

Supplementary material

A molecular phylogeny of Callianassidae and related families (Crustacea : Decapoda : Axiidea) with morphological support

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Table S1. Molecular resources

List of 298 specimens (including outgroups) used for molecular analysis arranged alphabetically by family and species name using the new classification. Localities are specific to the specimens from which tissue was taken. GenBank accession numbers are given for each gene: 18S rRNA, 16SrRNA, 12S rRNA and histone H3. x indicates that no sequence was obtained for that gene. Museum and catalogue numbers refer to voucher specimens from which tissue was taken. Museums are abbreviated as follows: Museum national d'Histoire naturelle, Paris, France (MNHN), Naturhistorisches Museum Wien, Austria (NHMW); Senckenberg Museum, Frankfurt (SMF); National Museum of Natural History, Washington, USA (USNM); University of Louisiana Lafayette, USA (ULLZ); Florida Museum of Natural History, Gainesville, USA (UF); Museo de Zoología, Universidad de Costa Rica (MZUCR); Museu de Zoologia da Universidade de São Paulo, Brazil (MZUSP); Crustacean Collection of Department of Biology, University of São Paulo, Ribeirão Preto, Brazil (CCDB); National Museum of the Philippines, Manila (NMCR); Zoological Reference Collection, Lee Kong Chian Natural History Museum, National University of Singapore (ZRC); Phuket Marine Biological Center, Phuket, Thailand (PMBC); Museums Victoria, Melbourne, Australia (NMV); Northern Territory Museum and Art Gallery, Darwin, Australia (NTMAG); and Queensland Museum, Brisbane, Australia (QM). ULLZ numbers in parentheses refer to tissue samples only. Abbreviations used in species codes are: PNG, Papua New Guinea; FP, French Polynesia; MA, Madagascar; PCR, Pacific Costa Rica; GMX, Gulf of Mexico; MOZ, Mozambique; HWI, Hawaii

Family / Species name	Locality	18S	16S	12S	H3	Museum material sampled for tissue
Axiidae						
<i>Pillsburyaxius clevai</i> (Ngoc-Ho, 2006)	Solomon Is	MN237869	MN237675	MN238354	MN238075	ULLZ 11385
<i>Eiconaxius agassizi</i> (Bouvier, 1905)	Gulf of Mexico	MN237979	MN237769	MN238446	MN238192	ULLZ 215893
Callianideidae						
<i>Heardaxius rogerbamberei</i> Poore, 2015	Papua New Guinea	MN237894	MN237695	x	MN238099	MNHN-IU-2013-7093
<i>Thomassinia aimsae</i> Poore, 1997	Papua New Guinea	MN237907	MN237709	MN238388	MN238114	MNHN-IU-2013-7082
Callianassidae						
<i>Aqaballianassa aqabaensis</i> (Dworschak, 2003)	Jordan, Red Sea	EU874975	EU874925	MN238481	MN238296	ULLZ 7924
<i>Aqaballianassa brevirostris</i> (Sakai, 2002)	Singapore	MN237904	MN237706	x	MN238111	ZRC 2017.0948
<i>Aqaballianassa lewtonae</i> (Ngoc-Ho, 1994)	Papua New Guinea	MN237944	MN237735	x	MN238153	MNHN-IU-2013-8835
<i>Aqaballianassa lewtonae</i> (Ngoc-Ho, 1994)	Papua New Guinea	MN237965	MN237756	x	MN238177	MNHN-IU-2014-2780
<i>Aqaballianassa lewtonae</i> (Ngoc-Ho, 1994)	Papua New Guinea	MN237959	MN237750	MN238433	MN238171	MNHN-IU-2016-8153
<i>Aqaballianassa lewtonae</i> (Ngoc-Ho, 1994)	Papua New Guinea	MN237946	MN237737	MN238421	MN238155	MNHN-IU-2016-8154
<i>Aqaballianassa lewtonae</i> (Ngoc-Ho, 1994)	Papua New Guinea	MN237957	MN237748	x	MN238169	MNHN-IU-2014-10001
<i>Aqaballianassa</i> PNG-1166	Papua New Guinea	MN237918	MN237715	MN238397	MN238126	MNHN-IU-2013-7068
<i>Aqaballianassa</i> PNG-1166	Papua New Guinea	MN237916	MN237713	x	MN238124	MNHN-IU-2013-7080
<i>Aqaballianassa</i> PNG-1166	Papua New Guinea	MN237924	MN237718	MN238403	MN238132	MNHN-IU-2013-7114
<i>Aqaballianassa</i> PNG-1166	Papua New Guinea	MN237919	x	MN238398	MN238127	MNHN-IU-2013-7117
<i>Aqaballianassa</i> PNG-1166	Papua New Guinea	MN237974	MN237764	MN238440	MN238185	MNHN-IU-2016-8151

Family / Species name	Locality	18S	16S	12S	H3	Museum material sampled for tissue
<i>Arenallianassa arenosa</i> (Poore, 1975)	Australia, Qld	EU874995	EU874945	MN238450	MN238196	NMV J40669
<i>Biffarius biformis</i> (Biffar, 1971)	USA, FL, Atlantic	EU875003	EU874953 (3)	MN238427	MN238162	USNM 309754
<i>Biffarius biformis</i> (Biffar, 1971)	USA, FL, Atlantic	x	x	MN238445	MN238191	ULLZ 14810
<i>Biffarius biformis</i> (Biffar, 1971)	USA, TX, Gulf of Mexico	MN237978	MN237768	MN238444	MN238189	ULLZ 14816
<i>Biffarius delicatulus</i> Rodrigues & Manning, 1992	Brazil, Ceará	MN237875	MN237680	MN238359	MN238080	NHMW 25542
<i>Callianassa subterranea</i> (Leach, 1814)	Croatia, Mediterranean	MN237998	MN237801	MN238455	MN238236	NHMW 25641
<i>Callianassa subterranea</i> (Leach, 1814)	Scotland	MN238024	EU882924	EU875034	MN238269	ULLZ 6368
<i>Cavallianassa</i> FP-11	French Polynesia	x	MN237780	x	MN238207	UF 28875
<i>Cavallianassa</i> FP-11	French Polynesia	x	MN237784	x	MN238211	UF 28904
<i>Cavallianassa</i> FP-11	French Polynesia	x	MN237786	x	MN238213	UF 28909
<i>Cavallianassa</i> FP-11	French Polynesia	MN238014	MN237814	MN238465	MN238253	UF 16467
<i>Cavallianassa</i> FP-11	French Polynesia	x	MN237776	x	MN238203	UF 28819
<i>Cavallianassa</i> PNG-1172	Papua New Guinea	MN237921	x	MN238400	MN238129	MNHN-IU-2013-7111
<i>Cavallianassa</i> PNG-1165	Papua New Guinea	MN237917	MN237714	MN238396	MN238125	MNHN-IU-2013-7092
<i>Cheramoides</i> GMX_1	USA, LA, Gulf of Mexico	x	MN237827	MN238485	MN238301	ULLZ 8284
<i>Cheramoides marginata</i> (Rathbun, 1901)	USA, LA, Gulf of Mexico	EU874962*	EU874912*	EU875009	MN238285	ULLZ 7313
<i>Cheramoides</i> PCR	Costa Rica, Pacific	x	EU882901	EU875013	MN238290	ULLZ 7751
<i>Cheramoides</i> PCR	Costa Rica, Pacific	MN238037	MN237824	MN238476	MN238292	ULLZ 7917
<i>Coriollanassa coriolisae</i> (Ngoc-Ho, 2014)	Philippines	MN237920	x	MN238399	MN238128	MNHN-IU-2013-7138
<i>Coriollanassa coriolisae</i> (Ngoc-Ho, 2014)	Philippines	MN237854	MN237660	MN238339	MN238059	NMCR 49805 (ULLZ 10135)
<i>Coriollanassa</i> MOZ-31	Mozambique	x	x	MN238395	MN238122	MNHN-IU-2014-10472
<i>Coriollanassa</i> MOZ-33	Mozambique	MN237915	x	x	MN238123	MNHN-IU-2016-8146
<i>Coriollanassa</i> MOZ-33	Mozambique	MN237977	MN237767	MN238443	MN238188	MNHN-IU-2008-10314
<i>Coriollanassa</i> MOZ-33	Mozambique	MN237890	MN237694	MN238373	MN238095	MNHN-IU-2008-10315
<i>Coriollanassa</i> MOZ-33	Mozambique	MN237914	MN237712	MN238394	MN238121	MNHN-IU-2010-7922
<i>Filhollianassa ceramica</i> (Fulton & Grant, 1906)	Australia, Vic.	x	NC_026225	NC_026225	x	GenBank NC_026225
<i>Filhollianassa ceramica</i> (Fulton & Grant, 1906)	Australia, Vic.	MN237867	MN237673	MN238352	MN238073	ULLZ 11379
<i>Filhollianassa filholi</i> (A. Milne-Edwards, 1878)	New Zealand	EU874999	EU874949	MN238452	MN238218	NMV J44818
<i>Fragillianassa debilis</i> (Hernandez-Aguilera, 1998)	Panama, Pacific	MN237886	x	MN238369	MN238091	NHMW 25911
<i>Fragillianassa fragilis</i> (Biffar, 1970)	Brazil, Ceará	MN237885	MN237690	MN238368	MN238090	NHMW 25543 (ULLZ 6406)
<i>Fragillianassa fragilis</i> (Biffar, 1970)	Jamaica, Caribbean	MN238031	EU882912	EU875022	MN238278	ULLZ 6532
<i>Fragillianassa fragilis</i> (Biffar, 1970)	USA, FL, Atlantic	x	EU882910	EU875020	MN238281	ULLZ 6540
<i>Fragillianassa fragilis</i> (Biffar, 1970)	USA, FL, Atlantic	MN238026	EU882911	EU875021	MN238271	ULLZ 6406
<i>Gilvossius candidus</i> (Olivi, 1792)	Croatia, Mediterranean	DQ079740	DQ079706 (1)	x	DQ079663	Genbank: KCcasu
<i>Gilvossius candidus</i> (Olivi, 1792)	Slovenia, Mediterranean	x	MN237828	MN238486	x	NHMW 317 (ULLZ 8427)
<i>Gilvossius setimanus</i> (DeKay, 1844)	USA, FL, Gulf of Mexico	MN237986	EU882935	EU875045	MN238222	ULLZ 4500
<i>Gilvossius setimanus</i> (DeKay, 1844)	USA, FL, Gulf of Mexico	MN237987	EU882936	EU875046	MN238223	ULLZ 4500
<i>Gilvossius setimanus</i> (DeKay, 1844)	USA, FL, Gulf of Mexico	MN237985	EU882934	EU875044	MN238221	ULLZ 4500
<i>Gilvossius setimanus</i> (DeKay, 1844)	USA, FL, Gulf of Mexico	EU874974	EU874924	MN238478	MN238294	ULLZ 7919
<i>Gilvossius tyrrhenus</i> (Petagna, 1792)	Gran Canaria, Atlantic	EU874977	EU874927	MN238483	MN238298	ULLZ 7931
<i>Gilvossius whitei</i> (Sakai, 1999)	Croatia, Mediterranean	MN237871	MN237677	MN238356	x	NHMW 25538
<i>Gilvossius whitei</i> (Sakai, 1999)	Croatia, Mediterranean	EU874978	EU874928	MN238484	MN238299	NHMW 21948 (ULLZ 7932)
<i>Jocullianassa jocularis</i> (De Man, 1905)	Philippines, Panglao	x	MN237658	MN238337	MN238057	NMCR 39112 (ULLZ 10130)
<i>Necallianassa</i> MA-03	Madagascar	MN238016	MN237815	MN238466	MN238255	UF 14499
<i>Necallianassa acanthura</i> (Caroli, 1946)	Croatia, Mediterranean	x	MN237826	MN238480	MN238295	NHMW 21947 (ULLZ 7922)
<i>Necallianassa truncata</i> (Giard & Bonnier, 1890)	Corfu, Mediterranean	x	MN237825	MN238479	x	ULLZ 7921
<i>Neotrypaea caesari</i> (Heard & Manning, 2000)	Aruba, Caribbean	x	MN237846	MN238511	x	NHMW 23016 (ULLZ 9004)

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<i>Neotrypaea caesari</i> (Heard & Manning, 2000)	Jamaica, Caribbean	x	MN237821	MN238473	MN238279	ULLZ 6534
<i>Neotrypaea californiensis</i> (Dana, 1854)	USA, WA, Pacific	MN238025	EU882947	EU875058	MN238270	ULLZ 6405
<i>Neotrypaea gigas</i> (Dana, 1852)	Mexico, Pacific	MN238004	EU882943	EU875054	MN238242	ULLZ 5176
<i>Neotrypaea gigas</i> (Dana, 1852)	Mexico, Pacific	x	EU882949	EU875060	MN238199	ULLZ 4121
<i>Neotrypaea gigas</i> (Dana, 1852)	Mexico, Pacific	MN237982	EU882948	EU875059	MN238198	ULLZ 4121
<i>Neotrypaea harmandi</i> (Bouvier, 1901)	Japan	MN237858	MN237664	MN238343	MN238063	ULLZ 10216
<i>Neotrypaea harmandi</i> (Bouvier, 1901)	Japan	MN237857	MN237663	MN238342	MN238062	ULLZ 10216
<i>Neotrypaea harmandi</i> (Bouvier, 1901)	Japan	MN237862	MN237668	MN238347	MN238067	ULLZ 10546
<i>Neotrypaea japonica</i> (Ortmann, 1891)	Japan	MN237860	MN237666	MN238345	MN238065	ULLZ 10217
<i>Neotrypaea japonica</i> (Ortmann, 1891)	Japan	MN237861	MN237667	MN238346	MN238066	ULLZ 10217
<i>Neotrypaea japonica</i> (Ortmann, 1891)	Japan	MN237859	MN237665	MN238344	MN238064	ULLZ 10217
<i>Neotrypaea tabogensis</i> (Sakai, 2005)	Panama, Pacific	MN237877	MN237682	MN238361	MN238082	NHMW 25914
<i>Neotrypaea uncinata</i> (A. Milne Edwards, 1837)	unknown	MN237863	x	MN238348	MN238068	USNM Acc. 2041350 (ULLZ 11079)
<i>Neotrypaea thermophila</i> (Lin, Komai & Chan, 2007)	Japan, Pacific	MN238053	EU882908	EU875050	MN238332	ULLZ 9414
<i>Neotrypaea thermophila</i> (Lin, Komai & Chan, 2007)	Taiwan	x	JN897380Nt	JN897380Nt	x	J. Scioli pers. comm. 17.7.2017
<i>Neotrypaea uncinata</i> (A. Milne Edwards, 1837)	Mexico, Pacific	x	MN237819	MN238471	MN238266	ULLZ 6364
<i>Paratrypaea bowieri</i> (Nobili, 1904)	Egypt, Red Sea	MN238041	MN237834	MN238496	MN238312	ULLZ 8442
<i>Paratrypaea bowieri</i> (Nobili, 1904)	Egypt, Red Sea	MN238042	MN237835	MN238497	MN238313	ULLZ 8443
<i>Paratrypaea bowieri</i> (Nobili, 1904)	Indonesia, Bali	x	MN237837	MN238499	MN238315	ULLZ 8445
<i>Paratrypaea bowieri</i> (Nobili, 1904)	Indonesia, Bali	MN238043	MN237836	MN238498	MN238314	ULLZ 8444
<i>Paratrypaea bowieri</i> (Nobili, 1904)	Japan	MN238022	EU882913	EU875023	MN238267	ULLZ 6367
<i>Paratrypaea bowieri</i> (Nobili, 1904)	Japan	MN238023	EU882914	EU875024	MN238268	ULLZ 6367
<i>Paratrypaea bowieri</i> (Nobili, 1904)	Papua New Guinea	x	MN237723	MN238408	x	MNHN-IU-2013-7084
<i>Paratrypaea bowieri</i> (Nobili, 1904)	Papua New Guinea	MN237930	x	MN238409	MN238138	MNHN-IU-2013-7103
<i>Paratrypaea bowieri</i> (Nobili, 1904)	Papua New Guinea	MN237971	MN237762	MN238438	MN238182	MNHN-IU-2014-10005
<i>Paratrypaea bowieri</i> (Nobili, 1904)	Papua New Guinea	MN237939	MN237730	MN238416	MN238148	MNHN-IU-2014-1158
<i>Paratrypaea bowieri</i> (Nobili, 1904)	Papua New Guinea	MN237943	MN237734	MN238420	MN238152	MNHN-IU-2014-1159
<i>Paratrypaea</i> HWI	USA, Hawaii	MN238034	EU882919	EU875029	MN238283	ULLZ 7080
<i>Paratrypaea maldivensis</i> (Borradaile, 1904)	Egypt, Red Sea	MN238038	MN237830	MN238488	MN238303	ULLZ 8430
<i>Paratrypaea maldivensis</i> (Borradaile, 1904)	Egypt, Red Sea	MN238039	MN237831	MN238489	MN238304	ULLZ 8431
<i>Paratrypaea maldivensis</i> (Borradaile, 1904)	French Polynesia	x	MN237772	x	MN238197	UF 28781
<i>Paratrypaea maldivensis</i> (Borradaile, 1904)	French Polynesia	x	MN237777	x	MN238204	UF 28820
<i>Paratrypaea maldivensis</i> (Borradaile, 1904)	French Polynesia	x	MN237783	x	MN238210	UF 28879
<i>Paratrypaea maldivensis</i> (Borradaile, 1904)	Jordan, Red Sea	x	MN237829	MN238487	MN238302	ULLZ 8429
<i>Paratrypaea maldivensis</i> (Borradaile, 1904)	Papua New Guinea	MN237955	MN237746	MN238431	MN238167	MNHN-IU-2014-10053
<i>Paratrypaea maldivensis</i> (Borradaile, 1904)	Papua New Guinea	MN237961	MN237752	MN238435	MN238173	MNHN-IU-2014-10053
<i>Paratrypaea maldivensis</i> (Borradaile, 1904)	Papua New Guinea	MN237947	MN237738	MN238422	MN238156	MNHN-IU-2014-10053B
<i>Paratrypaea maldivensis</i> (Borradaile, 1904)	Papua New Guinea	MN237942	MN237733	MN238419	MN238151	MNHN-IU-2014-1156
<i>Paratrypaea maldivensis</i> (Borradaile, 1904)	Papua New Guinea	MN237956	MN237747	MN238432	MN238168	MNHN-IU-2014-2618
<i>Praedatrypaea MOZ-34</i>	Mozambique	MN237889	MN237693	MN238372	MN238094	MNHN-IU-2008-10313
<i>Praedatrypaea praedatrix</i> (De Man, 1905)	Egypt, Red Sea	MN237852	MN237657	MN238336	MN238056	NHMW 24324 (ULLZ 10129)
<i>Praedatrypaea propinqua</i> (De Man, 1905)	Australia, NW Shelf	x	MN237670	MN238349	MN238070	NMV J59650
<i>Pugnatrypaea</i> GMX	USA, LA, Gulf of Mexico	x	EU882915	EU875025	MN238262	ULLZ 6058
<i>Pugnatrypaea</i> GMX	USA, LA, Gulf of Mexico	x	EU882903	EU875015	MN238300	ULLZ 8279
<i>Pugnatrypaea pugnatrix</i> (De Man, 1905)	Philippines	x	MN237684	MN238363	x	NMCR 49803
<i>Rayllianassa</i> cf. <i>amboinensis</i> (De Man, 1888)	Papua New Guinea	MN238013	MN237813	MN238464	MN238252	UF 8700
<i>Rayllianassa</i> cf. <i>amboinensis</i> (De Man, 1888)	Papua New Guinea	MN237933	MN237725	MN238411	MN238141	MNHN-IU-2013-7079

Family / Species name	Locality	18S	16S	12S	H3	Museum material sampled for tissue
<i>Rayllianassa</i> cf. <i>amboinensis</i> (De Man, 1888)	Papua New Guinea	MN237882	MN237688	MN238367	MN238087	MNHN-IU-2013-7049
<i>Rayllianassa</i> cf. <i>amboinensis</i> (De Man, 1888)	Papua New Guinea	MN237926	MN237719	MN238404	MN238134	MNHN-IU-2013-7137
<i>Rayllianassa</i> cf. <i>amboinensis</i> (De Man, 1888)	Papua New Guinea	MN237881	MN237687	MN238366	MN238086	MNHN-IU-2013-7058
<i>Rayllianassa</i> cf. <i>amboinensis</i> (De Man, 1888)	Philippines	MN237851	MN237656	MN238335	MN238055	NHFW 25915 (ULLZ 10127)
<i>Rayllianassa</i> cf. <i>amboinensis</i> (De Man, 1888)	Philippines	MN237925	x	x	MN238133	MNHN-IU-2016-8124
<i>Rayllianassa</i> cf. <i>amboinensis</i> (De Man, 1888)	USA, Hawaii, Line Islands	MN238012	MN237812	MN238463	MN238251	UF 11678
<i>Rudisullianassa</i> PNG-369	Papua New Guinea	MN237908	MN237710	MN238389	MN238115	MNHN-IU-2017-1348
<i>Rudisullianassa</i> PNG-369	Papua New Guinea	MN237927	MN237720	MN238405	MN238135	MNHN-IU-2013-7063
<i>Rudisullianassa</i> PNG-369	Papua New Guinea	MN237931	MN237724	MN238410	MN238139	MNHN-IU-2013-7054
<i>Rudisullianassa rudisulcus</i> (Komai, Fujita & Maenosono, 2014)	Papua New Guinea	MN237912	x	MN238392	MN238119	MNHN-IU-2013-7060
<i>Rudisullianassa rudisulcus</i> (Komai, Fujita & Maenosono, 2014)	Papua New Guinea	MN237936	x	MN238413	MN238144	MNHN-IU-2013-7042
<i>Rudisullianassa rudisulcus</i> (Komai, Fujita & Maenosono, 2014)	Papua New Guinea	MN237937	x	MN238414	MN238145	MNHN-IU-2013-7088
<i>Rudisullianassa rudisulcus</i> (Komai, Fujita & Maenosono, 2014)	Papua New Guinea	MN237892	x	MN238375	MN238097	MNHN-IU-2013-435
<i>Rudisullianassa rudisulcus</i> (Komai, Fujita & Maenosono, 2014)	Papua New Guinea	MN237911	x	MN238391	MN238118	MNHN-IU-2013-7069
<i>Scallasis amboinae</i> Bate, 1888	Papua New Guinea	MN237932	x	x	MN238140	MNHN-IU-2013-610
<i>Spinicallianassa</i> aff. <i>acutirostella</i> (Sakai, 1988)	Papua New Guinea	MN237910	x	MN238390	MN238117	MNHN-IU-2013-7115
<i>Spinicallianassa</i> aff. <i>acutirostella</i> (Sakai, 1988)	Papua New Guinea	MN237923	MN237717	MN238402	MN238131	MNHN-IU-2013-7064
<i>Spinicallianassa</i> aff. <i>acutirostella</i> (Sakai, 1988)	Papua New Guinea	MN237973	x	MN238439	MN238184	MNHN-IU-2013-8838
<i>Spinicallianassa</i> aff. <i>acutirostella</i> (Sakai, 1988)	Papua New Guinea	MN237975	MN237765	MN238441	MN238186	MNHN-IU-2013-8839
<i>Spinicallianassa</i> aff. <i>acutirostella</i> (Sakai, 1988)	Papua New Guinea	MN237940	MN237731	MN238417	MN238149	MNHN-IU-2014-1042
<i>Spinicallianassa</i> aff. <i>acutirostella</i> (Sakai, 1988)	Papua New Guinea	MN237976	MN237766	MN238442	MN238187	MNHN-IU-2016-8147
<i>Spinicallianassa</i> aff. <i>acutirostella</i> (Sakai, 1988)	Philippines, Palawan	MN237902	MN237704	MN238384	MN238109	NHFW 25368
<i>Spinicallianassa</i> FP-10	French Polynesia	x	MN237775	x	MN238202	UF 28785
<i>Spinicallianassa</i> FP-10	French Polynesia	x	MN237778	x	MN238205	UF 28821
<i>Spinicallianassa</i> FP-10	French Polynesia	x	MN237779	x	MN238206	UF 28822
<i>Spinicallianassa</i> FP-10	French Polynesia	x	MN237785	x	MN238212	UF 28905
<i>Spinicallianassa</i> PNG-757	Papua New Guinea	MN237938	MN237728	MN238415	MN238146	MNHN-IU-2013-842
<i>Trypaea australiensis</i> Dana, 1852	Australia, Vic.	MN238051	MN237847	MN238512	MN238330	ULLZ 9189
Callianopsidae						
<i>Callianopsis goniophthalma</i> (Rathbun, 1902)	USA, AK, Pacific	MN237906	MN237708	MN238387	MN238113	J. Sciolo pers.comm. 17.7.2017
<i>Vulcanocalliax arutyulovi</i> Dworschak & Cunha, 2007	NE Atlantic	EU874969*	EU874919	MN238474	MN238289	NHFW 21927 (ULLZ 7620)
Callichiridae						
<i>Audacallichirus audax</i> (De Man, 1911)	Kenya	x	MN237698	MN238378	MN238102	NHFW 24901
<i>Audacallichirus mirim</i> (Rodrigues, 1971)	Brazil, RS	MN237995	MN237798	x	MN238233	CCDB 2974
<i>Audacallichirus mirim</i> (Rodrigues, 1971)	Brazil, São Paulo	MN237994	MN237797	MN238453	MN238232	CCDB 2975
<i>Balsscallichirus masoomi</i> (Tirmizi, 1970)	Iran, Persian Gulf	MN237899	MN237701	MN238381	MN238105	NHFW 24990 (ULLZ 11472)
<i>Calliapagurrops charcoti</i> de Saint Laurent, 1973	Madeira, Atlantic	MN237900	MN237702	MN238383	MN238107	NHFW 25026
<i>Callichirus</i> aff. <i>major</i> (Say, 1818)	Brazil, São Paulo	x	EU882918	EU875028	MN238261	ULLZ 6056
<i>Callichirus</i> aff. <i>major</i> (Say, 1818)	Brazil, São Paulo	MN238018	EU882917	EU875027	MN238260	ULLZ 6055
<i>Callichirus garthi</i> (Retamal, 1975)	Chile, Tongay	MN238050	KR003900	x	MN238329	NHFW 23017 (ULLZ 9002)
<i>Callichirus islagrande</i> (Schmitt, 1935)	USA, LA, Gulf of Mexico	MN237980	MN237770	MN238448	MN238194	ULLZ 15003
<i>Callichirus islagrande</i> (Schmitt, 1935)	USA, LA, Gulf of Mexico	x	EU882916	EU875026	MN238257	ULLZ 6052
<i>Callichirus major</i> (Say, 1818)	unknown	DQ079741	DQ079707(1)	x	DQ079664	GenBank: KC1864
<i>Callichirus seilacheri</i> (Bott, 1955)	Mexico, Pacific	x	EU882920	EU875030	MN238259	ULLZ 6054
<i>Callichirus seilacheri</i> (Bott, 1955)	Nicaragua, Pacific	MN237981	MN237771	MN238449	MN238195	ULLZ 10834
<i>Callichirus seilacheri</i> (Bott, 1955)	Nicaragua, Pacific	MN238017	EU882921	EU875031	MN238258	ULLZ 6053
<i>Corallianassa borradalei</i> (De Man, 1928)	French Polynesia	x	MN237787	x	MN238214	UF 28963

Family / Species name	Locality	18S	16S	12S	H3	Museum material sampled for tissue
<i>Corallianassa borradailei</i> (De Man, 1928)	French Polynesia	x	MN237788	x	MN238215	UF 28964
<i>Corallianassa borradailei</i> (De Man, 1928)	Indonesia, Kalimantan	MN238001	MN237804	MN238457	MN238239	NHFW 25919
<i>Corallianassa borradailei</i> (De Man, 1928)	Indonesia, Sulawesi	x	NC020025	NC020025	x	GenBank: NC_020025
<i>Corallianassa borradailei</i> (De Man, 1928)	Tonga	MN238036	MN237823	x	MN238288	NMV J62119
<i>Corallianassa coutierei</i> (Nobili, 1904)	Papua New Guinea	MN237888	MN237692	MN238371	MN238093	MNHN-IU-2013-7073
<i>Corallianassa coutierei</i> (Nobili, 1904)	Papua New Guinea	MN237954	MN237745	MN238430	MN238166	MNHN-IU-2014-10010
<i>Corallianassa coutierei</i> (Nobili, 1904)	Papua New Guinea	MN237951	MN237742	MN238425	MN238160	MNHN-IU-2014-2711
<i>Corallianassa coutierei</i> (Nobili, 1904)	Philippines, Panglao	x	x	MN238382	MN238106	NMCR 39099
<i>Corallianassa hartmeyeri</i> (Schmitt, 1935)	Belize, Caribbean	MN237989	MN237793	x	MN238225	ULLZ 8995
<i>Corallianassa hartmeyeri</i> (Schmitt, 1935)	Panama, Caribbean	MN237878	MN237683	MN238362	MN238083	NHFW 25912
<i>Corallianassa longiventris</i> (A. Milne-Edwards, 1870)	Ascension I., Atlantic	MN238002	MN237805	MN238458	MN238240	NHFW 25601
<i>Corallianassa longiventris</i> (A. Milne-Edwards, 1870)	Brazil, São Paulo	x	MN237729	x	MN238147	CCDB 3098
<i>Corallianassa longiventris</i> (A. Milne-Edwards, 1870)	Jamaica, Caribbean	MN238029	EU882923	EU875033	MN238276	ULLZ 6530
<i>Corallianassa martensi</i> (Miers, 1884)	Australia, Cocos (Keeling) Is	MN237874	MN237679	MN238358	MN238079	ZRC 2013.1139
<i>Corallianassa martensi</i> (Miers, 1884)	Papua New Guinea	MN237953	MN237744	MN238429	MN238165	MNHN-IU-2014-2070
<i>Corallianassa martensi</i> (Miers, 1884)	Tonga	MN238035	MN237822	x	MN238287	NMV J62121
<i>Corallianassa xutha</i> Manning, 1988	Costa Rica, Pacific	x	MN237809	MN238460	MN238248	MZUCR 2253-02 (ULLZ 5643)
<i>Corallianassa xutha</i> Manning, 1988	Panama, Pacific	MN237997	MN237800	MN238454	MN238235	NHFW 25913
<i>Glypturoides trilobata</i> (Biffar, 1971)	USA, LA, Gulf of Mexico	MN237988	EU882962	EU875075	MN238224	ULLZ 4501
<i>Glypturoides trilobata</i> (Biffar, 1971)	USA, LA, Gulf of Mexico	EU874972	EU874922	MN238475	MN238291	ULLZ 7916
<i>Glypturus rabalaisae</i> Sakai, 2011	USA, LA, Gulf of Mexico	x	EU882933	EU875043	MN238229	ULLZ 4659
<i>Glypturus rabalaisae</i> Sakai, 2011	USA, LA, Gulf of Mexico	MN237992	EU882932	EU875042	MN238228	ULLZ 4659
<i>Glypturus acanthochirus</i> Stimpson, 1866	Jamaica, Caribbean	MN238028	EU882929	EU875039	MN238275	ULLZ 6528
<i>Glypturus acanthochirus</i> Stimpson, 1866	Venezuela, Caribbean	MN238009	EU882928	EU875038	MN238247	ULLZ 5642
<i>Glypturus armatus</i> (A. Milne-Edwards, 1870)	French Polynesia	x	MN237789	x	MN238216	UF 28967
<i>Glypturus armatus</i> (A. Milne-Edwards, 1870)	Papua New Guinea	MN237895	MN237696	MN238377	MN238100	MNHN-IU-2013-7047
<i>Glypturus armatus</i> (A. Milne-Edwards, 1870)	Papua New Guinea	MN237913	x	MN238393	MN238120	MNHN-IU-2013-7065
<i>Glypturus armatus</i> (A. Milne-Edwards, 1870)	Philippines, Panglao	x	MN237838	MN238502	MN238318	NMCR 39031 (ULLZ 8448)
<i>Glypturus armatus</i> (A. Milne-Edwards, 1870)	Tonga	MN238054	MN237849	x	MN238333	NMV J62120
<i>Glypturus armatus</i> (A. Milne-Edwards, 1870)	Vietnam	x	MN237839	MN238503	MN238319	NHFW 21941 (ULLZ 8449)
<i>Glypturus laurae</i> (de Saint Laurent, 1984)	Jordan, Red Sea	EU874985	EU874935	MN238500	MN238316	NHFW 21939 (ULLZ 8446)
<i>Glypturus laurae</i> (de Saint Laurent, 1984)	Jordan, Red Sea	MN238044	x	MN238501	MN238317	NHFW 21940 (ULLZ 8447)
<i>Grynaminna tamakii</i> Poore, 2000	Japan	MN238006	EU882937	EU875047	MN238244	ULLZ 5474
<i>Grynaminna tamakii</i> Poore, 2000	Japan	MN238007	EU882938	EU875048	MN238245	ULLZ 5475
<i>Grynaminna tamakii</i> Poore, 2000	Japan	MN238045	MN237842	MN238506	MN238322	NHFW 19954 (ULLZ 8891)
<i>Karumballichirus karumba</i> (Poore & Griffin, 1979)	Singapore	x	MN237844	MN238509	MN238327	ZRC 2002.0275 (ULLZ 9000)
<i>Karumballichirus karumba</i> (Poore & Griffin, 1979)	Singapore	EU874980	EU874930	MN238492	MN238307	ZRC 2002-0274 (ULLZ 8435)
<i>Karumballichirus karumba</i> (Poore & Griffin, 1979)	Singapore	MN238048	x	MN238508	MN238326	ZRC 2002.0275 (ULLZ 8999)
<i>Karumballichirus karumba</i> (Poore & Griffin, 1979)	Singapore	MN238049	MN237845	MN238510	MN238328	NHFW 21897 (ULLZ 9001)
<i>Karumballichirus karumba</i> (Poore & Griffin, 1979)	Taiwan	x	MN237833	MN238491	MN238306	NTOU A00089 (ULLZ 8434)
<i>Karumballichirus karumba</i> (Poore & Griffin, 1979)	Taiwan	MN238040	MN237832	MN238490	MN238305	MNHN-Th1511 (ULLZ 8432)
<i>Kraussillichirus kraussi</i> (Stebbing, 1900)	South Africa	FJ644897	FJ644868	x	x	GenBank: FJ644868
<i>Lepidophthalmus jamaicensis</i> (Schmitt, 1935)	Jamaica, Caribbean	MN238005	EU882941	EU875052	MN238243	ULLZ 5189
<i>Lepidophthalmus louisianensis</i> (Schmitt, 1935)	USA, LA, Gulf of Mexico	DQ079751	DQ079717	EU920897	DQ079678	Genbank: KC1852
<i>Lepidophthalmus louisianensis</i> (Schmitt, 1935)	USA, LA, Gulf of Mexico	MN238008	EU882940	EU875051	MN238246	ULLZ 5617
<i>Lepidophthalmus louisianensis</i> (Schmitt, 1935)	USA, LA, Gulf of Mexico	EU874973	EU874923	MN238477	MN238293	ULLZ 7918
<i>Lepidophthalmus madagassus</i> (Lenz & Richters, 1881)	Saudi Arabia	MN238011	MN237811	MN238462	MN238250	UF 37048

Family / Species name	Locality	18S	16S	12S	H3	Museum material sampled for tissue
<i>Lepidophthalmus rosae</i> (Nobili, 1904)	Indonesia, Bali	x	MN237843	MN238507	MN238323	NHMW 23010 (ULLZ 8892)
<i>Lepidophthalmus tridentatus</i> (von Martens, 1868)	Japan, Okinawa	x	MN237841	MN238505	MN238321	NHMW 23011 (ULLZ 8890)
<i>Lepidophthalmus tridentatus</i> (von Martens, 1868)	Philippines	EU874976	EU874926	MN238482	MN238297	NMCR 27007 (ULLZ 7928)
<i>Michaelcallianassa indica</i> Sakai, 2002	Iran, Persian Gulf	MN237898	MN237700	MN238380	MN238104	NHMW 24989
<i>Michaelcallianassa sinica</i> Liu & Liu, 2009	Singapore	MN238003	MN237806	MN238459	MN238241	ZRC 2017.0957
<i>Mocallichirus mocambiquensis</i> (Sakai, 2004)	Madagascar	MN238010	MN237810	MN238461	MN238249	UF 14337
<i>Mucrollichirus mucronatus</i> (Strahl, 1862)	Papua New Guinea	MN237964	MN237755	MN238437	MN238176	MNHN-IU-2014-2776
<i>Mucrollichirus mucronatus</i> (Strahl, 1862)	Papua New Guinea	MN237962	MN237753	MN238436	MN238174	MNHN-IU-2014-2576
<i>Mucrollichirus mucronatus</i> (Strahl, 1862)	Papua New Guinea	MN237960	MN237751	MN238434	MN238172	MNHN-IU-2014-2480
<i>Mucrollichirus mucronatus</i> (Strahl, 1862)	Papua New Guinea	MN237949	MN237740	MN238423	MN238158	MNHN-IU-2014-2777
<i>Mucrollichirus mucronatus</i> (Strahl, 1862)	Philippines, Panglao	EU874983	EU874933	MN238494	MN238310	NHMW 21944 (ULLZ 8440)
<i>Neocallichirus angelikae</i> Sakai, 2000	Australia, SA	MN237868	MN237674	MN238353	MN238074	NMV J58652 (ULLZ 11380)
<i>Neocallichirus cf. cacahuata</i> Felder & Manning, 1995	USA, FL, Atlantic	x	EU882946	EU875057	MN238190	ULLZ 3552
<i>Neocallichirus calmani</i> (Nobili, 1904)	French Polynesia	x	MN237790	x	MN238217	UF 29095
<i>Neocallichirus calmani</i> (Nobili, 1904)	Iran, Gulf of Oman	MN237864	MN237669	x	MN238069	ULLZ 11080
<i>Neocallichirus calmani</i> (Nobili, 1904)	Philippines, Panglao	EU874982	EU874932	x	MN238309	NHMW 21943 (ULLZ 8439)
<i>Neocallichirus cf. cacahuata</i> Felder & Manning, 1995	Nicaragua, Pacific	MN238032	EU882961	EU875074	MN238280	ULLZ 6536
<i>Neocallichirus grandimana</i> (Gibbes, 1850)	Bahamas, Atlantic	MN237893	x	MN238376	MN238098	NHMW 25536
<i>Neocallichirus grandimana</i> (Gibbes, 1850)	USA, FL, Atlantic	MN237928	MN237721	MN238406	MN238136	NHMW 25555
<i>Neocallichirus grandimana</i> (Gibbes, 1850)	USA, FL, Atlantic	x	MN237820	MN238472	MN238272	ULLZ 6491
<i>Neocallichirus guassuina</i> (Rodrigues, 1971)	Brazil, Sao Paulo	MN237996	MN237799	x	MN238234	CCDB 5516
<i>Neocallichirus jousseumei</i> (Nobili, 1904)	Australia, Cocos (Keeling) Is	MN237999	MN237802	MN238456	MN238237	ZRC 2013-1158
<i>Neocallichirus jousseumei</i> (Nobili, 1904)	Iran, Gulf of Oman	MN237993	MN237796	x	MN238231	ULLZ 11468
<i>Neocallichirus jousseumei</i> (Nobili, 1904)	Papua New Guinea	MN237935	MN237727	x	MN238143	MNHN-IU-2013-7122
<i>Neocallichirus jousseumei</i> (Nobili, 1904)	Papua New Guinea	MN237884	x	x	MN238089	MNHN-IU-2013-7039
<i>Neocallichirus jousseumei</i> (Nobili, 1904)	Philippines, Panglao	EU874981	EU874931	MN238493	MN238308	NHMW 21942 (ULLZ 8437)
<i>Neocallichirus maryae</i> Karasawa, 2004	Brazil, Alagoas	MN237929	MN237722	MN238407	MN238137	NHMW 25569
<i>Neocallichirus maryae</i> Karasawa, 2004	Panama, Caribbean	MN237991	MN237795	x	MN238227	ULLZ 13491
<i>Neocallichirus maryae</i> Karasawa, 2004	USA, FL, Atlantic	x	EU882954	EU875065	MN238273	ULLZ 6492
<i>Neocallichirus maryae</i> Karasawa, 2004	USA, FL, Atlantic	EU875002	EU874952	MN238426	MN238161	USNM 309751
<i>Neocallichirus mericeae</i> (Manning & Felder 1995)	Nicaragua, Pacific	MN238000	EU882959	EU875072	MN238238	ULLZ 4838
<i>Neocallichirus mericeae</i> (Manning & Felder 1995)	Panama, Caribbean	MN237876	MN237681	MN238360	MN238081	NHMW 25287
<i>Neocallichirus mericeae</i> (Manning & Felder 1995)	Panama, Caribbean	MN237990	MN237794	x	MN238226	ULLZ 13322
<i>Neocallichirus mericeae</i> (Manning & Felder 1995)	unknown	DQ079768	DQ079733	x	DQ079700	GenBank: KC1865
<i>Neocallichirus mericeae</i> (Manning & Felder 1995)	USA, FL, Atlantic	EU875004	EU874954 (3)	MN238428	MN238163	USNM 309755
<i>Neocallichirus mericeae</i> (Manning & Felder 1995)	USA, FL, Atlantic	MN238027	EU882960	EU875073	MN238274	ULLZ 6493
<i>Neocallichirus natalensis</i> (Barnard, 1946)	Kenya	MN237897	MN237699	MN238379	MN238103	NHMW 24900
<i>Neocallichirus</i> PNG-1589	Papua New Guinea	MN237948	MN237739	x	MN238157	MNHN-IU-2014-10052
<i>Neocallichirus</i> PNG-1589	Papua New Guinea	MN237966	MN237757	x	MN238178	MNHN-IU-2014-10052
<i>Neocallichirus</i> PNG-1589	Papua New Guinea	MN237967	MN237758	x	MN238179	MNHN-IU-2014-10052
<i>Neocallichirus</i> PNG-1589	Papua New Guinea	MN237941	MN237732	MN238418	MN238150	MNHN-IU-2014-1157
<i>Neocallichirus variabilis</i> (Edmondson, 1944)	USA, Hawaii	x	EU882955	EU875066	MN238256	MNHN-IU-2014-1157
<i>Neocallichirus vigilax</i> (De Man, 1916)	Australia, Qld	MN237865	MN237671	MN238350	MN238071	NMV J40124 (ULLZ 11376)
<i>Neocallichirus vigilax</i> (De Man, 1916)	Papua New Guinea	MN237896	MN237697	x	MN238101	MNHN-IU-2013-7072
<i>Neocallichirus vigilax</i> (De Man, 1916)	Papua New Guinea	MN237922	MN237716	MN238401	MN238130	MNHN-IU-2013-7129
<i>Neocallichirus vigilax</i> (De Man, 1916)	Papua New Guinea	MN237970	MN237761	x	x	MNHN-IU-2014-10009
<i>Neocallichirus vigilax</i> (De Man, 1916)	Papua New Guinea	MN237883	MN237689	x	MN238088	MNHN-IU-2013-7105

Family / Species name	Locality	18S	16S	12S	H3	Museum material sampled for tissue
<i>Neocallichirus vigilax</i> (De Man, 1916)	Papua New Guinea	MN237958	MN237749	x	MN238170	MNHN-IU-2014-10002
<i>Neocallichirus vigilax</i> (De Man, 1916)	Papua New Guinea	MN237968	MN237759	x	MN238180	MNHN-IU-2014-2553
<i>Neocallichirus vigilax</i> (De Man, 1916)	Philippines, Panglao	EU874984	EU874934	MN238495	MN238311	NHMW 21945 (ULLZ 8441)
Ctenochelidae						
<i>Ctenocheles balssi</i> Kishinouye, 1926	Japan	EF585455	EF585444	x	x	GenBank: EF585455
<i>Ctenocheles balssi</i> Kishinouye, 1926	Japan	MN237856	MN237662	MN238341	MN238061	ULLZ 10137
<i>Ctenocheles balssi</i> Kishinouye, 1926	Philippines	MN237855	MN237661	MN238340	MN238060	NTOU A00076 (ULLZ 10136)
<i>Ctenocheloides almeidai</i> Anker & Pachelle, 2013	Brazil, Alagoas	MN237870	MN237676	MN238355	MN238076	MZUSP 27617 (ULLZ 11534)
<i>Ctenocheloides boucheti</i> Poore, 2015	Papua New Guinea	MN237891	x	MN238374	MN238096	MNHN-IU-2013-66
<i>Dawsonius</i> aff. <i>latispina</i> (Dawson, 1967)	Panama, Pacific	MN238019	MN237816	MN238468	MN238263	ULLZ 6175
<i>Dawsonius</i> aff. <i>latispina</i> (Dawson, 1967)	Panama, Pacific	MN238021	MN237818	MN238470	MN238265	ULLZ 6177
<i>Dawsonius</i> aff. <i>latispina</i> (Dawson, 1967)	Panama, Pacific	MN238020	MN237817	MN238469	MN238264	ULLZ 6176
<i>Dawsonius</i> aff. <i>latispina</i> (Dawson, 1967)	Panama, Pacific	MN238052	MN237848	MN238513	MN238331	ULLZ 9255
<i>Dawsonius latispina</i> (Dawson, 1967)	Mexico, Gulf of Mexico	EU874961	EU874911	EU875008	MN238284	ULLZ 7306
<i>Gourettia sinica</i> Liu & Liu, 2010	Singapore	MN237905	MN237707	MN238386	MN238112	ZRC 2017.0947
<i>Gourettia</i> ULLZ 9707	Panama, Caribbean	x	MN237850	MN238514	MN238334	ULLZ 9707
<i>Paragourettia biffari</i> (Blanco-Rambla & Linero-Arana, 1994)	USA, LA, Gulf of Mexico	x	EU882925	EU875035	MN238230	ULLZ 4673
<i>Paragourettia biffari</i> (Blanco-Rambla & Linero-Arana, 1994)	USA, LA, Gulf of Mexico	EU874965*	EU874915	x	MN238286	ULLZ 7370
<i>Paragourettia coolibah</i> (Poore & Griffin, 1979)	Dubai, Persian Gulf	MN237873	x	x	MN238078	NHMW 25493
<i>Paragourettia coolibah</i> (Poore & Griffin, 1979)	Madagascar	MN238015	x	x	MN238254	UF 14443
<i>Paragourettia</i> ULLZ 10134	Philippines	MN237853	MN237659	MN238338	MN238058	NMCR 49804 (ULLZ 10134)
Eucalliidae						
<i>Calliax lobata</i> (de Gaillande & Lagardère, 1966)	Atlantic, Gulf of Cadiz	MN237872	MN237678	MN238357	MN238077	NHMW 25511
<i>Calliaxina bulimba</i> (Poore & Griffin, 1979)	Papua New Guinea	MN237934	MN237726	MN238412	MN238142	MNHN-IU-2013-7097
<i>Calliaxina kensleyi</i> (Dworschak, 2005)	Egypt, Red Sea	MN237901	MN237703	x	MN238108	NHMW 25374
<i>Calliaxina novaebritanniae</i> (Borradaile, 1900)	Indonesia, Sulawesi	x	MN237803	x	x	NHMW 25783
<i>Calliaxina novaebritanniae</i> (Borradaile, 1900)	Papua New Guinea	MN237909	MN237711	x	MN238116	MNHN-IU-2013-7062
<i>Calliaxina novaebritanniae</i> (Borradaile, 1900)	Papua New Guinea	MN237945	MN237736	x	MN238154	MNHN-IU-2013-7941
<i>Calliaxina novaebritanniae</i> (Borradaile, 1900)	Papua New Guinea	MN237972	MN237763	x	MN238183	MNHN-IU-2013-8837
<i>Calliaxina novaebritanniae</i> (Borradaile, 1900)	Philippines, Palawan	MN237903	MN237705	MN238385	MN238110	NHMW 25366
<i>Calliaxina sakaii</i> (de Saint Laurent & Le Loeuff, 1979)	Japan	MN238047	EU882905	EU875071	MN238325	ULLZ 8894
<i>Calliaxina sakaii</i> (de Saint Laurent & Le Loeuff, 1979)	Japan	MN238046	EU882904	EU875070	MN238324	ULLZ 8894
<i>Eucalliix quadracuta</i> (Biffar, 1970)	Panama, Caribbean	MN237887	MN237691	MN238370	MN238092	NHMW 25916
<i>Eucalliixiopsis aequimana</i> (Baker, 1907)	Australia, SA	MN237866	MN237672	MN238351	MN238072	NMV J59651 (ULLZ 11378)
<i>Eucalliixiopsis</i> aff. <i>panglaoensis</i> (Dworschak, 2006)	French Polynesia	x	MN237773	x	MN238200	UF 28782
<i>Eucalliixiopsis</i> aff. <i>panglaoensis</i> (Dworschak, 2006)	French Polynesia	MN237983	MN237781	MN238451	MN238208	UF 28877
<i>Eucalliixiopsis</i> aff. <i>panglaoensis</i> (Dworschak, 2006)	French Polynesia	x	MN237782	x	MN238209	UF 28878
<i>Eucalliixiopsis</i> aff. <i>panglaoensis</i> (Dworschak, 2006)	Papua New Guinea	MN237950	MN237741	MN238424	MN238159	MNHN-IU-2014-10003
<i>Eucalliixiopsis</i> HWI	USA, Hawaii	MN237984	MN237791	x	MN238219	ULLZ 6502
<i>Eucalliixiopsis</i> HWI	USA, Hawaii	x	MN237792	x	MN238220	ULLZ 6503
<i>Eucalliixiopsis inaequimana</i> (Dworschak, 2014)	Australia, Cocos (Keeling) Is	MN237880	MN237686	MN238365	MN238085	ZRC 2013.1140
<i>Eucalliixiopsis inaequimana</i> (Dworschak, 2014)	Australia, Cocos (Keeling) Is	MN237879	MN237685	MN238364	MN238084	ZRC 2013.1151
<i>Eucalliixiopsis inaequimana</i> (Dworschak, 2014)	French Polynesia	x	MN237774	x	MN238201	UF 28784
<i>Eucalliixiopsis inaequimana</i> (Dworschak, 2014)	Papua New Guinea	MN237952	MN237743	x	MN238164	MNHN-IU-2014-10008
<i>Eucalliixiopsis inaequimana</i> (Dworschak, 2014)	Papua New Guinea	MN237969	MN237760	x	MN238181	MNHN-IU-2014-10006
<i>Eucalliixiopsis jonesi</i> (Heard, 1989)	Belize, Caribbean	x	x	MN238447	MN238193	ULLZ 15972
<i>Eucalliixiopsis jonesi</i> (Heard, 1989)	Colombia, Caribbean	MN238033	EU882926	EU875036	MN238282	ULLZ 6543

Family / Species name	Locality	18S	16S	12S	H3	Museum material sampled for tissue
<i>Eucallixiopsis jonesi</i> (Heard, 1989)	Jamaica, Caribbean	MN238030	EU882927	EU875037	MN238277	ULLZ 6531
<i>Eucallixiopsis panglaoensis</i> (Dworschak, 2003)	Philippines, Panglao	x	MN237840	MN238504	MN238320	NMCR 27000 (ULLZ 8450)
<i>Eucallixiopsis</i> PNG-1153	Papua New Guinea	MN237963	MN237754	x	MN238175	MNHN-IU-2014-2536
<i>Paraglypturus tonganus</i> Ahn, Kim, Ju & Min, 2017	Tonga	x	NC024651	NC024651	x	Genbank: NC024651

Table S2. Morphological resources

List of 198 species (including outgroups) used for the morphological analysis arranged alphabetically by family and species name using the new classification. All specimens listed in Table S1 were examined in detail, as were many others from the museums listed. Museum are abbreviated as follows: Museum national d'Histoire naturelle, Paris, France (MNHN), Naturhistorisches Museum Wien, Austria (NHMW); Senckenberg Museum, Frankfurt (SMF); National Museum of Natural History, Washington, USA (USNM); University of Louisiana Lafayette, USA (ULLZ); Florida Museum of Natural History, Gainesville, USA (UF); Museo de Zoología, Universidad de Costa Rica (MZUCR); Museu de Zoologia da Universidade de São Paulo, Brazil (MZUSP); Crustacean Collection of Department of Biology, University of São Paulo, Ribeirão Preto, Brazil (CCDB); National Museum of the Philippines, Manila (NMCR); Zoological Reference Collection, Lee Kong Chian Natural History Museum, National University of Singapore (ZRC); Phuket Marine Biological Center, Phuket, Thailand (PMBC); Museums Victoria, Melbourne, Australia (NMV); Northern Territory Museum and Art Gallery, Darwin, Australia (NTMAG); and Queensland Museum, Brisbane, Australia (QM). Citations of published descriptions can be found in the comprehensive synonymies of Sakai (2011) and Poore *et al.* (2019)

Family / Species name	Museum material	Published source(s)
Axiidae		
<i>Eiconaxius agassizi</i> (Bouvier, 1905)	MNHN (syntypes)	Poore & Dworschak 2018
<i>Pillsburyaxius clevai</i> (Ngoc-Ho, 2006)	MNHN	Ngoc-Ho 2006
Callianaideidae		
<i>Heardaxius rogerbamberi</i> Poore, 2015	MNHN	Poore 2015
<i>Thomassinia aimsae</i> Poore, 1997	MNHN, NMV	Poore 1997
Anacalliacidae		
<i>Anacalliax agassizi</i> (Biffar, 1971)	MNHN (paratype)	Biffar 1971
<i>Anacalliax argentinensis</i> (Biffar, 1971)	MNHN (paratype)	Manning & Felder 1991, de Saint Laurent 1973
Callianassidae		
<i>Aqaballianassa aqabaensis</i> (Dworschak, 2003)	NHMW (types), MNHN (paratypes)	Dworschak 2003
<i>Aqaballianassa brevirostris</i> (Sakai, 2002)	PMBC	Sakai 2002
<i>Aqaballianassa lewtonae</i> (Ngoc-Ho, 1994)	NMV (holotype), MNHN (paratypes)	Ngoc-Ho 1994
<i>Aqaballianassa</i> PNG-1166	MNHN	
<i>Arenallianassa arenosa</i> (Poore, 1975)	NMV (types, others)	Poore 1975
<i>Biffarius biformis</i> (Biffar, 1971)	MNHN, NMV, NHMW, USNM, ULLZ	Biffar 1971a, b, Manning & Felder 1991
<i>Biffarius delicatulus</i> Rodrigues & Manning, 1992	NHMW	Rodrigues & Manning 1992
<i>Biffarius limosus</i> (Poore, 1975)	NMV	Poore 1975, Poore & Griffin 1979
<i>Callianassa australis</i> Kensley 1974	MNHN	Kensley 1974
<i>Callianassa diaphora</i> Le Loeuff & Intes 1974	MNHN	Le Loeuff & Intes 1974, Sakai 2004
<i>Callianassa marchali</i> Le Loeuff & Intes 1974		Le Loeuff & Intes 1974
<i>Callianassa subterranea</i> (Leach, 1814)	NHMW, NMV, ULLZ	Ngoc-Ho 2003

Family / Species name	Museum material	Published source(s)
<i>Caviallianassa cavifrons</i> (Komai & Fujiwara, 2012)		Komai & Fujiwara 2012
<i>Caviallianassa</i> FP-11	UF	
<i>Caviallianassa</i> PNG-1172	MNHN	
<i>Cheramoides marginata</i> (Rathbun, 1901)	MNHN, ULLZ	Manning & Felder 1991, Biffar 1971
<i>Cheramoides oblonga</i> (Le Loeuff & Intès, 1974)	MNHN (holotype)	Le Loeuff & Intès 1974
<i>Cheramus profundus</i> (Biffar, 1973)	ULLZ, TXA&M	Manning & Felder 1991, Biffar 1973
<i>Coriollianassa coriolisae</i> (Ngoc-Ho, 2014)	MNHN, NMCR	Ngoc-Ho 2014
<i>Coriollianassa</i> MOZ-31	MNHN	
<i>Coriollianassa</i> MOZ-33	MNHN	
<i>Coriollianassa sibogae</i> (De Man, 1905)	MNHN	De Man 1928, Ngoc-Ho 1994
<i>Filhollianassa ceramica</i> (Fulton & Grant, 1906)	NMV (including types)	Poore 1975, Poore & Griffin 1979
<i>Filhollianassa filholi</i> (A. Milne-Edwards, 1878)	MNHN (including syntype), NMV	Sakai 1999, Chilton 1907
<i>Fragillianassa debilis</i> (Hernandez-Aguilera, 1998)	MHNW	Hernandez-Aguilera 1998
<i>Fragillianassa fragilis</i> (Biffar, 1970)	ULLZ	Biffar 1970, Botter-Carvalho et al. 2012
<i>Gilvossius candidus</i> (Olivi, 1792)	MNHN, NHMW	Ngoc-Ho 2003
<i>Gilvossius convexus</i> (de Saint Laurent & Le Loeuff, 1979)	MNHN (types, others)	de Saint Laurent & Le Loeuff 1979, Sakai 2005
<i>Gilvossius setimanus</i> (DeKay, 1844)	NMV, ULLZ	Manning & Felder 1992, De Man 1928
<i>Gilvossius tyrrhenus</i> (Petagna, 1792)	MNHN	Ngoc-Ho 2003, Sakai 1999
<i>Gilvossius whitei</i> (Sakai, 1999)	MNHN, NHMW	Ngoc-Ho 2003, Sakai 1999
<i>Jocullianassa joculatrix</i> (De Man, 1905)	MNHN, NMV	De Man 1928, Komai & Tachikawa 2008, Ngoc-Ho 1991
<i>Lipkecallianassa abyssa</i> Sakai, 2002		Sakai 2002
<i>Necallianassa acanthura</i> (Caroli, 1946)	MNHN, UF, NHMW	Ngoc-Ho 2004
<i>Necallianassa berylae</i> Heard & Manning, 1998		Heard & Manning 1998
<i>Necallianassa truncata</i> (Giard & Bonnier, 1890)	MNHN, NMV, ULLZ	Ngoc-Ho 2003
<i>Neotrypaea caesari</i> (Heard & Manning, 2000)	NMV, NHMW, ULLZ	Heard & Manning 2000
<i>Neotrypaea californiensis</i> (Dana, 1854)	MNHN, NMV, ULLZ	Manning & Felder 1991
<i>Neotrypaea gigas</i> (Dana, 1852)	MNHN, NMV, ULLZ	Dworschak 1992
<i>Neotrypaea harmandi</i> (Bouvier, 1901)	ULLZ	De Man 1928, Manning & Tamaki 1998
<i>Neotrypaea japonica</i> (Ortmann, 1891)	MNHN (types, others), NMV, ULLZ	De Man 1928, Sakai 2001
<i>Neotrypaea makarovi</i> (Marin, 2013)		Marin, 2013
<i>Neotrypaea petalura</i> (Stimpson, 1860)	NMV	Sakai 2005
<i>Neotrypaea tabogensis</i> (Sakai, 2005)	NHMW, USNM	Sakai 2005, Ayón-Parente et al. 2013
<i>Neotrypaea thermophila</i> (Lin, Komai & Chan, 2007)	ULLZ	Lin et al. 2007, Lin et al. 2012, Komai & Fujiwara 2012
<i>Neotrypaea uncinata</i> (A. Milne-Edwards, 1837)	MNHN, NMV, ULLZ	Sakai 2005
<i>Notiax brachyophthalma</i> (A. Milne-Edwards, 1870)	MNHN (syntype)	Manning & Felder 1991, Thatje 2000
<i>Notiax santarita</i> Thatje, 2000		Thatje 2000
<i>Paratrypaea bowieri</i> (Nobili, 1904)	MNHN, ULLZ	Komai & Tachikawa 2008, Dworschak 2012
<i>Paratrypaea maldivensis</i> (Borradaile, 1904)	UMC (holotype), MNHN, UF, ULLZ	Dworschak 2012
<i>Poti gaucho</i> Rodrigues & Manning, 1992		Rodrigues & Manning 1992
<i>Praedatrypaea intermedia</i> (De Man, 1925)		De Man 1928
<i>Praedatrypaea</i> MOZ-34	MNHN	
<i>Praedatrypaea praedatrix</i> (De Man, 1905)	MNHW	De Man 1928, Sakai 1988, Ngoc-Ho 1994
<i>Praedatrypaea propinqua</i> (De Man, 1905)	MNHN, NMV	De Man 1928, Ngoc-Ho 1991 1994
<i>Pugnatrypaea</i> GMX	ULLZ	
<i>Pugnatrypaea lobetobensis</i> (De Man, 1905)		De Man 1928
<i>Pugnatrypaea pugnatrrix</i> (De Man, 1905)	NMCR	De Man 1928

Family / Species name	Museum material	Published source(s)
<i>Rayllianassa amboinensis</i> (De Man, 1888)	MNHN, NMV, NHMW, UF	De Man 1888 1928, Sakai 1984 1988 1999, Poore & Griffin 1979, Ngoc-Ho 1991, Sakai & Tachikawa 2008, Komai et al. 2014
<i>Rudisullianassa</i> PNG-369	MNHN	
<i>Rudisullianassa rudisulcus</i> (Komai, Fujita & Maenosono, 2014)	MNHN	Komai, Fujita & Maenosono, 2014
<i>Scallasis amboinae</i> Bate, 1888	NHMUK (holotype), MNHN	Bate 1888, Sakai 2005
<i>Scallasis spinophthalma</i> (Sakai, 1970)		Sakai 1970, Komai 2002
<i>Spinicallianassa acutirostella</i> (Sakai, 1988)	NTMAG (holotype)	Sakai 1988, Komai 2014
<i>Spinicallianassa</i> aff. <i>acutirostella</i> (Sakai, 1988)	MNHN, NHMW	
<i>Spinicallianassa</i> FP-10	UF	
<i>Spinicallianassa ohurana</i> (Komai, Maenosono & Fujita, 2014)		(Komai, Maenosono & Fujita 2014)
<i>Spinicallianassa</i> PNG-757	MNHN	
<i>Spinicallianassa spinicauda</i> (Komai, Maenosono & Fujita, 2014)		Komai 2014
<i>Tastrypaea poorei</i> (Sakai, 1999)	NMV (including types)	Sakai 1999, Poore 1975
<i>Trypaea australiensis</i> Dana, 1852	MNHN, NMV	Poore & Griffin 1979
Callianopsidae		
<i>Bathycalliax geomar</i> Sakai & Türkay, 1999		Sakai & Türkay 1999
<i>Callianopsis anovalis</i> Lin, Komai & Chan, 2007		Lin et al. 2007
<i>Callianopsis caecigena</i> (Alcock & Anderson, 1894)		Alcock & Anderson 1894
<i>Callianopsis goniophthalma</i> (Rathbun, 1902)	ULLZ	Manning & Felder 1991, Schweitzer & Feldman 1997, de Saint Laurent 1973
<i>Callianopsis mauritana</i> Sakai, Türkay, Beuck & Freiwald, 2015	SMF (holotype)	Sakai et al. 2015
<i>Vulcanocalliax arutyunovi</i> Dworschak & Cunha, 2007	NHMW	Dworschak & Cunha 2007
Callichiridae		
<i>Audacallichirus audax</i> (De Man, 1911)	MNHN, NHMW	De Man 2011, Dworschak 1992, Sakai 1999, Tirmizi 1967, Rao & Kartha 1967, Ngoc-Ho 2014
<i>Audacallichirus mirim</i> (Rodrigues, 1971)	CCDB	Rodrigues 1971
<i>Audacallichirus monodi</i> (de Saint Laurent & LeLoeuff, 1979)	MNHN	de Saint Laurent & Le Loeuff 1979
<i>Balsscallichirus balssi</i> (Monod, 1933)	MNHN	de Saint Laurent & LeLoeuff 1979, LeLoeuff & Intes 1974
<i>Balsscallichirus foresti</i> (Le Loeuff & Intes, 1974) comb. nov.	MNHN (types, others)	de Saint Laurent & Le Loeuff 1979, Le Loeuff & Intes 1974
<i>Balsscallichirus guineensis</i> (De Man, 1928)	MNHN	de Saint Laurent & LeLoeuff 1979, LeLoeuff & Intes 1974, De Man 1928
<i>Balsscallichirus masoomi</i> (Tirmizi, 1970)	NHMW	Tirmizi 1970, Sankolli 1971
<i>Balsscallichirus pixii</i> (Kensley, 1976)		Kensley 1976
<i>Balsscallichirus tenuimanus</i> (de Saint Laurent & LeLoeuff, 1979)	MNHN (paratypes)	de Saint Laurent & LeLoeuff 1979
<i>Calliapagurops charcoti</i> de Saint Laurent, 1973	MNHN (holotype)	Ngoc-Ho 2003, Dworschak & Wirts 2010
<i>Calliapagurops foresti</i> Ngoc-Ho, 2002	MNHN (types)	Ngoc-Ho 2002
<i>Callichirus adamas</i> (Kensley, 1974)	MNHN	de Saint Laurent & Le Loeuff 1979, Kensley 1974
<i>Callichirus islagrande</i> (Schmitt, 1935)	MNHN, NMV, ULLZ	Manning & Felder 1986
<i>Callichirus major</i> (Say, 1818)	NMV	
<i>Callichirus</i> aff. <i>major</i> (Say, 1818)	ULLZ	
<i>Callichirus seilacheri</i> (Bott, 1955)	ULLZ	Manning & Felder 1986, Sakai 1999 2011
<i>Corallianassa borradalei</i> (De Man, 1928)	MNHN, UF, NMV, NHMW	Komai 2015, de Saint Laurent 1984, Poore & Suchanek 1988: Komai 2015
<i>Corallianassa coutierei</i> (Nobili, 1904)	MNHN (lectotype, others), NMCR	Ngoc-Ho 2005, Edmondson 1944, Manning 1987

Family / Species name	Museum material	Published source(s)
<i>Corallianassa hartmeyeri</i> (Schmitt, 1935)	NHMW, ULLZ	Manning 1988
<i>Corallianassa haswelli</i> Poore & Griffin 1979	NMV	Poore & Griffin 1979
<i>Corallianassa intesi</i> (de Saint Laurent & Le Loeuff, 1979)	MNHN (including holotype)	de Saint Laurent & Le Loeuff 1979
<i>Corallianassa longiventris</i> (A. Milne-Edwards, 1870)	MNHN, NMV	Biffar 1971, Manning 1987
<i>Corallianassa martensi</i> (Miers, 1884)	MNHN, ZRC, NMV	Tirmizi 1974, Sakai 1984, Komai 2015
<i>Corallianassa xutha</i> Manning, 1988	MNHN, MZUCR, NHMW	Manning 1988 1992
<i>Glypturoides trilobata</i> (Biffar, 1970)	MNHN, ULLZ	Biffar 1971, Sakai 1999 2012
<i>Glypturus rabalaisae</i> Sakai, 2011	ULLZ	Rabalais et al. 1981
<i>Glypturus acanthochirus</i> Stimpson, 1866	MNHN, ULLZ	Manning 1987, Biffar 1971
<i>Glypturus armatus</i> (A. Milne-Edwards, 1870)	MNHN, NMV, UF, NHMW, NMCR	
<i>Glypturus laurae</i> (de Saint Laurent, 1984)	MNHN, NMV, NHMW	Poore 2000, Poore & Suchanek 1988
<i>Grynaminna tamakii</i> Poore, 2000	NMV, NHMW, ULLZ	Poore 2000
<i>Karumballichirus karumba</i> (Poore & Griffin, 1979)	MNHN, NMV, ZRC, NTOU, NHMW	Poore & Griffin 1979, Dworschak 2008, Sakai 1999, Kemp 1915
<i>Kraussillichirus kraussi</i> (Stebbing, 1900)	NHMW	Stebbing 1900, Barnard 1950
<i>Laticallichirus grandis</i> (Karasawa & Goda, 1996)		Komai et al. 2019
<i>Lepidophthalmus bocourti</i> (A. Milne-Edwards, 1870)	MNHN (types), NMV	Felder 2003, Lemaitre & Ramos 1992, Sakai 1999
<i>Lepidophthalmus eiseni</i> (Holmes, 1904)		Felder 2003, Holthuis 1954
<i>Lepidophthalmus grandidieri</i> (Coutière, 1899)	MNHN	Sakai 2005
<i>Lepidophthalmus jamaicensis</i> (Schmitt, 1935)	ULLZ	Manning & Felder 1997
<i>Lepidophthalmus louisianensis</i> (Schmitt, 1935)	ULLZ, NMV	Felder & Rodrigues 1993, Sakai 1999
<i>Lepidophthalmus madagassus</i> (Lenz & Richters, 1881)	MNHN, NMV, UF	De Man 1928, Sakai 1999 2005
<i>Lepidophthalmus rosae</i> (Nobili, 1904)	NHMW	Nobili 1906, Sakai 2005
<i>Lepidophthalmus tridentatus</i> (von Martens, 1868)	NHMW, UF, NMCR	Sakai 1970, Dworschak 2007
<i>Lepidophthalmus turneranus</i> (White, 1861)	MNHN	Le Loeuff & Intes 1974, de Saint Laurent & Le Loeuff 1979, De Man 1928
<i>Michaelcallianassa indica</i> Sakai, 2002	NHMW	Sakai 2002, 2005
<i>Michaelcallianassa sinica</i> Liu & Liu, 2009		Liu & Liu 2009
<i>Mocallichirus mocambiquensis</i> (Sakai, 2004)	MNHN (including types), UF	Sakai 2004
<i>Mucrollichirus mucronatus</i> (Strahl, 1862)	MNHN, NHMW	Sakai 1999 2005, Poore & Griffin 1979, Tirmizi 1977
<i>Neocallichirus angelikae</i> Sakai, 2000	NMV	Sakai 2000
<i>Neocallichirus cacahuatense</i> Felder & Manning, 1995	ULLZ	Felder & Manning 1995
<i>Neocallichirus calmani</i> (Nobili, 1904)	MNHN (including types), ULLZ, NHMW, UF	Sakai 1999, Dworschak 1992, Ngoc-Ho, 1995
<i>Neocallichirus darwinensis</i> Sakai, 1988	NTMAG (holotype)	Sakai 1988
<i>Neocallichirus grandimana</i> (Gibbes, 1850)	MNHN, USNM (neotype), ULLZ, NHMW	Manning 1987, Felder & Manning 1995
<i>Neocallichirus guassutunga</i> (Rodrigues, 1971)	MNHN, CCDB	Rodrigues 1971, Manning & Lemaitre 1994
<i>Neocallichirus horneri</i> Sakai, 1988	NTMAG (types)	Sakai 1988, Manning & Felder 1991
<i>Neocallichirus jousseamei</i> (Nobili, 1904)	MNHN, ZRC, NHMW, ULLZ	Dworschak 2011, Sakai 2005
<i>Neocallichirus lemaitrei</i> Manning, 1993		Manning 1993
<i>Neocallichirus maryae</i> Karasawa, 2004	MNHN, NMV, USNM, NHMW, ULLZ	Schmitt 1935, Manning & Heard 1986
<i>Neocallichirus mericeae</i> (Manning & Felder, 1995)	USNM, NHMW, ULLZ	Manning & Felder 1995
<i>Neocallichirus natalensis</i> (Barnard, 1947)	NHMW	Barnard 1946, Dworschak 2011
<i>Neocallichirus nickellae</i> Manning, 1993	ULLZ	Manning 1993
<i>Neocallichirus pachydactyla</i> (A. Milne-Edwards, 1870)	MNHN	de Saint Laurent & Le Loeuff 1979
<i>Neocallichirus PNG-1589</i>	MNHN	
<i>Neocallichirus spiridonovi</i> (Sakai, 2010)		Sakai 2010

Family / Species name	Museum material	Published source(s)
<i>Neocallichirus sulfureus</i> Lemaitre & Felder 1996		Lemaitre & Felder 1996
<i>Neocallichirus variabilis</i> (Edmondson, 1944)	ULLZ	Edmondson, 1944
<i>Neocallichirus vaugelasii</i> Dworschak, 2011	NHMW	Dworschak 2011
<i>Neocallichirus vigilax</i> (De Man, 1916)	MNHN (including paratypes), NMV, NHMW	Ngoc-Ho 1994
<i>Thailandcallichirus ranongensis</i> (Sakai, 1983)		Sakai 1983, 1987
Ctenochelidae		
<i>Ctenocheles balssi</i> Kishinouye, 1926	ULLZ	Sakai 1999
<i>Ctenocheloides almeidai</i> Anker & Pachelles, 2013	MSUSP	Anker & Pachelles 2013
<i>Ctenocheloides attenboroughi</i> Anker, 2010		Anker 2010
<i>Ctenocheloides boucheti</i> Poore, 2015)	MNHN	Poore 2015
<i>Dawsonius latispina</i> (Dawson, 1967)	ULLZ, NMV	Dawson 1967, Manning & Felder 1991
<i>Dawsonius</i> aff. <i>latispina</i> (Dawson, 1967)	ULLZ	
<i>Gourretia barracuda</i> Le Loeuff & Intes, 1974	MNHN (holotype)	Le Loeuff & Intes 1974
<i>Gourretia denticulata</i> (Lutze, 1937)	MNHN	Ngoc-Ho 2003, Sakai & Türkay 2005
<i>Gourretia laresi</i> Blanco-Rambla & Linero-Arana, 1994		Pachelles et al. 2013
<i>Gourretia manihinae</i> Sakai, 1984		Sakai 1984
<i>Gourretia nosybeensis</i> Sakai, 2004	MNHN	Sakai 2017
<i>Gourretia sinica</i> Liu & Liu, 2010	ZRC	Liu & Liu 2010
<i>Gourretia zarenkovi</i> (Sakai, 2010)		Sakai 2010
? <i>Gourretia</i> ULLZ 9707	ULLZ	
<i>Kiictenochelodes nomurai</i> (Komai, 2013)		Komai 2013
<i>Laurentgourretia rhopalommata</i> Sakai, 2004	MNHN (holotype)	Sakai 2004
<i>Paragourretia aungtonya</i> (Sakai, 2002)		Sakai 2002
<i>Paragourretia biffari</i> (Blanco-Rambla & Linero-Arana, 1994)	ULLZ	Blanco Rambla & Liñero Arana 1994
<i>Paragourretia coolibah</i> (Poore & Griffin, 1979)	MNHN, UF, NHMW, NMV	Dworschak 2009
<i>Paragourretia galathea</i> (Sakai, 2017)		Sakai 2017
<i>Paragourretia laevidactyla</i> (Liu & Liu, 2010)		Liu & Liu 2010
<i>Paragourretia lahouensis</i> (Le Loeuff & Intes, 1974)	MNHN (types)	Le Loeuff & Intes 1974
<i>Paragourretia phuketensis</i> (Sakai, 2002)	MNHN	Sakai 2002 2004
<i>Paragourretia portsudanensis</i> (Sakai, 2005)	SMF (holotype)	Sakai 2005
<i>Paragourretia</i> ULLZ 10134	ULLZ	
Eucalliidae		
<i>Andamancalliax andamanica</i> (Sakai, 2002)		Sakai 2002
<i>Calliax doerjesti</i> Sakai, 1999		Sakai 1999
<i>Calliax lobata</i> (de Gaillande & Lagardère, 1966)	MNHN (including types), NHMW	Ngoc-Ho 2003
<i>Calliax tulearensis</i> Ngoc-Ho, 2014		Ngoc-Ho 2014
<i>Calliaxina bulimba</i> (Poore & Griffin, 1979)	NMV, MNHN	Poore & Griffin 1979
<i>Calliaxina kensleyi</i> (Dworschak, 2005)	NMV, MNHN	Dworschak 2005
<i>Calliaxina novaebritanniae</i> (Borradaile, 1900)	MNHN, NHMW, UF	de Saint Laurent & Manning 1982
<i>Calliaxina punica</i> (de Saint Laurent & Manning, 1982)	MNHN (including types)	Ngoc-Ho 2003, de Saint Laurent & Manning 1982
<i>Calliaxina sakaii</i> (de Saint Laurent, 1979)	MNHN (types), NMV, ULLZ	de Saint Laurent & Manning 1982, Sakai 1966
<i>Calliaxina xishaensis</i> Liu & Liang, 2016		Liu & Liang 2016
<i>Eucalliiax quadracuta</i> (Biffar, 1970)	MNHW	Biffar 1970, Manning & Felder 1991, Sakai 1999
<i>Eucalliiaxiopsis aequimana</i> (Baker, 1907)	MNHN, NMV, ULLZ	Poore & Griffin 1979, Sakai 1999

Family / Species name	Museum material	Published source(s)
<i>Eucallixiopsis ceareaensis</i> (Rodrigues & Manning, 1992)		Rodrigues & Manning 1992
<i>Eucallixiopsis inaequimana</i> (Dworschak, 2014)	QM (types), ZRC (types), NHMW	Dworschak 2014
<i>Eucallixiopsis jonesi</i> (Heard, 1989)		Heard 1989
<i>Eucallixiopsis madagassa</i> (Sakai & Türkay, 2014)		Ngoc-Ho 2014, Sakai & Türkay 2014
<i>Eucallixiopsis mcilhennyi</i> (Felder & Manning, 1994)	MNHN	Ngoc-Ho 2003
<i>Eucallixiopsis panglaoensis</i> (Dworschak, 2006)	NMCR, MNHN (paratypes)	Dworschak 2003
<i>Eucallixiopsis</i> aff. <i>panglaoensis</i> (Dworschak, 2006)	NMCR, MNHN, NMV, UF	
<i>Eucallixiopsis</i> PNG-1153C	MNHN	
<i>Paraglypturus calderus</i> Türkay & Sakai, 1995	MNHN	Ngoc-Ho 2003, Türkay & Sakai 1995
<i>Paraglypturus tonganus</i> Ahn, Kim, Ju & Min, 2017		Ahn et al. 2017
<i>Pseudocalliax tooradin</i> (Poore & Griffin, 1979)	NMV (including types)	Ngoc-Ho 2003
Paracalliidae		
<i>Paracalliax bollerei</i> de Saint Laurent, 1979	MNHN (holotype)	de Saint Laurent & Le Loeuff 1979

List of primers used

18S fragment:

18S-A (5'-AAC CTG GTT GAT CCT GCC AGT-3'), 18S-B (5'-TGA TCC TTC CGC AGG TTC ACC T-3') (Medlin *et al.* 1988) 18S-L (5'-CCA ACT ACG AGC TTT TTA ACT G-3'), 18S-C (5'- CGG TAA TTC CAG CTC CAA TAG-3'), 18S-Y (5'-CAG AC A AAT CGC TCC ACC AAC-3'), 18S-0 (5'-AAG GGC ACC ACC AGG AGT GGA G-3') (Apakupakul *et al.* 1999).

H3 fragment:

H3-AF (5'-ATG GCT CGT ACC AAG CAG ACV GC-3'), H3-AR (5'- ATA TCC TTR GGC ATR ATR GTG AC-3') (Colgan *et al.* 1998).

16S fragment:

16ar (5'-CGC CTG TTT ATC AAA AAC AT-3), 16br (5'-CCG GTC TGA ACT CAG ATC ACG T-3) (Palumbi *et al.* 1991), 1472 (5'-AGA TAG AAA CCA ACC TGG-3) (Crandall and Fitzpatrick 1996), and 16L2 (5'-TGC CTG TTT ATC AAA AAC AT-3) (Schubart *et al.* 2002).

12S fragment:

12Sai (5'-AAA CTA GCA TTA GAT ACC CCT ATT AT-3') (Palumbi *et al.* 1991) and 12H2 (5'-ATG CAC TTT CCA GTA CAT CTA C-3') (Colbourne and Hebert 1996).

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