i>Montipora mollis</i>	Yes	CTR:AY313552 ITS:AY722776 PAC:AY313525	[S1]	
Acroporidae	<i>Montipora monasteriata</i>	Yes		[S1]	
Acroporidae	<i>Montipora niugini</i>	Yes		[S1]	
Acroporidae	<i>Montipora nodosa</i>	Yes		[S1]	
Acroporidae	<i>Montipora orientalis</i>	Yes		[S1]	
Acroporidae	<i>Montipora pachytuberculata</i>	Yes		[S1]	
Acroporidae	<i>Montipora palawanensis</i>	Yes		[S1]	
Acroporidae	<i>Montipora patula</i>	Yes	16S:HQ246691 AT6:HQ246667 COI:HQ246595 CTR:HQ246573 CYB:HQ246497 ITS:HQ246469	[S1]	
Acroporidae	<i>Montipora peltiformis</i>	Yes	CTR:AY313550 ITS:AY722777 PAC:AY313527	[S1]	
Acroporidae	<i>Montipora porites</i>	Yes		[S1]	
Acroporidae	<i>Montipora samarensis</i>	Yes		[S1]	
Acroporidae	<i>Montipora saudii</i>	Yes		[S1]	
Acroporidae	<i>Montipora setosa</i>	Yes		[S1]	
Acroporidae	<i>Montipora spongiosa</i>	Yes		[S1]	
Acroporidae	<i>Montipora spongodes</i>	Yes	CTR:AY313547 PAC:AY313533	[S1]	
Acroporidae	<i>Montipora spumosa</i>	Yes		[S1]	
Acroporidae	<i>Montipora stellata</i>	Yes	CTR:AY313587 PAC:AY313534	[S1]	
Acroporidae	<i>Montipora stilosa</i>	Yes		[S1]	
Acroporidae	<i>Montipora taiwanensis</i>	Yes	ITS:AY722778	[S1]	
Acroporidae	<i>Montipora tuberculosa</i>	Yes	ITS:AY722779	[S1]	

Family	Species	Reef	Molecular	Morphology	Remarks
Acroporidae	<i>Montipora turgescens</i>	Yes	16S:HQ246704 AT6:HQ246681 COI:HQ246608 CTR:HQ246564 CYB:HQ246511	[S1]	Montipora cf. <i>turgescens</i> in GenBank
Acroporidae	<i>Montipora turtlensis</i>	Yes	CTR:AY313574 PAC:AY313537	[S1]	
Acroporidae	<i>Montipora undata</i>	Yes	CTR:AY313569 PAC:AY313540	[S1]	
Acroporidae	<i>Montipora vaughani</i>	Yes		[S1]	Range information [S4]
Acroporidae	<i>Montipora venosa</i>	Yes	ITS:AY722780	[S1]	
Acroporidae	<i>Montipora verrilli</i>	Yes	16S:HQ246695 AT6:HQ246671 COI:HQ246598 CTR:HQ246582 CYB:HQ246501 ITS:HQ246457	[S1]	
Acroporidae	<i>Montipora verrucosa</i>	Yes	12S:EF597090 CTR:AY313584 PAC:AY313542	[S1]	
Acroporidae	<i>Montipora verriculosus</i>	Yes		[S1]	
Acroporidae	<i>Montipora vietnamensis</i>	Yes		[S1]	
Agariciidae	<i>Agaricia agaricites</i>	Yes	12S:EF597079 COI:AY451366	[S12]	
Agariciidae	<i>Agaricia fragilis</i>	Yes	12S:EF597077	[S12]	
Agariciidae	<i>Agaricia grahamae</i>	Yes	12S:EF597078		
Agariciidae	<i>Agaricia humilis</i>	Yes	12S:DQ643831 16S:DQ643831 AT6:DQ643831 COI:DQ643831 CYB:DQ643831 ND5:DQ643831		
Agariciidae	<i>Agaricia lamarckii</i>	Yes	12S:EF597076 COI:AY451369		
Agariciidae	<i>Agaricia tenuifolia</i>	Yes	12S:EF597081 COI:AY451370		
Agariciidae	<i>Agaricia undata</i>	Yes	12S:EF597075		
Agariciidae	<i>Coeloseris mayeri</i>	Yes			Closest to Pavona [S13]
Agariciidae	<i>Dactylotrochus cervicornis</i>	No	16S:HQ439697 COI:HM018624		
Agariciidae	<i>Gardineroseris planulata</i>	Yes	12S:EF597084 COI:AB441218 CYB:AB441303		
Agariciidae	<i>Helioseris cucullata</i>	Yes	COI:AB441220 CYB:AB441305	[S12]	
Agariciidae	<i>Leptoseris amitioriensis</i>	Yes			Leptoseris monophyly assumed; closest to L. papyracea [S14]
Agariciidae	<i>Leptoseris cailleti</i>	Yes			Leptoseris monophyly assumed; closest to L. papyracea [S3]
Agariciidae	<i>Leptoseris explanata</i>	Yes			Leptoseris monophyly assumed
Agariciidae	<i>Leptoseris foliosa</i>	Yes			Leptoseris monophyly assumed; closest to L. mycetoseroides [S13]
Agariciidae	<i>Leptoseris gardineri</i>	Yes			Leptoseris monophyly assumed; closest to L. papyracea [S13]
Agariciidae	<i>Leptoseris hawaiiensis</i>	Yes			Leptoseris monophyly assumed; closest to L. scabra [S13]
Agariciidae	<i>Leptoseris incrustans</i>	Yes	16S:L76012		
Agariciidae	<i>Leptoseris mycetoseroides</i>	Yes			Leptoseris monophyly assumed
Agariciidae	<i>Leptoseris papyracea</i>	Yes			Leptoseris monophyly assumed
Agariciidae	<i>Leptoseris scabra</i>	Yes			Leptoseris monophyly assumed
Agariciidae	<i>Leptoseris solida</i>	Yes			Leptoseris monophyly assumed; closest to L. scabra [S3]
Agariciidae	<i>Leptoseris striata</i>	Yes			Leptoseris monophyly assumed; closest to L. scabra [S9]
Agariciidae	<i>Leptoseris tubulifera</i>	Yes			Leptoseris monophyly assumed
Agariciidae	<i>Leptoseris yabei</i>	Yes			Leptoseris monophyly assumed; closest to L. mycetoseroides [S13]
Agariciidae	<i>Pavona bipartita</i>	Yes		[S15]	
Agariciidae	<i>Pavona cactus</i>	Yes	16S:AF550370 COI:AB441217 CYB:AB441302	[S15]	
Agariciidae	<i>Pavona chiriquiensis</i>	Yes		[S15]	

Family	Species	Reef	Molecular	Morphology	Remarks
Agariciidae	<i>Pavona clavus</i>	Yes	12S:DQ643836 16S:DQ643836 AT6:DQ643836 COI:DQ643836 CYB:DQ643836 ND5:DQ643836	[S15]	
Agariciidae	<i>Pavona danai</i>	Yes		[S15]	
Agariciidae	<i>Pavona decussata</i>	Yes		[S15]	
Agariciidae	<i>Pavona diffluens</i>	Yes		[S15]	
Agariciidae	<i>Pavona duerdeni</i>	Yes		[S15]	
Agariciidae	<i>Pavona explanulata</i>	Yes		[S15]	
Agariciidae	<i>Pavona frondifera</i>	Yes	12S:AF333055	[S15]	
Agariciidae	<i>Pavona gigantea</i>	Yes		[S15]	
Agariciidae	<i>Pavona maldivensis</i>	Yes		[S15]	
Agariciidae	<i>Pavona minuta</i>	Yes		[S15]	
Agariciidae	<i>Pavona varians</i>	Yes	12S:EF597083 16S:L76016	[S15]	
Agariciidae	<i>Pavona venosa</i>	Yes		[S15]	
Agariciidae	<i>Pavona xarifae</i>	Yes		[S15]	Range information [S4]
Anthemiphyllidae	<i>Anthemiphyllia dentata</i>	No	16S:HQ439686 COI:HM018603		
Anthemiphyllidae	<i>Anthemiphyllia frustum</i>	No			Closest to <i>A. pacifica</i> [S16]
Anthemiphyllidae	<i>Anthemiphyllia macrolobata</i>	No			Closest to <i>A. dentata</i> [S17]
Anthemiphyllidae	<i>Anthemiphyllia multidentata</i>	No			Closest to <i>A. dentata</i> [S17]
Anthemiphyllidae	<i>Anthemiphyllia pacifica</i>	No			Closest to <i>A. dentata</i> [S17]
Anthemiphyllidae	<i>Anthemiphyllia patera</i>	No	COI:HM018604		
Anthemiphyllidae	<i>Anthemiphyllia spinifera</i>	No	16S:AF265596	[S15]	
Astrocoeniidae	<i>Stephanocoenia intersepta</i>	Yes	12S:EF597072 COI:AB441228 CYB:AB441313	[S12]	Senior synonym of <i>S. michelinii</i>
Caryophylliidae	<i>Anomocora carinata</i>	No			Main Caryophylliidae clade
Caryophylliidae	<i>Anomocora fecunda</i>	No			Main Caryophylliidae clade
Caryophylliidae	<i>Anomocora gigas</i>	No			Main Caryophylliidae clade
Caryophylliidae	<i>Anomocora marchadi</i>	No			Main Caryophylliidae clade
Caryophylliidae	<i>Anomocora prolifera</i>	No			Main Caryophylliidae clade
Caryophylliidae	<i>Aulocyathus atlanticus</i>	No			Aulocyathus monophyly assumed; closest to Ceratotrochus [S18] & Conotrochus [S19]
Caryophylliidae	<i>Aulocyathus juvenescens</i>	No			Aulocyathus monophyly assumed; closest to Ceratotrochus [S18] & Conotrochus [S19]
Caryophylliidae	<i>Aulocyathus matricidus</i>	No			Aulocyathus monophyly assumed; closest to Ceratotrochus [S18] & Conotrochus [S19]
Caryophylliidae	<i>Aulocyathus recidivus</i>	No			Aulocyathus monophyly assumed; closest to Ceratotrochus [S18] & Conotrochus [S19]
Caryophylliidae	<i>Bathygyathus chilensis</i>	No			Main Caryophylliidae clade
Caryophylliidae	<i>Bourneotrochus stellulatus</i>	No			Closest to Trochocystathus [S20]
Caryophylliidae	<i>Caryophyllia abrupta</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia abyssorum</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia alaskensis</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia alberti</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia ambrosia</i>	No	16S:AF550362	[S12,S15]	
Caryophylliidae	<i>Caryophyllia antarctica</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia antillarum</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia arnoldi</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia aspera</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia atlantica</i>	No	16S:FJ788113 COI:HM018613	[S15]	
Caryophylliidae	<i>Caryophyllia balanacea</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia barbadensis</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia berteriana</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia calveri</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia cincticulatus</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia concreta</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia cornulum</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia corona</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia corrugata</i>	No		[S15]	

Family	Species	Reef	Molecular	Morphology	Remarks
Caryophylliidae	<i>Caryophyllia crosnieri</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia crypta</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia cyathus</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia decamera</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia dentata</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia diomedae</i>	No	16S:FJ788115 COI:HM018614	[S15]	
Caryophylliidae	<i>Caryophyllia eltaninae</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia ephyala</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia foresti</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia grandis</i>	No	16S:FJ788117	[S15]	
Caryophylliidae	<i>Caryophyllia grayi</i>	No	16S:FJ788119 COI:HM018615	[S15]	
Caryophylliidae	<i>Caryophyllia hawaiiensis</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia horologium</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia huinayensis</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia inornata</i>	No	12S:EF597042 16S:AF265599	[S15]	
Caryophylliidae	<i>Caryophyllia japonica</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia jogashimaensis</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia karubarica</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia laevigata</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia lamellifera</i>	No	16S:FJ788120 COI:HM018616	[S15]	
Caryophylliidae	<i>Caryophyllia mabahithi</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia marmorea</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia oblonga</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia octonaria</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia octopali</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia paradoxus</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia paucipalata</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia perculta</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia planilamellata</i>	No	16S:FJ788121	[S15]	
Caryophylliidae	<i>Caryophyllia polygona</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia profunda</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia protei</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia quadragenaria</i>	No	16S:HQ439687	[S15]	
Caryophylliidae	<i>Caryophyllia quangdongensis</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia ralpiae</i>	No	16S:HQ439688 COI:HM018617	[S15]	
Caryophylliidae	<i>Caryophyllia rugosa</i>	No	16S:FJ788123 COI:HM018618	[S15]	
Caryophylliidae	<i>Caryophyllia sarsiae</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia scobinosa</i>	No	16S:FJ788124	[S15]	
Caryophylliidae	<i>Caryophyllia secta</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia seguenziae</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia sewelli</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia smithii</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia solida</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia spinicarens</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia spinigera</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia squiresi</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia stellula</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia tangaroae</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia transversalis</i>	No	16S:FJ788125	[S15]	
Caryophylliidae	<i>Caryophyllia unicristata</i>	No	16S:FJ788127	[S15]	
Caryophylliidae	<i>Caryophyllia valdiviae</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia versicolorata</i>	No	16S:HQ439689	[S15]	
Caryophylliidae	<i>Caryophyllia zanzibarensis</i>	No		[S15]	
Caryophylliidae	<i>Caryophyllia zopyros</i>	No		[S15]	
Caryophylliidae	<i>Ceratotrochus franciscana</i>	No			Ceratotrochus monophyly assumed
Caryophylliidae	<i>Ceratotrochus laxus</i>	No			Ceratotrochus monophyly assumed

Family	Species	Reef	Molecular	Morphology	Remarks
Caryophylliidae	<i>Ceratotrochus magnaghi</i>	No	16S:AF265597		
Caryophylliidae	<i>Coenocyathus anthophyllites</i>	No			Coenocyathus monophyly assumed; main Caryophylliidae clade
Caryophylliidae	<i>Coenocyathus bowersi</i>	No			Coenocyathus monophyly assumed; main Caryophylliidae clade
Caryophylliidae	<i>Coenocyathus brooksi</i>	No			Coenocyathus monophyly assumed; main Caryophylliidae clade
Caryophylliidae	<i>Coenocyathus caribbeana</i>	No			Coenocyathus monophyly assumed; main Caryophylliidae clade
Caryophylliidae	<i>Coenocyathus cylindricus</i>	No			Coenocyathus monophyly assumed; main Caryophylliidae clade
Caryophylliidae	<i>Coenocyathus goreau</i>	No			Coenocyathus monophyly assumed; main Caryophylliidae clade
Caryophylliidae	<i>Coenocyathus humanni</i>	No			Coenocyathus monophyly assumed; main Caryophylliidae clade
Caryophylliidae	<i>Coenocyathus parvulus</i>	No			Coenocyathus monophyly assumed; main Caryophylliidae clade
Caryophylliidae	<i>Coenosmilia arbuscula</i>	No			Main Caryophylliidae clade
Caryophylliidae	<i>Coenosmilia inordinata</i>	No			Main Caryophylliidae clade
Caryophylliidae	<i>Colangia immersa</i>	No			Colangia monophyly assumed; closest to Rhizosmilia Atlantic clade [S21]
Caryophylliidae	<i>Colangia jamaicaensis</i>	No			Colangia monophyly assumed; closest to Rhizosmilia Atlantic clade [S21]
Caryophylliidae	<i>Colangia moseleyi</i>	No			Colangia monophyly assumed; closest to Rhizosmilia Atlantic clade [S21]
Caryophylliidae	<i>Colangia multipalifera</i>	No			Colangia monophyly assumed; closest to Rhizosmilia Atlantic clade [S21]
Caryophylliidae	<i>Concentrotheca laevigata</i>	No			Concentrotheca monophyly assumed; main Caryophylliidae clade [S22]
Caryophylliidae	<i>Concentrotheca vaughani</i>	No			Concentrotheca monophyly assumed; main Caryophylliidae clade [S22]
Caryophylliidae	<i>Conflophyllia juncta</i>	No			Closest to Goniocorella [S20]
Caryophylliidae	<i>Conotrochus asymmetros</i>	No			Conotrochus monophyly assumed
Caryophylliidae	<i>Conotrochus brunneus</i>	No			Conotrochus monophyly assumed
Caryophylliidae	<i>Conotrochus funicolumna</i>	No	16S:HQ439695 COI:HM018621		
Caryophylliidae	<i>Crispatotrochus cornu</i>	No		[S15]	
Caryophylliidae	<i>Crispatotrochus curvatus</i>	No		[S15]	
Caryophylliidae	<i>Crispatotrochus foxi</i>	No		[S15]	
Caryophylliidae	<i>Crispatotrochus galapagensis</i>	No		[S15]	
Caryophylliidae	<i>Crispatotrochus gregarius</i>	No		[S15]	
Caryophylliidae	<i>Crispatotrochus inornatus</i>	No		[S15]	
Caryophylliidae	<i>Crispatotrochus irregularis</i>	No		[S15]	
Caryophylliidae	<i>Crispatotrochus niinoi</i>	No		[S15]	
Caryophylliidae	<i>Crispatotrochus rubescens</i>	No		[S15]	
Caryophylliidae	<i>Crispatotrochus rugosus</i>	No	12S:EF597041 16S:AF265600	[S15]	
Caryophylliidae	<i>Crispatotrochus septumdentatus</i>	No		[S15]	
Caryophylliidae	<i>Crispatotrochus squiresi</i>	No		[S15]	
Caryophylliidae	<i>Crispatotrochus woodsi</i>	No		[S15]	
Caryophylliidae	<i>Dasmosmilia lymani</i>	No	16S:FJ788130 COI:HM018625	[S12]	Dasmosmilia cf. lymani in GenBank
Caryophylliidae	<i>Dasmosmilia valida</i>	No			Dasmosmilia monophyly assumed
Caryophylliidae	<i>Dasmosmilia variegata</i>	No		[S12]	Dasmosmilia monophyly assumed
Caryophylliidae	<i>Desmophyllum dianthus</i>	No	12S:GQ868667 16S:GQ868690		
Caryophylliidae	<i>Desmophyllum quinarium</i>	No			Desmophyllum monophyly assumed
Caryophylliidae	<i>Desmophyllum striatum</i>	No			Desmophyllum monophyly assumed
Caryophylliidae	<i>Ericiocyathus echinatus</i>	No			Closest to Stephanocyathus [S20]
Caryophylliidae	<i>Goniocorella dumosa</i>	No			Main Caryophylliidae clade [S23]
Caryophylliidae	<i>Heterocyathus aequicostatus</i>	Yes			Heterocyathus monophyly assumed
Caryophylliidae	<i>Heterocyathus alternatus</i>	Yes			Heterocyathus monophyly assumed; range information [S4]
Caryophylliidae	<i>Heterocyathus antoniae</i>	No			Heterocyathus monophyly assumed
Caryophylliidae	<i>Heterocyathus hemisphaericus</i>	No			Heterocyathus monophyly assumed
Caryophylliidae	<i>Heterocyathus japonicus</i>	No			Heterocyathus monophyly assumed
Caryophylliidae	<i>Heterocyathus sulcatus</i>	Yes	COI [S24]		Range information [S4]
Caryophylliidae	<i>Hoplangia durotrix</i>	No	12S:EF597064		

Family	Species	Reef	Molecular	Morphology	Remarks
Caryophylliidae	<i>Labyrinthocyathus delicatus</i>		No		Labyrinthocyathus monophyly assumed; closest to Crispatotrochus [S22]
Caryophylliidae	<i>Labyrinthocyathus facetus</i>		No		Labyrinthocyathus monophyly assumed; closest to Crispatotrochus [S22]
Caryophylliidae	<i>Labyrinthocyathus langae</i>		No		Labyrinthocyathus monophyly assumed; closest to Crispatotrochus [S22]
Caryophylliidae	<i>Labyrinthocyathus limatulus</i>		No		Labyrinthocyathus monophyly assumed; closest to Crispatotrochus [S22]
Caryophylliidae	<i>Labyrinthocyathus quaylei</i>		No		Labyrinthocyathus monophyly assumed; closest to Crispatotrochus [S22]
Caryophylliidae	<i>Lochmaeotrochus gardineri</i>		No		Lochmaeotrochus monophyly assumed; closest to Conotrochus [S17]
Caryophylliidae	<i>Lochmaeotrochus ocaleus</i>		No		Lochmaeotrochus monophyly assumed; closest to Conotrochus [S17]
Caryophylliidae	<i>Lophelia pertusa</i>	No	12S:FR821799 16S:FR821799 AT6:FR821799 COI:FR821799 CYB:FR821799		
Caryophylliidae	<i>Monohedotrochus capitolii</i>	No			Monohedotrochus monophyly assumed; closest to Tethocyathus & Oxysmilia [S25]
Caryophylliidae	<i>Monohedotrochus circularis</i>	No			Monohedotrochus monophyly assumed; closest to Tethocyathus & Oxysmilia [S25]
Caryophylliidae	<i>Monohedotrochus epithecatus</i>	No			Monohedotrochus monophyly assumed; closest to Tethocyathus & Oxysmilia [S25]
Caryophylliidae	<i>Nomlandia californica</i>	No			Main Caryophylliidae clade
Caryophylliidae	<i>Oxysmilia corrugata</i>	No			Oxysmilia monophyly assumed
Caryophylliidae	<i>Oxysmilia rotundifolia</i>	No			Oxysmilia monophyly assumed
Caryophylliidae	<i>Paraconotrochus antarctica</i>	No			Paraconotrochus monophyly assumed; closest to Conotrochus [S19]
Caryophylliidae	<i>Paraconotrochus capense</i>	No			Paraconotrochus monophyly assumed; closest to Conotrochus [S19]
Caryophylliidae	<i>Paraconotrochus zeidleri</i>	No			Paraconotrochus monophyly assumed; closest to Conotrochus [S19]
Caryophylliidae	<i>Paracyathus andersoni</i>	No	[S15]		
Caryophylliidae	<i>Paracyathus arcuatus</i>	No	[S15]		
Caryophylliidae	<i>Paracyathus cavatus</i>	No	[S15]		
Caryophylliidae	<i>Paracyathus conceptus</i>	No	[S15]		
Caryophylliidae	<i>Paracyathus coronatus</i>	No	[S15]		
Caryophylliidae	<i>Paracyathus darwinensis</i>	No	[S15]		
Caryophylliidae	<i>Paracyathus ebonensis</i>	No	[S15]		
Caryophylliidae	<i>Paracyathus fulvus</i>	No	[S15]		
Caryophylliidae	<i>Paracyathus humilis</i>	No	[S15]		
Caryophylliidae	<i>Paracyathus indicus</i>	No	[S15]		
Caryophylliidae	<i>Paracyathus lifuensis</i>	No	[S15]		
Caryophylliidae	<i>Paracyathus molokensis</i>	No	[S15]		
Caryophylliidae	<i>Paracyathus montereyensis</i>	No	[S15]		
Caryophylliidae	<i>Paracyathus parvulus</i>	No	[S15]		
Caryophylliidae	<i>Paracyathus persicus</i>	No	[S15]		
Caryophylliidae	<i>Paracyathus porcellanus</i>	No	[S15]		
Caryophylliidae	<i>Paracyathus profundus</i>	No	[S15]		
Caryophylliidae	<i>Paracyathus pruinosis</i>	No	[S15]		
Caryophylliidae	<i>Paracyathus pulchellus</i>	No	12S:EF597027 16S:AF265603	[S15]	
Caryophylliidae	<i>Paracyathus rotundatus</i>	No		[S15]	
Caryophylliidae	<i>Paracyathus stearnsii</i>	No		[S15]	
Caryophylliidae	<i>Paracyathus stokesii</i>	No		[S15]	
Caryophylliidae	<i>Paracyathus vittatus</i>	No		[S15]	
Caryophylliidae	<i>Phacelocyathus flos</i>	No			Closest to Rhizosmilia Atlantic clade [S22]
Caryophylliidae	<i>Phyllangia americana</i>	No	12S:EF597022 16S:AF265605	[S12,S15]	Phyllangia Atlantic clade
Caryophylliidae	<i>Phyllangia consagensis</i>	No			Phyllangia Pacific clade
Caryophylliidae	<i>Phyllangia dispersa</i>	No			Phyllangia Pacific clade
Caryophylliidae	<i>Phyllangia echinosepes</i>	No			Phyllangia Pacific clade
Caryophylliidae	<i>Phyllangia granulata</i>	No		[S15]	Phyllangia Atlantic clade
Caryophylliidae	<i>Phyllangia hayamaensis</i>	No			Phyllangia Pacific clade
Caryophylliidae	<i>Phyllangia papuensis</i>	No	16S:HQ439773 COI:HM018660		Phyllangia Pacific clade

Family	Species	Reef	Molecular	Morphology	Remarks
Caryophylliidae	<i>Phyllangia pequegnatae</i>	No	[S15]		Phyllangia Atlantic clade [S21]
Caryophylliidae	<i>Polycyathus andamanensis</i>	No	[S15]		
Caryophylliidae	<i>Polycyathus atlanticus</i>	No	[S15]		
Caryophylliidae	<i>Polycyathus difficilis</i>	No	[S15]		
Caryophylliidae	<i>Polycyathus fulvus</i>	No	[S15]		
Caryophylliidae	<i>Polycyathus furanaensis</i>	No	[S15]		
Caryophylliidae	<i>Polycyathus fuscomarginatus</i>	No	[S15]		
Caryophylliidae	<i>Polycyathus hodgsoni</i>	No	[S15]		
Caryophylliidae	<i>Polycyathus hondaensis</i>	No	[S15]		
Caryophylliidae	<i>Polycyathus isabela</i>	No	[S15]		
Caryophylliidae	<i>Polycyathus marigondoni</i>	No	[S15]		
Caryophylliidae	<i>Polycyathus mayae</i>	No	[S15]		
Caryophylliidae	<i>Polycyathus muellerae</i>	No	12S:EF597026 16S:AF265606	[S15]	
Caryophylliidae	<i>Polycyathus norfolkensis</i>	No	[S15]		
Caryophylliidae	<i>Polycyathus octuplus</i>	No	[S15]		
Caryophylliidae	<i>Polycyathus palifera</i>	No	[S15]		
Caryophylliidae	<i>Polycyathus persicus</i>	No	[S15]		
Caryophylliidae	<i>Polycyathus senegalensis</i>	No	[S15]		
Caryophylliidae	<i>Polycyathus verrilli</i>	No	[S15]		
Caryophylliidae	<i>Pourtalosmilia anthophyllites</i>	No			Main Caryophylliidae clade
Caryophylliidae	<i>Pourtalosmilia conferta</i>	No			Main Caryophylliidae clade
Caryophylliidae	<i>Premocyathus cornuformis</i>	No		[S12]	Revised from Caryophyllia cornuformis
Caryophylliidae	<i>Premocyathus dentiformis</i>	No			Premocyathus monophly assumed
Caryophylliidae	<i>Rhizosmilia elata</i>	No			Rhizosmilia Pacific clade [S20]
Caryophylliidae	<i>Rhizosmilia gerdae</i>	No			Rhizosmilia Atlantic clade [S26]
Caryophylliidae	<i>Rhizosmilia maculata</i>	No	12S:EF597023 16S:AF265602	[S12]	Rhizosmilia Atlantic clade
Caryophylliidae	<i>Rhizosmilia multipaliferus</i>	No			Rhizosmilia Pacific clade; closest to R. sagamiensis [S27]
Caryophylliidae	<i>Rhizosmilia robusta</i>	No	16S:HQ439698 COI:HM018664		Main Caryophylliidae clade [S28]
Caryophylliidae	<i>Rhizosmilia sagamiensis</i>	No	16S:HQ439699		Rhizosmilia Pacific clade
Caryophylliidae	<i>Solenosmilia variabilis</i>	No	16S:HM015348		
Caryophylliidae	<i>Stephanocyathus campaniformis</i>	No			Stephanocyathus monophly assumed
Caryophylliidae	<i>Stephanocyathus coronatus</i>	No	16S:HQ439700		
Caryophylliidae	<i>Stephanocyathus crassus</i>	No			Stephanocyathus monophly assumed
Caryophylliidae	<i>Stephanocyathus diadema</i>	No			Stephanocyathus monophly assumed
Caryophylliidae	<i>Stephanocyathus explanans</i>	No			Stephanocyathus monophly assumed
Caryophylliidae	<i>Stephanocyathus imperialis</i>	No			Stephanocyathus monophly assumed
Caryophylliidae	<i>Stephanocyathus isabellae</i>	No			Stephanocyathus monophly assumed
Caryophylliidae	<i>Stephanocyathus laevifundus</i>	No			Stephanocyathus monophly assumed
Caryophylliidae	<i>Stephanocyathus moseleyanus</i>	No			Stephanocyathus monophly assumed
Caryophylliidae	<i>Stephanocyathus nobilis</i>	No			Stephanocyathus monophly assumed
Caryophylliidae	<i>Stephanocyathus paliferus</i>	No			Stephanocyathus monophly assumed
Caryophylliidae	<i>Stephanocyathus platypus</i>	No	16S:HM015352		
Caryophylliidae	<i>Stephanocyathus regius</i>	No			Stephanocyathus monophly assumed
Caryophylliidae	<i>Stephanocyathus spiniger</i>	No	16S:HM015359 COI:HM018665		
Caryophylliidae	<i>Stephanocyathus weberianus</i>	No	16S:AF265594		
Caryophylliidae	<i>Sympodangia albatrossi</i>	No			Closest to Madrepore [S20]
Caryophylliidae	<i>Tethocyathus cylindraceus</i>	No			Tethocyathus monophly assumed
Caryophylliidae	<i>Tethocyathus endesa</i>	No			Tethocyathus monophly assumed
Caryophylliidae	<i>Tethocyathus minor</i>	No			Tethocyathus monophly assumed
Caryophylliidae	<i>Tethocyathus prahli</i>	No			Tethocyathus monophly assumed
Caryophylliidae	<i>Tethocyathus recurvatus</i>	No			Tethocyathus monophly assumed
Caryophylliidae	<i>Tethocyathus variabilis</i>	No			Tethocyathus monophly assumed
Caryophylliidae	<i>Tethocyathus virgatus</i>	No	16S:FJ788131		
Caryophylliidae	<i>Thalamophyllia gasti</i>	No	12S:EF597086 16S:AF265590	[S15]	
Caryophylliidae	<i>Thalamophyllia gombergi</i>	No		[S15]	
Caryophylliidae	<i>Thalamophyllia riisei</i>	No	12S:EF597087	[S15]	

Family	Species	Reef	Molecular	Morphology	Remarks
Caryophylliidae	<i>Thalamophyllia tenuescens</i>	No		[S15]	
Caryophylliidae	<i>Trochocyathus aithoseptatus</i>	No			Trochocyathus monophyly assumed
Caryophylliidae	<i>Trochocyathus apertus</i>	No			Trochocyathus monophyly assumed
Caryophylliidae	<i>Trochocyathus brevispina</i>	No			Trochocyathus monophyly assumed; Trochocyathus (Aplocyathus)
Caryophylliidae	<i>Trochocyathus burchae</i>	No			Trochocyathus monophyly assumed
Caryophylliidae	<i>Trochocyathus caryophylloides</i>	No			Trochocyathus monophyly assumed
Caryophylliidae	<i>Trochocyathus cepulla</i>	No			Trochocyathus monophyly assumed
Caryophylliidae	<i>Trochocyathus cooperi</i>	No			Trochocyathus monophyly assumed
Caryophylliidae	<i>Trochocyathus decamera</i>	No			Trochocyathus monophyly assumed
Caryophylliidae	<i>Trochocyathus discus</i>	No			Trochocyathus monophyly assumed
Caryophylliidae	<i>Trochocyathus efateensis</i>	No	16S:FJ788132 COI:HM018667		Trochocyathus monophyly assumed
Caryophylliidae	<i>Trochocyathus fasciatus</i>	No			Trochocyathus monophyly assumed
Caryophylliidae	<i>Trochocyathus fossulus</i>	No			Trochocyathus monophyly assumed
Caryophylliidae	<i>Trochocyathus gardineri</i>	No			Trochocyathus monophyly assumed
Caryophylliidae	<i>Trochocyathus gordoni</i>	No			Trochocyathus monophyly assumed
Caryophylliidae	<i>Trochocyathus hastatus</i>	No			Trochocyathus monophyly assumed; Trochocyathus (Aplocyathus)
Caryophylliidae	<i>Trochocyathus japonicus</i>	No			Trochocyathus monophyly assumed
Caryophylliidae	<i>Trochocyathus laboreli</i>	No			Trochocyathus monophyly assumed
Caryophylliidae	<i>Trochocyathus longispina</i>	No			Trochocyathus monophyly assumed; Trochocyathus (Aplocyathus)
Caryophylliidae	<i>Trochocyathus maculatus</i>	No			Trochocyathus monophyly assumed
Caryophylliidae	<i>Trochocyathus mauiensis</i>	No			Trochocyathus monophyly assumed
Caryophylliidae	<i>Trochocyathus oahensis</i>	No			Trochocyathus monophyly assumed
Caryophylliidae	<i>Trochocyathus patelliformis</i>	No			Trochocyathus monophyly assumed
Caryophylliidae	<i>Trochocyathus philippinensis</i>	No			Trochocyathus monophyly assumed
Caryophylliidae	<i>Trochocyathus porphyreus</i>	No			Trochocyathus monophyly assumed
Caryophylliidae	<i>Trochocyathus rawsonii</i>	No			Trochocyathus monophyly assumed
Caryophylliidae	<i>Trochocyathus rhombocolumna</i>	No	16S:HQ439704 COI:HM018668		Turbinoliidae clade [S28]
Caryophylliidae	<i>Trochocyathus semperi</i>	No			Trochocyathus monophyly assumed
Caryophylliidae	<i>Trochocyathus spinosocostatus</i>	No			Trochocyathus monophyly assumed
Caryophylliidae	<i>Trochocyathus vasiformis</i>	No			Trochocyathus monophyly assumed
Caryophylliidae	<i>Trochocyathus wellsi</i>	No			Trochocyathus monophyly assumed
Caryophylliidae	<i>Vaughanella concinna</i>	No	16S:HQ439705	[S15]	
Caryophylliidae	<i>Vaughanella margaritata</i>	No		[S15]	
Caryophylliidae	<i>Vaughanella multipalifera</i>	No		[S15]	
Caryophylliidae	<i>Vaughanella oreophila</i>	No		[S15]	
Coscinaraeidae	<i>Anomastraea irregularis</i>	Yes	COI:AM494870	[S29]	
Coscinaraeidae	<i>Coscinaraea columna</i>	Yes	COI:AB441210 CYB:AB441295	[S29]	
Coscinaraeidae	<i>Coscinaraea crassa</i>	Yes		[S29]	
Coscinaraeidae	<i>Coscinaraea exesa</i>	Yes		[S29]	
Coscinaraeidae	<i>Coscinaraea hahazimaensis</i>	Yes		[S29]	Range information [S4]
Coscinaraeidae	<i>Coscinaraea marshae</i>	Yes		[S29]	
Coscinaraeidae	<i>Coscinaraea mcneilli</i>	Yes		[S29]	
Coscinaraeidae	<i>Coscinaraea monile</i>	Yes		[S29]	
Coscinaraeidae	<i>Craterastrea levis</i>	Yes			Closest to Coscinaraea [S30]; range information [S4]
Coscinaraeidae	<i>Horastrea indica</i>	Yes	COI:AM494864	[S29]	
Deltocyathiidae	<i>Deltocyathus agassizii</i>	No			Deltocyathus monophyly shown (excluding D. magnificus) [S31]
Deltocyathiidae	<i>Deltocyathus andamanicus</i>	No			Deltocyathus monophyly shown (excluding D. magnificus) [S31]
Deltocyathiidae	<i>Deltocyathus calcar</i>	No		[S12]	Deltocyathus monophyly shown (excluding D. magnificus) [S31]
Deltocyathiidae	<i>Deltocyathus cameratus</i>	No			Deltocyathus monophyly shown (excluding D. magnificus) [S31]
Deltocyathiidae	<i>Deltocyathus corrugatus</i>	No			Deltocyathus monophyly shown (excluding D. magnificus) [S31]
Deltocyathiidae	<i>Deltocyathus crassiseptum</i>	No			Deltocyathus monophyly shown (excluding D. magnificus) [S31]
Deltocyathiidae	<i>Deltocyathus eccentricus</i>	No		[S12]	Deltocyathus monophyly shown (excluding D. magnificus) [S31]

Family	Species	Reef	Molecular	Morphology	Remarks
Deltocyathiidae	<i>Deltocyathus halianthus</i>		No		Deltocyathus monophyly shown (excluding <i>D. magnificus</i> ) [S31]
Deltocyathiidae	<i>Deltocyathus heteroclitus</i>		No		Deltocyathus monophyly shown (excluding <i>D. magnificus</i> ) [S31]
Deltocyathiidae	<i>Deltocyathus inusitatus</i>	No	COI:HM018626		
Deltocyathiidae	<i>Deltocyathus italicus</i>	No		[S12]	
Deltocyathiidae	<i>Deltocyathus magnificus</i>	No	16S:HQ439770 COI:HM018627		Turbinoliidae clade [S28]
Deltocyathiidae	<i>Deltocyathus moseleyi</i>	No			Deltocyathus monophyly shown (excluding <i>D. magnificus</i> ) [S31]
Deltocyathiidae	<i>Deltocyathus murrayi</i>	No			Deltocyathus monophyly shown (excluding <i>D. magnificus</i> ) [S31]
Deltocyathiidae	<i>Deltocyathus nascornatus</i>	No			Deltocyathus monophyly shown (excluding <i>D. magnificus</i> ) [S31]
Deltocyathiidae	<i>Deltocyathus ornatus</i>	No	COI:HM018628		
Deltocyathiidae	<i>Deltocyathus parvulus</i>	No			Deltocyathus monophyly shown (excluding <i>D. magnificus</i> ) [S31]
Deltocyathiidae	<i>Deltocyathus philippinensis</i>	No			Deltocyathus monophyly shown (excluding <i>D. magnificus</i> ) [S31]
Deltocyathiidae	<i>Deltocyathus pourtalesi</i>	No			Deltocyathus monophyly shown (excluding <i>D. magnificus</i> ) [S31]
Deltocyathiidae	<i>Deltocyathus rotulus</i>	No	COI:HM018629		
Deltocyathiidae	<i>Deltocyathus sarsi</i>	No	COI:HM018630		
Deltocyathiidae	<i>Deltocyathus stella</i>	No			Deltocyathus monophyly shown (excluding <i>D. magnificus</i> ) [S31]
Deltocyathiidae	<i>Deltocyathus suluensis</i>	No	COI:HM018631		
Deltocyathiidae	<i>Deltocyathus taiwanicus</i>	No			Deltocyathus monophyly shown (excluding <i>D. magnificus</i> ) [S31]
Deltocyathiidae	<i>Deltocyathus varians</i>	No			Deltocyathus monophyly shown (excluding <i>D. magnificus</i> ) [S31]
Deltocyathiidae	<i>Deltocyathus vaughani</i>	No			Deltocyathus monophyly shown (excluding <i>D. magnificus</i> ) [S31]
Dendrophylliidae	<i>Astroides calycularis</i>	No		[S32]	
Dendrophylliidae	<i>Balanophyllia bairdiana</i>	No		[S15,S32]	
Dendrophylliidae	<i>Balanophyllia bayeri</i>	No		[S15,S32]	
Dendrophylliidae	<i>Balanophyllia bonaespei</i>	No		[S15,S32]	
Dendrophylliidae	<i>Balanophyllia capensis</i>	No		[S15,S32]	
Dendrophylliidae	<i>Balanophyllia caribbeana</i>	No		[S15,S32]	Balanophyllia (Eupsammia)
Dendrophylliidae	<i>Balanophyllia carinata</i>	No		[S15,S32]	Balanophyllia (Eupsammia)
Dendrophylliidae	<i>Balanophyllia cedrosensis</i>	No		[S15,S32]	
Dendrophylliidae	<i>Balanophyllia cellulosa</i>	No		[S15,S32]	
Dendrophylliidae	<i>Balanophyllia chnous</i>	No		[S15,S32]	
Dendrophylliidae	<i>Balanophyllia corniculans</i>	No		[S15,S32]	
Dendrophylliidae	<i>Balanophyllia cornu</i>	No	16S:HQ439710 COI:HM018605	[S15,S32]	
Dendrophylliidae	<i>Balanophyllia crassiseptum</i>	No		[S15,S32]	
Dendrophylliidae	<i>Balanophyllia crassitheca</i>	No		[S15,S32]	
Dendrophylliidae	<i>Balanophyllia cumingii</i>	No		[S15,S32]	
Dendrophylliidae	<i>Balanophyllia cyathoides</i>	No		[S15,S32]	
Dendrophylliidae	<i>Balanophyllia dentata</i>	No	16S:HQ439709	[S15,S32]	Balanophyllia cf. dentata in GenBank
Dendrophylliidae	<i>Balanophyllia desmophylloides</i>	No	16S:HQ439711 COI:HM018607	[S15,S32]	
Dendrophylliidae	<i>Balanophyllia diademata</i>	No		[S15,S32]	
Dendrophylliidae	<i>Balanophyllia diffusa</i>	No		[S15,S32]	
Dendrophylliidae	<i>Balanophyllia dilatata</i>	No		[S15,S32]	
Dendrophylliidae	<i>Balanophyllia dineta</i>	No		[S15,S32]	
Dendrophylliidae	<i>Balanophyllia diomedaeae</i>	No		[S15,S32]	
Dendrophylliidae	<i>Balanophyllia dubia</i>	No		[S15,S32]	
Dendrophylliidae	<i>Balanophyllia elegans</i>	No	COI:DQ445805	[S15,S32]	
Dendrophylliidae	<i>Balanophyllia europaea</i>	Yes		[S12,S15,S32]	
Dendrophylliidae	<i>Balanophyllia floridana</i>	No		[S15,S32]	
Dendrophylliidae	<i>Balanophyllia galapagensis</i>	No		[S15,S32]	
Dendrophylliidae	<i>Balanophyllia gemma</i>	No		[S15,S32]	
Dendrophylliidae	<i>Balanophyllia gemmifera</i>	No		[S15,S32]	
Dendrophylliidae	<i>Balanophyllia generatrix</i>	No		[S15,S32]	
Dendrophylliidae	<i>Balanophyllia gigas</i>	No	16S:HQ439712	[S15,S32]	

Family	Species	Reef	Molecular	Morphology	Remarks
Dendrophylliidae	<i>Balanophyllia hadros</i>	No	[S15,S32]		
Dendrophylliidae	<i>Balanophyllia helenae</i>	No	[S15,S32]		
Dendrophylliidae	<i>Balanophyllia imperialis</i>	No	[S15,S32]		Balanophyllia (Eupsammia)
Dendrophylliidae	<i>Balanophyllia iwayamaensis</i>	No	[S15,S32]		
Dendrophylliidae	<i>Balanophyllia japonica</i>	No	[S15,S32]		
Dendrophylliidae	<i>Balanophyllia kalakauai</i>	No	[S15,S32]		
Dendrophylliidae	<i>Balanophyllia laysanensis</i>	No	[S15,S32]		
Dendrophylliidae	<i>Balanophyllia malouinensis</i>	No	[S15,S32]		
Dendrophylliidae	<i>Balanophyllia merguiensis</i>	No	[S15,S32]		
Dendrophylliidae	<i>Balanophyllia palifera</i>	No	[S15,S32]		
Dendrophylliidae	<i>Balanophyllia parallela</i>	No	[S15,S32]		
Dendrophylliidae	<i>Balanophyllia parvula</i>	No	[S15,S32]		
Dendrophylliidae	<i>Balanophyllia pittieri</i>	No	[S15,S32]		Balanophyllia (Eupsammia)
Dendrophylliidae	<i>Balanophyllia profundicella</i>	No	[S15,S32]		
Dendrophylliidae	<i>Balanophyllia rediviva</i>	No	[S15,S32]		
Dendrophylliidae	<i>Balanophyllia regalis</i>	No	[S15,S32]		Balanophyllia (Eupsammia)
Dendrophylliidae	<i>Balanophyllia regia</i>	No 12S:EF597047 16S:AF265587	[S15,S32]		
Dendrophylliidae	<i>Balanophyllia scabra</i>	No	[S15,S32]		
Dendrophylliidae	<i>Balanophyllia scabrosa</i>	No	[S15,S32]		
Dendrophylliidae	<i>Balanophyllia serrata</i>	No	[S15,S32]		
Dendrophylliidae	<i>Balanophyllia spongiosa</i>	No	[S15,S32]		
Dendrophylliidae	<i>Balanophyllia stimpsonii</i>	No	[S15,S32]		Balanophyllia (Eupsammia)
Dendrophylliidae	<i>Balanophyllia striata</i>	No	[S15,S32]		
Dendrophylliidae	<i>Balanophyllia taprobanae</i>	No	[S15,S32]		
Dendrophylliidae	<i>Balanophyllia tenuis</i>	No	[S15,S32]		
Dendrophylliidae	<i>Balanophyllia thalassae</i>	No	[S15,S32]		
Dendrophylliidae	<i>Balanophyllia vanderhorsti</i>	No	[S15,S32]		
Dendrophylliidae	<i>Balanophyllia wellsi</i>	No	[S15,S32]		
Dendrophylliidae	<i>Balanophyllia yongei</i>	No	[S15,S32]		
Dendrophylliidae	<i>Bathypsammia fallosocialis</i>	No	[S32]		
Dendrophylliidae	<i>Bathypsammia tintinnabulum</i>	No	[S32]		
Dendrophylliidae	<i>Cladopsammia echinata</i>	No	[S32]		
Dendrophylliidae	<i>Cladopsammia eguchii</i>	No	[S32]		
Dendrophylliidae	<i>Cladopsammia gracilis</i>	No 12S:EF597049 16S:AF265588	[S32]		
Dendrophylliidae	<i>Cladopsammia manuelensis</i>	No	[S32]		
Dendrophylliidae	<i>Cladopsammia rolandi</i>	No	[S32]		
Dendrophylliidae	<i>Cladopsammia willeyi</i>	No	[S32]		
Dendrophylliidae	<i>Dendrophyllia aculeata</i>	No	[S32]	Group 2 [S32]	
Dendrophylliidae	<i>Dendrophyllia alcocki</i>	No	[S32]	Group 3 [S32]	
Dendrophylliidae	<i>Dendrophyllia alternata</i>	No 16S:AF550366	[S32]	Group 3 [S32]	
Dendrophylliidae	<i>Dendrophyllia arbuscula</i>	No	[S32]	Group 2 [S32]	
Dendrophylliidae	<i>Dendrophyllia boschmai</i>	No	[S32]	Group 3 [S32]	
Dendrophylliidae	<i>Dendrophyllia californica</i>	No	[S32]	Group 3 [S32]	
Dendrophylliidae	<i>Dendrophyllia carleena</i>	No	[S32]	Group 1 [S32]	
Dendrophylliidae	<i>Dendrophyllia cecilliana</i>	No	[S32]		
Dendrophylliidae	<i>Dendrophyllia cladonia</i>	No	[S32]	Group 2 [S32]	
Dendrophylliidae	<i>Dendrophyllia cornigera</i>	No	[S32]	Group 2 [S32]	
Dendrophylliidae	<i>Dendrophyllia cribrosa</i>	No	[S32]	Group 1 [S32]	
Dendrophylliidae	<i>Dendrophyllia dilatata</i>	No	[S32]	Group 3 [S32]	
Dendrophylliidae	<i>Dendrophyllia florulenta</i>	No	[S32]	Group 3 [S32]	
Dendrophylliidae	<i>Dendrophyllia fotojiku</i>	No	[S32]	Group 2 [S32]	
Dendrophylliidae	<i>Dendrophyllia granosa</i>	No	[S32]	Group 1 [S32]	
Dendrophylliidae	<i>Dendrophyllia ijimai</i>	No	[S32]	Group 1 [S32]	
Dendrophylliidae	<i>Dendrophyllia incisa</i>	No	[S32]	Group 2 [S32]	
Dendrophylliidae	<i>Dendrophyllia indica</i>	No	[S32]	Group 1 [S32]	
Dendrophylliidae	<i>Dendrophyllia johnsoni</i>	No	[S32]	Group 3 [S32]	
Dendrophylliidae	<i>Dendrophyllia laboreli</i>	No	[S32]	Group 2 [S32]	
Dendrophylliidae	<i>Dendrophyllia minima</i>	No	[S32]	Group 2 [S32]	

Family	Species	Reef	Molecular	Morphology	Remarks
Dendrophylliidae	<i>Dendrophyllia minuscula</i>	No	[S32]	Group 1 [S32]	
Dendrophylliidae	<i>Dendrophyllia oldroydae</i>	No	[S32]	Group 3 [S32]	
Dendrophylliidae	<i>Dendrophyllia paragracilis</i>	No	[S32]	Group 2 [S32]	
Dendrophylliidae	<i>Dendrophyllia radians</i>	No	[S32]	Group 2 [S32]	
Dendrophylliidae	<i>Dendrophyllia ramea</i>	No	[S32]	Group 1 [S32]	
Dendrophylliidae	<i>Dendrophyllia robusta</i>	No	[S32]	Group 2 [S32]	
Dendrophylliidae	<i>Dendrophyllia suprarbuscula</i>	No	[S32]	Group 2 [S32]	
Dendrophylliidae	<i>Dendrophyllia velata</i>	No	[S32]	Group 1 [S32]	
Dendrophylliidae	<i>Dichopsammia granulosa</i>	No	[S32]		
Dendrophylliidae	<i>Duncanopsammia axifuga</i>	Yes	[S32]		
Dendrophylliidae	<i>Eguchipsammia cornucopia</i>	No	[S32]		
Dendrophylliidae	<i>Eguchipsammia fistula</i>	No	[S32]		
Dendrophylliidae	<i>Eguchipsammia gaditana</i>	No	[S32]		
Dendrophylliidae	<i>Eguchipsammia japonica</i>	No	[S32]		
Dendrophylliidae	<i>Eguchipsammia serpentina</i>	No	[S32]		
Dendrophylliidae	<i>Eguchipsammia strigosa</i>	No	[S32]		
Dendrophylliidae	<i>Eguchipsammia wellsi</i>	No	[S32]		
Dendrophylliidae	<i>Enallopssammia profunda</i>	No	[S15,S32]		
Dendrophylliidae	<i>Enallopssammia pusilla</i>	No	[S15,S32]		
Dendrophylliidae	<i>Enallopssammia rostrata</i>	No	16S:U40294 COI:HM018632	[S15,S32]	
Dendrophylliidae	<i>Endopachys bulbosa</i>	No	[S32]		
Dendrophylliidae	<i>Endopachys grayi</i>	No	16S:HQ439719	[S32]	
Dendrophylliidae	<i>Endopsammia philippensis</i>	No	[S32]		
Dendrophylliidae	<i>Endopsammia pourtalesi</i>	No	[S32]		
Dendrophylliidae	<i>Endopsammia regularis</i>	No	[S32]		
Dendrophylliidae	<i>Heteropsammia cochleata</i>	Yes	12S:EF597050	[S32]	Heteropsammia sp. in GenBank; synonym type species of Heteropsammia Range information [S4]
Dendrophylliidae	<i>Heteropsammia eupssammides</i>	Yes	[S32]		
Dendrophylliidae	<i>Heteropsammia moretonensis</i>	No	[S32]		
Dendrophylliidae	<i>Leptopsammia brittanica</i>	No	[S15,S32]		
Dendrophylliidae	<i>Leptopsammia chevalieri</i>	No	[S15,S32]		
Dendrophylliidae	<i>Leptopsammia columna</i>	No	[S15,S32]		
Dendrophylliidae	<i>Leptopsammia crassa</i>	No	[S15,S32]		
Dendrophylliidae	<i>Leptopsammia formosa</i>	No	[S15,S32]		
Dendrophylliidae	<i>Leptopsammia poculum</i>	No	[S15,S32]		
Dendrophylliidae	<i>Leptopsammia pruvoti</i>	No	12S:EF597068 16S:AF265579	[S15,S32]	
Dendrophylliidae	<i>Leptopsammia queenslandiae</i>	No	[S15,S32]		
Dendrophylliidae	<i>Leptopsammia stokesiana</i>	No	[S15,S32]		
Dendrophylliidae	<i>Leptopsammia trinitatis</i>	No	[S15,S32]		
Dendrophylliidae	<i>Notophyllia etheridgi</i>	No	[S32]		
Dendrophylliidae	<i>Notophyllia hecki</i>	No	[S32]		
Dendrophylliidae	<i>Notophyllia piscacauda</i>	No	[S32]		
Dendrophylliidae	<i>Notophyllia recta</i>	No	[S32]		
Dendrophylliidae	<i>Pourtalopsammia togata</i>	No	[S32]		
Dendrophylliidae	<i>Rhizopsammia annae</i>	No	[S15,S32]		
Dendrophylliidae	<i>Rhizopsammia bermudensis</i>	No	[S15,S32]		
Dendrophylliidae	<i>Rhizopsammia compacta</i>	No	[S15,S32]		
Dendrophylliidae	<i>Rhizopsammia goesi</i>	No	[S15,S32]		
Dendrophylliidae	<i>Rhizopsammia minuta</i>	No	[S15,S32]		
Dendrophylliidae	<i>Rhizopsammia nuda</i>	No	[S15,S32]		
Dendrophylliidae	<i>Rhizopsammia pulchra</i>	No	[S15,S32]		
Dendrophylliidae	<i>Rhizopsammia verrilli</i>	No	[S15,S32]		
Dendrophylliidae	<i>Rhizopsammia wellingtoni</i>	No	[S15,S32]		
Dendrophylliidae	<i>Rhizopsammia wettsteini</i>	No	[S15,S32]		
Dendrophylliidae	<i>Thecopssammia elongata</i>	No	[S32]		
Dendrophylliidae	<i>Thecopssammia socialis</i>	No	[S32]		
Dendrophylliidae	<i>Trochopsammia infundibulum</i>	No	[S32]		

Family	Species	Reef	Molecular	Morphology	Remarks
Dendrophylliidae	<i>Tubastraea coccinea</i>	No	12S:EF597045 16S:L76022 COI:DQ445806	[S15,S32]	
Dendrophylliidae	<i>Tubastraea diaphana</i>	No		[S15,S32]	
Dendrophylliidae	<i>Tubastraea faulkneri</i>	No		[S15,S32]	
Dendrophylliidae	<i>Tubastraea floreana</i>	No		[S15,S32]	
Dendrophylliidae	<i>Tubastraea micranthus</i>	No		[S15,S32]	
Dendrophylliidae	<i>Tubastraea tagusensis</i>	No		[S15,S32]	
Dendrophylliidae	<i>Turbinaria bifrons</i>	Yes		[S15,S32]	
Dendrophylliidae	<i>Turbinaria conspicua</i>	Yes		[S15,S32]	
Dendrophylliidae	<i>Turbinaria crater</i>	Yes		[S15,S32]	Range information from GBIF
Dendrophylliidae	<i>Turbinaria frondens</i>	Yes		[S15,S32]	
Dendrophylliidae	<i>Turbinaria heronensis</i>	Yes		[S15,S32]	
Dendrophylliidae	<i>Turbinaria irregularis</i>	Yes		[S15,S32]	
Dendrophylliidae	<i>Turbinaria mesenterina</i>	Yes		[S15,S32]	
Dendrophylliidae	<i>Turbinaria patula</i>	Yes		[S15,S32]	
Dendrophylliidae	<i>Turbinaria peltata</i>	Yes	12S:EF597044 COI:AB441240 CYB:AB441325	[S15,S32]	
Dendrophylliidae	<i>Turbinaria radicalis</i>	Yes		[S15,S32]	
Dendrophylliidae	<i>Turbinaria reniformis</i>	Yes		[S15,S32]	
Dendrophylliidae	<i>Turbinaria stellulata</i>	Yes		[S15,S32]	
Diploastreidae	<i>Diploastrea heliopora</i>	Yes	COI:AB117290 CYB:AB117375		
Euphylliidae	<i>Ctenella chagius</i>	Yes	COI:AB441208 CYB:AB441293		
Euphylliidae	<i>Euphyllia ancora</i>	Yes	12S:JF825139 16S:JF825139 AT6:JF825139 COI:JF825139 CYB:JF825139 ND5:JF825139		
Euphylliidae	<i>Euphyllia cristata</i>	Yes			Closest to <i>E. glabrescens</i> [S33]
Euphylliidae	<i>Euphyllia divisa</i>	Yes	COI:AB441203 CYB:AB441288		
Euphylliidae	<i>Euphyllia glabrescens</i>	Yes	COI:AB441206 CYB:AB441291		
Euphylliidae	<i>Euphyllia paraancora</i>	Yes			Closest to <i>E. ancora</i> & <i>E. divisa</i> [S34]
Euphylliidae	<i>Euphyllia paradivisa</i>	Yes			Closest to <i>E. glabrescens</i> [S14]
Euphylliidae	<i>Euphyllia paraglabrescens</i>	Yes			Closest to <i>E. glabrescens</i> [S34]
Euphylliidae	<i>Euphyllia yaeyamaensis</i>	Yes			Closest to <i>E. divisa</i> [S3]
Euphylliidae	<i>Galaxea acrhelia</i>	Yes			Closest to <i>G. horrescens</i> [S9]
Euphylliidae	<i>Galaxea astreata</i>	Yes	12S:AF333056		
Euphylliidae	<i>Galaxea cryptoramosa</i>	Yes			Closest to <i>G. astreata</i> [S9]
Euphylliidae	<i>Galaxea fascicularis</i>	Yes	16S:L76006 COI:AB441201 CYB:AB441286 ND5:AB109376		
Euphylliidae	<i>Galaxea horrescens</i>	Yes	12S:EF597096 16S:L75994		
Euphylliidae	<i>Galaxea longisepta</i>	Yes			Closest to <i>G. horrescens</i> [S9]
Euphylliidae	<i>Galaxea paucisepta</i>	Yes			Closest to <i>G. astreata</i> [S35]
Euphylliidae	<i>Gyrosomilia interrupta</i>	Yes			Closest to <i>Ctenella chagius</i> [S3]
Euphylliidae	<i>Montigya kenti</i>	Yes			Closest to <i>Gyrosomilia</i> [S13]
Euphylliidae	<i>Pachyseris foliosa</i>	Yes			Pachyseris monophly assumed; closest to <i>P. involuta</i> [S14]
Euphylliidae	<i>Pachyseris gemmae</i>	Yes			Pachyseris monophly assumed; closest to <i>P. rugosa</i> & <i>P. speciosa</i> [S3]
Euphylliidae	<i>Pachyseris involuta</i>	Yes			Pachyseris monophly assumed
Euphylliidae	<i>Pachyseris rugosa</i>	Yes			Pachyseris monophly assumed
Euphylliidae	<i>Pachyseris speciosa</i>	Yes	COI:AB441222 CYB:AB441307		Pachyseris monophly assumed
Flabellidae	<i>Blastotrochus nutrix</i>	No			Flabellidae monophly shown [S31]
Flabellidae	<i>Falcatoflabellum rauolensis</i>	No			Closest to <i>Placotrochides</i> [S23]
Flabellidae	<i>Flabellum alabastrum</i>	No		[S15]	
Flabellidae	<i>Flabellum angulare</i>	No	16S:AF550363	[S15]	
Flabellidae	<i>Flabellum angustum</i>	No		[S15]	

Family	Species	Reef	Molecular	Morphology	Remarks
Flabellidae	<i>Flabellum aotearoa</i>	No		[S15]	
Flabellidae	<i>Flabellum apertum</i>	No	16S:HQ439720 COI:HM018635	[S15]	
Flabellidae	<i>Flabellum arcuatile</i>	No	16S:HQ439721 COI:HM018636	[S15]	
Flabellidae	<i>Flabellum areum</i>	No		[S15]	
Flabellidae	<i>Flabellum atlanticum</i>	No		[S15]	
Flabellidae	<i>Flabellum australe</i>	No		[S15]	
Flabellidae	<i>Flabellum campanulatum</i>	No		[S15]	
Flabellidae	<i>Flabellum chunii</i>	No		[S15]	
Flabellidae	<i>Flabellum conuis</i>	No		[S15]	
Flabellidae	<i>Flabellum curvatum</i>	No		[S15]	
Flabellidae	<i>Flabellum daphnense</i>	No		[S15]	
Flabellidae	<i>Flabellum deludens</i>	No	16S:AB510170 COI:HM018638	[S15]	
Flabellidae	<i>Flabellum flexuosum</i>	No		[S15]	
Flabellidae	<i>Flabellum floridanum</i>	No		[S15]	
Flabellidae	<i>Flabellum folkesoni</i>	No	16S:HQ439725 COI:HM018639	[S15]	
Flabellidae	<i>Flabellum gardineri</i>	No		[S15]	
Flabellidae	<i>Flabellum hoffmeisteri</i>	No		[S15]	
Flabellidae	<i>Flabellum impensum</i>	No	16S:AF265582	[S15]	
Flabellidae	<i>Flabellum japonicum</i>	No	16S:AB510178	[S15]	
Flabellidae	<i>Flabellum knoxi</i>	No		[S15]	
Flabellidae	<i>Flabellum lamellulosum</i>	No	16S:HQ439726 COI:HM018640	[S15]	
Flabellidae	<i>Flabellum lowekeyesi</i>	No	16S:HQ439728 COI:HM018641	[S15]	
Flabellidae	<i>Flabellum macandrewi</i>	No		[S15]	
Flabellidae	<i>Flabellum magnificum</i>	No	16S:AB510167 COI:HM018637	[S15]	Flabellum cf. magnificum in GenBank
Flabellidae	<i>Flabellum marcus</i>	No		[S15]	
Flabellidae	<i>Flabellum marenzelleri</i>	No		[S15]	
Flabellidae	<i>Flabellum messum</i>	No		[S15]	
Flabellidae	<i>Flabellum moseleyi</i>	No		[S15]	
Flabellidae	<i>Flabellum ongulense</i>	No		[S15]	
Flabellidae	<i>Flabellum patens</i>	No		[S15]	
Flabellidae	<i>Flabellum pavoninum</i>	No	16S:AB510168	[S15]	
Flabellidae	<i>Flabellum politum</i>	No		[S15]	
Flabellidae	<i>Flabellum sexcostatum</i>	No		[S15]	
Flabellidae	<i>Flabellum sibogae</i>	No		[S15]	
Flabellidae	<i>Flabellum thouarsii</i>	No		[S15]	
Flabellidae	<i>Flabellum transversale</i>	No		[S15]	
Flabellidae	<i>Flabellum tuthilli</i>	No	16S:HQ439733 COI:HM018643	[S15]	
Flabellidae	<i>Flabellum vaughani</i>	No	16S:HQ439735 COI:HM018644	[S15]	
Flabellidae	<i>Javania antarctica</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Javania borealis</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Javania cailleti</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Javania californica</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Javania erhardti</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Javania exserta</i>	No	COI:HM018651		
Flabellidae	<i>Javania fusca</i>	No	16S:HQ439737 COI:HM018652		
Flabellidae	<i>Javania insignis</i>	No	16S:AB510174		
Flabellidae	<i>Javania lamprotichum</i>	No	16S:HQ439740 COI:HM018653		
Flabellidae	<i>Javania pseudoalabastra</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Monomyces pygmaea</i>	No	16S:AF265583	[S15]	
Flabellidae	<i>Monomyces rubrum</i>	No		[S15]	
Flabellidae	<i>Placotrochides cylindrica</i>	No			Placotrochides monophyly assumed
Flabellidae	<i>Placotrochides frustum</i>	No			Placotrochides monophyly assumed
Flabellidae	<i>Placotrochides minuta</i>	No			Placotrochides monophyly assumed

Family	Species	Reef	Molecular	Morphology	Remarks
Flabellidae	<i>Placotrochides scaphula</i>	No	16S:HQ439744 COI:HM018661		
Flabellidae	<i>Placotrochus laevis</i>	No	16S:AF265589	[S15]	
Flabellidae	<i>Polymyces fragilis</i>	No			Polymyces monophyly assumed; closest to Monomyces [S23]
Flabellidae	<i>Polymyces montereyensis</i>	No			Polymyces monophyly assumed; closest to Monomyces [S23]
Flabellidae	<i>Polymyces wellsi</i>	No			Polymyces monophyly assumed; closest to Monomyces [S23]
Flabellidae	<i>Rhizotrochus flabelliformis</i>	No			Rhizotrochus monophyly assumed
Flabellidae	<i>Rhizotrochus levidensis</i>	No			Rhizotrochus monophyly assumed
Flabellidae	<i>Rhizotrochus tuberculatus</i>	No			Rhizotrochus monophyly assumed
Flabellidae	<i>Rhizotrochus typus</i>	No	16S:AB510175		
Flabellidae	<i>Truncatoflabellum aculeatum</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Truncatoflabellum angiomatum</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Truncatoflabellum angustum</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Truncatoflabellum arcuatum</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Truncatoflabellum australiensis</i>	No	16S:HQ439746 COI:HM018670		
Flabellidae	<i>Truncatoflabellum candeatum</i>	No	16S:HQ439749 COI:HM018671		
Flabellidae	<i>Truncatoflabellum carinatum</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Truncatoflabellum crassum</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Truncatoflabellum cumingi</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Truncatoflabellum dens</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Truncatoflabellum formosum</i>	No	16S:HQ439752		
Flabellidae	<i>Truncatoflabellum gardineri</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Truncatoflabellum inconstans</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Truncatoflabellum incrustatum</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Truncatoflabellum irregulare</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Truncatoflabellum macroeschara</i>	No	COI:HM018672		
Flabellidae	<i>Truncatoflabellum martensii</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Truncatoflabellum mortensenii</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Truncatoflabellum multispinosum</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Truncatoflabellum paripavoninum</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Truncatoflabellum phoenix</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Truncatoflabellum pusillum</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Truncatoflabellum spheniscus</i>	No	16S:AB510172		
Flabellidae	<i>Truncatoflabellum stabile</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Truncatoflabellum stokesii</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Truncatoflabellum trapezoideum</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Truncatoflabellum truncum</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Truncatoflabellum vanuatu</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Truncatoflabellum veroni</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Truncatoflabellum virginarium</i>	No			Flabellidae monophyly shown [S31]
Flabellidae	<i>Truncatoflabellum zuluense</i>	No			Flabellidae monophyly shown [S31]
Fungiacyathidae	<i>Fungiacyathus crispus</i>	No			Fungiacyathus monophyly shown [S31]
Fungiacyathidae	<i>Fungiacyathus dennanti</i>	No			Fungiacyathus monophyly shown [S31]
Fungiacyathidae	<i>Fungiacyathus fissidiscus</i>	No			Fungiacyathus monophyly shown [S31]
Fungiacyathidae	<i>Fungiacyathus fissilis</i>	No			Fungiacyathus monophyly shown [S31]
Fungiacyathidae	<i>Fungiacyathus fragilis</i>	No	16S:HQ439753 COI:HM018645		
Fungiacyathidae	<i>Fungiacyathus granulosus</i>	No			Fungiacyathus monophyly shown [S31]
Fungiacyathidae	<i>Fungiacyathus hydra</i>	No			Fungiacyathus monophyly shown [S31]
Fungiacyathidae	<i>Fungiacyathus marenzelleri</i>	No	12S:EF597074 16S:L76004		
Fungiacyathidae	<i>Fungiacyathus margaretae</i>	No			Fungiacyathus monophyly shown [S31]
Fungiacyathidae	<i>Fungiacyathus multicarinatus</i>	No			Fungiacyathus monophyly shown [S31]
Fungiacyathidae	<i>Fungiacyathus paliferus</i>	No			Fungiacyathus monophyly shown [S31]
Fungiacyathidae	<i>Fungiacyathus pliciseptus</i>	No			Fungiacyathus monophyly shown [S31]
Fungiacyathidae	<i>Fungiacyathus pseudostephanus</i>	No			Fungiacyathus monophyly shown [S31]
Fungiacyathidae	<i>Fungiacyathus pusillus</i>	No	16S:HQ439754 COI:HM018646		

Family	Species	Reef	Molecular	Morphology	Remarks
Fungiacyathidae	<i>Fungiacyathus sandoi</i>		No		Fungiacyathus monophyly shown [S31]
Fungiacyathidae	<i>Fungiacyathus sibogae</i>		No		Fungiacyathus monophyly shown [S31]
Fungiacyathidae	<i>Fungiacyathus stephanus</i>		No	12S:JF825138 16S:JF825138 AT6:JF825138 COI:JF825138 CYB:JF825138 ND5:JF825138	
Fungiacyathidae	<i>Fungiacyathus symmetricus</i>	No			Fungiacyathus monophyly shown [S31]
Fungiacyathidae	<i>Fungiacyathus turbinoloides</i>	No	16S:HQ439759 COI:HM018648		
Fungiacyathidae	<i>Fungiacyathus variegatus</i>	No			Fungiacyathus monophyly shown [S31]
Fungiidae	<i>Cantharellus doederleini</i>	Yes		[S36]	
Fungiidae	<i>Cantharellus jebbi</i>	Yes			Cantharellus monophyly assumed
Fungiidae	<i>Cantharellus noumeae</i>	Yes		[S36]	
Fungiidae	<i>Ctenactis albidentaculata</i>	Yes	COI:EU149869	[S36]	
Fungiidae	<i>Ctenactis crassa</i>	Yes	COI:EU149859	[S36]	
Fungiidae	<i>Ctenactis echinata</i>	Yes	COI:EU149879	[S36]	
Fungiidae	<i>Cycloseris costulata</i>	Yes	COI:EU149870	[S12,S36]	Revised from <i>Fungia costulata</i> & <i>C. marginata</i> [S37]
Fungiidae	<i>Cycloseris curvata</i>	Yes		[S36]	Revised from <i>Fungia curvata</i> [S37]
Fungiidae	<i>Cycloseris cyclolites</i>	Yes	COI:EU202719	[S36]	Revised from <i>Fungia cyclolites</i> [S37]; senior synonym of <i>C. patelliformis</i> [S36]
Fungiidae	<i>Cycloseris distorta</i>	Yes		[S36]	Revised from <i>Fungia distorta</i> [S37]
Fungiidae	<i>Cycloseris explanulata</i>	Yes	COI:AM494845		Fungiidae clade [S38]
Fungiidae	<i>Cycloseris fragilis</i>	Yes	16S:L75998 COI:EU149860	[S36]	Revised from <i>Fungia fragilis</i> [S37]; senior synonym of <i>C. patelliformis</i> [S36]
Fungiidae	<i>Cycloseris hexagonalis</i>	Yes		[S36]	Revised from <i>Fungia hexagonalis</i> [S37]
Fungiidae	<i>Cycloseris mokai</i>	Yes	COI:EU149877	[S12,S36]	Revised from <i>Lithophyllum mokai</i> [S37]
Fungiidae	<i>Cycloseris sinensis</i>	Yes	COI:EU149900	[S12,S36]	Revised from <i>Fungia sinensis</i> [S37]
Fungiidae	<i>Cycloseris somervillei</i>	Yes		[S36]	Revised from <i>Fungia somervillei</i> [S37]
Fungiidae	<i>Cycloseris tenuis</i>	Yes	COI:EU149871	[S36]	Revised from <i>Fungia tenuis</i> [S37]; senior synonym of <i>C. erosa</i> [S36]
Fungiidae	<i>Cycloseris vaughani</i>	Yes	16S:L75999 COI:EU149861	[S36]	Revised from <i>Fungia vaughani</i> [S37]
Fungiidae	<i>Cycloseris wellsi</i>	Yes	COI:AM494861		Fungiidae clade [S38]
Fungiidae	<i>Danafungia horrida</i>	Yes		[S36]	Revised from <i>Fungia horrida</i> [S37]; senior synonym of <i>F. klonzingeri</i> [S36]
Fungiidae	<i>Danafungia scruposa</i>	Yes	COI:EU149872	[S36]	Revised from <i>Fungia scruposa</i> [S37]; senior synonym of <i>F. corona</i> & <i>F. danai</i> [S36]
Fungiidae	<i>Fungia fungites</i>	Yes	COI:EU149892	[S12,S15,S36]	
Fungiidae	<i>Halomitra clavator</i>	Yes	COI:EU149904	[S36]	
Fungiidae	<i>Halomitra pileus</i>	Yes	COI:EU149865	[S12,S36]	
Fungiidae	<i>Heliofungia actiniformis</i>	Yes	12S:EF596995 COI:EU149885	[S36]	
Fungiidae	<i>Heliofungia fralinae</i>	Yes	COI:EU149901	[S36]	Revised from <i>Fungia fralinae</i> [S37]
Fungiidae	<i>Herpolitha limax</i>	Yes	COI:AB441223 CYB:AB441308	[S12,S36]	Senior synonym of <i>H. weberi</i> [S36] & <i>S. africana</i> (Hoeksema, pers. comm.)
Fungiidae	<i>Lithophyllum concinna</i>	Yes	COI:EU149893	[S12,S36]	Revised from <i>Fungia concinna</i> [S37]
Fungiidae	<i>Lithophyllum puishani</i>	Yes			Revised from <i>Fungia puishani</i> ; closest to <i>L. scabra</i> [S9]
Fungiidae	<i>Lithophyllum ranjithi</i>	Yes			Lithophyllum monophyly shown [S37]; range information [S4]
Fungiidae	<i>Lithophyllum repanda</i>	Yes	COI:EU149883	[S12,S36]	Revised from <i>Fungia repanda</i> [S37]
Fungiidae	<i>Lithophyllum scabra</i>	Yes	COI:EU149874	[S36]	Revised from <i>Fungia scabra</i> [S37]
Fungiidae	<i>Lithophyllum spinifer</i>	Yes	COI:EU149864	[S36]	Revised from <i>Fungia spinifer</i> [S37]; senior synonym of <i>C. colini</i> (Hoeksema, pers. comm.)
Fungiidae	<i>Lithophyllum undulatum</i>	Yes	COI:EU149867	[S36]	Senior synonym of <i>P. lobata</i> (Hoeksema, pers. comm.)
Fungiidae	<i>Lobactis scutaria</i>	Yes	12S:DQ320497 16S:L76005 COI:AB441224 CYB:AB441309	[S36]	Revised from <i>Fungia scutaria</i> [S37]
Fungiidae	<i>Pleuractis granulosa</i>	Yes	COI:EU149884	[S36,S39]	Revised from <i>Fungia granulosa</i> [S37]
Fungiidae	<i>Pleuractis gravis</i>	Yes	COI:EU149910	[S36,S39]	Revised from <i>Fungia gravis</i> [S37]; range information [S39]
Fungiidae	<i>Pleuractis moluccensis</i>	Yes	COI:EU149909	[S36,S39]	Revised from <i>Fungia moluccensis</i> [S37]
Fungiidae	<i>Pleuractis paumotensis</i>	Yes	COI:EU149911	[S36,S39]	Revised from <i>Fungia paumotensis</i> [S37]
Fungiidae	<i>Pleuractis seychellensis</i>	Yes		[S39]	Revised from <i>Fungia seychellensis</i> [S37]

Family	Species	Reef	Molecular	Morphology	Remarks
Fungiidae	<i>Pleuractis taiwanensis</i>	Yes	[S39]		Revised from <i>Fungia taiwanensis</i> [S37]
Fungiidae	<i>Podabacia crustacea</i>	Yes	COI:EU149878	[S36]	
Fungiidae	<i>Podabacia kunzmanni</i>	Yes	COI:EU149908		Range information [S40]
Fungiidae	<i>Podabacia motuporensis</i>	Yes	COI:EU149868		
Fungiidae	<i>Podabacia sinai</i>	Yes	COI:EU149888		
Fungiidae	<i>Polyphyllia novaehiberniae</i>	Yes		[S36]	
Fungiidae	<i>Polyphyllia talpina</i>	Yes	COI:EU149915	[S12,S36]	
Fungiidae	<i>Sandalolitha dentata</i>	Yes	COI:EU149914	[S36]	Senior synonym of <i>H. meierae</i> (Hoeksema, pers. comm.)
Fungiidae	<i>Sandalolitha robusta</i>	Yes	COI:EU149917	[S36]	Senior synonym of <i>P. lankaensis</i> (Hoeksema, pers. comm.)
Fungiidae	<i>Zoopilus echinatus</i>	Yes	12S:EF596990 16S:L76024 COI:EU149916	[S12,S15,S36]	
Gardineriidae	<i>Gardineria hawaiiensis</i>	No	12S:GQ868660 16S:GQ868701 COI:GQ868678		
Gardineriidae	<i>Gardineria minor</i>	No			Gardineria monophyly shown [S28]
Gardineriidae	<i>Gardineria paradoxa</i>	No	12S:GQ868656 16S:GQ868700 COI:GQ868681		
Gardineriidae	<i>Gardineria philippinensis</i>	No			Gardineria monophyly shown [S28]
Gardineriidae	<i>Gardineria simplex</i>	No			Gardineria monophyly shown [S28]
Gardineriidae	<i>Stolarskicyathus pocilliformis</i>	No			Gardineriidae monophyly assumed
Guyniidae	<i>Guynia annulata</i>	No	16S:AF265580		
Incertae sedis	<i>Catalaphyllia jardinei</i>	Yes	12S:EF596997 16S:L76000	[S15]	
Incertae sedis	<i>Indophyllia macassarensis</i>	Yes			Closest to <i>Cynarina lacrymalis</i> [S41]
Incertae sedis	<i>Leptastrea aequalis</i>	Yes			Leptastrea + Fungiidae monophyly shown [S31]
Incertae sedis	<i>Leptastrea bewickensis</i>	Yes			Leptastrea + Fungiidae monophyly shown [S31]
Incertae sedis	<i>Leptastrea bottae</i>	Yes			Leptastrea + Fungiidae monophyly shown [S31]
Incertae sedis	<i>Leptastrea inaequalis</i>	Yes			Leptastrea + Fungiidae monophyly shown [S31]
Incertae sedis	<i>Leptastrea pruinosa</i>	Yes	COI:AB441196 CYB:AB441281		
Incertae sedis	<i>Leptastrea purpurea</i>	Yes	COI:EU371702		
Incertae sedis	<i>Leptastrea transversa</i>	Yes	COI:HM018655		
Incertae sedis	<i>Oulastrea crispata</i>	Yes	12S:AF333062 COI:AB441197 CYB:AB441282		
Incertae sedis	<i>Simblastrea vesicularis</i>	Yes			Closest to Galaxea [S3]
Lobophylliidae	<i>Acanthastrea bowerbanki</i>	Yes		[S29]	
Lobophylliidae	<i>Acanthastrea brevis</i>	Yes		[S29]	
Lobophylliidae	<i>Acanthastrea echinata</i>	Yes	COI:AB117249 CYB:AB117327	[S29,S42]	
Lobophylliidae	<i>Acanthastrea faviaformis</i>	Yes		[S29]	
Lobophylliidae	<i>Acanthastrea hemprichii</i>	Yes		[S29]	
Lobophylliidae	<i>Acanthastrea hillae</i>	Yes	COI:AB441199 CYB:AB441284		
Lobophylliidae	<i>Acanthastrea ishigakiensis</i>	Yes		[S29]	
Lobophylliidae	<i>Acanthastrea lordhowensis</i>	Yes		[S29]	
Lobophylliidae	<i>Acanthastrea maxima</i>	Yes		[S29]	
Lobophylliidae	<i>Acanthastrea regularis</i>	Yes		[S29]	
Lobophylliidae	<i>Acanthastrea rotundoflora</i>	Yes	COI:AB117251 CYB:AB117328	[S29,S42]	
Lobophylliidae	<i>Acanthastrea subechinata</i>	Yes		[S29]	
Lobophylliidae	<i>Australomussa rowleyensis</i>	Yes		[S29]	
Lobophylliidae	<i>Cynarina lacrymalis</i>	Yes	12S:EF597034 COI:AB117246 CYB:AB117323	[S29]	
Lobophylliidae	<i>Echinomorpha nishihirai</i>	Yes			Closest to <i>Echinophyllia</i> [S14]
Lobophylliidae	<i>Echinophyllia aspera</i>	Yes	COI:AB117252 CYB:AB117329		
Lobophylliidae	<i>Echinophyllia costata</i>	Yes			<i>Echinophyllia</i> monophyly shown [S43]; closest to <i>E. pectinata</i> [S9]
Lobophylliidae	<i>Echinophyllia echinata</i>	Yes			<i>Echinophyllia</i> monophyly shown [S43]
Lobophylliidae	<i>Echinophyllia echinoporoides</i>	Yes	COI:AB117254 CYB:AB117331		

Family	Species	Reef	Molecular	Morphology	Remarks
Lobophylliidae	<i>Echinophyllia orpheensis</i>	Yes	12S:AF333065 COI:AB117253 CYB:AB117330		
Lobophylliidae	<i>Echinophyllia patula</i>	Yes			Echinophyllia monophyly shown [S43]; closest to <i>E. aspera</i> [S3]
Lobophylliidae	<i>Echinophyllia pectinata</i>	Yes			Echinophyllia monophyly shown [S43]
Lobophylliidae	<i>Homophyllia australis</i>	Yes		[S29]	
Lobophylliidae	<i>Lobophyllia corymbosa</i>	Yes	COI:AB117241 CYB:AB117318	[S15,S29]	
Lobophylliidae	<i>Lobophyllia dentatus</i>	Yes		[S15,S29]	
Lobophylliidae	<i>Lobophyllia diminuta</i>	Yes		[S15,S29]	Range information [S4]
Lobophylliidae	<i>Lobophyllia flabelliformis</i>	Yes		[S15,S29]	
Lobophylliidae	<i>Lobophyllia hataii</i>	Yes		[S15,S29]	
Lobophylliidae	<i>Lobophyllia hemprichii</i>	Yes	12S:EF597013 16S:L76013 COI:AB117240 CYB:AB117317	[S12,S15,S29]	
Lobophylliidae	<i>Lobophyllia pachysepta</i>	Yes	COI:AB117242 CYB:AB117319	[S15,S29]	
Lobophylliidae	<i>Lobophyllia robusta</i>	Yes		[S15,S29]	
Lobophylliidae	<i>Lobophyllia serratus</i>	Yes		[S15,S29]	
Lobophylliidae	<i>Micromussa amakusensis</i>	Yes	COI:AB441200 CYB:AB441285		
Lobophylliidae	<i>Micromussa diminuta</i>	Yes			Micromussa monophyly assumed; closest to <i>M. minuta</i> [S9]
Lobophylliidae	<i>Micromussa minuta</i>	Yes			Micromussa monophyly assumed
Lobophylliidae	<i>Moseleya latistellata</i>	Yes	COI:HQ203293		
Lobophylliidae	<i>Oxypora convoluta</i>	Yes			Oxypora monophyly assumed; closest to <i>O. lacera</i> [S9]
Lobophylliidae	<i>Oxypora crassispinosa</i>	Yes			Oxypora monophyly assumed; closest to <i>O. glabra</i> [S3]
Lobophylliidae	<i>Oxypora egyptensis</i>	Yes			Oxypora monophyly assumed; closest to <i>O. glabra</i> [S3]
Lobophylliidae	<i>Oxypora glabra</i>	Yes			Oxypora monophyly assumed
Lobophylliidae	<i>Oxypora lacera</i>	Yes	COI:AB117255 CYB:AB117332		
Lobophylliidae	<i>Parascolymia vitiensis</i>	Yes	COI:AB117247 CYB:AB117324	[S29]	
Lobophylliidae	<i>Sympyllia agaricia</i>	Yes	COI:AB117243 CYB:AB117320	[S29]	
Lobophylliidae	<i>Sympyllia erythraea</i>	Yes		[S29]	
Lobophylliidae	<i>Sympyllia hassi</i>	Yes		[S29]	
Lobophylliidae	<i>Sympyllia radians</i>	Yes	COI:AB117245 CYB:AB117322	[S29]	
Lobophylliidae	<i>Sympyllia recta</i>	Yes	COI:AB117244 CYB:AB117321	[S29]	
Lobophylliidae	<i>Sympyllia valenciennesii</i>	Yes	COI:HM018666	[S29]	
Lobophylliidae	<i>Sympyllia wilsoni</i>	Yes		[S29]	
Meandrinidae	<i>Dendrogyra cylindrus</i>	Yes	12S:EF597024 COI:AB117299 CYB:AB117384		
Meandrinidae	<i>Dichocoenia stellaris</i>	Yes		[S15]	Range information [S4]
Meandrinidae	<i>Dichocoenia stokesi</i>	Yes	12S:EF597020 16S:AF265607 COI:AB117298 CYB:AB117383	[S15]	
Meandrinidae	<i>Eusmilia fastigiata</i>	Yes	COI:AB117294 CYB:AB117380		
Meandrinidae	<i>Meandrina brasiliensis</i>	Yes	COI:AB117297 CYB:AB117382	[S12]	Range information [S4]
Meandrinidae	<i>Meandrina danae</i>	Yes			Closest to <i>M. brasiliensis</i> [S44,S45]; range information [S4]
Meandrinidae	<i>Meandrina jacksoni</i>	Yes			Closest to <i>M. meandrites</i> [S45]; range information [S45]
Meandrinidae	<i>Meandrina meandrites</i>	Yes	12S:EF597032 COI:AB117296 CYB:AB117381		
Merulinidae	<i>Australogyra zelli</i>	Yes			Closest to <i>Platygyra</i> [S46]
Merulinidae	<i>Barabattoia amicorum</i>	Yes	COI:AB441193 CYB:AB441278		
Merulinidae	<i>Barabattoia laddi</i>	Yes			Clade XVII-B monophyly shown [S47]; <i>Barabattoia</i> monophyly assumed

Family	Species	Reef	Molecular	Morphology	Remarks
Merulinidae	<i>Boninastrea boninensis</i>	Yes			Closest to Merulina [S13]
Merulinidae	<i>Caulastraea connata</i>	Yes			Closest to <i>C. tumida</i> [S3]
Merulinidae	<i>Caulastraea curvata</i>	Yes			Closest to <i>C. furcata</i> [S48]
Merulinidae	<i>Caulastraea echinulata</i>	Yes	COI:FJ345414		
Merulinidae	<i>Caulastraea furcata</i>	Yes	12S:EF597035 16S:L75997 COI:AB117274 CYB:AB117355		
Merulinidae	<i>Caulastraea tumida</i>	Yes	COI:HQ203249		
Merulinidae	<i>Cyphastrea agassizi</i>	Yes			Cyphastrea monophyly shown [S47]
Merulinidae	<i>Cyphastrea chalcidicum</i>	Yes	COI:AB117259 CYB:AB117336		
Merulinidae	<i>Cyphastrea decadia</i>	Yes			Cyphastrea monophyly shown [S47]; closest to <i>C. japonica</i> [S49]
Merulinidae	<i>Cyphastrea hexasepta</i>	Yes			Cyphastrea monophyly shown [S47]; closest to <i>C. microphthalmia</i> [S9]
Merulinidae	<i>Cyphastrea japonica</i>	Yes			Cyphastrea monophyly shown [S47]
Merulinidae	<i>Cyphastrea microphthalmia</i>	Yes	COI:FJ345416		
Merulinidae	<i>Cyphastrea ocellina</i>	Yes	12S:EF596996 16S:L76132		
Merulinidae	<i>Cyphastrea serailia</i>	Yes	COI:AB117258 CYB:AB117334		
Merulinidae	<i>Dipsastraea albodus</i>	Yes			Clade XVII-B monophyly shown [S47]; closest to <i>F. matthaii</i> [S9]
Merulinidae	<i>Dipsastraea danae</i>	Yes	COI:EU371663		
Merulinidae	<i>Dipsastraea favus</i>	Yes	12S:AF177048 COI:AB117267 CYB:AB117346		
Merulinidae	<i>Dipsastraea helianthoides</i>	Yes			Clade XVII-B monophyly shown [S47]; closest to <i>F. laxa</i> [S3]
Merulinidae	<i>Dipsastraea lacuna</i>	Yes			Clade XVII-B monophyly shown [S47]
Merulinidae	<i>Dipsastraea laxa</i>	Yes	COI:EU371707		<i>Favia</i> cf. <i>laxa</i> in GenBank
Merulinidae	<i>Dipsastraea lizardensis</i>	Yes	COI:HM018633		
Merulinidae	<i>Dipsastraea maritima</i>	Yes	COI:HQ203258		<i>Favia</i> cf. <i>maritima</i> in GenBank
Merulinidae	<i>Dipsastraea marshae</i>	Yes			Clade XVII-F monophyly shown [S47]; closest to <i>F. rotundata</i> [S9]
Merulinidae	<i>Dipsastraea matthaii</i>	Yes	COI:HQ203259		
Merulinidae	<i>Dipsastraea maxima</i>	Yes	COI:HQ203260		
Merulinidae	<i>Dipsastraea pallida</i>	Yes	COI:AB117266 CYB:AB117345		
Merulinidae	<i>Dipsastraea rosaria</i>	Yes	COI:HQ203262		
Merulinidae	<i>Dipsastraea rotumana</i>	Yes	COI:FJ345427		
Merulinidae	<i>Dipsastraea speciosa</i>	Yes	COI:AB441194 CYB:AB441279		
Merulinidae	<i>Dipsastraea stelligera</i>	Yes	COI:AB117264 CYB:AB117343		
Merulinidae	<i>Dipsastraea truncatus</i>	Yes	COI:HQ203266		
Merulinidae	<i>Dipsastraea veroni</i>	Yes			Clade XVII-B monophyly shown [S47]; closest to <i>F. maxima</i> [S49]
Merulinidae	<i>Dipsastraea vietnamensis</i>	Yes			Clade XVII-B monophyly shown [S47]
Merulinidae	<i>Echinopora ashmorensis</i>	Yes			Echinopora monophyly shown [S47]; closest to <i>E. lamellosa</i> [S14]
Merulinidae	<i>Echinopora forskaliana</i>	Yes			Echinopora monophyly shown [S47]
Merulinidae	<i>Echinopora fruticulosa</i>	Yes			Echinopora monophyly shown [S47]
Merulinidae	<i>Echinopora gemmacea</i>	Yes	COI:AB117263 CYB:AB117342		Echinopora monophyly shown [S47]
Merulinidae	<i>Echinopora grandicula</i>	Yes			Echinopora monophyly shown [S47]; range information [S4]
Merulinidae	<i>Echinopora hirsutissima</i>	Yes			Echinopora monophyly shown [S47]
Merulinidae	<i>Echinopora horrida</i>	Yes	COI:HQ203253		
Merulinidae	<i>Echinopora irregularis</i>	Yes			Echinopora monophyly shown [S47]; closest to <i>E. hirsutissima</i> [S9]
Merulinidae	<i>Echinopora lamellosa</i>	Yes	16S:L76003 COI:FJ345419		
Merulinidae	<i>Echinopora mammiformis</i>	Yes	COI:HQ203254		
Merulinidae	<i>Echinopora pacificus</i>	Yes	COI:AB117262 CYB:AB117341		
Merulinidae	<i>Echinopora robusta</i>	Yes			Echinopora monophyly shown [S47]; closest to <i>E. forskaliana</i> [S9]
Merulinidae	<i>Echinopora taylorae</i>	Yes			Echinopora monophyly shown [S47]

Family	Species	Reef	Molecular	Morphology	Remarks
Merulinidae	<i>Echinopora tiranensis</i>	Yes			Echinopora monophyly shown [S47]
Merulinidae	<i>Erythrasrea flabellata</i>	Yes			Closest to Caulastraea [S50]
Merulinidae	<i>Favites abdita</i>	Yes	COI:HQ203267	[S12]	
Merulinidae	<i>Favites acuticollis</i>	Yes			Clade XVII-F monophyly shown [S47]
Merulinidae	<i>Favites bestae</i>	Yes			Clade XVII-F monophyly shown [S47]
Merulinidae	<i>Favites chinensis</i>	Yes	COI:AB117269 CYB:AB117349		
Merulinidae	<i>Favites complanata</i>	Yes	COI:EU371689		
Merulinidae	<i>Favites flexuosa</i>	Yes	COI:HQ203269		
Merulinidae	<i>Favites halicora</i>	Yes	COI:AB117268 CYB:AB117348		
Merulinidae	<i>Favites micropentagona</i>	Yes			Closest to <i>F. pentagona</i> [S9]
Merulinidae	<i>Favites paraflexuosa</i>	Yes	COI:EU371694		
Merulinidae	<i>Favites pentagona</i>	Yes	COI:HQ203271		
Merulinidae	<i>Favites rotundata</i>	Yes	COI:HQ203263		Clade XVII-F monophyly shown [S47]
Merulinidae	<i>Favites russelli</i>	Yes	COI:HQ203272		
Merulinidae	<i>Favites spinosa</i>	Yes			Clade XVII-F monophyly shown [S47]
Merulinidae	<i>Favites stylifera</i>	Yes	COI:HQ203273	[S15]	Clade XVII-G monophyly shown [S47]
Merulinidae	<i>Favites vasta</i>	Yes			Clade XVII-F monophyly shown [S47]
Merulinidae	<i>Goniastrea aspera</i>	Yes	COI:AB117271 CYB:AB117351		
Merulinidae	<i>Goniastrea australensis</i>	Yes	COI:HQ203274		
Merulinidae	<i>Goniastrea columella</i>	Yes			Closest to <i>G. pectinata</i> [S3]
Merulinidae	<i>Goniastrea deformis</i>	Yes	COI:AB441195 CYB:AB441280		
Merulinidae	<i>Goniastrea edwardsi</i>	Yes	COI:EU371697		
Merulinidae	<i>Goniastrea favulus</i>	Yes	COI:EU371698		
Merulinidae	<i>Goniastrea minuta</i>	Yes			Closest to <i>G. retiformis</i> [S9]
Merulinidae	<i>Goniastrea palauensis</i>	Yes	COI:EU371699		Clade XVII-B monophyly shown [S47]
Merulinidae	<i>Goniastrea pectinata</i>	Yes	COI:AB117270 CYB:AB117350		
Merulinidae	<i>Goniastrea peresi</i>	Yes			Closest to <i>G. aspera</i> [S3]
Merulinidae	<i>Goniastrea ramosa</i>	Yes			Closest to <i>G. retiformis</i> [S9]
Merulinidae	<i>Goniastrea retiformis</i>	Yes	12S:EF597033 COI:HQ203275		
Merulinidae	<i>Goniastrea thecata</i>	Yes			Closest to <i>G. aspera</i> [S9]
Merulinidae	<i>Hydnophora bonsai</i>	Yes		[S15]	
Merulinidae	<i>Hydnophora exesa</i>	Yes	12S:AF333059 COI:AB117285 CYB:AB117370	[S15]	
Merulinidae	<i>Hydnophora grandis</i>	Yes	COI:AB117286 CYB:AB117371	[S15]	
Merulinidae	<i>Hydnophora microconos</i>	Yes	COI:HQ203277	[S15]	
Merulinidae	<i>Hydnophora pilosa</i>	Yes	COI:HQ203278	[S15]	
Merulinidae	<i>Hydnophora rigida</i>	Yes	12S:EF597000 16S:L76009	[S15]	
Merulinidae	<i>Leptoria irregularis</i>	Yes	COI:AB117272 CYB:AB117353		
Merulinidae	<i>Leptoria phrygia</i>	Yes	16S:L76011 COI:AB117273 CYB:AB117354		
Merulinidae	<i>Merulina ampliata</i>	Yes	12S:AF333058 COI:AB117283 CYB:AB117368		
Merulinidae	<i>Merulina scabricula</i>	Yes	16S:L76014 COI:AB117284 CYB:AB117369		
Merulinidae	<i>Merulina scheeri</i>	Yes			Merulina monophyly shown [S47]; closest to <i>M. ampliata</i> [S30]
Merulinidae	<i>Mycedium elephantotus</i>	Yes	12S:AF333057 COI:AB117387 CYB:AB117366		
Merulinidae	<i>Mycedium mancaoi</i>	Yes			Mycedium monophyly shown [S47]; closest to <i>M. elephantotus</i> [S3]
Merulinidae	<i>Mycedium robokaki</i>	Yes	COI:HQ203295		
Merulinidae	<i>Mycedium spina</i>	Yes			Mycedium monophyly shown [S47]; range information [S4]
Merulinidae	<i>Mycedium steeni</i>	Yes			Mycedium monophyly shown [S47]; closest to <i>M. robokaki</i> [S9]

Family	Species	Reef	Molecular	Morphology	Remarks
Merulinidae	<i>Mycedium umbra</i>		Yes		Mycedium monophyly shown [S47]; closest to <i>M. elephantotus</i> [S9]
Merulinidae	<i>Orbicella annularis</i>	Yes	12S:AP008973 16S:AP008973 AT6:AP008973 COI:AP008973 CYB:AP008973		
Merulinidae	<i>Orbicella faveolata</i>	Yes	12S:AP008977 16S:AP008977 AT6:AP008977 COI:AP008977 CYB:AP008977		Range information [S4]
Merulinidae	<i>Orbicella franksi</i>	Yes	12S:AP008976 16S:AP008976 AT6:AP008976 COI:AP008976 CYB:AP008976		Range information [S4]
Merulinidae	<i>Oulophyllia bennettae</i>	Yes	COI:AB117277 CYB:AB117358		
Merulinidae	<i>Oulophyllia crispa</i>	Yes	COI:AB117276 CYB:AB117357		
Merulinidae	<i>Oulophyllia levis</i>	Yes			Closest to <i>O. crispa</i> [S3]
Merulinidae	<i>Paraclavarina triangularis</i>	Yes			Closest to Merulina [S51]
Merulinidae	<i>Pectinia africanus</i>	Yes			Pectinia + Mycedium monophyly shown [S47]; closest to <i>P. lactuca</i> [S9]
Merulinidae	<i>Pectinia alcicornis</i>	Yes	12S:EF597037 16S:L76017 COI:AB117385 CYB:AB117364		
Merulinidae	<i>Pectinia ayleni</i>	Yes	COI:HQ203299		
Merulinidae	<i>Pectinia crassa</i>	Yes			Pectinia + Mycedium monophyly shown [S47]; range information [S4]
Merulinidae	<i>Pectinia elongata</i>	Yes			Pectinia + Mycedium monophyly shown [S47]
Merulinidae	<i>Pectinia lactuca</i>	Yes	COI:HQ203300		
Merulinidae	<i>Pectinia maxima</i>	Yes			Pectinia + Mycedium monophyly shown [S47]; closest to <i>P. lactuca</i> & <i>P. ayleni</i> [S3]
Merulinidae	<i>Pectinia paeonia</i>	Yes	COI:AB117386 [S12] CYB:AB117365		
Merulinidae	<i>Pectinia pygmaeus</i>	Yes			Pectinia + Mycedium monophyly shown [S47]; closest to <i>P. elongata</i> & <i>P. teres</i> [S9]
Merulinidae	<i>Pectinia teres</i>	Yes			Pectinia + Mycedium monophyly shown [S47]; closest to <i>P. elongata</i> [S3]
Merulinidae	<i>Phymastrea annuligera</i>	Yes	COI:JN248781		Clade XVII-B monophyly shown [S47]
Merulinidae	<i>Phymastrea colemani</i>	Yes	COI:HQ203284		Clade XVII-F monophyly shown [S47]
Merulinidae	<i>Phymastrea curta</i>	Yes	COI:AB117278 CYB:AB117359		
Merulinidae	<i>Phymastrea magnstellata</i>	Yes	COI:AB117279 CYB:AB117360		Clade XVII-F monophyly shown [S47]
Merulinidae	<i>Phymastrea multipunctata</i>	Yes	COI:HQ203289		
Merulinidae	<i>Phymastrea salebrosa</i>	Yes	COI:HQ203290		
Merulinidae	<i>Phymastrea serageldini</i>	Yes			Closest to <i>M. curta</i> [S9]
Merulinidae	<i>Phymastrea valenciennessi</i>	Yes	12S:AF333061 COI:AB117280 CYB:AB117361		Clade XVII-F monophyly shown [S47]
Merulinidae	<i>Platygyra acuta</i>	Yes	COI:JN248782 [S15]		
Merulinidae	<i>Platygyra carmosus</i>	Yes	[S15]		
Merulinidae	<i>Platygyra contorta</i>	Yes	COI:JN248783 [S15]		
Merulinidae	<i>Platygyra crosslandi</i>	Yes	[S15]		
Merulinidae	<i>Platygyra daedalea</i>	Yes	COI:AB117281 [S12,S15] CYB:AB117362		
Merulinidae	<i>Platygyra lamellina</i>	Yes	COI:HQ203302 [S15] CYB:AB117363		
Merulinidae	<i>Platygyra pini</i>	Yes	COI:HQ203303 [S15]		
Merulinidae	<i>Platygyra ryukyuensis</i>	Yes	COI:HQ203304 [S15]		
Merulinidae	<i>Platygyra sinensis</i>	Yes	12S:AF177047 [S15] COI:HQ203305		
Merulinidae	<i>Platygyra verweyi</i>	Yes	COI:EU371722 [S15]		Platygyra cf. <i>verweyi</i> in GenBank
Merulinidae	<i>Platygyra yaeyamaensis</i>	Yes	[S15]		
Merulinidae	<i>Plesiastrea devantieri</i>	Yes	COI:FR837987		
Merulinidae	<i>Scapophyllia cylindrica</i>	Yes	COI:AB441198 CYB:AB441283		

Family	Species	Reef	Molecular	Morphology	Remarks
Merulinidae	<i>Trachyphyllia geoffroyi</i>	Yes	COI:AB117287 CYB:AB117372		Clade XVII-B monophyly shown [S47]
Micrabaciidae	<i>Leptopenus antarcticus</i>	No		[S12]	
Micrabaciidae	<i>Leptopenus discus</i>	No			Leptopenus monophyly assumed
Micrabaciidae	<i>Leptopenus hypocoelus</i>	No			Leptopenus monophyly assumed
Micrabaciidae	<i>Leptopenus solidus</i>	No			Leptopenus monophyly assumed
Micrabaciidae	<i>Letepsammia fissilis</i>	No			Letepsammia monophyly assumed
Micrabaciidae	<i>Letepsammia formosissima</i>	No	12S:GQ868663 16S:GQ868697 COI:GQ868685		
Micrabaciidae	<i>Letepsammia franki</i>	No			Letepsammia monophyly assumed
Micrabaciidae	<i>Letepsammia superstes</i>	No			Letepsammia monophyly assumed
Micrabaciidae	<i>Rhombopsammia niphada</i>	No	12S:GQ868661 16S:GQ868693 COI:GQ868683		
Micrabaciidae	<i>Rhombopsammia squiresi</i>	No			Rhombopsammia monophyly assumed
Micrabaciidae	<i>Stephanophyllia complicata</i>	No	16S:GQ868689		
Micrabaciidae	<i>Stephanophyllia fungulus</i>	No			Stephanophyllia monophyly assumed
Micrabaciidae	<i>Stephanophyllia neglecta</i>	No			Stephanophyllia monophyly assumed
Montastraeidae	<i>Montastraea cavernosa</i>	Yes	12S:EF597006 COI:AB117288 CYB:AB117373	[S12]	
Mussidae	<i>Colpophyllia amaranthus</i>	Yes		[S42]	Range information from GBIF
Mussidae	<i>Colpophyllia breviserialis</i>	Yes		[S42]	Range information from GBIF
Mussidae	<i>Colpophyllia natans</i>	Yes	12S:DQ643833 16S:DQ643833 AT6:DQ643833 COI:DQ643833 CYB:DQ643833	[S42]	
Mussidae	<i>Diploria labyrinthiformis</i>	Yes	12S:EF597002 COI:AB117224 CYB:AB117302	[S42]	
Mussidae	<i>Favia fragum</i>	Yes	12S:EF597005 16S:U40295 COI:AB117222 CYB:AB117301	[S42]	
Mussidae	<i>Favia gravida</i>	Yes		[S42]	Range information from GBIF
Mussidae	<i>Isophyllastrea rigida</i>	Yes		[S29,S42]	
Mussidae	<i>Isophyllia sinuosa</i>	Yes	COI:AB117238 CYB:AB117315	[S29,S42]	
Mussidae	<i>Manicina areolata</i>	Yes	12S:EF597012 COI:AB117227 CYB:AB117305	[S42]	
Mussidae	<i>Mussa angulosa</i>	Yes	12S:DQ643834 16S:DQ643834 AT6:DQ643834 COI:DQ643834 CYB:DQ643834	[S29,S42]	
Mussidae	<i>Mussismilia brasiliensis</i>	Yes	COI:AB117231 CYB:AB117309	[S12,S29,S42]	
Mussidae	<i>Mussismilia harttii</i>	Yes	COI:AB117232 CYB:AB117308	[S12,S29,S42]	
Mussidae	<i>Mussismilia hispida</i>	Yes	COI:AB117233 CYB:AB117310	[S12,S29,S42]	
Mussidae	<i>Mussismilia leptophylla</i>	Yes	COI:AB117229 CYB:AB117307	[S12,S42]	
Mussidae	<i>Mycetophyllia aliciae</i>	Yes	12S:EF597039 COI:AB117235 CYB:AB117312	[S29,S42]	
Mussidae	<i>Mycetophyllia danaana</i>	Yes	COI:AB117234 CYB:AB117311	[S29,S42]	
Mussidae	<i>Mycetophyllia ferox</i>	Yes		[S29,S42]	
Mussidae	<i>Mycetophyllia lamarckiana</i>	Yes	12S:EF597040	[S29,S42]	
Mussidae	<i>Mycetophyllia reesi</i>	Yes		[S29,S42]	
Mussidae	<i>Pseudodiploria clivosa</i>	Yes	12S:EF597001 COI:AB117226 CYB:AB117304	[S42]	
Mussidae	<i>Pseudodiploria strigosa</i>	Yes	12S:EF597003 COI:AB117225 CYB:AB117303	[S42]	
Mussidae	<i>Scolymia cubensis</i>	Yes	COI:AB117236 CYB:AB117314	[S42]	Atlantic Scolymia

Family	Species	Reef	Molecular	Morphology	Remarks
Mussidae	<i>Scolymia lacera</i>	Yes		[S42]	Junior synonym of <i>S. cubensis</i> [S3]; Atlantic Scolymia; range information [S4]
Mussidae	<i>Scolymia wellsi</i>	Yes		[S12,S42]	Junior synonym of <i>S. cubensis</i> [S52]; Atlantic Scolymia; range information [S4]
Oculinidae	<i>Bathelia candida</i>	No			Closest to Oculina [S53]
Oculinidae	<i>Cladocora arbuscula</i>	Yes	COI:AB117292 CYB:AB117377	[S12,S15]	
Oculinidae	<i>Cladocora caespitosa</i>	Yes	12S:EF597017 16S:AF265612	[S15]	
Oculinidae	<i>Cladocora debilis</i>	No		[S12,S15]	
Oculinidae	<i>Cladocora pacifica</i>	No		[S15]	
Oculinidae	<i>Cyathelia axillaris</i>	No	COI:HM018622		
Oculinidae	<i>Madreporella arbuscula</i>	No			Madreporella monophyly assumed
Oculinidae	<i>Madreporella carolina</i>	No			Madreporella monophyly assumed
Oculinidae	<i>Madreporella minutiseptum</i>	No			Madreporella monophyly assumed
Oculinidae	<i>Madreporella oculata</i>	No	16S:AF550369 COI:HM018659		
Oculinidae	<i>Madreporella porcellana</i>	No			Madreporella monophyly assumed
Oculinidae	<i>Oculina diffusa</i>	Yes	COI:AB117293 CYB:AB117379	[S15]	
Oculinidae	<i>Oculina patagonica</i>	Yes	12S:EF597025 16S:AF265601	[S12,S15]	
Oculinidae	<i>Oculina profunda</i>	No		[S15]	
Oculinidae	<i>Oculina robusta</i>	Yes	COI:FJ966869	[S15]	Range information [S4]
Oculinidae	<i>Oculina tenella</i>	Yes		[S15]	Range information [S4]
Oculinidae	<i>Oculina valenciennessi</i>	Yes		[S15]	
Oculinidae	<i>Oculina varicosa</i>	Yes	COI:FJ966875	[S15]	
Oculinidae	<i>Oculina virgosa</i>	No		[S15]	
Oculinidae	<i>Petrosiphonia rerediviva</i>	No			Closest to Oculina [S32]
Oculinidae	<i>Schizoculina africana</i>	Yes			Schizoculina monophyly assumed; closest to Oculina [S54]
Oculinidae	<i>Schizoculina fissipara</i>	Yes			Schizoculina monophyly assumed; closest to Oculina [S54]
Oculinidae	<i>Sclerhelia hirtella</i>	No			Closest to Coenocyathus [S55]
Oculinidae	<i>Solenastrea bournoni</i>	Yes	COI:AB117291 CYB:AB117376		
Oculinidae	<i>Solenastrea hyades</i>	Yes	COI:FJ966870		
Plesiastreidae	<i>Blastomussa loyae</i>	Yes		[S29]	Sister species to <i>B. merleti</i> [S56]; range information [S56]
Plesiastreidae	<i>Blastomussa merleti</i>	Yes		[S29]	
Plesiastreidae	<i>Blastomussa wellsi</i>	Yes	COI:AB289563 CYB:AB289565	[S29]	
Plesiastreidae	<i>Nemenzophyllia turbida</i>	Yes			Closest to Plerogyra [S13]
Plesiastreidae	<i>Parasimiplastrea sheppardi</i>	Yes			Closest to Leptastrea [S9]
Plesiastreidae	<i>Physogyra lichensteini</i>	Yes	12S:EF597030 COI:AB289562 CYB:AB289564	[S12]	
Plesiastreidae	<i>Plerogyra cauliformis</i>	Yes			Plerogyra monophyly assumed; closest to <i>P. simplex</i> [S7]; range information [S4]
Plesiastreidae	<i>Plerogyra diabolotus</i>	Yes			Plerogyra monophyly assumed; range information [S4]
Plesiastreidae	<i>Plerogyra discus</i>	Yes			Plerogyra monophyly assumed; closest to <i>P. sinuosa</i> [S9]
Plesiastreidae	<i>Plerogyra multilobata</i>	Yes			Plerogyra monophyly assumed; closest to <i>P. diabolotus</i> [S7]; range information [S7]
Plesiastreidae	<i>Plerogyra simplex</i>	Yes			Plerogyra monophyly assumed
Plesiastreidae	<i>Plerogyra sinuosa</i>	Yes	COI:HM018663		Plerogyra sp. in GenBank; synonym type species of Plerogyra
Plesiastreidae	<i>Plesiastrea versipora</i>	Yes	COI:AB289561 CYB:AB289566		
Pocilloporidae	<i>Madracis asanoi</i>	Yes	COI:HM018656		
Pocilloporidae	<i>Madracis asperula</i>	Yes			Closest to <i>M. asanoi</i> [S3]
Pocilloporidae	<i>Madracis auretenra</i>	Yes	12S:EU400212 16S:EU400212 AT6:EU400212 COI:EU400212 CYB:EU400212		Probably <i>M. mirabilis</i> in GenBank [S57]
Pocilloporidae	<i>Madracis brueggemannii</i>	No			Madracis monophyly assumed
Pocilloporidae	<i>Madracis carmabi</i>	Yes	12S:EF596980		Range information [S4]
Pocilloporidae	<i>Madracis decactis</i>	Yes	12S:EF596982	[S12]	

Family	Species	Reef	Molecular	Morphology	Remarks
Pocilloporidae	<i>Madracis formosa</i>	Yes	12S:EF596981		
Pocilloporidae	<i>Madracis fragilis</i>	No			Madracis monophyly assumed
Pocilloporidae	<i>Madracis hellana</i>	No			Madracis monophyly assumed
Pocilloporidae	<i>Madracis kauaiensis</i>	No			Madracis monophyly assumed
Pocilloporidae	<i>Madracis kirbyi</i>	Yes			Closest to <i>M. decactis</i> [S3]
Pocilloporidae	<i>Madracis myriaster</i>	No			Madracis monophyly assumed
Pocilloporidae	<i>Madracis pharensis</i>	Yes	12S:EF596983		
Pocilloporidae	<i>Madracis profunda</i>	No			Madracis monophyly assumed
Pocilloporidae	<i>Madracis senaria</i>	Yes	12S:EF596979		
Pocilloporidae	<i>Palauastrea ramosa</i>	Yes			Closest to <i>Madracis</i> [S58]
Pocilloporidae	<i>Pocillopora ankeli</i>	Yes	[S1]		
Pocilloporidae	<i>Pocillopora capitata</i>	Yes	[S1]		
Pocilloporidae	<i>Pocillopora damicornis</i>	Yes	12S:EF526302 16S:EF526302 AT6:EF526302 COI:EF526302 CYB:EF526302	[S1]	
Pocilloporidae	<i>Pocillopora danae</i>	Yes		[S1]	
Pocilloporidae	<i>Pocillopora effusus</i>	Yes		[S1]	
Pocilloporidae	<i>Pocillopora elegans</i>	Yes		[S1]	
Pocilloporidae	<i>Pocillopora eydouxi</i>	Yes	12S:EF526303 16S:EF526303 AT6:EF526303 COI:EF526303 CYB:EF526303	[S1]	
Pocilloporidae	<i>Pocillopora fungiformis</i>	Yes		[S1]	
Pocilloporidae	<i>Pocillopora indiania</i>	Yes		[S1]	
Pocilloporidae	<i>Pocillopora inflata</i>	Yes		[S1]	
Pocilloporidae	<i>Pocillopora kelleheri</i>	Yes		[S1]	
Pocilloporidae	<i>Pocillopora ligulata</i>	Yes		[S1]	
Pocilloporidae	<i>Pocillopora meandrina</i>	Yes	12S:EF596976 16S:L76018	[S1]	
Pocilloporidae	<i>Pocillopora molokensis</i>	Yes		[S1]	
Pocilloporidae	<i>Pocillopora setichelli</i>	Yes		[S1]	Range information [S4]
Pocilloporidae	<i>Pocillopora verrucosa</i>	Yes	COI:AB441230 CYB:AB441315	[S1]	
Pocilloporidae	<i>Pocillopora woodjonesi</i>	Yes		[S1]	
Pocilloporidae	<i>Pocillopora zelli</i>	Yes		[S1]	
Pocilloporidae	<i>Seriatopora aculeata</i>	Yes			Seriatopora monophyly shown [S43]; closest to <i>S. stellata</i> [S3]
Pocilloporidae	<i>Seriatopora caliendrum</i>	Yes	12S:EF633601 16S:EF633601 AT6:EF633601 COI:EF633601 CYB:EF633601		
Pocilloporidae	<i>Seriatopora dendritica</i>	Yes			Seriatopora monophyly shown [S43]; closest to <i>S. hystrix</i> [S9]
Pocilloporidae	<i>Seriatopora guttatus</i>	Yes			Seriatopora monophyly shown [S43]; closest to <i>S. hystrix</i> [S9]
Pocilloporidae	<i>Seriatopora hystrix</i>	Yes	12S:EF633600 16S:EF633600 AT6:EF633600 COI:EF633600 CYB:EF633600		
Pocilloporidae	<i>Seriatopora stellata</i>	Yes			Seriatopora monophyly shown [S43]
Pocilloporidae	<i>Stylocoeniella armata</i>	Yes			Stylocoeniella monophyly assumed; closest to <i>S. guentheri</i> [S3]
Pocilloporidae	<i>Stylocoeniella cocosensis</i>	Yes			Stylocoeniella monophyly assumed
Pocilloporidae	<i>Stylocoeniella guentheri</i>	Yes	COI:AB441225 CYB:AB441310		
Pocilloporidae	<i>Stylocoeniella muscosus</i>	Yes			Stylocoeniella monophyly assumed; range information [S4]
Pocilloporidae	<i>Stylocoeniella nikelii</i>	Yes			Stylocoeniella monophyly assumed; closest to <i>S. guentheri</i> [S59]; range information [S59]
Pocilloporidae	<i>Stylophora danae</i>	Yes			Stylophora monophyly assumed; closest to <i>S. pistillata</i> [S3]
Pocilloporidae	<i>Stylophora kuehlmanni</i>	Yes			Stylophora monophyly assumed; closest to <i>S. subseriata</i> [S3]
Pocilloporidae	<i>Stylophora madagascarensis</i>	Yes			Stylophora monophyly assumed; closest to <i>S. kuehlmanni</i> & <i>S. subseriata</i> [S9]

Family	Species	Reef	Molecular	Morphology	Remarks
Pocilloporidae	<i>Stylophora mamillata</i>		Yes		Stylophora monophyly assumed; not close to other Stylophora [S3]
Pocilloporidae	<i>Stylophora pistillata</i>	Yes	12S:EU400214 16S:EU400214 AT6:EU400214 COI:EU400214 CYB:EU400214		
Pocilloporidae	<i>Stylophora subseriata</i>	Yes			Stylophora monophyly assumed
Pocilloporidae	<i>Stylophora wellsi</i>	Yes			Stylophora monophyly assumed
Poritidae	<i>Goniopora albiconus</i>	Yes		[S15]	
Poritidae	<i>Goniopora burgosi</i>	Yes		[S15]	
Poritidae	<i>Goniopora cellulosa</i>	Yes		[S15]	
Poritidae	<i>Goniopora ciliatus</i>	Yes		[S15]	
Poritidae	<i>Goniopora columna</i>	Yes	12S:JF825141 16S:JF825141 AT6:JF825141 COI:JF825141 CYB:JF825141 ND5:JF825141	[S15]	
Poritidae	<i>Goniopora djiboutiensis</i>	Yes		[S15]	
Poritidae	<i>Goniopora eclipsensis</i>	Yes		[S15]	
Poritidae	<i>Goniopora fruticosa</i>	Yes		[S15]	
Poritidae	<i>Goniopora lobata</i>	Yes		[S15]	
Poritidae	<i>Goniopora minor</i>	Yes		[S15]	
Poritidae	<i>Goniopora norfolkensis</i>	Yes		[S15]	
Poritidae	<i>Goniopora palmensis</i>	Yes		[S15]	
Poritidae	<i>Goniopora pandoraensis</i>	Yes		[S15]	
Poritidae	<i>Goniopora pearsoni</i>	Yes		[S15]	
Poritidae	<i>Goniopora pendulus</i>	Yes		[S15]	
Poritidae	<i>Goniopora planulata</i>	Yes		[S15]	
Poritidae	<i>Goniopora polyformis</i>	Yes		[S15]	
Poritidae	<i>Goniopora savignyi</i>	Yes		[S15]	
Poritidae	<i>Goniopora somaliensis</i>	Yes		[S15]	
Poritidae	<i>Goniopora stokesi</i>	Yes	12S:EF597060 16S:L76008	[S15]	
Poritidae	<i>Goniopora stutchburyi</i>	Yes		[S15]	
Poritidae	<i>Goniopora sultani</i>	Yes		[S15]	
Poritidae	<i>Goniopora tenella</i>	Yes		[S15]	
Poritidae	<i>Goniopora tenuidens</i>	Yes		[S12,S15]	
Poritidae	<i>Machadolites tantillus</i>	Yes			Closest to Goniopora & Porites [S60,S61]; range information [S4]
Poritidae	<i>Porites annae</i>	Yes	COI:FJ423965	[S15]	
Poritidae	<i>Porites aranetai</i>	Yes		[S15]	
Poritidae	<i>Porites arnaudi</i>	Yes		[S15]	
Poritidae	<i>Porites astreoides</i>	Yes	12S:EF597055 COI:AB441242 CYB:AB441327	[S12,S15]	
Poritidae	<i>Porites attenuata</i>	Yes		[S15]	
Poritidae	<i>Porites australiensis</i>	Yes		[S15]	
Poritidae	<i>Porites baueri</i>	Yes		[S15]	Range information [S4]
Poritidae	<i>Porites bernardi</i>	Yes		[S15]	Range information [S4]
Poritidae	<i>Porites branneri</i>	Yes	12S:EF597059 COI:AY451380	[S15]	
Poritidae	<i>Porites brighami</i>	Yes		[S15]	
Poritidae	<i>Porites cocosensis</i>	Yes		[S15]	
Poritidae	<i>Porites colonensis</i>	Yes	COI:FJ423972	[S15]	
Poritidae	<i>Porites columnaris</i>	Yes		[S15]	
Poritidae	<i>Porites compressa</i>	Yes	12S:EF597053 16S:L76020 COI:FJ423970	[S15]	
Poritidae	<i>Porites cumulatus</i>	Yes		[S15]	
Poritidae	<i>Porites cylindrica</i>	Yes	COI:FJ423968	[S15]	
Poritidae	<i>Porites decasepta</i>	Yes		[S15]	Range information [S4]
Poritidae	<i>Porites deformis</i>	Yes		[S15]	
Poritidae	<i>Porites densa</i>	Yes		[S15]	

Family	Species	Reef	Molecular	Morphology	Remarks
Poritidae	<i>Porites desilveri</i>	Yes	[S15]		
Poritidae	<i>Porites divaricata</i>	Yes	12S:EF597058 COI:FJ423969	[S15]	
Poritidae	<i>Porites duerdeni</i>	Yes	COI:FJ423976	[S15]	Range information [S4]
Poritidae	<i>Porites echinulata</i>	Yes		[S15]	
Poritidae	<i>Porites ericacea</i>	Yes		[S15]	Range information [S4]
Poritidae	<i>Porites eridani</i>	Yes		[S15]	
Poritidae	<i>Porites evermanni</i>	Yes	COI:FJ423984	[S15]	
Poritidae	<i>Porites excavata</i>	Yes		[S15]	Range information [S4]
Poritidae	<i>Porites flavus</i>	Yes		[S15]	
Poritidae	<i>Porites furcata</i>	Yes	COI:FJ423988	[S15]	
Poritidae	<i>Porites harrisoni</i>	Yes		[S15]	
Poritidae	<i>Porites heronensis</i>	Yes		[S15]	
Poritidae	<i>Porites horizontalata</i>	Yes		[S15]	
Poritidae	<i>Porites latistella</i>	Yes		[S15]	
Poritidae	<i>Porites lichen</i>	Yes	COI:FJ423963	[S15]	
Poritidae	<i>Porites lobata</i>	Yes	16S:AF550372 COI:FJ423973	[S15]	
Poritidae	<i>Porites lutea</i>	Yes	COI:AB441243 CYB:AB441328	[S15]	
Poritidae	<i>Porites mayeri</i>	Yes		[S15]	
Poritidae	<i>Porites monticulosa</i>	Yes		[S15]	
Poritidae	<i>Porites murrayensis</i>	Yes		[S15]	
Poritidae	<i>Porites myrmidonensis</i>	Yes		[S15]	
Poritidae	<i>Porites napopora</i>	Yes		[S15]	
Poritidae	<i>Porites negrosensis</i>	Yes		[S15]	
Poritidae	<i>Porites nigrescens</i>	Yes		[S15]	
Poritidae	<i>Porites nodifera</i>	Yes		[S15]	
Poritidae	<i>Porites okinawensis</i>	Yes	12S:JF825142 16S:JF825142 AT6:JF825142 COI:JF825142 CYB:JF825142 ND5:JF825142	[S15]	
Poritidae	<i>Porites ornata</i>	Yes		[S15]	
Poritidae	<i>Porites panamensis</i>	Yes	COI:FJ423990	[S15]	
Poritidae	<i>Porites porites</i>	Yes	12S:DQ643837 16S:DQ643837 AT6:DQ643837 COI:DQ643837 CYB:DQ643837 ND5:DQ643837	[S15]	
Poritidae	<i>Porites profundus</i>	Yes		[S15]	
Poritidae	<i>Porites pukoensis</i>	Yes		[S15]	
Poritidae	<i>Porites randalli</i>	Yes	COI:FJ423966	[S15]	Range information [S62]
Poritidae	<i>Porites rugosa</i>	Yes		[S15]	
Poritidae	<i>Porites rus</i>	Yes	COI:FJ423979	[S15]	
Poritidae	<i>Porites sillimaniana</i>	Yes		[S15]	
Poritidae	<i>Porites solida</i>	Yes	COI:FJ423962	[S15]	
Poritidae	<i>Porites somaliensis</i>	Yes		[S15]	
Poritidae	<i>Porites stephensonii</i>	Yes		[S15]	
Poritidae	<i>Porites studeri</i>	Yes		[S15]	Range information [S4]
Poritidae	<i>Porites sverdrupi</i>	Yes		[S15]	Range information [S4]
Poritidae	<i>Porites tuberculosa</i>	Yes		[S15]	
Poritidae	<i>Porites vaughani</i>	Yes		[S15]	
Poritidae	<i>Poritipora paliformis</i>	Yes			Poritidae monophyly assumed (excluding Alveopora) Closest to Porites [S13]
Poritidae	<i>Stylaraea punctata</i>	Yes			
Psammocorididae	<i>Psammocora albopicta</i>	Yes	COI:FM865871	[S29]	Range information [S4]
Psammocorididae	<i>Psammocora contigua</i>	Yes	16S:AF550371 COI:AB441209 CYB:AB441294	[S29]	
Psammocorididae	<i>Psammocora decussata</i>	Yes		[S29]	Psammocora monophyly shown [S63]
Psammocorididae	<i>Psammocora digitata</i>	Yes	COI:AM494855	[S29]	
Psammocorididae	<i>Psammocora haimeana</i>	Yes	COI:FM865874	[S29]	

Family	Species	Reef	Molecular	Morphology	Remarks
Psammocoridae	<i>Psammocora interstinctus</i>	Yes		[S29]	Psammocora monophyly shown [S63]; range information [S4]
Psammocoridae	<i>Psammocora nierstraszi</i>	Yes	COI:AM494851	[S29]	
Psammocoridae	<i>Psammocora obtusangula</i>	Yes		[S29]	
Psammocoridae	<i>Psammocora profundacella</i>	Yes	COI:AM494853	[S29]	
Psammocoridae	<i>Psammocora ramosa</i>	Yes		[S29]	Psammocora monophyly shown [S63]; range information [S4]
Psammocoridae	<i>Psammocora stellata</i>	Yes		[S29]	Psammocora monophyly shown [S63]
Psammocoridae	<i>Psammocora superficialis</i>	Yes		[S29]	
Psammocoridae	<i>Psammocora vaughani</i>	Yes		[S29]	
Psammocoridae	<i>Psammocora verrilli</i>	Yes		[S29]	Psammocora monophyly shown [S63]
Rhizangiidae	<i>Astrangia astrata</i>	No			Astrangia monophyly assumed
Rhizangiidae	<i>Astrangia browni</i>	No			Astrangia monophyly assumed
Rhizangiidae	<i>Astrangia californica</i>	No			Astrangia monophyly assumed
Rhizangiidae	<i>Astrangia conferta</i>	No			Astrangia monophyly assumed
Rhizangiidae	<i>Astrangia costata</i>	No			Astrangia monophyly assumed
Rhizangiidae	<i>Astrangia dentata</i>	No			Astrangia monophyly assumed
Rhizangiidae	<i>Astrangia equatorialis</i>	No			Astrangia monophyly assumed
Rhizangiidae	<i>Astrangia haimei</i>	No			Astrangia monophyly assumed
Rhizangiidae	<i>Astrangia howardi</i>	No			Astrangia monophyly assumed
Rhizangiidae	<i>Astrangia macrodentata</i>	No			Astrangia monophyly assumed
Rhizangiidae	<i>Astrangia mercatoris</i>	No			Astrangia monophyly assumed
Rhizangiidae	<i>Astrangia poculata</i>	Yes	12S:DQ643832 AT6:DQ643832 COI:DQ643832 CYB:DQ643832	[S29]	Astrangia sp. in GenBank; synonym type species of Astrangia
Rhizangiidae	<i>Astrangia rathbuni</i>	No			
Rhizangiidae	<i>Astrangia solitaria</i>	No			Astrangia monophyly assumed
Rhizangiidae	<i>Astrangia woodsi</i>	No			Astrangia monophyly assumed
Rhizangiidae	<i>Cladangia exusta</i>	No			Rhizangiidae monophyly assumed
Rhizangiidae	<i>Culicia australiensis</i>	No			Rhizangiidae monophyly assumed
Rhizangiidae	<i>Culicia cuticulata</i>	No			Rhizangiidae monophyly assumed
Rhizangiidae	<i>Culicia excavata</i>	No			Rhizangiidae monophyly assumed
Rhizangiidae	<i>Culicia fragilis</i>	No			Rhizangiidae monophyly assumed
Rhizangiidae	<i>Culicia hoffmeisteri</i>	No			Rhizangiidae monophyly assumed
Rhizangiidae	<i>Culicia quinaria</i>	No			Rhizangiidae monophyly assumed
Rhizangiidae	<i>Culicia rachelfitzhardingeae</i>	No			Rhizangiidae monophyly assumed
Rhizangiidae	<i>Culicia rubeola</i>	No			Rhizangiidae monophyly assumed
Rhizangiidae	<i>Culicia smithii</i>	No			Rhizangiidae monophyly assumed
Rhizangiidae	<i>Culicia stellata</i>	No			Rhizangiidae monophyly assumed
Rhizangiidae	<i>Culicia subaustraliensis</i>	No			Rhizangiidae monophyly assumed
Rhizangiidae	<i>Culicia tenella</i>	No			Rhizangiidae monophyly assumed
Rhizangiidae	<i>Culicia tenuisepes</i>	No			Rhizangiidae monophyly assumed
Rhizangiidae	<i>Cylicia inflata</i>	No			Incertae sedis, but probably closest to Culicia [S20]
Rhizangiidae	<i>Oulangia bradleyi</i>	No			Rhizangiidae monophyly assumed
Rhizangiidae	<i>Oulangia cyathiformis</i>	No			Rhizangiidae monophyly assumed
Rhizangiidae	<i>Oulangia stokesiana</i>	No			Rhizangiidae monophyly assumed
Schizocyathidae	<i>Pourtalocyathus hispidus</i>	No			Schizocyathidae monophyly assumed; closest to Gardineriidae, hypothesis A [S64]
Schizocyathidae	<i>Schizocyathus fissilis</i>	No			Schizocyathidae monophyly assumed; closest to Gardineriidae, hypothesis A [S64]
Schizocyathidae	<i>Temnotrochus kermadecensis</i>	No			Schizocyathidae monophyly assumed; closest to Gardineriidae, hypothesis A [S64]
Siderastreidae	<i>Pseudosiderastrea formosa</i>	Yes	CYB:JN600483	[S29]	Range information [S65]
Siderastreidae	<i>Pseudosiderastrea tayami</i>	Yes	CYB:JN600486	[S29]	
Siderastreidae	<i>Siderastrea glynni</i>	Yes	CYB:JN600490	[S29]	
Siderastreidae	<i>Siderastrea radians</i>	Yes	12S:DQ643838 16S:DQ643838 AT6:DQ643838 COI:DQ643838 CYB:DQ643838 ND5:DQ643838	[S29]	
Siderastreidae	<i>Siderastrea savignyana</i>	Yes	COI:AB441215 CYB:AB441300	[S29]	

Family	Species	Reef	Molecular	Morphology	Remarks
Siderastreidae	<i>Siderastrea siderea</i>	Yes	12S:EF597067 COI:AB441211 CYB:AB441296	[S29]	
Siderastreidae	<i>Siderastrea stellata</i>	Yes	COI:AB441213 CYB:AB441298	[S12,S29]	
Stenocyathidae	<i>Pedicellocyathus keyesi</i>	No			Stenocyathidae monophly assumed
Stenocyathidae	<i>Stenocyathus vermiformis</i>	No	16S:HQ439763 COI:HM018619		
Stenocyathidae	<i>Truncatoguynia irregularis</i>	No			Stenocyathidae monophly assumed
Turbinoliidae	<i>Alatotrochus rubescens</i>	No		[S66]	
Turbinoliidae	<i>Australocyathus vincentinus</i>	No		[S66]	
Turbinoliidae	<i>Conocyathus formosus</i>	No		[S66]	
Turbinoliidae	<i>Conocyathus gracilis</i>	No		[S66]	
Turbinoliidae	<i>Conocyathus zelandiae</i>	No		[S66]	
Turbinoliidae	<i>Cryptotrochus brevipalus</i>	No		[S66]	
Turbinoliidae	<i>Cryptotrochus carolinensis</i>	No		[S66]	
Turbinoliidae	<i>Cryptotrochus javanus</i>	No		[S66]	
Turbinoliidae	<i>Cyathotrochus nascornatus</i>	No		[S66]	
Turbinoliidae	<i>Cyathotrochus pileus</i>	No	12S:EF597069 16S:HQ439764 COI:HM018623	[S66]	
Turbinoliidae	<i>Deltocyathoides orientalis</i>	No		[S66]	
Turbinoliidae	<i>Deltocyathoides stimpsonii</i>	No		[S66]	
Turbinoliidae	<i>Dunocyathus parasiticus</i>	No		[S66]	
Turbinoliidae	<i>Dunocyathus wallaceae</i>	No		[S66]	
Turbinoliidae	<i>Endocyathopora laticostata</i>	No		[S66]	
Turbinoliidae	<i>Foveolocyathus alternans</i>	No		[S66]	
Turbinoliidae	<i>Foveolocyathus kitsoni</i>	No		[S66]	
Turbinoliidae	<i>Foveolocyathus parkeri</i>	No		[S66]	
Turbinoliidae	<i>Foveolocyathus verconis</i>	No		[S66]	
Turbinoliidae	<i>Holcotrochus crenulatus</i>	No		[S66]	
Turbinoliidae	<i>Holcotrochus scriptus</i>	No		[S66]	
Turbinoliidae	<i>Idiotrochus alatus</i>	No		[S66]	
Turbinoliidae	<i>Idiotrochus emarciatus</i>	No		[S66]	
Turbinoliidae	<i>Idiotrochus kikutii</i>	No		[S66]	
Turbinoliidae	<i>Kionotrochus suteri</i>	No		[S66]	
Turbinoliidae	<i>Lissotrochus curvatus</i>	No			Closest to Cryptotrochus and Pleotrochus [S67]
Turbinoliidae	<i>Notocyathus conicus</i>	No	12S:EF597061 16S:AF265584	[S66]	Notocyathus sp. in GenBank
Turbinoliidae	<i>Notocyathus venustus</i>	No		[S66]	
Turbinoliidae	<i>Peponocyathus dawsoni</i>	No		[S66]	
Turbinoliidae	<i>Peponocyathus folliculus</i>	No		[S66]	
Turbinoliidae	<i>Peponocyathus minimus</i>	No		[S66]	
Turbinoliidae	<i>Platytrochus compressus</i>	No		[S66]	
Turbinoliidae	<i>Platytrochus hastatus</i>	No		[S66]	
Turbinoliidae	<i>Platytrochus laevigatus</i>	No		[S66]	
Turbinoliidae	<i>Platytrochus parisepta</i>	No		[S66]	
Turbinoliidae	<i>Pleotrochus venustus</i>	No		[S66]	
Turbinoliidae	<i>Pleotrochus zibrowii</i>	No		[S66]	
Turbinoliidae	<i>Pseudocyathoceras avis</i>	No		[S66]	
Turbinoliidae	<i>Sphenotrochus andrewianus</i>	No		[S66]	
Turbinoliidae	<i>Sphenotrochus aurantiacus</i>	No		[S66]	
Turbinoliidae	<i>Sphenotrochus auritus</i>	No		[S66]	Sphenotrochus (Eusthenotrochus)
Turbinoliidae	<i>Sphenotrochus cuneolus</i>	No		[S66]	
Turbinoliidae	<i>Sphenotrochus evexicostatus</i>	No		[S66]	
Turbinoliidae	<i>Sphenotrochus excavatus</i>	No		[S66]	
Turbinoliidae	<i>Sphenotrochus gardineri</i>	No		[S66]	
Turbinoliidae	<i>Sphenotrochus gilchristi</i>	No		[S66]	Sphenotrochus (Eusthenotrochus)
Turbinoliidae	<i>Sphenotrochus hancocki</i>	No		[S66]	
Turbinoliidae	<i>Sphenotrochus imbricaticostatus</i>	No		[S66]	
Turbinoliidae	<i>Sphenotrochus lindstroemi</i>	No		[S66]	
Turbinoliidae	<i>Sphenotrochus ralpae</i>	No		[S66]	

Family	Species	Reef	Molecular	Morphology	Remarks
Turbinoliidae	<i>Sphenotrochus squiresi</i>	No		[S66]	
Turbinoliidae	<i>Thrypticotrochus petterdi</i>	No		[S66]	
Turbinoliidae	<i>Trematotrochus corbicula</i>	No		[S66]	
Turbinoliidae	<i>Trematotrochus hedleyi</i>	No		[S66]	
Turbinoliidae	<i>Tropidocyathus labidus</i>	No	12S:EF597062 16S:AF265585	[S66]	
Turbinoliidae	<i>Tropidocyathus lessoni</i>	No	16S:HQ439765 COI:HM018669	[S66]	
Turbinoliidae	<i>Turbinolia stephensonii</i>	No		[S66]	

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