5) NCBI accession numbers for sequences used for phylogenetic inference. SRA numbers are provided in place of accession numbers for those sequences that were extracted from transcriptomes, and labeled in green.

Species	16S	18S
Abylopsis tetragona	AY935303.1	AY937345.1
Agalma clausi	AY935270.1	AY937312.1
Agalma elegans	AY935271.1	AY937313.1
Agalma okenii	AY935272.1	AY937314.1
Apolemia lanosa	KF214712.1	KF214714.1
Apolemia rubriversa	KF214713.1	KF214715.1
Athorybia rosacea	AY935274.1	AY937316.1
Bargmannia amoena	AY935292.1	AY937333.1
Bargmannia elongata	AY935321.1	AY937334.1
Chelophyes appendiculata	AY935304.1	AY937346.1
Chuniphyes moserae	KX374464.1	KX421847.1
Chuniphyes multidentata	AY935293.1	AY937335.1
Clytia hemisphaerica	EU999221.1	FJ550601.1
Cordagalma ordinatum	AY935275.1	AY937317.1
Craseoa lathetica	AY935297.1	AY937339.1
Crystallophyes amygdalina	KX374466.1	KX421850.1
Desmophyes haematogaster	DQ080006.1	KX421851.1
Diphyes dispar	AY935276.1	AY937318.1
Ectopleura dumortieri	EU305474.1	EU272616.1
Erenna laciniata	KX752722.1	KX752704.1
Erenna richardi	KX752723.1	KX752705.1
Erenna sirena	KX752725.1	AY937361.1
Forskalia asymmetrica	AY935277.1	AY937319.1
Forskalia edwardsii	AY935278.1	AY937320.1
Forskalia formosa	AY935302.1	AY937344.1
Forskalia tholoides	AY935279.1	AY937321.1
Frillagalma vityazi	MK958598.1	SRR1548362
Gymnopraia lapislazula	AY935317.1	AY937359.1
Halistemma rubrum	AY935316.1	AY937323.1

Species	16S	18S
Hippopodius hippopus	AY935299.1	AF358069.1
Hydra circumcincta	GU722773.1	EF059948.1
Kephyes ovata	AY935294.1	AY937336.1
Lensia conoidea	AY935318.1	AY937360.1
Lilyopsis fluoracantha	SRR1548373	AY919607.1
Lychnagalma utricularia	DQ080009.1	SRR1548374
Marrus claudanielis	DQ080007.1	SRR1548375
Muggiaea atlantica	AY935295.1	AY937337.1
Nanomia bijuga	AY935296.1	AY937338.1
Nectadamas diomedeae	AY935306.1	AY937348.1
Nectopyramis natans	AY935307.1	AY937349.1
Physalia physalis	AY935284.1	AF358065.1
Physonect sp	SRR1648381	DQ080012.1
Physophora gilmeri	SRR6512853	SRR6512853
Physophora hydrostatica	AY935300.1	AY937342.1
Porpita porpita	AY935322.1	AF358086.1
Praya dubia	AY935285.1	AY937326.1
Resomia ornicephala	SRR1548382	SRR1548382
Rhizophysa eysenhardtii	AY935309.1	AY937351.1
Rhizophysa filiformis	AY935286.1	AY937327.1
Rosacea flaccida	AY935287.1	AY937328.1
Sphaeronectes christiansonae	KX374468.1	KX421853.1
Sphaeronectes koellikeri	AY935301.1	AF358070.1
Staurocladia wellingtoni	AJ580934.1	AF358084.1
Stephalia dilata	AY935315.1	AY937357.1
Stephanomia amphytridis	AY935280.1	AY937322.1
Sulculeolaria quadrivalvis	AY935288.1	AY937353.1
Thermopalia sp	MK958599.1	SRR6512855
Tottonophyes enigmatica	KX374465.1	KX421849.1
Velella velella	AY935323.1	AF358087.1
Vogtia glabra	AY935308.1	AY937350.1
Vogtia pentacantha	AY935320.1	AY937362.1