**Table S1.** Sea anemones species included in our phylogenetic analyses. Information on voucher specimens and associated museum catalogue numbers are provided here, if available. Dashes denote that such information is absent. Accession numbers in **bold** denotes new sequences to this study. Abbreviations: AMNH, American Museum of Natural History, New York; CAS, California Academy of Sciences, San Francisco; Cat. nos., Catalogue numbers; KUNHM, University of Kansas Natural History Museum; ZRC, Zoological Records Collection, Lee Kong Chian Natural History Museum, Singapore

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  | Accession numbers |
| Superfamily | Family | Genus | Species | Voucher | Cat. nos. | 12S | 16S | 28S | *cox3* |
| Actinioidea | Actiniidae | *Actinia* | *fragacea* | CAS | - | EU190714 | EU190756 | KJ483085 | GU473334 |
|  |  | *Actinia* | *tenebrosa* | - | - | KT852045 | KT852111 | - | KT852330 |
|  |  | *Anemonia* | *erythraea* | - | - | KY789302 | KY789335 | - | KY789271 |
|  |  | *Anemonia* | *viridis* | CAS | - | EU190718 | EU190760 | KJ483095 | GU473335 |
|  |  | *Anthopleura* | *anneae* | - | - | KY789327 | KY789360 | KY789392 | KY789293 |
|  |  | *Anthopleura* | *artemisia* | - | - | KT852015 | KT852081 | - | KT852300 |
|  |  | *Anthopleura* | *atodai* | - | - | KT851993 | KT852055 | KT852247 | KT852275 |
|  |  | *Anthopleura* | *ballii* | - | - | KY789311 | KY789346 | KY789376 | KY789281 |
|  |  | *Anthopleura* | *buddemeieri* | - | - | KY789316 | KY789351 | KY789381 | - |
|  |  | *Anthopleura* | *buddemeieri* | ZRC | In situ | MW158840 | MW158857 | MW158875 | MW158887 |
|  |  | *Anthopleura* | *buddemeieri* | ZRC | In situ | MW158841 | MW158858 | MW158876 | MW158888 |
|  |  | ***Anthopleura*** | ***buddemeieri*** | **ZRC** | **ZRC.CNI.1231** | **-** | **OQ357356** | **OQ357324** | **OQ363522** |
|  |  | *Anthopleura* | *dixoniana* | - | - | KY789307 | KY789341 | - | KY789276 |
|  |  | *Anthopleura* | *dowii* | - | - | KY789318 | KY789353 | KY789383 | KY789286 |
|  |  | *Anthopleura* | *elegantissima* | KUNHM | - | EU190755 | EU190755 | KJ483104 | GU473333 |
|  |  | *Anthopleura* | *fuscoviridis* | - | - | KY789303 | KY789336 | KY789369 | KY789272 |
|  |  | *Anthopleura* | *handi* | - | - | KT852013 | KT852079 | KY789387 | KT852298 |
|  |  | ***Anthopleura*** | ***handi*** | **ZRC** | **In situ**  | **-** | **OQ357325** | **OQ357298** | **OQ363518** |
|  |  | ***Anthopleura*** | ***handi***  | **ZRC** | **In situ**  | **-** | **OQ357326** | **OQ357299** | **OQ363519** |
|  |  | ***Anthopleura*** | ***handi*** | **ZRC** | **In situ**  | **OQ357273** | **OQ357327** | **OQ357300** | **OQ363520** |
|  |  | ***Anthopleura*** | ***handi*** | **ZRC** | **In situ** | **OQ357274** | **OQ357328** | **OQ357301** | **-** |
|  |  | ***Anthopleura*** | ***handi*** | **ZRC** | **In situ** | **OQ357275** | **OQ357329** | **OQ357302** | **-** |
|  |  | ***Anthopleura*** | ***handi*** | **ZRC** | **In situ**  | **OQ357276** | **OQ357330** | **OQ357303** | **OQ363521** |
|  |  | ***Anthopleura*** | ***handi*** | **ZRC** | **ZRC.CNI.1097** | **OQ357291** | **OQ357343** | **-** | **OQ363536** |
|  |  | ***Anthopleura*** | ***handi*** | **ZRC** | **ZRC.CNI.1219** | **-** | **OQ357353** | **OQ357321** | **OQ363547** |
|  |  | *Anthopleura* | *insignis* | - | - | KY789331 | KY789364 | KY789395 | KY789297 |
|  |  | *Anthopleura* | *japonica* | - | - | KY789310 | KY789345 | - | KY789280 |
|  |  | *Anthopleura* | *krebsi* | - | - | KY789305 | KY789339 | KY789372 | KY789275 |
|  |  | *Anthopleura* | *kurogane* Japan | - | - | KY789323 | KY789356 | - | - |
|  |  | *Anthopleura* | *kurogane* Korea | - | - | KY789321 | KY789355 | KY789385 | KY789288 |
|  |  | *Anthopleura* | *midori* | - | - | KY789324 | - | KY789388 | KY789289 |
|  |  | *Anthopleura* | *nigrescens* Galapagos | - | - | - | KY789343 | KY789373 | KY789278 |
|  |  | *Anthopleura* | *nigrescens* | - | - | KY789309 | KY789344 | KY789375 | KY789279 |
|  |  | *Anthopleura* | *nigrescens* Hawaii | - | - | KY789306 | KY789340 | KY789374 | - |
|  |  | ***Anthopleura*** | ***nigrescens*** | **ZRC** | **ZRC.CNI.1221** | **OQ357297** | **OQ357354** | **OQ357322** | **OQ363548** |
|  |  | *Anthopleura* | *pallida* | - | - | KY789308 | KY789342 | - | KY789277 |
|  |  | *Anthopleura* | *sola* | - | - | - | KY789365 | - | - |
|  |  | *Anthopleura* | sp. | - | - | KY789304 | KY789338 | KY789371 | KY789274 |
|  |  | *Anthopleura* | sp. “Green” | - | - | - | KY789337 | KY789370 | KY789273 |
|  |  | *Anthopleura* | sp. South Africa | - | - | KY789329 | KY789362 | KY789393 | KY789295 |
|  |  | *Anthopleura* | *thallia* | - | - | KY789333 | KY789366 | KY789397 | KY789300 |
|  |  | *Anthopleura* | *waridi* | - | - | KY789301 | KY789334 | KY789368 | KY789270 |
|  |  | *Anthopleura* | *xanthogrammica* | - | - | - | KY789367 | KY789398 | - |
|  |  | *Anthostella* | *stephensoni* | AMNH | - | JQ810719 | JQ810721 | KJ483132 | JQ810726 |
|  |  | *Aulactinia* | *incubans* | - | - | KT852014 | KT852080 | KT852256 | KT852299 |
|  |  | *Aulactinia* | sp. | - | - | KT310187  | KT310197  | - | KT310209 |
|  |  | *Aulactinia* | *stella* | - | - | KT310192  | KT310202  | - | KT310214  |
|  |  | *Aulactinia* | *stella* | - | - | KT310191 | KT310201  | - | KT310213  |
|  |  | *Aulactinia* | *stella* | - | - | KT310190  | KT310200  | - | KT310212  |
|  |  | *Aulactinia* | *stella* | - | - | KT310189  | KT310199  | - | KT310211  |
|  |  | *Aulactinia* | *stella* | - | - | KT310188  | KT310198  | - | KT310210  |
|  |  | *Aulactinia* | *stella* | - | - | KT852044 | KT852110 | KT852263 | KT852329 |
|  |  | *Aulactinia* | *veratra* | - | - | KT852001 | KT852063 | - | KT852283 |
|  |  | *Aulactinia* | *verrucosa* | KUNHM | - | EU190723 | EU190766 | KJ483084 | - |
|  |  | *Bolocera* | *kerguelensis* | AMNH | - | KJ482925 | KJ482965 | KJ483133 | KJ482985 |
|  |  | *Bunodactis* | *reynaudi* | - | - | KT852041 | KT852106 | KT852260 | - |
|  |  | *Bunodosoma* | *biscayense* | - | - | KY789315 | KY789350 | KY789380 | KY789284 |
|  |  | *Bunodosoma* | *californicum* | - | - | KY789312 | KY789347 | KY789377 | - |
|  |  | *Bunodosoma* | *capense* | - | - | KY789332 | - | KY789396 | KY789298 |
|  |  | *Bunodosoma* | *cavernatum* | - | - | KY789313 | KY789348 | KY789378 | KY789282 |
|  |  | *Bunodosoma* | *grandis* | KUNHM | - | EU190722 | EU190765 | KJ483083 | GU473336 |
|  |  | ***Bunodosoma*** | ***goanense***  | **ZRC** | **ZRC.CNI.1215** | **OQ357295** | **OQ357349** | **OQ357316** | **OQ363542** |
|  |  | ***Bunodosoma*** | ***goanense***  | **ZRC** | **ZRC.CNI.1215** | **-** | **OQ357350** | **OQ357317** | **OQ363543** |
|  |  | ***Bunodosoma*** | ***goanense*** | **ZRC** | **ZRC.CNI.1215** | **OQ357296** | **-** | **OQ357318** | **OQ363544** |
|  |  | *Bunodosoma* | *granuliferum* | - | - | KY789314 | KY789349 | KY789379 | KY789283 |
|  |  | *Bunodosoma* | sp. South Africa | - | - | KY789330 | KY789363 | KY789394 | KY789296 |
|  |  | *Dofleinia* | *armata* | ZRC | ZRC.CNI.1015 | MW158843 | MW158860 | - | MW158890 |
|  |  | ***Dofleinia*** | ***armata*** | **ZRC** | **ZRC.CNI.1055** | **OQ357281** | **OQ357334** | **-** | **OQ363527** |
|  |  | *Entacmaea* | *quadricolor* | - | - | MK519401 | MK519456 | - | MK522439 |
|  |  | *Entacmaea* | *quadricolor* | - | - | MK519402 | MK519457 | - | MK522440 |
|  |  | *Entacmaea* | *quadricolor* | - | - | MK519403 | - | MK519639 | MK522441 |
|  |  | *Entacmaea* | *quadricolor* | - | - | MK519404 | MK519458 | MK519644 | MK522442 |
|  |  | *Entacmaea* | *quadricolor* | - | - | MK519405 | MK519459 | MK519643 | MK522443 |
|  |  | *Entacmaea* | *quadricolor* | - | - | MK519406 | MK519460 | MK519645 | MK522444 |
|  |  | *Entacmaea* | *quadricolor* | - | - | MK519407 | MK519461 | MK519646 | MK522445 |
|  |  | *Entacmaea* | *quadricolor* | - | - | MK519408 | MK519462 | MK519640 | MK522446 |
|  |  | *Entacmaea* | *quadricolor* | - | - | MK519409 | MK519463 | MK519641 | MK522447 |
|  |  | *Entacmaea* | *quadricolor* | - | - | MK519410 | MK519464 | MK519642 | MK522448 |
|  |  | ***Entacmaea*** | ***quadricolor*** | **ZRC** | **ZRC.CNI.1116** | **OQ357286** | **OQ357339** | **OQ357310** | **OQ363531** |
|  |  | ***Entacmaea*** | ***quadricolor***  | **ZRC** | **ZRC.CNI.1118** | **OQ357287** | **OQ357340** | **OQ357311** | **-** |
|  |  | ***Entacmaea*** | ***quadricolor*** | **ZRC** | **ZRC.CNI.1130** | **OQ357288** | **OQ357341** | **-** | **OQ363532** |
|  |  | ***Entacmaea*** | ***quadricolor*** | **ZRC** | **ZRC.CNI.1121** | **OQ357289** | **OQ357342** | **OQ357312** | **OQ363533** |
|  |  | *Epiactis* | *japonica* | - | - | KY789317 | KY789352 | KY789382 | KY789285 |
|  |  | *Epiactis* | *japonica* | - | - | KT852026 | KT852091 | - | KT852311 |
|  |  | *Epiactis* | *japonica* | - | - | KY789320 | KY789354 | KY789384 | KY789287 |
|  |  | *Epiactis* | *lisbethae* | KUNHM | - | EU190727 | EU190771 | EU190816 | GU473360 |
|  |  | *Epiactis* | *prolifera* |  |  | KY789320 | KY789354 | KY789384 | KY789287 |
|  |  | *Epiactis* | *thompsoni* | - | - | KT852011 | KT852074 | - | KT852294 |
|  |  | *Glyphoperidium* | *bursa* | AMNH | - | KJ482923 | KJ482961 | KJ483136 | KJ482982 |
|  |  | *Gyractis* | *sesere* | - | - | KT852012 | KT852078 | KY789386 | KT852297 |
|  |  | *Gyractis* | sp. Oman | - | - | KY789325 | KY789357 | KY789390 | KY789290 |
|  |  | *Isactinia* | *olivacea* | AMNH | - | - | KT852077 | - | KT852296 |
|  |  | *Isosicyonis* | *alba* | AMNH | - | - | KJ482959 | KJ483134 | KJ482981 |
|  |  | *Isosicyonis* | *striata* | AMNH | - | EU190736 | EU190864 | KJ483137 | FJ489493 |
|  |  | *Isotealia\_* | *antarctica* | AMNH | - | JQ810720 | JQ810722 | - | JQ810727 |
|  |  | *Korsaranthus* | sp. | AMNH | - | KJ482920 | KJ482958 | KJ483117 | KJ482987 |
|  |  | ***Macrodactyla*** | ***aspera*** | **ZRC** | **ZRC.CNI.1080** | **OQ357282** | **OQ357335** | **-** | **OQ363528** |
|  |  | ***Macrodactyla*** | ***asper*** | **ZRC** | **ZRC.CNI.1090** | **-** | **-** | **OQ357313** | **OQ363535** |
|  |  | ***Macrodactyla*** | ***aspera*** | **ZRC** | **ZRC.CNI.1099** | **OQ357285** | **OQ357338** | **OQ357309** | **OQ363530** |
|  |  | ***Macrodactyla*** | ***aspera*** | **ZRC** | **ZRC.CNI.1217** | **-** | **OQ357351** | **OQ357319** | **OQ363545** |
|  |  | ***Macrodactyla*** | ***aspera*** | **ZRC** | **ZRC.CNI.1217** | **-** | **OQ357352** | **OQ357320** | **OQ363546** |
|  |  | ***Macrodactyla*** | ***aspera***  | **ZRC** | **ZRC.CNI.1222** | **-** | **OQ357355** | **OQ357323** | **OQ363549** |
|  |  | ***Macrodactyla*** | ***fautinae* sp. nov.** | **ZRC** | **ZRC.CNI.1020** | **OQ357277** | **-** | **OQ357304** | **OQ363523** |
|  |  | ***Macrodactyla*** | ***fautinae* sp. nov.** | **ZRC** | **ZRC.CNI.1300** | **OQ357279** | **OQ357332** | **OQ357306** | **OQ363525** |
|  |  | ***Macrodactyla*** | ***fautinae* sp. nov.** | **ZRC** | **ZRC.CNI.1159** | **OQ357280** | **OQ357333** | **-** | **OQ363526** |
|  |  | ***Paracondylactis*** | ***hertwigi*** | **ZRC** | **ZRC.CNI.1077** | **OQ357284** | **OQ357337** | **OQ357307** | **-** |
|  |  | ***Paracondylactis*** | ***sinensis***  | **ZRC** | **ZRC.CNI.1104** | **OQ357292** | **OQ357344** | **-** | **OQ363537** |
|  |  | ***Paracondylactis*** | ***singaporensis***  | **ZRC** | **ZRC.CNI.1035** | **OQ357283** | **OQ357336** | **-** | **OQ363529** |
|  |  | ***Paracondylactis*** | ***singaporensis*** | **ZRC** | **ZRC.CNI.1172** | **OQ357293** | **OQ357346** | **-** | **OQ363539** |
|  |  | *Phlyctenactis* | *tuberculosa* | - | - | KY789326 | KY789359 | - | KY789292 |
|  |  | *Pseudactinia* | *varia* | - | - | KY789328 | KY789361 | - | KY789294 |
|  |  | *Phymactis* | *clematis* | - | - | - | KY789358 | - | KY789291 |
|  |  | *Urticina* | *coriacea* | KUNHM | - | GU473282 | EU190797 | KJ483094 | GU473351 |
|  |  | *Urticina* | *grebenlnyi* | - | - | KT852034 | KT852098 | - | KT852318 |
| Actinioidea | Actinodendridae | ***Actinodendron*** | ***aboreum***  | **ZRC** | **ZRC.CNI.1085** | **OQ357290** | **-** | **-** | **OQ363534** |
|  |  | ***Actinostephanus*** | ***haeckeli*** | **ZRC** | **ZRC.CNI.1014** | **OQ357278** | **OQ357331** | **OQ357305** | **OQ363524** |
|  |  | ***Actinostephanus*** | ***haeckeli*** | **ZRC** | **ZRC.CNI.1143** | **-** | **OQ357345** | **OQ357314** | **OQ363538** |
|  |  | ***Actinostephanus*** | ***haeckeli***  | **ZRC** | **ZRC.CNI.1206** | **OQ357294** | **OQ357347** | **OQ357308** | **OQ363540** |
| Actinioidea | Haloclavidae | *Haloclava* | *producta* | KUNHM | - | EU190734 | EU190779 | KJ483097 | JF833008 |
|  |  | *Haloclava* | sp. | AMNH | - | KJ482924 | KJ482963 | KJ483138 | KJ482989 |
|  |  | *Harenactis* | *argentina* | AMNH | - | KJ482926 | KJ482964 | KJ483047 | KJ482984 |
|  |  | *Metapeachia* | *tropica*  | ZRC | ZRC.CNI.1023 | MW158842 | MW158859 | MW158877 | MW158889 |
|  |  | *Metapeachia* | *tropica* | ZRC | ZRC.CNI.1165 | MW158845 | MW158862 | MW158879 | MW158892 |
|  |  | ***Synpeachia*** | ***temasek*** | **ZRC** | **ZRC.CNI.1200** | **-** | **OQ357348** | **OQ357315** | **OQ363541** |
|  |  | *Peachia* | *cylindrica* | KUNHM | - | EU190743 | EU190789 | EU190732 | - |
|  |  | *Stephanthus* | *antarcticus* | AMNH | - | KJ482927 | KJ482960 | KJ483092 | KJ482983 |
| Actinioidea | Heteranthidae | *Heteranthus* | *verruculatus* | KUNHM | - | KC812147 | - | - | - |
|  |  | *Heteranthus* | *verruculatus* | ZRC | ZRC.CNI.1207 | MW158846 | MW158863 | MW158880 | MW158893 |
|  |  | *Heteranthus* | *verruculatus* | ZRC | ZRC.CNI.1230 | MW158847 | MW158865 | - | MW158895 |
|  |  | *Heteranthus* | *verruculatus* | ZRC | ZRC.CNI.1230 | MW158848 | MW158866 | - | MW158896 |
|  |  | *Heteranthus* | *verruculatus* | ZRC | ZRC.CNI.1230 | MW158849 | MW158867 | - | MW158897 |
|  |  | *Heteranthus* | *verruculatus* | ZRC | ZRC.CNI.1230 | MW158850 | MW158868 | MW158882 | MW158898 |
|  |  | *Heteranthus* | *verruculatus* | ZRC | In situ | MW158851 | MW158869 | MW158883 | MW158899 |
|  |  | *Heteranthus* | *verruculatus* | ZRC | ZRC.CNI.1367 | MW158852 | MW158870 | - | MW158900 |
|  |  | *Heteranthus* | *verruculatus* | ZRC | ZRC.CNI.1368 | MW158853 | MW158871 | MW158884 | MW158901 |
|  |  | *Heteranthus* | *verruculatus* | ZRC | ZRC.CNI.1368 | MW158854 | MW158872 | MW158885 | MW158902 |
|  |  | *Heteranthus* | *verruculatus* | ZRC | In situ | MW158855 | MW158873 | - | MW158903 |
| Actinioidea | Liponematidae | *Liponema* | *brevicornis* | KUNHM | - | EU190738 | EU190866 | KJ483139 | KJ483001 |
|  |  | *Liponema* | *multiporum* | AMNH | - | KJ482922 | KJ482962 | - | - |
| Actinioidea | Phymanthidae | *Phymanthus* | *crucifer*  | KUNHM | - | - | KC812159 | - | KC812228 |
|  |  | *Phymanthus* | *crucifer*  | AMNH | - | KJ910344 | KJ910345 | - | KJ910346 |
|  |  | *Phymanthus* | *crucifer*  | AMNH | - | KJ910344 | - | - | - |
|  |  | *Phymanthus* | *loligo* | KUNHM | - | EU190745 | EU190791 | - | GU473345 |
|  |  | *Phymanthus* | *loligo* | ZRC | ZRC.CNI.1389 | MW158856 | MW158874 | MW158886 | MW158904 |
| Actinioidea | Preactiniidae | *Dactylanthus* | *antarcticus* | AMNH | - | GU473272 | AY345877 | KJ483086 | GU473358 |
|  |  | *Preactis* | *millardae* | AMNH | - | KJ482921 | KJ482957 | KJ483118 | KJ482986 |
| Actinioidea | Stichodactylidae | *Heteractis* | *aurora* | - | - | MK519412 | MK519467 | - | MK522451 |
|  |  | *Heteractis* | *aurora* | - | - | MK519413 | MK519468 | - | MK522452 |
|  |  | *Heteractis* | *aurora* | - | - | MK519414 | MK519469 | MK519647 | MK522453 |
|  |  | *Heteractis* | *aurora*  | - | - | MK519415 | MK519470 | - | MK522454 |
|  |  | *Heteractis* | *aurora* | - | - | EU190739 | EU190785 | KJ483049 | GU473342 |
|  |  | *Heteractis* | *crispa* | - | - | MK519416 | MK519471 | MK519648 | MK522455 |
|  |  | *Heteractis* | *crispa* | - | - | MK519417 | MK519472 | MK519649 | MK522456 |
|  |  | *Heteractis* | *crispa* | - | - | MK519418 | MK519473 | MK519650 | MK522457 |
|  |  | *Heteractis* | *crispa* | - | - | MK519419 | MK519474 | - | MK522458 |
|  |  | *Heteractis* | *crispa* | - | - | MK519421 | MK519476 | - | MK522460 |
|  |  | *Heteractis* | *crispa* | - | - | MK519422 | MK519477 | - | MK522461 |
|  |  | *Heteractis* | *crispa* | - | - | MK519423 | MK519478 | MK519654 | MK522462 |
|  |  | *Heteractis* | *crispa* | - | - | MK519424 | MK519479 | - | MK522463 |
|  |  | *Heteractis* | *crispa* | - | - | MK519425 | MK519480 | - | MK522464 |
|  |  | *Heteractis* | *crispa* | - | - | MK519426 | MK519481 | MK519574 | MK522465 |
|  |  | *Heteractis* | *crispa* | - | - | MK519427 | MK519482 | - | MK522466 |
|  |  | *Heteractis* | *crispa* | - | - | MK519428 | MK519483 | MK519652 | MK522467 |
|  |  | *Heteractis* | *crispa* | - | - | MK519429 | MK519484 | MK519653 | MK522468 |
|  |  | *Heteractis* | *magnifica* | KUNHM | - | EU190732 | EU190777 | KJ483093 | KJ482988 |
|  |  | *Heteractis* | *magnifica* | - | - | MK519430 | MK519485 | MK519656 | MK522469 |
|  |  | *Heteractis* | *magnifica* | - | - | MK519431 | MK519486 | MK519657 | MK522470 |
|  |  | *Heteractis* | *magnifica* | - | - | MK519432 | MK519487 | MK519658 | MK522471 |
|  |  | *Heteractis* | *magnifica* | - | - | MK519433 | MK519488 | MK519659 | MK522472 |
|  |  | *Heteractis* | *magnifica* | - | - | MK519434 | MK519489 | MK519660 | MK522473 |
|  |  | *Heteractis* | *magnifica* | - | - | MK519420 | MK519475 | MK519655 | MK522459 |
|  |  | *Heteractis* | *malu* | - | - | - | - | - | MK522474 |
|  |  | *Heteractis* | *malu* | - | - | - | MK519490 | - | MK52275 |
|  |  | *Macrodactyla* | *doreensis* | KUNHM | - | EU190739 | EU190785 | KJ483049 | GU473342 |
|  |  | *Macrodactyla* | *doreensis* | - | - | MK519411 | MK519465 | MK519661 | MK522449 |
|  |  | *Macrodactyla* | *doreensis* | - | - | - | MK519466 | - | MK522450 |
|  |  | *Macrodactyla* | *doreensis* | ZRC | ZRC.CNI.1016 | MW158844 | MW158861 | MW158878 | MW158891 |
|  |  | *Macrodactyla* | *doreensis* | ZRC | ZRC.CNI.1201 | - | MW158864 | MW158881 | MW158894 |
|  |  | *Stichodactyla* | *gigantea* | - | - | EU190747 | EU190793 | EU190835 | KY789299 |
|  |  | *Stichodactyla* | *haddoni* | - | - | MK519435 | MK519491 | MK519662 | MK522476 |
|  |  | *Stichodactyla* | *helianthus* | - | - | MK519436 | MK519492 | MK519667 | MK522477 |
|  |  | *Stichodactyla* | *helianthus* | - | - | MK519437 | MK519493 | MK519668 | MK522478 |
|  |  | *Stichodactyla* | *helianthus* | - | - | MK519438 | MK519494 | MK519669 | MK522479 |
|  |  | *Stichodactyla* | *helianthus* | - | - | MK519439 | MK519495 | MK519670 | MK522480 |
|  |  | *Stichodactyla* | *mertensii* | - | - | MK519440 | MK519496 | MK519584 | K522481 |
|  |  | *Stichodactyla* | *mertensii* | - | - | MK519441 | MK519497 | MK519585 | K522482 |
|  |  | *Stichodactyla* | *mertensii* | - | - | MK519442 | MK519498 | MK519665 | K522483 |
|  |  | *Stichodactyla* | *mertensii* | - | - | MK519443 | MK519499 | MK519666 | - |
|  | Thalassianthidae | *Cryptodendrum* | *adhaesivum* | - | - | - | MK519500 | MK519638 | K522484 |
| Actinostoloidea | Actinostoloidea | *Paranthus* | *niveus* | AMNH | - | GU473277 | GU473295 | KJ483072 | GU473344 |
| Metridioidea | Aliciidae | *Triactis* | *producta* | KUNHM | - | EU490525 | - | KJ483125 | GU473350 |
|  | Metridiidae | *Metridium* | *senile* | - | - | KJ482916 | KJ482950 | KJ483113 | KT852309 |
|  | Sagartiidae | *Cereus* | *herpetodes* | KUNHM | - | JF832956 | JF832969 | JF832992 | - |
|  |  | *Cereus* | *pedunculatus* | KUNHM | - | EU190724 | EU190767 | EU190813 | FJ489471 |
|  |  | *Sagartia* | *elegans* | KUNHM | - | - | - | JF832994 | JF833012 |