

SUPPLEMENTARY MATERIAL- TABLE S1.

Table SI. mtDNA *Cyt b* genotype designations, their GenBank accession numbers, numbers of fish bearing the genotype, the Zoological Reference collection accession numbers (asterisks identify specimens for which both genetic and morphological analyses were available), species and species group designation (after Ng & Kottelat, 2013) and additional designations referred to in the text. Italicized species code in genotype designation indicates specimens assigned a species name based solely on genetic relationships. *XX* species code indicates specimens that were genetically divergent but remained unidentified in morphological analyses, or cases of contradiction between morphological and genetic identification. Species names in small type indicate specimens identified by N&K that contradict genetic relationships (see text).

¹ These two sequences identify *H. chrysops* (Ng & Dodson, 1999), although the Rajang R. specimens were subsequently synonymized with *H. capitulum* (Ng & Kottelat, 2013). We here retain the CH designation (see text for further discussion).

² Most specimens forming the *H. capitulum* Indochinese clade were not examined by Ng & Kottelat (2013). We use the CA species designation based largely on clade membership and geographical distribution (see text for further discussion).

Genotype	GenBank Accession No.	N	Sample river and site code	ZRC Accession No.	Species (N&K)	Species Group (N&K)	Additional designation
WYCHP0203	KP322805	3	Chao Phraya (2a)	40753	<i>H. wyckioides</i>	<i>H. wyckii</i>	
WYMEK1101	KP322797	1	Mekong (1f)	-	<i>H. wyckioides</i>		
WYCHP0401	KP322807	1	Chao Phraya (2b)	-	<i>H. wyckioides</i>		
GUPEA0602	KP322904	2	Pearl (37)	-	<i>H. guttatus</i>	<i>H. guttatus</i>	
GUPEA0401	KP322902	1	Pearl (37)	-	<i>H. guttatus</i>		
GUPEA0501	KP322903	1	Pearl (37)	-	<i>H. guttatus</i>		
GURED0102	KP322898	2	Red (35)	-	<i>H. guttatus</i>		
MAPEA0101	KP322899	1	Pearl (37)	-	<i>H. macropterus</i>		
MAPEA0302	KP322901	2	Pearl (37)	-	<i>H. macropterus</i>		
MAPEA0201	KP322900	1	Pearl (37)	-	<i>H. macropterus</i>		
PESAL0102	KP322897	2	Salween (35)	43707*, 43709*	<i>H. peguensis</i>	<i>H. menoda</i>	
BOKAP1801	KP322864	1	Kapuas (24h)	-	<i>H. bongan</i>	<i>H. planiceps</i>	
BOKAP1601	KP322862	1	Kapuas (24h)	43015*	<i>H. bongan</i>		
BOKAP1701	KP322863	1	Kapuas (24h)	-	<i>H. bongan</i>		
BOKAP1402	KP322860	2	Kapuas (24g)	-	<i>H. bongan</i>		
BOKAP1503	KP322861	3	Kapuas (24h)	43013*	<i>H. bongan</i>		
VEBAH0907	KP322839	7	Batang Hari (14b)	41503*	<i>H. velox</i>		

GREND0206	KP322823	6	Endau (9a)	21484*, 21486*, 21487*, 21482*	<i>H. gracilis</i>		
PLCIM0114	KP322843	14	Ci Manuk (19a)	42563*	<i>H. planiceps</i>		
PLCIS0101	KP322841	1	Ci Sadane (17a)	-	<i>H. planiceps</i>		
DIPER0401	KP322830	1	Perak (11c)	41151*	<i>H. divaricatus</i>		
DIPER0301	KP322829	1	Perak (11c)	41151*	<i>H. divaricatus</i>		
DIPER0201	KP322828	1	Perak (11c)	41604	<i>H. divaricatus</i>		
SEPAD0202	KP322880	2	Padas (30a)	46122*	<i>H. semotus</i>	<i>H. baramensis</i>	
SEPAD0101	KP322879	1	Padas (30a)	46122*	<i>H. semotus</i>		
SEUMA0101	KP322895	1	Umas-Umas (34a)	46123*	<i>H. baramensis</i>		
SESGM0502	KP322890	2	Segama (32a)	40525*	<i>H. baramensis</i>		
SAKIN0204	KP322894	4	Kinabatangan (33a)	42743*	<i>H. sabanus</i>		
SASGM0706	KP322892	6	Segama (32b)	42741*	<i>H. sabanus</i>		
BASGM0402	KP322889	2	Segama (32a)	40526*	<i>H. baramensis</i>		
BASGM0301	KP322888	1	Segama (32a)	40527*	<i>H. baramensis</i>		
BASGM0201	KP322887	1	Segama (32a)	40527*	<i>H. baramensis</i>		

BASGM0104	KP322886	4	Segama (32a)	40523*	<i>H. baramensis</i>		
CHRAJ0401 ¹	KP322870	1	Rajang (26b)	23008*	<i>H. capitulum</i> ¹	Unspecified	<i>H. spp. A</i>
CHSARA20 ¹	KP322867	6	Rajang (26b)	23009-14*	<i>H. capitulum</i> ¹		
		14	Sadong (25a)	29583-96*	<i>H. spilopterus</i> ¹		
XXEND0410	KP322825	10	Endau (9d)	-	<i>unidentified</i>		
XXSEG0101	KP322885	1	Segaliud (31a)	-	<i>unidentified</i>		
XXBEL0101	KP322877	2	Belait (29a)	40481	<i>unidentified</i>		
XXPAD0501	KP322883	1	Padas (30a)	46122*	<i>H. semotus</i>		<i>H. spp. B</i>
XXRAJ0511	KP322871	11	Rajang (26c)	-	<i>unidentified</i>		
XXBRM0202	KP322873	2	Baram (27a)	42742*	<i>H. baramensis</i>		<i>H. spp. C</i>
XXBEL0202	KP322878	2	Belait (29A)	40481	<i>unidentified</i>		
XXPAD0401	KP322882	1	Padas (30a)	46122*	<i>H. semotus</i>		
XXPAD0601	KP322884	1	Padas (30a)	46122*	<i>H. semotus</i>		
XXPAD0303	KP322881	3	Padas (30a)	46122*	<i>H. semotus</i>		
SPMEK1701	KP322803	1	Mekong (1g)	43324*	<i>H. spilopterus</i>	<i>H. nemurus species group</i>	<i>H. spilopterus (sub-clade A)</i>
SPMEK0801	KP322794	1	Mekong (1d)	-	<i>H. spilopterus</i>		
SPMEK0701	KP322793	1	Mekong (1d)	-	<i>H. spilopterus</i>		
SPMEK1601	KP322802	1	Mekong (1g)	43324*	<i>H.</i>		

					<i>spilopterus</i>		
SPMEK1502	KP322801	2	Mekong (1g)	43324*	<i>H.</i> <i>spilopterus</i>		
SPMEK1301	KP322799	1	Mekong (1f)	-	<i>H.</i> <i>spilopterus</i>		
SPMEK1201	KP322798	1	Mekong (1f)	46157*	<i>H.</i> <i>spilopterus</i>		
SPMEK0501	KP322791	1	Mekong (1c)	46012*	<i>H.</i> <i>spilopterus</i>		<i>H.</i> <i>spilopterus</i> (sub-clade B)
SPMEK1401	KP322800	1	Mekong (1f)	-	<i>H.</i> <i>spilopterus</i>		
SPMEK0103	KP322787	3	Mekong (1a)	-	<i>H.</i> <i>spilopterus</i>		
SPMEK0301	KP322789	1	Mekong (1b)	-	<i>H.</i> <i>spilopterus</i>		
SPMEK0401	KP322790	1	Mekong (1c)	46012*	<i>H.</i> <i>spilopterus</i>		
SPMEK0202	KP322788	2	Mekong (1a)	-	<i>H.</i> <i>spilopterus</i>		
SPPAT0101	KP322812	1	Phattalung (5a)	-	<i>H.</i> <i>spilopterus</i>		<i>H.</i> <i>spilopterus</i> (sub-clade C)
SPCHA0304	KP322810	4	Chanthaburi (3a)	-	<i>H.</i> <i>spilopterus</i>		

SPCHA0201	KP322809	1	Chanthaburi (3a)	-	<i>H. spilopterus</i>		
SPCHP0501	KP322808	1	Chao Phraya (2b)	-	<i>H. spilopterus</i>		
SPCPCHMK 12	KP322804	4	Chao Phraya (2a)	-	<i>H. spilopterus</i>		
		3	Chao Phraya (2b)	-			
		1	Chanthaburi (3a)	-			
		4	Mea Khlong (4a)	-			
FOUMA0201	KP322896	1	Umas Umas (34a)	46123*	<i>H. baramensis</i>		
FOSGM0606	KP322891	6	Segama (32a)	40521*-22*	<i>H. fortis</i>		
FOKIN0102	KP322893	2	Kinabatangan (33a)	40508	<i>Unidentified</i>		
HOKAP0501	KP322851	1	Kapuas (24a)	-	<i>H. hoevenii</i>		<i>H. hoevenii</i> (sub-clade A)
HOBAB0701	KP322837	1	Batang Hari (14a)	-	<i>H. hoevenii</i>		
HMUBHKA BM23	KP322832	10	Muar (13a)	40590*	<i>H. hoevenii</i>		
		2	Batang Hari (14a)	-	<i>H. hoevenii</i>		
		2	Kapuas (24a)	-	<i>H. hoevenii</i>		
		2	Baram (27b)	40499*	<i>H. hoevenii</i>		
		7	Baram (27c)	40511*	<i>H. hoevenii</i>		
HOBHMS05	KP322835	3	Batang Hari (14a)	-	<i>H. hoevenii</i>		<i>H. hoevenii</i> (sub-clade B)
		2	Musi (15a)	29546*, 29548*	<i>H. hoevenii</i>		

HOB AH0601	KP322836	1	Batang Hari (14a)	-	<i>H. hoevenii</i>		
HJOMSKA11	KP322826	3	Johor (10a)	29575-76*, 29582*	<i>H. hoevenii</i>		
		4	Musi (15a)	29544, 29549- 51*	<i>H. hoevenii</i>		
		4	Kapuas (24a)	29386-87*, 29377-78*	<i>H. hoevenii</i>		
NECIT0201	KP322842	1	Ci Tarum (18a)	29359	<i>H. nemurus</i>	<i>H. nemurus</i>	<i>Sundaic clade</i>
NCLCTBA20	KP322840	2	Ci Liwong (16a)	-	<i>H. nemurus</i>		
		6	Ci Tarum (18a)	42564*	<i>H. nemurus</i>		
		9		29356-58	<i>H. nemurus</i>		
				29360-64	<i>H. nemurus</i>		
		2		-	<i>H. nemurus</i>		
		1	Barito (23a)	40553*	<i>H. capitulum</i>		
CABRA0301	KP322846	1	Brantas (21a)	40554*	<i>H. nemurus</i>		
CABHKPBR0 9	KP322833	1	Batang Hari (14a)	40534*	<i>H. capitulum</i>		
		1		29519*	<i>H. hoevenii</i>		
		5		-	<i>unidentified</i>		
		1	Kali Progo (20a)	-	<i>unidentified</i>		
		1	Brantas (21a)	40554*	<i>H. nemurus</i>		
CABHMS20	KP322834	2	Batang Hari (14a)	40534*	<i>H. capitulum</i>	<i>H. capitulum</i>	
		2		-	<i>H. capitulum</i>		

		7		29518, 29522, 29524-25, 29528-30	<i>H. capitulum</i>		
		9	Musi	29538-42, 29532-34, 29545	<i>H. capitulum</i>		
CABRA0204	KP322845	4	Brantas (21a)	40554*	<i>H. nemurus</i>		
CABAR0203	KP322848	3	Barito (23a)	40553*	<i>H. capitulum</i>		
CARAJ0210	KP322868	6	Rajang (26a)	23005-07	<i>unidentified</i>		
		3	Rajang (26b)	-	<i>unidentified</i>		
		1	Rajang (26c)	-	<i>unidentified</i>		
CAKAP0701	KP322853	1	Kapuas (24b)	-	<i>unidentified</i>		
CAKAP0801	KP322854	1	Kapuas (24c)	-	<i>unidentified</i>		
CAKAP0903	KP322855	3	Kapuas (24c)	-	<i>unidentified</i>		
CPEBEMU	KP322827	9	Perak (11c)	41150*	<i>H. capitulum</i>		
KA36		6	Perak (11b)	41137	<i>H. capitulum</i>		
		13	Perak (11a)	29370-75	<i>H. capitulum</i>		
				29348-51	<i>H. capitulum</i>		
				29354-55	<i>H. capitulum</i>		
		1	Bernam (12a)	-	<i>H. capitulum</i>		
		1	Muar (13c)	29385	<i>H. capitulum</i>		
					<i>H. hoevenii</i>		

		3	Kapuas (24a)	29383	<i>H. capitulum</i>		
		1	Kapuas (24b)	-	<i>H. capitulum</i>		
		1	Kapuas (24d)	-	<i>H. capitulum</i>		
		1	Kapuas (24e)	-			
CAKAP0601	KP322852	1	Kapuas (24a)	29382	<i>unidentified</i>		
CAKAP0401	KP322850	1	Kapuas (24a)	29380	<i>unidentified</i>		
CAKPR0201	KP322844	1	Kali Progo (20a)	-	<i>unidentified</i>		
CABAR0305	KP322849	5	Barito (23a)	40553*	<i>H. capitulum</i>		
CAMAH0110	KP322847	10	Mahakam (22a)	40533*	<i>H. capitulum</i>		
CAPAH0303	KP322822	3	Pahang (8a)	29391, 29394, 29400	<i>unidentified</i>	<i>H. capitulum</i>²	<i>Indochinese clade</i>
CATER0501	KP322817	1	Terengganu (7a)	-	<i>unidentified</i>		<i>Sub-clade A</i>
CAKETE04	KP322813	2	Kelantan (6a)	21166, 21162	<i>unidentified</i>		
		2	Terengganu (7a)	21169, 21170	<i>unidentified</i>		
CATERR0801	KP322820	1	Terengganu (7b)	-	<i>unidentified</i>		
CATER0701	KP322819	1	Terengganu (7b)	-	<i>unidentified</i>		
CATEEN03	KP322818	1	Terengganu (7b)	-	<i>unidentified</i>		
		3	Endau (9b,c)				
CAPABH05	KP322821	4	Pahang (8a)	29389-90, 29392	<i>unidentified</i>		
			Batang Hari (14a)	-			
CABAH0801	KP322838	1	Batang Hari (14a)	29517	<i>unidentified</i>		

CAEND0301	KP322824	1	Endau (9c)	-	<i>unidentified</i>		
CASAD0220	KP322866	9	Sadong (25a)	39526*	<i>H. capitulum</i>		Sub-clade B
		11	Sadong (25b)	39527*,	<i>H. capitulum</i>		
				38752,39014,	<i>H. capitulum</i>		
				38753*	<i>H. capitulum</i>		
CASAD0102	KP322865	2	Sadong (25a)	-	<i>unidentified</i>		
CABRM0501	KP322875	1	Baram (27b)	40498*	<i>H. capitulum</i>		
CAKAP1301	KP322859	1	Kapuas (24f)	-	<i>unidentified</i>		Sub-clade C
CAKAP1101	KP322857	1	Kapuas (24d)	-	<i>unidentified</i>		
CAKAP1001	KP322856	1	Kapuas (24d)	-	<i>unidentified</i>		
CAKAP1201	KP322858	1	Kapuas (24f)	-	<i>unidentified</i>		
CABRM0601	KP322876	1	Baram (27b)	40498*	<i>H. capitulum</i>		Sub-clade D
CABMTU09	KP322874	6	Baram (27b)	40498*	<i>H. capitulum</i>		
				40512	<i>H. capitulum</i>		
		3	Tutong (28a)	40482*	<i>H. capitulum</i>		
CAMUBM02	KP322831	1	Muar (13a)	-	<i>unidentified</i>		
		1	Baram (27a)	42742*	<i>H. baramensis</i>		
CAMEK1003	KP322796	3	Mekong (1e)	29562-64	<i>unidentified</i>		Sub-clade E
CAMEK0910	KP322795	10	Mekong (1e)	29560-61, 29565-72	<i>unidentified</i>		
CAMKPA03	KP322811	1	Mea Khlong (4a)	-	<i>unidentified</i>		
		2	Pahang (8a)	29393, 29396	<i>unidentified</i>		

CACHP0301	KP322806	1	Chao Phraya (2a)	-	<i>unidentified</i>		
CAMEK0601	KP322792	1	Mekong (1d)	-	<i>unidentified</i>		
CKETEMU23	KP322814	10	Kelantan (6a)	21156-61, 21163-65, 21167	<i>unidentified</i>		
		9	Terengganu (7a)	21168, 21171-73	<i>unidentified</i>		
		4	Muar (13b)	-	<i>unidentified</i>		
CATER0401	KP322816	1	Terengganu (7a)	-	<i>unidentified</i>		
CATER0301	KP322815	1	Terengganu (7a)	-	<i>unidentified</i>		