

**Table 1.** Additional sources of COI sequences from GenBank

Species	Sample locality	Accession No.
<i>M. asperulum</i>	Northern Taiwan	AB235242
<i>M. asperulum</i>	Southern Taiwan	AB235243
<i>M. australe</i>	Philippines	AB235244
<i>M. australe</i>	Taiwan	AB235245
<i>M. equidens</i>	Philippines	AB235248
<i>M. equidens</i>	Singapore	AB235249
<i>M. equidens</i>	Taiwan	AB235250
<i>M. esculentum</i>	Taiwan	AB235251
<i>M. esculentum</i>	Taiwan	AB235252
<i>M. formosense</i>	Japan	AB235253
<i>M. formosense</i>	Mainland China	AB235254
<i>M. formosense</i>	Ryukyus	AB235255
<i>M. formosense</i>	Taiwan	AB235256
<i>M. gracilirostre</i>	Taiwan	AB235258
<i>M. japonicum</i>	Japan	AB235264
<i>M. japonicum</i>	Ryukyus	AB235265
<i>M. japonicum</i>	Taiwan	AB235266
<i>M. jaroense</i>	Unknown	AB235267
<i>M. lar</i>	Philippines	AB235268
<i>M. lar</i>	Ryukyus	AB235269
<i>M. lar</i>	Taiwan	AB235270
<i>M. latidactylus</i>	Malaysia	AB235272
<i>M. latidactylus</i>	Mainland China	AB235271
<i>M. latidactylus</i>	Philippines	AB235273
<i>M. latidactylus</i>	Taiwan	AB235275
<i>M. latidactylus</i>	Thailand	AB235274
<i>M. latimanus</i>	Philippines	AB235276
<i>M. latimanus</i>	Taiwan	AB235278
<i>M. mammilodactylus</i>	unknown location	AB235282
<i>M. rosenbergii</i>	unknown location	AY659990
<i>M. rosenbergii</i>	unknown location	AB235295
<i>C. pseudodenticulata</i>	unknown location	AB235308

**Table 2.** Specimen ID, sex, total length and locality recordings. COI inference based on sequence data shown with morphological inference.

Specimen ID	Morphological inference	COI inference	Sex	Total length (mm)	Locality	Date collected	Comment
NTHULS1	cryptic	cryptic	M	52.0	Hsiukuluan River	22/08/2002	
NTHULS2	cryptic	cryptic	uncertain	44.6	Hsiukuluan River	22/08/2002	
NTHULS3	cryptic	cryptic	uncertain	41.9	Hsiukuluan River	22/08/2002	
NTHULS4	cryptic	cryptic	uncertain	42.4	Hsiukuluan River	22/08/2002	
NTHULS5	cryptic	cryptic	uncertain	47.2	Hsiukuluan River	22/08/2002	
NTHULS6	cryptic	cryptic	F	44.1	Hsiukuluan River	22/08/2002	
NTHULS7	uncertain	cryptic	F	36.0	Hsiukuluan River	22/08/2002	Missing major periopod
NTHULS8	uncertain	cryptic	uncertain	36.7	Hsiukuluan River	22/08/2002	Missing major periopod
NTHULS10	uncertain	cryptic	M	42.2	Hsiukuluan River	20/08/2002	
NTHULS12	uncertain	cryptic	M	44.8	Hsiukuluan River	08/05/2000	
NTHULS15	uncertain	cryptic	M	44.0	Hsiukuluan River	20/08/2002	Missing minor periopod
NTHULS19	uncertain	cryptic	M	39.3	Hsiukuluan River	20/08/2002	Missing minor periopod
NTHULS20	cryptic	cryptic	M	43.9	Hsiukuluan River	20/08/2002	Broken Pollex
NTHULS24	uncertain	cryptic	uncertain	51.6	Hsiukuluan River	26/04/2002	
NTHULS28	cryptic	cryptic	M	53.9	Hsiukuluan River	26/04/2002	Broken Pollex
NTHULS30	cryptic	cryptic	M	55.2	Hsiukuluan River	26/04/2002	Broken Dactylus
NTHULS11	latidactylus	latidactylus	M	47.4	Hsiukuluan River	08/05/2000	
NTHULS16	uncertain	latidactylus	uncertain	42.5	Hsiukuluan River	20/08/2002	Missing major periopod
NTHULS26	latidactylus	latidactylus	M	51.0	Hsiukuluan River	20/08/2002	Broken rostrum
NTHULS32	uncertain	latidactylus	uncertain	52.1	Gangkou River	26/04/2002	Missing both periopods
NTHULS33	latidactylus	latidactylus	uncertain	55.6	Gangkou River	26/04/2002	Missing major periopod
NTHULS13	latidactylus	na	M	46.9	Hsiukuluan River	08/05/2000	No COI sequence obtained
NTHULS17	latidactylus	na	M	57.0	Lan Yang River	23/12/2001	No COI sequence obtained
NTHULS18	latidactylus	na	M	47.2	Shuang River	01/09/1999	No COI sequence obtained

**Table 3.** Morphological measurements – Rostral analysis. COI inference based on sequence data shown with morphological inference. # denotes data not available.

Specimen ID	Morphological classification	COI inference	Rostrum (mm)	Dorsal no.	No. teeth on carapace behind orbit	Ventral no.
NTHULS1	cryptic	cryptic	7.2	15	4	4
NTHULS10	uncertain	cryptic	5.9	13	4	3
NTHULS12	uncertain	cryptic	6.3	15	4	3
NTHULS15	uncertain	cryptic	7.5	15	4	4
NTHULS19	uncertain	cryptic	4.5	14	4	3
NTHULS2	cryptic	cryptic	7.2	14	4	3
NTHULS20	cryptic	cryptic	6.2	15	4	3
NTHULS24	uncertain	cryptic	7.9	17	5	4
NTHULS28	cryptic	cryptic	8.0	16	4	4
NTHULS3	cryptic	cryptic	6.6	14	4	3
NTHULS30	cryptic	cryptic	7.8	17	5	4
NTHULS4	cryptic	cryptic	6.0	13	4	4
NTHULS5	cryptic	cryptic	6.9	15	4	4
NTHULS6	cryptic	cryptic	5.7	16	4	4
NTHULS7	uncertain	cryptic	4.9	15	4	4
NTHULS8	uncertain	cryptic	6.5	14	4	3
NTHULS11	latidactylus	latidactylus	6.0	14	4	4
NTHULS16	uncertain	latidactylus	7.0	15	4	3
NTHULS26	latidactylus	latidactylus	#	#	#	#
NTHULS32	uncertain	latidactylus	9.8	16	4	3
NTHULS33	latidactylus	latidactylus	7.5	14	3	4

**Table 4.** Measurements, CL – carapace length, RL – Rostral length, major second periopod and telson recordings. COI inference based on sequence data shown with morphological inference. # denotes data not available. All measurements in millimetres.

Specimen ID	Morphological inference	COI inference	CL	RL	Length of 2nd Periopod	Telson
NTHULS1	cryptic	cryptic	13.8	7.2	66.8	4.8
NTHULS2	cryptic	cryptic	10.0	7.2	25.7	4.1
NTHULS3	cryptic	cryptic	12.2	6.6	33.3	4.5
NTHULS4	cryptic	cryptic	10.5	6.0	50.5	4.0
NTHULS5	cryptic	cryptic	12.8	6.9	46.7	2.7
NTHULS6	cryptic	cryptic	10.7	5.7	22.1	4.4
NTHULS7	uncertain	cryptic	8.1	4.9	#	3.3
NTHULS8	uncertain	cryptic	13.0	6.5	#	4.6
NTHULS10	uncertain	cryptic	11.0	5.9	48.4	4.3
NTHULS12	uncertain	cryptic	11.7	6.3	53.5	4.3
NTHULS15	uncertain	cryptic	11.1	7.5	59.1	4.1
NTHULS19	uncertain	cryptic	10.9	4.5	44.0	3.1
NTHULS20	cryptic	cryptic	11.3	6.2	54.6	3.8
NTHULS24	uncertain	cryptic	14.5	7.9	50.0	4.8
NTHULS28	cryptic	cryptic	14.6	8.0	66.5	6.5
NTHULS30	cryptic	cryptic	16.1	7.8	66.7	5.4
NTHULS11	latidactylus	latidactylus	12.3	6.0	46.7	4.6
NTHULS16	uncertain	latidactylus	9.9	7.0	#	4.7
NTHULS26	latidactylus	latidactylus	13.2	#	51.4	4.6
NTHULS32	uncertain	latidactylus	14.5	9.8	#	5.8
NTHULS33	latidactylus	latidactylus	15.3	7.5	#	5.8
NTHULS13	latidactylus	na	14.0	6.1	61.1	4.4
NTHULS17	latidactylus	na	16.5	7.2	64.0	5.2
NTHULS18	latidactylus	na	13.4	6.4	54.4	4.4

**Table 5.** Measurements of segments of second periopod. COI inference based on sequence data shown with morphological inference. # denotes data not available. All measurements in millimetres.

Specimen ID	Morphological inference	COI inference	Ischium	Merus	Carpus	Dactylus	Manus
NTHULS1	cryptic	cryptic	3.6	11.9	18.0	17.0	16.3
NTHULS2	cryptic	cryptic	2.0	5.2	6.4	6.5	5.8
NTHULS3	cryptic	cryptic	2.2	6.5	8.5	9.7	6.5
NTHULS4	cryptic	cryptic	2.4	8.1	13.6	13.2	13.2
NTHULS5	cryptic	cryptic	2.6	8.2	10.8	13.9	11.2
NTHULS6	cryptic	cryptic	2.2	4.6	6.6	3.0	5.7
NTHULS7	uncertain	cryptic	#	#	#	#	#
NTHULS8	uncertain	cryptic	#	#	#	#	#
NTHULS10	uncertain	cryptic	2.3	8.1	13.5	10.3	14.3
NTHULS12	uncertain	cryptic	2.7	10.0	14.3	11.5	15.1
NTHULS15	uncertain	cryptic	1.5	10.1	16.0	14.3	17.4
NTHULS19	uncertain	cryptic	1.9	7.6	11.6	11.4	11.6
NTHULS20	cryptic	cryptic	2.7	9.0	15.0	12.6	15.5
NTHULS24	uncertain	cryptic	2.6	9.0	12.7	10.0	15.7
NTHULS28	cryptic	cryptic	2.6	11.6	16.9	15.9	19.6
NTHULS30	cryptic	cryptic	3.5	15.8	24.0	#	23.4
NTHULS11	latidactylus	latidactylus	1.5	10.6	13.7	9.8	11.2
NTHULS16	uncertain	latidactylus	#	#	#	#	#
NTHULS26	latidactylus	latidactylus	2.0	9.7	13.2	10.4	16.1
NTHULS32	uncertain	latidactylus	#	#	#	#	#
NTHULS33	latidactylus	latidactylus	#	#	#	#	#
NTHULS13	latidactylus	na	2.9	11.8	15.6	11.3	19.6
NTHULS17	latidactylus	na	2.6	11.5	19.4	11.1	19.5
NTHULS18	latidactylus	na	2.5	10.9	14.9	10.6	15.6

**Table 6.** Total length and ratios of segments of the major second periopod. COI inference based on sequence data shown together with morphological inference. # denotes data not available.

Specimen ID	Morphological inference	COI inference	Total length (mm)	Carapace Rostrum	Dactylus Manus	Chela Manus	Carpus Merus	Merus Ischium
NTHULS1	cryptic	cryptic	52	1.9	1.0	2.0	1.5	3.3
NTHULS2	cryptic	cryptic	45	1.4	1.1	2.1	1.2	2.7
NTHULS3	cryptic	cryptic	42	1.9	1.5	2.5	1.3	3.0
NTHULS4	cryptic	cryptic	42	1.7	1.0	2.0	1.7	3.4
NTHULS5	cryptic	cryptic	47	1.9	1.2	2.2	1.3	3.2
NTHULS6	cryptic	cryptic	44	1.9	0.5	1.5	1.4	2.1
NTHULS7	uncertain	cryptic	36	1.7	#	#	#	#
NTHULS8	uncertain	cryptic	37	2.0	#	#	#	#
NTHULS10	uncertain	cryptic	42	1.9	0.7	1.7	1.7	3.5
NTHULS12	uncertain	cryptic	45	1.9	0.8	1.8	1.4	3.7
NTHULS15	uncertain	cryptic	44	1.5	0.8	1.8	1.6	6.9
NTHULS19	uncertain	cryptic	39	2.4	0.8	1.8	1.5	4.0
NTHULS20	cryptic	cryptic	44	1.8	0.8	1.8	1.7	3.4
NTHULS24	uncertain	cryptic	52	1.8	0.6	1.6	1.4	3.5
NTHULS28	cryptic	cryptic	54	1.8	0.8	1.8	1.5	4.5
NTHULS30	cryptic	cryptic	55	2.1	#	#	1.5	4.5
NTHULS11	latidactylus	latidactylus	47	2.1	0.9	1.9	1.3	7.0
NTHULS16	uncertain	latidactylus	43	1.4	#	#	#	#
NTHULS26	latidactylus	latidactylus	51	#	0.7	1.7	1.4	5.0
NTHULS32	uncertain	latidactylus	52	1.5	#	#	#	#
NTHULS33	latidactylus	latidactylus	56	2.0	#	#	#	#
NTHULS13	latidactylus	na	46.9	2.3	0.6	1.6	1.3	4.1
NTHULS17	latidactylus	na	57	2.3	0.6	1.6	1.7	4.4
NTHULS18	latidactylus	na	47.15	2.1	0.7	1.7	1.4	4.3

**Table 7.** Pollex measurements and no. of teeth of selected representatives of *Macrobrachium* sp. nov. and *M. latidactylus* groups. COI inference based on sequence data shown together with morphological inference. All measurements in millimetres.

Specimen ID	Morphological inference	COI inference	Pollex width	Pollex height	No. teeth inside pollex	No. teeth inside dactylus
NTHULS1	cryptic	cryptic	18.8	3.5	11	12
NTHULS4	cryptic	cryptic	12.7	2.6	12	11
NTHULS10	uncertain	cryptic	11.4	2.9	12	11
NTHULS15	uncertain	cryptic	14.6	2.5	10	10
NTHULS19	uncertain	cryptic	10.7	2.2	11	10
NTHULS11	latidactylus	latidactylus	10.8	5.2	7	9
NTHULS26	latidactylus	latidactylus	11.2	4.5	7	9
NTHULS13	latidactylus	na	10.7	5.9	6	6
NTHULS17	latidactylus	na	11.0	5.0	9	8
NTHULS18	latidactylus	na	11.0	4.7	8	9

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Outgroup sequence of *M. rosenbergii* included.

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**Table 10.** Variable sites of 7 haplotypes of the *Macrobrachium* species complex

|           |    | Site position | 3 | 9 | 16 | 30 | 33 | 39 | 42 | 48 | 57 | 58 | 66 | 72 | 75 | 78 | 87 | 90 | 99 | 117 | 126 | 135 | 147 | 162 | 177 | 189 | 192 | 195 | 198 | 204 |
|-----------|----|---------------|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Haplotype | n  |               |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |     |
| H1        | 14 |               | C | C | C  | T  | C  | A  | A  | T  | C  | C  | G  | A  | A  | C  | T  | A  | G  | A   | C   | A   | G   | C   | C   | C   | A   | T   | A   | A   |
| H2        | 1  |               | T | T | T  | C  | C  | C  | G  | C  | T  | T  | A  | G  | G  | T  | C  | G  | .  | A   | T   | G   | A   | A   | A   | T   | G   | C   | C   | G   |
| H3        | 2  |               | T | T | T  | C  | C  | C  | G  | C  | T  | T  | A  | G  | G  | T  | C  | G  | .  | A   | T   | G   | A   | A   | A   | T   | G   | C   | C   | G   |
| H4        | 1  |               | T | T | T  | C  | C  | C  | G  | C  | T  | T  | A  | G  | G  | T  | C  | G  | .  | A   | .   | G   | A   | A   | A   | T   | G   | C   | C   | G   |
| H5        | 1  |               | T | T | T  | C  | A  | C  | G  | C  | T  | T  | A  | G  | G  | T  | C  | G  | .  | A   | T   | G   | A   | A   | A   | T   | G   | C   | C   | G   |
| H6        | 1  |               | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | A  | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   |
| H7        | 1  |               | . | . | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .  | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   |

|           |    | Site position | 210 | 222 | 228 | 231 | 234 | 237 | 243 | 255 | 258 | 264 | 270 | 279 | 286 | 288 | 297 | 312 | 318 | 330 | 342 | 345 | 351 | 357 | 360 | 363 | 369 | 372 | 375 | 381 |
|-----------|----|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Haplotype | n  |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| H1        | 14 |               | C   | G   | C   | C   | C   | C   | A   | C   | C   | A   | C   | T   | T   | A   | T   | C   | T   | G   | T   | A   | T   | T   | C   | C   | A   | A   | C   | G   |
| H2        | 1  |               | T   | A   | T   | T   | T   | T   | G   | T   | T   | G   | T   | C   | C   | G   | C   | T   | C   | A   | A   | C   | C   | C   | T   | T   | G   | T   | T   | A   |
| H3        | 2  |               | T   | A   | T   | T   | T   | T   | A   | T   | T   | G   | T   | C   | C   | G   | C   | T   | C   | A   | A   | C   | C   | C   | T   | T   | G   | T   | T   | A   |
| H4        | 1  |               | T   | A   | T   | T   | T   | T   | A   | T   | T   | G   | T   | C   | C   | G   | C   | T   | C   | A   | A   | C   | C   | C   | T   | T   | G   | T   | T   | A   |
| H5        | 1  |               | T   | A   | T   | T   | T   | T   | A   | T   | T   | G   | T   | C   | C   | G   | C   | T   | C   | A   | A   | C   | C   | C   | T   | T   | G   | T   | T   | A   |
| H6        | 1  |               | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   |
| H7        | 1  |               | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   |

|           |    | Site position | 384 | 387 | 393 | 405 | 408 | 411 | 414 | 415 | 417 | 426 | 429 | 432 | 438 | 441 | 450 | 456 | 462 | 471 | 474 | 477 | 480 | 483 | 498 | 501 | 507 | 510 | 516 | 519 | 522 |   |
|-----------|----|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|
| Haplotype | n  |               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |   |
| H1        | 14 |               | A   | T   | G   | T   | C   | C   | C   | T   | A   | A   | C   | C   | T   | T   | T   | A   | T   | C   | A   | A   | C   | A   | T   | T   | T   | C   | T   | G   | G   |   |
| H2        | 1  |               | T   | .   | C   | C   | T   | T   | T   | C   | T   | T   | T   | T   | T   | C   | C   | C   | G   | G   | T   | G   | T   | C   | C   | C   | C   | C   | A   | C   | A   | T |
| H3        | 2  |               | T   | .   | C   | C   | T   | T   | T   | C   | T   | T   | T   | T   | T   | C   | C   | C   | G   | G   | T   | G   | T   | C   | C   | C   | C   | C   | A   | C   | A   | T |
| H4        | 1  |               | T   | .   | C   | C   | T   | T   | T   | C   | T   | T   | T   | T   | T   | C   | C   | C   | G   | G   | T   | G   | T   | C   | C   | C   | C   | C   | A   | C   | A   | T |
| H5        | 1  |               | T   | .   | C   | C   | T   | T   | T   | C   | T   | T   | T   | T   | T   | C   | C   | C   | G   | G   | T   | G   | T   | C   | C   | C   | C   | C   | A   | C   | A   | T |
| H6        | 1  |               | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   |   |
| H7        | 1  |               | .   | C   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   | .   |   |

Haplotypes compared to H1. Synonymous sites denoted by a dot, variable sites denoted by type of nucleotide substitution.