Supplementary Information

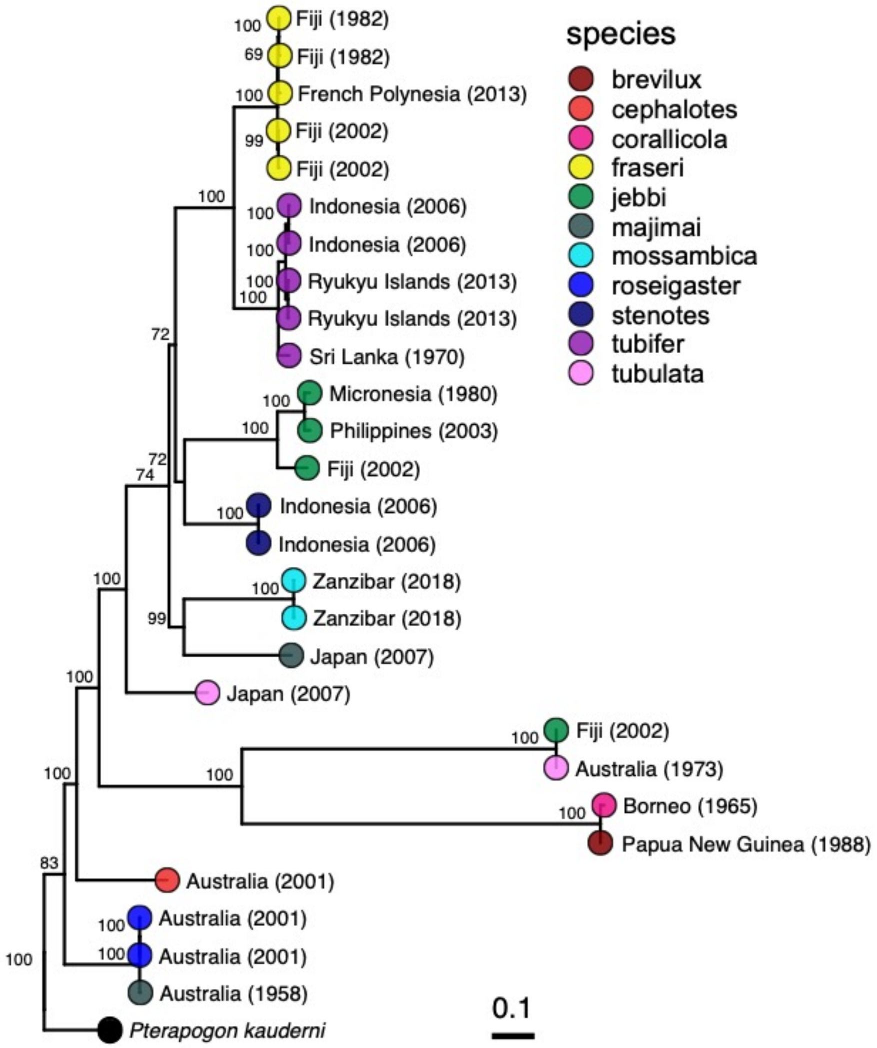

Figure S1. Maximum likelihood phylogeny of cardinalfishes in the genus *Siphamia* based on a concatenated supermatrix of 15 mtDNA gene sequences: *ATP6, ATP8, COXI, COX2, COX3, CYTB, ND1, ND2, ND3, ND4, ND4L, ND5, ND6, 16S, 18S*. Species identities are indicated by the branch tip colors and the sampling location and year of each specimen is listed in the branch label.

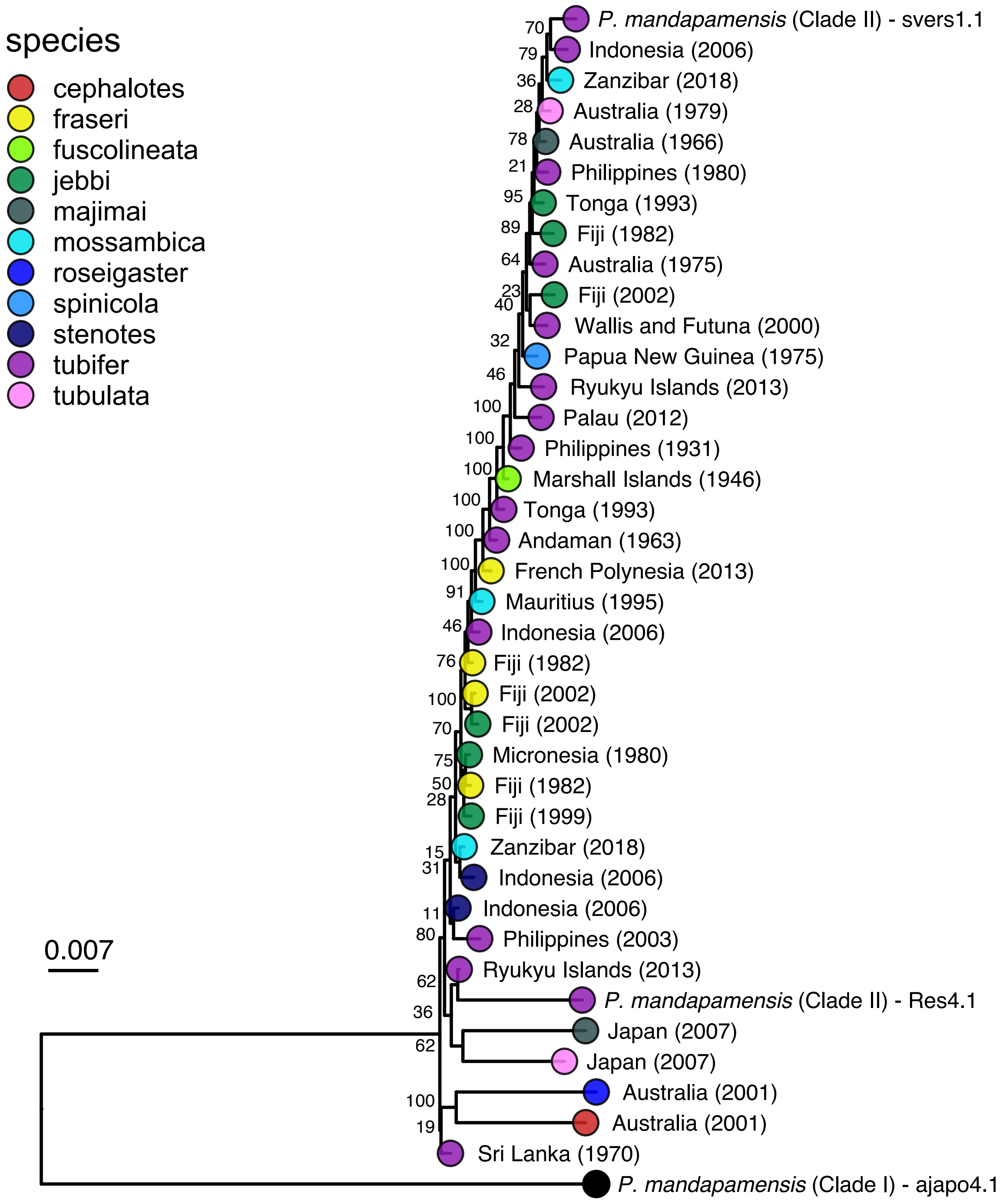

Figure S2. Maximum likelihood phylogeny of the light organ symbionts of various *Siphamia* species constructed from a core set of 165 single nucleotide polymorphisms. Corresponding host species are indicated by the branch tip colors and the sampling location and year of each specimen is listed in the branch label. Bootstrap support values are indicated at each node.

Table S1. Information for the *Siphamia* specimens sampled and their corresponding sequence information. Listed are each specimen’s catalog number or unique identifier, species identification, sampling location and year, the standard length of the individual sampled, the total amount of double stranded DNA extracted from the light organ, the raw number of sequence reads, the number of reads that passed quality filtering and were trimmed, the number of reads that aligned to the symbiont reference genome (*P. mandapamensis* strain svers1.1), the percent of the symbiont reference genome covered at 10x sequence read depth, the total number of SNPs identified for each symbiont relative to the reference genome, the type of sequencing that was carried out, and the kit used for sequence library preparation. Specimens with decimals after their catalog number or unique identifier indicate that more than one individual was sampled from the specimen lot.

Specimen ID	Species	Location	Year	Length (cm)	Total dsDNA (ng)	Raw	Trimmed	Aligned	%10x	SNPs	Sequence Run	Library Prep
AMI18353-041	jebbi	Fiji	1974	1.69	<2	28258958	26861780	187425	0.5	0	HiSeq 2x150	Swift
						27257752	26799476	407326	1	166	NovaSeq 2x150	Swift
AMI18740-066	jebbi	Australia	1975	1.46	<2	40906024	39209732	306641	2.1	0	HiSeq 2x150	Swift
AMI19450-018.1	tubifer	Australia	1975	2.94	3	58651761	56851489	442960	2.6	0	HiSeq 2x150	Swift
AMI19450-018.2	tubifer	Australia	1975	3.62	3.5	33895456	32610468	1337245	23.2	10	HiSeq 2x150	NEB Ultra II
						24526375	23858943	1042258	16.4	5,435	NovaSeq 2x150	NEB Ultra II
AMI20353-001	majimai	Australia	1972	1.67	<2	39503975	38494612	344674	2.3	1	HiSeq 2x150	Swift
AMI20753-031	tubulata	Australia	1979	2.56	<2	35965027	35217790	1085963	14.9	6,916	NovaSeq 2x150	Swift
AMI33715-016	jebbi	Australia	1993	1.46	2.2	35229540	33924547	359824	1.9	0	HiSeq 2x150	Swift
						33504802	33190608	655297	5	862	NovaSeq 2x150	Swift
AMI37933-007	tubifer	Vanuatu	1997	2.19	52.1	3604557	2090383	219645	0.1	47	NovaSeq 2x150	NEB Ultra II
						49624926	48314012	498902	1.9	0	HiSeq 2x150	Swift
AMI40838-008	cephalotes	Australia	2001	3.07	52.8	34771013	34092047	5099255	92.3	70,709	NovaSeq 2x150	NEB Ultra II
AMI40865-004.1	roseigaster	Australia	2001	4.56	74.1	91467705	89885499	6944692	93.4	72,219	NovaSeq 2x150	NEB Ultra II
AMI40865-004.2	roseigaster	Australia	2001	4.55	4.6	48426323	46531047	654416	5.9	1,588	HiSeq 2x150	Swift
AMIB4208	majimai	Australia	1958	2.31	<2	36877472	34915450	467033	6.4	2	HiSeq 2x150	Swift
						87751	55995	12134	0	0	NovaSeq 2x150	Swift

AMIB4247	tubifer	Vanuatu	1959	2.01	<2	28358555	27422784	269641	2	0	HiSeq 2x150	Swift
						23520680	23130431	584903	2.9	1,633	NovaSeq 2x150	Swift
CAS247233.1	mossambica	Zanzibar	2018	2.55	542	5478617	5384608	454932	76.9	8,112	HiSeq 1x150	SparQ
CAS247233.2	mossambica	Zanzibar	2018	2.92	1530	75836474	73645413	33775734	96.4	15,579	NovaSeq 2x150	NEB Ultra II
CAS222309	jebbi	Fiji	2002	-	10.2	50665038	45699796	28523692	95.2	21,238	NovaSeq 2x150	NEB Ultra II
CAS223855	jebbi	Fiji	2002	-	<2	44113541	41855479	377420	2.4	3	HiSeq 2x150	Swift
						33488272	33006205	576345	2.8	469	NovaSeq 2x150	Swift
CAS223939.1	jebbi	Fiji	2002	2.35	11.8	28012894	21498132	225577	4.3	63	HiSeq 1x150	SparQ
CAS223939.2	jebbi	Fiji	2002	1.81	8.9	11046726	10551137	716650	12	7,698	NovaSeq 2x150	NEB Ultra II
CAS223978.1	unknown	Fiji	2002	3.68	178.5	330421	323250	32364	0.1	10	HiSeq 1x150	SparQ
CAS223978.2	unknown	Fiji	2002	4.05	50.5	23063434	21244678	10747171	95.4	18,773	NovaSeq 2x150	NEB Ultra II
CAS223979.1	fraseri	Fiji	2002	2.8	9.2	24192691	22748353	328578	0.9	0	HiSeq 2x150	NEB Ultra II
						26735318	25635641	457797	1.1	7	NovaSeq 2x150	NEB Ultra II
CAS223979.2	fraseri	Fiji	2002	3.04	15.5	10467851	9981063	381078	17.7	72	HiSeq 1x150	SparQ
CAS225045	jebbi	Fiji	1999		3.4	21590245	20304117	15184111	96.1	18,316	NovaSeq 2x150	NEB Ultra II
CAS27441	tubifer	Philippines	1931	3.26	1.8	18607665	18124484	1483134	95.3	18,841	HiSeq 1x150	SparQ
CAS28515	tubulata	Australia	1973	-	<2	36559960	33708337	213670	1	2	HiSeq 2x150	Swift
						35922973	35323462	589696	3.1	1,301	NovaSeq 2x150	Swift
CAS84356	tubifer	Palau	2012	1.9	38.9	48287910	38767642	6258850	64.8	13,661	HiSeq 1x150	SparQ
Stubifer_M118	tubifer	Ryukyu Islands	2013	1.3	26.5	75237177	72661256	57068084	96.2	16,828	HiSeq 2x150	Swift
Smajimai_PVD	majimai	Japan	2007	2.61	8949	36930530	35957911	26787137	94.8	70,889	NovaSeq 2x150	NEB Ultra II
Stubulata_PVD	tubulata	Japan	2007	2.12	1225.5	34195315	33077310	21855337	95.1	66,583	NovaSeq 2x150	NEB Ultra II
Stubifer_S27	tubifer	Ryukyu Islands	2013	2.65	-	7403111	7277173	517331	88.9	19,790	HiSeq 1x150	SparQ

Sstenotes_GRA.1	stenotes	Indonesia	2006	1.89	115.9	22315393	24640343	21426979	95.8	24,716	NovaSeq 2x150	NEB Ultra II
Sstenotes_GRA.2	stenotes	Indonesia	2006	1.98	308	467708	426870	85208	0.5	23	HiSeq 1x150	SparQ
Stubifer_GRA.1	tubifer	Indonesia	2006	2.39	96	23365446	22298866	6159687	95.8	18,701	NovaSeq 2x150	NEB Ultra II
Stubifer_GRA.2	tubifer	Indonesia	2006	2.85	95.9	9455319	8509771	452475	52	3,041	HiSeq 1x150	SparQ
USNM112099	elongata	Philippines	1909	3.46	<2	49945895	48231023	430697	3.7	8	HiSeq 2x150	Swift
USNM142281.1	fuscolineata	Marshall Islands	1946	2.2	<2	16213148	15893522	6118510	96.1	15,366	NovaSeq 2x150	Swift
USNM142281.2	fuscolineata	Marshall Islands	1946	2.76	10.1	39670892	27192174	695872	62.8	381	HiSeq 1x150	NEB Ultra II
USNM203781	corallicola	Borneo	1965	2.58	<2	33588104	32488841	640895	0.6	0	HiSeq 2x150	Swift
						56446868	51658133	1237586	1.2	178	NovaSeq 2x150	Swift
USNM223216	jebbi	Micronesia	1980	1.74	7	181380283	186040521	176746273	96.5	14,693	NovaSeq 2x150	NEB Ultra II
USNM245638	jebbi	Fiji	1982	2.07	2.2	36426337	34932628	508273	9.2	38	HiSeq 2x150	Swift
						27073152	26801480	647893	13	2,188	NovaSeq 2x150	Swift
USNM245641	fraseri	Fiji	1982	4.13	5.3	864701674	829515210	714629012	97.5	17,070*	NovaSeq 2x150	NEB Ultra II
USNM245642	fraseri	Fiji	1982	3.65	13	35743393	35774905	33716527	96.2	16,396	NovaSeq 2x150	NEB Ultra II
USNM298542	brevilux	Papua New Guinea	1988	2.24	21.1	662337	482006	148333	0.1	23	NovaSeq 2x150	NEB Ultra II
						49597285	47386221	486582	2.4	0	HiSeq 2x150	Swift
USNM341594	jebbi	Tonga	1993	1.91	<2	27318206	27030306	1313295	61.4	7,995	NovaSeq 2x150	Swift
USNM341595	tubifer	Tonga	1993	3.87	7.8	18908174	17504661	4858215	94.2	725	HiSeq 2x150	NEB Ultra II
						11846770	11271717	2974122	88.1	17,900	NovaSeq 2x150	NEB Ultra II
USNM349778	mossambica	Mauritius	1995	2.36	15	33471029	32308812	12943283	95.8	18,219	NovaSeq 2x150	NEB Ultra II
USNM357884	tubifer	Philippinnes	1980	3.68	7.3	18374904	17191172	759889	8.5	1	HiSeq 2x150	NEB Ultra II
						13974418	12217495	879577	11.9	4,148	NovaSeq 2x150	NEB Ultra II
USNM357889	spinicola	Papua New Guinea	1975	3.11	4.1	21853900	21329666	2042137	42.7	12,366	NovaSeq 2x150	NEB Ultra II

						46425	42876	22	0	0	HiSeq 2x150	NEB Ultra II
USNM357892	tubifer	Red Sea	1969	3.35	<2	35509177	33451543	215301	0.7	1	HiSeq 2x150	Swift
						27788827	27434566	542781	1.7	1,107	NovaSeq 2x150	Swift
USNM357897	tubifer	Andaman	1963	4.09	3.9	26178035	25619280	9568200	95	17,295	NovaSeq 2x150	NEB Ultra II
USNM357999	tubifer	Sri Lanka	1970	2.94	<2	54251311	53731832	26374339	95.6	22,417	NovaSeq 2x150	Swift
USNM358001	majimai	Philippines	1978	2.1	<2	38324209	36313447	254445	0.8	2	HiSeq 2x150	Swift
						33631537	33293817	428773	1.1	151	NovaSeq 2x150	Swift
USNM374480	majimai	Australia	1966	1.97	2.1	63381524	62370257	1400945	40.5	8,157	NovaSeq 2x150	Swift
USNM374837	unknown	Wallis and Futuna	2000	1.96	12.1	10549216	7951371	985084	22.8	9,465	NovaSeq 2x150	NEB Ultra II
						41856128	40302628	595029	10.7	11	HiSeq 2x150	Swift
USNM396981	stenotes	Indonesia	2006	1.89	153.9	36161679	35712980	34096922	96.1	16,892	NovaSeq 2x150	NEB Ultra II
USNM412731	jebbi	Philippines	2003	1.73	23.6	27071135	25964385	16604538	95.9	32,687	NovaSeq 2x150	NEB Ultra II
USNM430718	fraseri	French Polynesia	2013	3.34	58.9	18468382	17513981	2806955	95.3	20,592	NovaSeq 2x150	NEB Ultra II

Table S2. Information for the *Siphamia COI* sequences that were used to construct the host phylogeny. Listed are each specimen's catalog number or unique identifier, species identification, sampling location, exact latitude and longitude, year, and the source of the sequence.

Specimen ID	Species	Location	Latitude	Longitude	Year	Source
AMI40838-008	cephalotes	Australia	-33.84	151.19	2001	this study
AMI40865-004-1	roseigaster	Australia	-33.87	152.00	2001	this study
AMI40865-004-2	roseigaster	Australia	-33.87	152.00	2001	this study
AMI41858-030	roseigaster	Australia	-29.42	153.36	2002	Mabuchi *et al.* 2014
AWCF412	goreni	Red Sea	25.71	36.62	2016	Atta *et al.* 2019
AWCF713	tubifer	Red Sea	25.71	36.62	2016	Atta *et al.* 2019
BW-A5255	fistulosa	Australia	-16.90	146.45	2005	International Barcode of Life
CAS223855	jebbi	Fiji	-18.15	178.36	2002	this study
CAS223978	fraseri	Fiji	-18.10	178.36	2002	this study
CAS223979	fraseri	Fiji	-18.10	178.36	2002	this study
CAS225045	jebbi	Fiji	-18.15	178.37	1999	this study
CAS247233.1	mossambica	Zanzibar	-6.22	39.17	2018	this study
CAS247233.2	mossambica	Zanzibar	-6.22	39.17	2018	this study
CAS28515	tubulata	Australia	-14.20	144.26	1973	this study
CSIRO-H-6648-02 (BW-A12333)	guttulata	Australia	-17.11	146.01	2004	International Barcode of Life
CSIRO-H-7457-03 (BW-A12338)	guttulata	Australia	-12.58	143.48	2004	International Barcode of Life
CSIRO-H-8482-02 (BW-A5590)	cuneiceps	Australia	-22.12	150.33	2005	International Barcode of Life
FAKU73087	tubulata	Japan	32.74	132.56	-	Mabuchi *et al.* 2014
FAKU78690	majimai	Ryukyu Islands	30.43	130.40	-	Mabuchi *et al.* 2014
KU_Tissue4631 (CAS222309)	jebbi	Fiji	-17.32	178.24	2002	Mabuchi *et al.* 2014
Stubifer_M118	tubifer	Ryukyu Islands	26.66	127.88	2013	this study
Smajimai_PVD	majimai	Japan	32.80	133.50	2007	this study
Stubulata_PVD	tubulata	Japan	32.74	132.56	2007	this study
Stubifer_S27	tubifer	Ryukyu Islands	26.64	127.87	2013	this study
SAIAB194663	paupuensis	Indonesia	-2.22	130.56	2013	Gon *et al.* 2014

SAIAB194704	paupuensis	Indonesia	-2.97	131.33	2013	Gon *et al*. 2014
Sstenotes_GRA.1	stenotes	Indonesia	-3.87	133.98	2006	this study
Sstenotes_GRA.2	stenotes	Indonesia	-3.87	133.98	2006	this study
Stubif_Kaeding	tubifer	Ryukyu Islands	26.64	127.87	2006	Kaeding *et al.* 2007
Stubifer_GRA.1	tubifer	Indonesia	-3.68	133.73	2006	this study
Stubifer_GRA.2	tubifer	Indonesia	-3.68	133.73	2006	this study
USNM112099-2	elongata	Philippines	16.93	120.23	1909	this study
USNM203781	corallicola	Borneo	6.02	116.06	1965	this study
USNM223216	jebbi	Micronesia	6.93	158.10	1980	this study
USNM245638	jebbi	Fiji	-19.16	179.76	1982	this study
USNM245641	fraseri	Fiji	-20.62	181.33	1982	this study
USNM245642	fraseri	Fiji	-20.62	181.33	1982	this study
USNM298542-2	brevilux	Papua New Guinea	-5.23	145.75	1988	this study
USNM349778	mossambica	Mauritius	-20.19	57.40	1995	this study
USNM357999	tubifer	Sri Lanka	8.60	81.23	1970	this study
USNM358001	majimai	Philippines	9.38	123.26	1978	this study
USNM396981	stenotes	Indonesia	-3.96	134.36	2006	this study
USNM412731	jebbi	Philippines	12.69	120.52	2003	this study
USNM430718	fraseri	French Polynesia	-22.64	207.18	2013	this study

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Gon, O., and Allen, G. R. (2012). Revision of the Indo-Pacific cardinalfish genus Siphamia (Perciformes: Apogonidae). *Zootaxa* 3294, 1–84. doi: 10.11646/zootaxa.3294.1.1

Kaeding, A. J., Ast, J. C., Pearce, M. M., Urbanczyk, H., Kimura, S., Endo, H., et al. (2007). Phylogenetic diversity and cosymbiosis in the bioluminescent symbioses of “Photobacterium mandapamensis”. *Appl. Environ. Microbiol.* 73, 3173–3182. doi: 10.1128/AEM.02212-06

Mabuchi, K., Fraser, T. H., Song, H., Azuma, Y., and Nishida, M. (2014). Revision of the systematics of the cardinalfishes (Percomorpha: Apogonidae) based on moecular analyses and comparative reevaluation of morphological characters. *Zootaxa* 3846, 151–203 doi: 10.11646/zootaxa.3846.2.1

Table S3. Results of the nucleotide BLAST search of symbiont 16S rRNA genes. Listed are each specimen's catalog number or unique identifier, the percent of the reference 16S rRNA gene sequence (*Photobacterium leiognathi*, AY292917) covered at 10x sequence depth, the top matching sequence from the NCBI database including its accession number in parentheses, and the corresponding query coverage, E-value, and percent identity relative to that sequence.

Specimen ID	%10x	Top hit	Query coverage	E-value	% identity
AMI18353-041	88.49	Photobacterium leiognathi subsp. mandapamensis strain MahLm3 (JN380344.1)	91%	0.0	86.08
AMI18740-066	89.2	Photobacterium leiognathi (AY292917.1)	93%	0.0	79.97
AMI19450-018.1	98.25	Photobacterium leiognathi strain LC1-277 (AB243248.1)	90%	0.0	86.48
AMI19450-018.2	99.94	Photobacterium leiognathi strain ljone1.1 (AY204494.1)	94%	0.0	95.96
AMI20353-001	95.02	Photobacterium leiognathi strain W214 (MF554624.1)	89%	0.0	83.82
AMI20753-031	99.94	Photobacterium leiognathi strain ljone1.1 (AY204494.1)	94%	0.0	95.14
AMI33715-016	100	Photobacterium mandapamensis seafl.1.4 (AY455873.1)	95%	0.0	84.58
AMI37933-007	99.81	Photobacterium mandapamensis seafl.1.4 (AY455873.1)	95%	0.0	95.93
AMI40838-008	100	Photobacterium leiognathi subsp. mandapamensis strain ATCC 27561 (NR_115206.1)	95%	0.0	99.93
AMI40865-004.1	99.94	Photobacterium leiognathi subsp. mandapamensis strain ATCC 27561 (NR_115206.1)	95%	0.0	99.86
AMI40865-004.2	99.94	Photobacterium leiognathi strain AK-MIE (MH746214.1)	91%	0.0	99.01
AMIB4208	100	Photobacterium leiognathi strain LC1-283 (AB243249.1)	90%	0.0	90.74
AMIB4247	99.94	Photobacterium leiognathi strain LC1-283 (AB243249.1)	90%	0.0	92.75
CAS222309	100	Photobacterium leiognathi subsp. mandapamensis strain ATCC 27561 (NR_115206.1)	95%	0.0	100.00
CAS223855	100	Photobacterium leiognathi strain LC1-283 (AB243249.1)	88%	0.0	86.35
CAS223939.1	99.94	Photobacterium leiognathi strain ljone1.1 (AY204494.1)	94%	0.0	99.04
CAS223939.2	99.94	Photobacterium mandapamensis seafl.1.1 (AY455871.1)	94%	0.0	97.67
CAS223978.1	29.61	Photobacterium leiognathi subsp. mandapamensis strain ATCC 27561 (NR_115206.1)	95%	0.0	99.73
CAS223978.2	100	Photobacterium mandapamensis seafl.1.1 (AY455871.1)	94%	0.0	100.00
CAS223979.1	99.94	Photobacterium leiognathi strain LC1-277 (AB243248.1)	90%	0.0	94.88

CAS223979.2	99.94	Photobacterium leiognathi subsp. mandapamensis strain ATCC 27561 (NR_115206.1)	95%	0.0	100.00
CAS225045	100	Photobacterium leiognathi subsp. mandapamensis strain ATCC 27561 (NR_115206.1)	95%	0.0	100.00
CAS247233.1	100	Photobacterium mandapamensis seafl.1.1 (AY455871.1)	94%	0.0	100.00
CAS247233.2	99.94	Photobacterium leiognathi subsp. mandapamensis strain ATCC 27561 (NR_115206.1)	95%	0.0	100.00
CAS27441	100	Photobacterium leiognathi subsp. mandapamensis strain ATCC 27561 (NR_115206.1)	95%	0.0	100.00
CAS28515	100	Photobacterium leiognathi subsp. mandapamensis strain MahLm3 (JN380344.1)	92%	0.0	84.13
CAS84356	99.94	Photobacterium leiognathi subsp. mandapamensis strain ATCC 27561 (NR_115206.1)	95%	0.0	99.93
Smajimai_PVD	100	Photobacterium leiognathi subsp. mandapamensis strain ATCC 27561 (NR_115206.1)	95%	0.0	99.93
Sstenotes_GRA.1	100	Photobacterium leiognathi subsp. mandapamensis strain ATCC 27561 (NR_115206.1)	95%	0.0	100.00
Sstenotes_GRA.2	99.94	Photobacterium leiognathi subsp. mandapamensis strain ATCC 27561 (NR_115206.1)	95%	0.0	99.73
Stubifer_GRA.1	100	Photobacterium leiognathi subsp. mandapamensis strain ATCC 27561 (NR_115206.1)	95%	0.0	100.00
Stubifer_GRA.2	99.94	Photobacterium leiognathi subsp. mandapamensis strain ATCC 27561 (NR_115206.1)	95%	0.0	99.93
Stubifer_M118	100	Photobacterium leiognathi subsp. mandapamensis strain ATCC 27561 (NR_115206.1)	95%	0.0	99.93
Stubifer_S27	99.94	Photobacterium leiognathi subsp. mandapamensis strain ATCC 27561 (NR_115206.1)	95%	0.0	100.00
Stubulata_PVD	100	Photobacterium leiognathi subsp. mandapamensis strain ATCC 27561 (NR_115206.1)	95%	0.0	99.93
USNM112099	92.18	Photobacterium leiognathi strain AK5 (AB243232.1)	90%	0.0	85.57
USNM142281.1	99.94	Photobacterium leiognathi subsp. mandapamensis strain ATCC 27561 (NR_115206.1)	95%	0.0	100.00
USNM142281.2	100	Photobacterium leiognathi strain ljone1.1 (AY204494.1)	93%	0.0	94.36
USNM203781	100	Photobacterium leiognathi strain LC1-277 (AB243248.1)	90%	0.0	90.68
USNM223216	100	Photobacterium leiognathi subsp. mandapamensis strain ATCC 27561 (NR_115206.1)	95%	0.0	100.00
USNM245638	100	Photobacterium leiognathi strain AK5 (AB243232.1)	90%	0.0	93.11
USNM245641	100	Photobacterium leiognathi subsp. mandapamensis strain ATCC 27561 (NR_115206.1)	95%	0.0	99.93
USNM245642	100	Photobacterium leiognathi subsp. mandapamensis strain ATCC 27561 (NR_115206.1)	95%	0.0	100.00

USNM298542	99.94	Photobacterium leiognathi subsp. mandapamensis strain MahLm3 (JN380344.1)	91%	0.0	82.60
USNM341594	100	Photobacterium leiognathi subsp. mandapamensis strain MahLm3 (JN380344.1)	92%	0.0	93.40
USNM341595	100	Photobacterium leiognathi subsp. mandapamensis strain ATCC 27561 (NR_115206.1)	95%	0.0	100.00
USNM349778	100	Photobacterium leiognathi subsp. mandapamensis strain ATCC 27561 (NR_115206.1)	95%	0.0	99.93
USNM357884	100	Photobacterium mandapamensis seafl.1.1 (AY455871.1)	94%	0.0	100.00
USNM357889	100	Photobacterium mandapamensis seafl.1.4 (AY455873.1)	95%	0.0	97.90
USNM357892	100	Photobacterium leiognathi strain LC1-277 (AB243248.1)	90%	0.0	91.53
USNM357897	100	Photobacterium leiognathi subsp. mandapamensis strain ATCC 27561 (NR_115206.1)	95%	0.0	99.93
USNM357999	100	Photobacterium leiognathi subsp. mandapamensis strain ATCC 27561 (NR_115206.1)	95%	0.0	99.93
USNM358001	100	Photobacterium leiognathi strain LC1-277 (AB243248.1)	90%	0.0	87.62
USNM374480	100	Photobacterium leiognathi strain LC1-283 (AB243249.1)	90%	0.0	91.82
USNM374837	100	Photobacterium leiognathi subsp. mandapamensis strain MahLm3 (JN380344.1)	91%	0.0	87.07
USNM396981	100	Photobacterium leiognathi strain lleuc1.1 (AY204495.1)	94%	0.0	100.00
USNM412731	100	Photobacterium leiognathi subsp. mandapamensis strain ATCC 27561 (NR_115206.1)	95%	0.0	100.00
USNM430718	99.94	Photobacterium leiognathi subsp. mandapamensis strain ATCC 27561 (NR_115206.1)	95%	0.0	100.00