

Supplementary material

Cryptic speciation in pan-tropical sea urchins: a case study of an edge-of-range population of *Tripneustes* from the Kermadec Islands

Authors

Omri Bronstein*^a

Andreas Kroh^a

Barbara Tauscher^a

Libby Liggins^b

Elisabeth Haring^{a,c}

Affiliation

^a Natural History Museum Vienna, Vienna, Austria

^b Auckland Museum and Massey University, Auckland, New Zealand

^c University of Vienna, Department of Integrative Zoology, Vienna, Austria

* Corresponding author

E-mail address: omribronstein@gmail.com

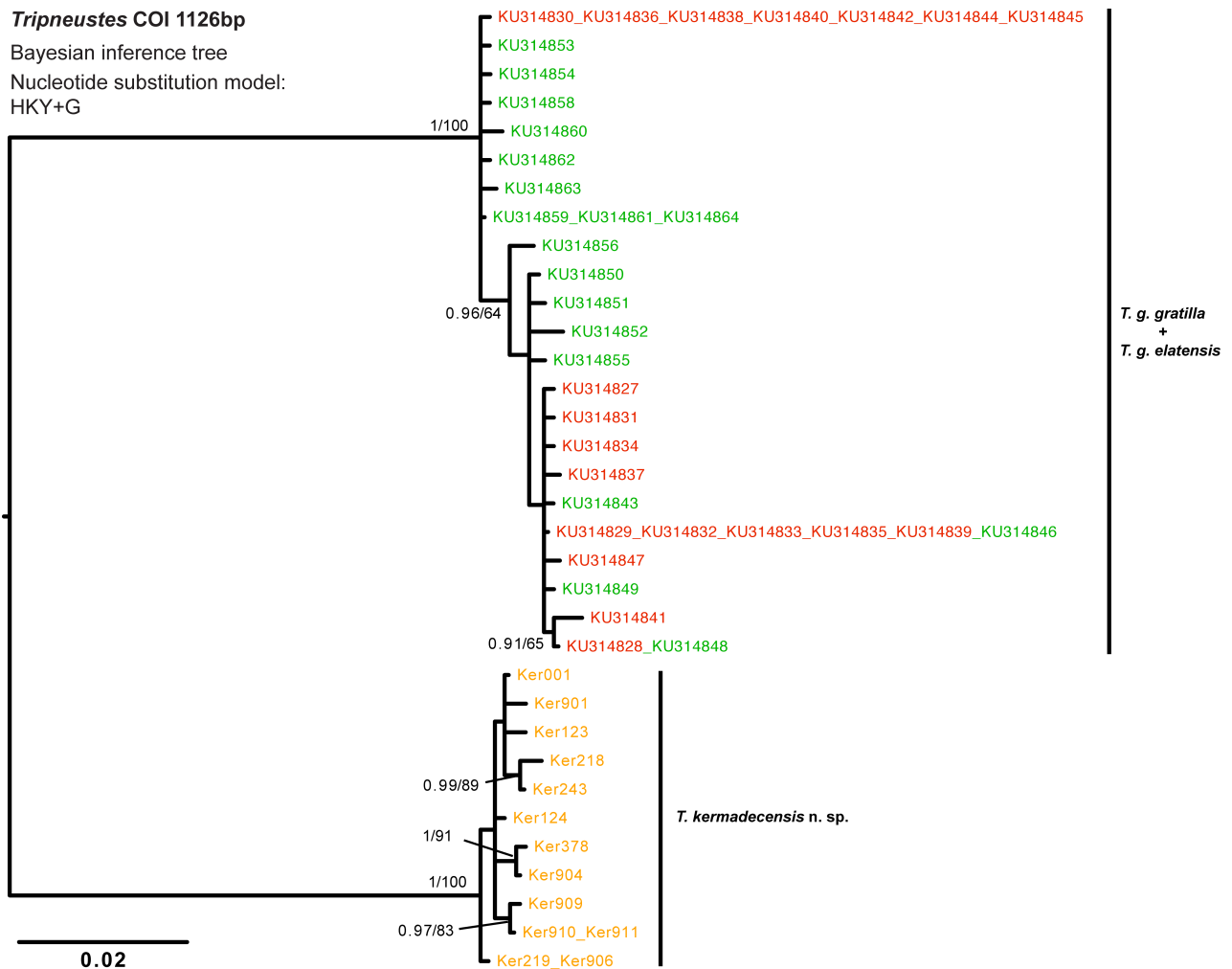
Tel: +43-1-52177-610

Fax: +43-1-52177-459

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Figure S1. Phylogenetic BI tree of 1126 bp long *Tripneustes* COI sequences.

Midpoint rooted BI tree reconstruction of 1256 bp long *Tripneustes* COI sequences. The tree reconstruction is based on 34 unique haplotypes representing the extended stretch of COI data available for *Tripneustes*. The analysis includes our de novo *T. kermadecensis* n. sp. sequences and the COI data generated in Bronstein et al. 2016 (downloaded sequences are indicated by GenBank accession numbers). Supporting values (> 0.9 posterior probabilities and > 60% ML bootstrap values) are shown above the nodes. Color code as in Fig. 2. Details on the sequences used for this tree are given in the supplementary tables S1 and S2.



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Table S1

List of sample names, collection locations, and GenBank accession numbers for the sequences generated in the current study. *COI* - cytochrome c oxidase subunit I, *CR* - control region.

| Sample ID | Species | Sampling location | <i>COI</i> accession number | <i>CR</i> accession number | <i>Bindin</i> accession number | Voucher repository number | GPS coordinates | Used in dataset |
|-----------|-------------------------|---|-----------------------------|----------------------------|--------------------------------|---------------------------|--------------------------|---|
| Ker001 | <i>T. kermadecensis</i> | New Zealand: Kermadec Islands, Egeria Rock | KY314757 | KY515240 | KY314771 | AIM MA30678 | 29.24979 S 177.8956 W | <i>COI</i> 1126 bp; <i>COI</i> 531 bp; <i>COI</i> 448 bp; <i>CR</i> ; <i>Bindin</i> ; Concatenated |
| Ker901 | <i>T. kermadecensis</i> | New Zealand: Kermadec Islands, West of South Meyer Island | KY314758 | KY515241 | KY314772 | NHMW-EV 20452 | 29.2444 S 177.8787 W | <i>COI</i> 1126 bp; <i>COI</i> 531 bp; <i>COI</i> 448 bp; <i>CR</i> ; <i>Bindin</i> ; Concatenated |
| Ker902 | <i>T. kermadecensis</i> | New Zealand: Kermadec Islands, West of South Meyer Island | – | KY515242 | – | AIM MA73565 | 29.2444 S 177.8787 W | <i>CR</i> |
| Ker903 | <i>T. kermadecensis</i> | New Zealand: Kermadec Islands, West of South Meyer Island | – | KY515243 | – | AIM MA73564 | 29.2444 S 177.8787 W | <i>CR</i> |
| Ker904 | <i>T. kermadecensis</i> | New Zealand: Kermadec Islands, West of South Meyer Island | KY314759 | KY515244 | KY314773 | AIM MA73566 | 29.2444 S 177.8787 W | <i>COI</i> 1126 bp; <i>COI</i> 531 bp; <i>COI</i> 448 bp; <i>CR</i> ; <i>Bindin</i> ; Concatenated |
| Ker905 | <i>T. kermadecensis</i> | New Zealand: Kermadec Islands, West of South Meyer Island | KY314760 | KY515245 | – | AIM MA121530.05 | 29.2444 S 177.8787 W | <i>COI</i> 1126 bp; <i>COI</i> 531 bp; <i>COI</i> 448 bp; <i>CR</i> |
| Ker906 | <i>T. kermadecensis</i> | New Zealand: Kermadec Islands, West of South Meyer Island | KY314761 | KY515246 | KY314774 | NHMW-EV 20453 | 29.2444 S 177.8787 W | <i>COI</i> 1126 bp; <i>COI</i> 531 bp; <i>COI</i> 448 bp; <i>CR</i> ; <i>Bindin</i> ; Concatenated |
| Ker907 | <i>T. kermadecensis</i> | New Zealand: Kermadec Islands, West of South Meyer Island | – | KY515247 | – | AIM MA73563 | 29.2444 S 177.8787 W | <i>CR</i> |
| Ker908 | <i>T. kermadecensis</i> | New Zealand: Kermadec Islands, West of South Meyer Island | – | KY515248 | KY314775 | AIM MA121530.08 | 29.2444 S 177.8787 W | <i>Bindin</i> ; <i>CR</i> |
| Ker909 | <i>T. kermadecensis</i> | New Zealand: Kermadec Islands, West of South Meyer Island | KY314762 | KY515249 | KY314776 | NIWA 116559 | 29.2444 S 177.8787 W | <i>COI</i> 1126 bp; <i>COI</i> 531 bp; <i>COI</i> 448 bp; <i>CR</i> ; <i>Bindin</i> ; Concatenated |
| Ker910 | <i>T. kermadecensis</i> | New Zealand: Kermadec Islands, West of South Meyer Island | KY314763 | KY515250 | KY314777 | NHMW-Geo 2017/0016/0001 | 29.2444 S 177.8787 W | <i>COI</i> 1126 bp; <i>COI</i> 531 bp; <i>COI</i> 448 bp; <i>CR</i> ; <i>Bindin</i> ; Concatenated |
| Ker911 | <i>T. kermadecensis</i> | New Zealand: Kermadec Islands, West of South Meyer Island | KY314764 | KY515251 | KY314778 | NIWA 116558 | 29.2444 S 177.8787 W | <i>COI</i> 1126 bp; <i>COI</i> 531 bp; <i>COI</i> 448 bp; <i>CR</i> ; <i>Bindin</i> ; Concatenated |
| Ker123 | <i>T. kermadecensis</i> | New Zealand: Kermadec Islands, L'Esperance Rock | KY314765 | – | – | K2013-19 | 31.3539 S 178.5259 W | <i>COI</i> 1126 bp; <i>COI</i> 531 bp; <i>COI</i> 448 bp |

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| Ker124 | <i>T. kermadecensis</i> | New Zealand: Kermadec Islands, L'Esperance Rock | KY314766 | _ | KY314779 | K2013-19 | 31.3539 S 178.5259 W | COI 1126 bp; COI 531 bp; COI 448 bp; CR; Bindin |
| Ker218 | <i>T. kermadecensis</i> | New Zealand: Kermadec Islands, N. Meyer Islands | KY314767 | KY515252 | KY314780 | K2013-17 | 29.2425 S 177.8781 W | COI 1126 bp; COI 531 bp; COI 448 bp; CR; Bindin; Concatenated |
| Ker219 | <i>T. kermadecensis</i> | New Zealand: Kermadec Islands, N. Meyer Islands | KY314768 | KY515253 | KY314781 | K2013-17 | 29.2425 S 177.8781 W | COI 1126 bp; COI 531 bp; COI 448 bp; CR; Bindin; Concatenated |
| Ker243 | <i>T. kermadecensis</i> | New Zealand: Kermadec Islands, Milne Islets | KY314769 | _ | KY314782 | K2013-4 | 29.2810 S 177.9040 W | COI 1126 bp; COI 531 bp; COI 448 bp; Bindin |
| Ker378 | <i>T. kermadecensis</i> | New Zealand: Kermadec Islands, West of South Meyer Island | KY314770 | _ | KY314783 | AIM MA30964 | 29.2465 S 177.8814 W | COI 1126 bp; COI 531 bp; COI 448 bp; Bindin |
| RS6.1 | <i>T. g. elatensis</i> | Jordan: Aqaba, Gulf of Aqaba, RS | Table S2 | KY515254 | Table S2 | _ | 29.458332 N 34.975609 E | COI 1126 bp; COI 531 bp; COI 448 bp; CR; Bindin; Concatenated |
| RS6.2 | <i>T. g. elatensis</i> | Jordan: Aqaba, Gulf of Aqaba, RS | Table S2 | KY515255 | Table S2 | _ | 29.458332 N 34.975609 E | COI 1126 bp; COI 531 bp; COI 448 bp; CR; Bindin; Concatenated |
| RS6.3 | <i>T. g. elatensis</i> | Jordan: Aqaba, Gulf of Aqaba, RS | Table S2 | KY515256 | _ | NHMW 2016/0012/0003 | 29.458332 N 34.975609 E | COI 1126 bp; COI 531 bp; COI 448 bp; CR |
| RS8.1 | <i>T. g. elatensis</i> | Israel: Eilat, Gulf of Aqaba, RS | Table S2 | KY515257 | Table S2 | NHMW 2016/0012/0005 | 29.516417 N 34.926286 E | COI 1126 bp; COI 531 bp; COI 448 bp; CR; Bindin; Concatenated |
| RS8.2 | <i>T. g. elatensis</i> | Israel: Eilat, Gulf of Aqaba, RS | Table S2 | KY515258 | Table S2 | _ | 29.458332 N 34.975609 E | COI 1126 bp; COI 531 bp; COI 448 bp; CR; Bindin; Concatenated |
| RS8.3 | <i>T. g. elatensis</i> | Israel: Eilat, Gulf of Aqaba, RS | Table S2 | KY515259 | Table S2 | _ | 29.458332 N 34.975609 E | COI 1126 bp; COI 531 bp; COI 448 bp; CR; Bindin; Concatenated |
| RS10.1 | <i>T. g. elatensis</i> | Jordan: Aqaba, Gulf of Aqaba, RS | Table S2 | KY515260 | Table S2 | _ | 29.458332 N 34.975609 E | COI 1126 bp; COI 531 bp; COI 448 bp; CR; Bindin; Concatenated |
| Pi187156.2 | <i>T. g. gratilla</i> | Philippines: Batangas Province, Luzon, IO | Table S2 | KY515261 | Table S2 | CASIZ 187156/2 | 13.68592 N 120.89515 E | COI 1126 bp; COI 531 bp; COI 448 bp; CR; Bindin; Concatenated |
| Pi187157.1 | <i>T. g. gratilla</i> | Philippines: Batangas Province, Luzon, IO | Table S2 | KY515262 | Table S2 | CASIZ 187157/1 | 13.68486 N 120.83036 E | COI 1126 bp; COI 531 bp; COI 448 bp; CR; Bindin; Concatenated |
| Pi187157.2 | <i>T. g. gratilla</i> | Philippines: Batangas Province, Luzon, IO | Table S2 | KY515263 | Table S2 | CASIZ 187157/2 | 13.68486 N 120.83036 E | COI 1126 bp; COI 531 bp; COI 448 bp; CR; Bindin; Concatenated |

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| Pi187157.3 | <i>T. g. gratilla</i> | Philippines: Batangas Province, Luzon, IO | Table S2 | KY515264 | Table S2 | CASIZ 187157/3 | 13.68486 N 120.83036 E | COI 1126 bp; COI 531 bp; COI 448 bp; CR; <i>Bindin</i> ; Concatenated |
|------------|-----------------------|--|----------|----------|----------|----------------|---------------------------|--|

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Table S2

List of sample names, collection locations, GenBank accession numbers and source of the downloaded sequences used in the current study.

| Sample ID | Species | Sampling location | COI accession number | Bindin accession number | Used in dataset | Source |
|-----------|------------------------|----------------------------------|----------------------|-------------------------|--|------------------------|
| RSEi1 | <i>T. g. elatensis</i> | Israel: Eilat, Gulf of Aqaba, RS | KU314827 | – | COI 1126 bp; COI 531 bp; COI 448 bp | Bronstein et al., 2016 |
| RSEi2 | <i>T. g. elatensis</i> | Israel: Eilat, Gulf of Aqaba, RS | KU314828 | – | COI 1126 bp; COI 531 bp; COI 448 bp | Bronstein et al., 2016 |
| RSJo1 | <i>T. g. elatensis</i> | Jordan: Aqaba, Gulf of Aqaba, RS | KU314836 | – | COI 1126 bp; COI 531 bp; COI 448 bp | Bronstein et al., 2016 |
| RSJo1d | <i>T. g. elatensis</i> | Jordan: Aqaba, Gulf of Aqaba, RS | KU314833 | – | COI 1126 bp; COI 531 bp; COI 448 bp | Bronstein et al., 2016 |
| RSJo2 | <i>T. g. elatensis</i> | Jordan: Aqaba, Gulf of Aqaba, RS | KU314835 | – | COI 1126 bp; COI 531 bp; COI 448 bp | Bronstein et al., 2016 |
| RSJo2d | <i>T. g. elatensis</i> | Jordan: Aqaba, Gulf of Aqaba, RS | KU314834 | – | COI 1126 bp; COI 531 bp; COI 448 bp | Bronstein et al., 2016 |
| RS4.1 | <i>T. g. elatensis</i> | Jordan: Aqaba, Gulf of Aqaba, RS | KU314837 | – | COI 1126 bp; COI 531 bp; COI 448 bp | Bronstein et al., 2016 |
| RS4.2 | <i>T. g. elatensis</i> | Jordan: Aqaba, Gulf of Aqaba, RS | KU314838 | KU355759 | COI 1126 bp; COI 531 bp; COI 448 bp; Bindin | Bronstein et al., 2016 |
| RS6.1 | <i>T. g. elatensis</i> | Jordan: Aqaba, Gulf of Aqaba, RS | KU314839 | KU355760 | COI 1126 bp; COI 531 bp; COI 448 bp; Bindin | Bronstein et al., 2016 |
| RS6.2 | <i>T. g. elatensis</i> | Jordan: Aqaba, Gulf of Aqaba, RS | KU314840 | KU355761 | COI 1126 bp; COI 531 bp; COI 448 bp; Bindin | Bronstein et al., 2016 |
| RS6.3 | <i>T. g. elatensis</i> | Jordan: Aqaba, Gulf of Aqaba, RS | KU314841 | – | COI 1126 bp; COI 531 bp; COI 448 bp | Bronstein et al., 2016 |
| RS7 | <i>T. g. elatensis</i> | Israel: Eilat, Gulf of Aqaba, RS | KU314829 | – | COI 1126 bp; COI 531 bp; COI 448 bp | Bronstein et al., 2016 |
| RS8.1 | <i>T. g. elatensis</i> | Israel: Eilat, Gulf of Aqaba, RS | KU314830 | KU355756 | COI 1126 bp; COI 531 bp; COI 448 bp; Bindin | Bronstein et al., 2016 |
| RS8.2 | <i>T. g. elatensis</i> | Israel: Eilat, Gulf of Aqaba, RS | KU314831 | KU355757 | COI 1126 bp; COI 531 bp; COI 448 bp; Bindin | Bronstein et al., 2016 |
| RS8.3 | <i>T. g. elatensis</i> | Israel: Eilat, Gulf of Aqaba, RS | KU314832 | KU355758 | COI 1126 bp; COI 531 bp; COI 448 bp; Bindin | Bronstein et al., 2016 |
| RS10.1 | <i>T. g. elatensis</i> | Jordan: Aqaba, Gulf of Aqaba, RS | KU314842 | KU355762 | COI 1126 bp; COI 531 bp; COI 448 bp; Bindin | Bronstein et al., 2016 |
| RS10.2 | <i>T. g. elatensis</i> | Jordan: Aqaba, Gulf of Aqaba, RS | KU314843 | – | COI 1126 bp; COI 531 bp; COI 448 bp | Bronstein et al., 2016 |
| RSEQ1 | <i>T. g. elatensis</i> | Egypt: El Moghar, El Quseir, RS | KU314844 | KU355763 | COI 1126 bp; COI 531 bp; COI 448 bp; Bindin | Bronstein et al., 2016 |
| RSEQ2 | <i>T. g. elatensis</i> | Egypt: El Moghar, El Quseir, RS | KU314845 | – | COI 1126 bp; COI 531 bp; COI 448 bp | Bronstein et al., 2016 |

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|------------|------------------------|---|----------|----------|---|------------------------|
| RSEQ7 | <i>T. g. elatensis</i> | Egypt: El Moghar, El Quseir, RS | KU314846 | KU355764 | COI 1126 bp; COI 531 bp; COI 448 bp; <i>Bindin</i> | Bronstein et al., 2016 |
| RSEQ18 | <i>T. g. elatensis</i> | Egypt: El Moghar, El Quseir, RS | KU314847 | KU355765 | COI 1126 bp; COI 531 bp; COI 448 bp; <i>Bindin</i> | Bronstein et al., 2016 |
| RSEQ19 | <i>T. g. elatensis</i> | Egypt: El Moghar, El Quseir, RS | KU314848 | – | COI 1126 bp; COI 531 bp; COI 448 bp | Bronstein et al., 2016 |
| RSEQ20 | <i>T. g. elatensis</i> | Egypt: El Moghar, El Quseir, RS | KU314849 | KU355766 | COI 1126 bp; COI 531 bp; COI 448 bp; <i>Bindin</i> | Bronstein et al., 2016 |
| ZnTg100 | <i>T. g. gratilla</i> | Tanzania: Nungwi, Zanzibar, WIO | KU314850 | KU355767 | COI 1126 bp; COI 531 bp; COI 448 bp; <i>Bindin</i> | Bronstein et al., 2016 |
| ZnTg101 | <i>T. g. gratilla</i> | Tanzania: Nungwi, Zanzibar, WIO | KU314851 | KU355768 | COI 1126 bp; COI 531 bp; COI 448 bp; <i>Bindin</i> | Bronstein et al., 2016 |
| ZnTg102 | <i>T. g. gratilla</i> | Tanzania: Nungwi, Zanzibar, WIO | KU314852 | KU355769 | COI 1126 bp; COI 531 bp; COI 448 bp; <i>Bindin</i> | Bronstein et al., 2016 |
| ZnTg103 | <i>T. g. gratilla</i> | Tanzania: Nungwi, Zanzibar, WIO | KU314853 | KU355770 | COI 1126 bp; COI 531 bp; COI 448 bp; <i>Bindin</i> | Bronstein et al., 2016 |
| ZnTg104 | <i>T. g. gratilla</i> | Tanzania: Nungwi, Zanzibar, WIO | KU314854 | KU355771 | COI 1126 bp; COI 531 bp; COI 448 bp; <i>Bindin</i> | Bronstein et al., 2016 |
| KenTrip1 | <i>T. g. gratilla</i> | Kenya: WIO | KU314855 | – | COI 1126 bp; COI 531 bp; COI 448 bp | Bronstein et al., 2016 |
| Pi7.0 | <i>T. g. gratilla</i> | Philippines: Batangas Province, Luzon, IO | KU314856 | – | COI 1126 bp; COI 531 bp; COI 448 bp | Bronstein et al., 2016 |
| Pi187147 | <i>T. g. gratilla</i> | Philippines: Batangas Province, Luzon, IO | KU314858 | KU355773 | COI 1126 bp; COI 531 bp; COI 448 bp; <i>Bindin</i> | Bronstein et al., 2016 |
| Pi187156.2 | <i>T. g. gratilla</i> | Philippines: Batangas Province, Luzon, IO | KU314859 | KU355772 | COI 1126 bp; COI 531 bp; COI 448 bp; <i>Bindin</i> | Bronstein et al., 2016 |
| Pi187157.1 | <i>T. g. gratilla</i> | Philippines: Batangas Province, Luzon, IO | KU314860 | KU355774 | COI 1126 bp; COI 531 bp; COI 448 bp; <i>Bindin</i> | Bronstein et al., 2016 |
| Pi187157.2 | <i>T. g. gratilla</i> | Philippines: Batangas Province, Luzon, IO | KU314861 | KU355775 | COI 1126 bp; COI 531 bp; COI 448 bp; <i>Bindin</i> | Bronstein et al., 2016 |
| Pi187157.3 | <i>T. g. gratilla</i> | Philippines: Batangas Province, Luzon, IO | KU314862 | KU355776 | COI 1126 bp; COI 531 bp; COI 448 bp; <i>Bindin</i> | Bronstein et al., 2016 |
| Pi187193 | <i>T. g. gratilla</i> | Philippines: Batangas Province, Luzon, IO | KU314863 | KU355777 | COI 1126 bp; COI 531 bp; COI 448 bp; <i>Bindin</i> | Bronstein et al., 2016 |
| Pi187197 | <i>T. g. gratilla</i> | Philippines: Batangas Province, Luzon, IO | KU314864 | KU355778 | COI 1126 bp; COI 531 bp; COI 448 bp; <i>Bindin</i> | Bronstein et al., 2016 |
| Pi193893 | <i>T. g. gratilla</i> | Philippines: Batangas Province, Luzon, IO | – | KU355779 | <i>Bindin</i> | Bronstein et al., 2016 |
| Pi193889 | <i>T. g. gratilla</i> | Philippines: Batangas Province, Luzon, IO | – | KU355780 | <i>Bindin</i> | Bronstein et al., 2016 |
| Pi193892 | <i>T. g. gratilla</i> | Philippines: Batangas Province, Luzon, IO | – | KU355781 | <i>Bindin</i> | Bronstein et al., 2016 |

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| Pi193891 | <i>T. g. gratilla</i> | Philippines: Batangas Province, Luzon, IO | – | KU355782 | <i>Bindin</i> | Bronstein et al., 2016 |
| Pi193890 | <i>T. g. gratilla</i> | Philippines: Batangas Province, Luzon, IO | – | KU355783 | <i>Bindin</i> | Bronstein et al., 2016 |
| MaAF520216 | <i>T. g. gratilla</i> | Marquesas | – | AF520216 | <i>Bindin</i> | Zigler and Lessios, 2003 |
| GuAF520215 | <i>T. g. gratilla</i> | Guam | – | AF520215 | <i>Bindin</i> | Zigler and Lessios, 2003 |
| PaAF520214 | <i>T. g. gratilla</i> | Papua New Guinea | – | AF520214 | <i>Bindin</i> | Zigler and Lessios, 2003 |
| ReAF520209 | <i>T. g. gratilla</i> | Reunion | – | AF520209 | <i>Bindin</i> | Zigler and Lessios, 2003 |
| ReAF520208 | <i>T. g. gratilla</i> | Reunion | – | AF520208 | <i>Bindin</i> | Zigler and Lessios, 2003 |
| KiAF520207 | <i>T. g. gratilla</i> | Kiritimati | – | AF520207 | <i>Bindin</i> | Zigler and Lessios, 2003 |
| DepAF520213Coco | <i>T. depressus</i> | Isla del Coco | – | AF520213 | <i>Bindin</i> | Zigler and Lessios, 2003 |
| DepAF520212Clip | <i>T. depressus</i> | Clipperton | – | AF520212 | <i>Bindin</i> | Zigler and Lessios, 2003 |
| DepAF520211Clip | <i>T. depressus</i> | Clipperton | – | AF520211 | <i>Bindin</i> | Zigler and Lessios, 2003 |
| DepAF520210Coco | <i>T. depressus</i> | Isla del Coco | – | AF520210 | <i>Bindin</i> | Zigler and Lessios, 2003 |
| VntAF520221Bra | <i>T. ventricosus</i> | Brazil | – | AF520221 | <i>Bindin</i> | Zigler and Lessios, 2003 |
| VntAF520220Bra | <i>T. ventricosus</i> | Brazil | – | AF520220 | <i>Bindin</i> | Zigler and Lessios, 2003 |
| VntAF520219Fl | <i>T. ventricosus</i> | Florida | – | AF520219 | <i>Bindin</i> | Zigler and Lessios, 2003 |
| VntAF520218ST | <i>T. ventricosus</i> | Sao Tome | – | AF520218 | <i>Bindin</i> | Zigler and Lessios, 2003 |
| VntAF520217ST | <i>T. ventricosus</i> | Sao Tome | – | AF520217 | <i>Bindin</i> | Zigler and Lessios, 2003 |
| LytVAY183350 | <i>Lytechinus variegatus</i> | Tallahassee | – | AY183350 | <i>Bindin</i> | Zigler and Lessios, 2004 |
| LvarAY183284 | <i>Lytechinus variegatus</i> | North Carolina | AY183284 | – | COI 531 bp | Zigler and Lessios, 2004 |
| TDAY205525 | <i>T. depressus</i> | Clipperton Island | AY205525 | – | COI 448 bp | Lessios et al., 2003 |
| TDAY205526 | <i>T. depressus</i> | Clipperton Island | AY205526 | – | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TDAY205527 | <i>T. depressus</i> | Clipperton Island | AY205527 | – | COI 448 bp | Lessios et al., 2003 |
| TDAY205528 | <i>T. depressus</i> | Clipperton Island | AY205528 | – | COI 448 bp | Lessios et al., 2003 |
| TDAY205529 | <i>T. depressus</i> | Clipperton Island | AY205529 | – | COI 448 bp | Lessios et al., 2003 |
| TDAY205530 | <i>T. depressus</i> | Clipperton Island | AY205530 | – | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TDAY205531 | <i>T. depressus</i> | Clipperton Island | AY205531 | – | COI 448 bp | Lessios et al., 2003 |
| TDAY205532 | <i>T. depressus</i> | Clipperton Island | AY205532 | – | COI 448 bp | Lessios et al., 2003 |
| TDAY205533 | <i>T. depressus</i> | Coco Island | AY205533 | – | COI 448 bp | Lessios et al., 2003 |
| TDAY205534 | <i>T. depressus</i> | Coco Island | AY205534 | – | COI 448 bp | Lessios et al., 2003 |
| TDAY205535 | <i>T. depressus</i> | Coco Island | AY205535 | – | COI 448 bp | Lessios et al., 2003 |
| TDAY205536 | <i>T. depressus</i> | Coco Island | AY205536 | – | COI 448 bp | Lessios et al., 2003 |
| TDAY205537 | <i>T. depressus</i> | Coco Island | AY205537 | – | COI 448 bp | Lessios et al., 2003 |
| TDAY205538 | <i>T. depressus</i> | Coco Island | AY205538 | – | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TDAY205539 | <i>T. depressus</i> | Coco Island | AY205539 | – | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TDAY205540 | <i>T. depressus</i> | Coco Island | AY205540 | – | COI 448 bp | Lessios et al., 2003 |

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Supplementary material

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|------------|-----------------------|-------------------|----------|---|---------------------------|----------------------|
| TDAY205541 | <i>T. depressus</i> | Coco Island | AY205541 | – | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TDAY205542 | <i>T. depressus</i> | Galapagos | AY205542 | – | COI 448 bp | Lessios et al., 2003 |
| TDAY205543 | <i>T. depressus</i> | Galapagos | AY205543 | – | COI 448 bp | Lessios et al., 2003 |
| TDAY205544 | <i>T. depressus</i> | Galapagos | AY205544 | – | COI 448 bp | Lessios et al., 2003 |
| TDAY205545 | <i>T. depressus</i> | Galapagos | AY205545 | – | COI 448 bp | Lessios et al., 2003 |
| TDAY205546 | <i>T. depressus</i> | Clipperton Island | AY205546 | – | COI 448 bp | Lessios et al., 2003 |
| TDAY205547 | <i>T. depressus</i> | Panama | AY205547 | – | COI 448 bp | Lessios et al., 2003 |
| TDAY205548 | <i>T. depressus</i> | Panama | AY205548 | – | COI 448 bp | Lessios et al., 2003 |
| TDAY205549 | <i>T. depressus</i> | Panama | AY205549 | – | COI 448 bp | Lessios et al., 2003 |
| TDAY205550 | <i>T. depressus</i> | Panama | AY205550 | – | COI 448 bp | Lessios et al., 2003 |
| TDAY205551 | <i>T. depressus</i> | Coco Island | AY205551 | – | COI 448 bp | Lessios et al., 2003 |
| TDAY205552 | <i>T. depressus</i> | Clipperton Island | AY205552 | – | COI 448 bp | Lessios et al., 2003 |
| TDAY205553 | <i>T. depressus</i> | Galapagos | AY205553 | – | COI 448 bp | Lessios et al., 2003 |
| TDAY205554 | <i>T. depressus</i> | Clipperton Island | AY205554 | – | COI 448 bp | Lessios et al., 2003 |
| TDAY205555 | <i>T. depressus</i> | Galapagos | AY205555 | – | COI 448 bp | Lessios et al., 2003 |
| TDAY205556 | <i>T. depressus</i> | Clipperton Island | AY205556 | – | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TDAY205557 | <i>T. depressus</i> | Clipperton Island | AY205557 | – | COI 448 bp | Lessios et al., 2003 |
| TDAY205558 | <i>T. depressus</i> | Clipperton Island | AY205558 | – | COI 448 bp | Lessios et al., 2003 |
| TDAY205559 | <i>T. depressus</i> | Clipperton Island | AY205559 | – | COI 448 bp | Lessios et al., 2003 |
| TGAY205373 | <i>T. g. gratilla</i> | Hawaii | AY205373 | – | COI 448 bp | Lessios et al., 2003 |
| TGAY205374 | <i>T. g. gratilla</i> | Easter Island | AY205374 | – | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TGAY205375 | <i>T. g. gratilla</i> | Easter Island | AY205375 | – | COI 448 bp | Lessios et al., 2003 |
| TGAY205376 | <i>T. g. gratilla</i> | Hawaii | AY205376 | – | COI 448 bp | Lessios et al., 2003 |
| TGAY205377 | <i>T. g. gratilla</i> | Hawaii | AY205377 | – | COI 448 bp | Lessios et al., 2003 |
| TGAY205378 | <i>T. g. gratilla</i> | Hawaii | AY205378 | – | COI 448 bp | Lessios et al., 2003 |
| TGAY205379 | <i>T. g. gratilla</i> | Kiritimati | AY205379 | – | COI 448 bp | Lessios et al., 2003 |
| TGAY205380 | <i>T. g. gratilla</i> | Marquesas | AY205380 | – | COI 448 bp | Lessios et al., 2003 |
| TGAY205381 | <i>T. g. gratilla</i> | Madagascar | AY205381 | – | COI 448 bp | Lessios et al., 2003 |
| TGAY205382 | <i>T. g. gratilla</i> | Madagascar | AY205382 | – | COI 448 bp | Lessios et al., 2003 |
| TGAY205383 | <i>T. g. gratilla</i> | Madagascar | AY205383 | – | COI 448 bp | Lessios et al., 2003 |
| TGAY205384 | <i>T. g. gratilla</i> | Japan | AY205384 | – | COI 448 bp | Lessios et al., 2003 |
| TGAY205385 | <i>T. g. gratilla</i> | Kiritimati | AY205385 | – | COI 448 bp | Lessios et al., 2003 |
| TGAY205386 | <i>T. g. gratilla</i> | Marquesas | AY205386 | – | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TGAY205387 | <i>T. g. gratilla</i> | Marquesas | AY205387 | – | COI 448 bp | Lessios et al., 2003 |
| TGAY205388 | <i>T. g. gratilla</i> | Marquesas | AY205388 | – | COI 448 bp | Lessios et al., 2003 |
| TGAY205389 | <i>T. g. gratilla</i> | Marquesas | AY205389 | – | COI 448 bp | Lessios et al., 2003 |
| TGAY205390 | <i>T. g. gratilla</i> | Marquesas | AY205390 | – | COI 448 bp | Lessios et al., 2003 |
| TGAY205391 | <i>T. g. gratilla</i> | Marquesas | AY205391 | – | COI 448 bp | Lessios et al., 2003 |
| TGAY205392 | <i>T. g. gratilla</i> | Easter Island | AY205392 | – | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TGAY205393 | <i>T. g. gratilla</i> | Easter Island | AY205393 | – | COI 448 bp | Lessios et al., 2003 |
| TGAY205394 | <i>T. g. gratilla</i> | Philippines | AY205394 | – | COI 448 bp | Lessios et al., 2003 |
| TGAY205395 | <i>T. g. gratilla</i> | Papua New Guinea | AY205395 | – | COI 448 bp | Lessios et al., 2003 |
| TGAY205396 | <i>T. g. gratilla</i> | Papua New Guinea | AY205396 | – | COI 531 bp; COI 448 bp | Lessios et al., 2003 |

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Supplementary material

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|------------|-----------------------|------------------|----------|---|---------------------------|----------------------|
| TGAY205397 | <i>T. g. gratilla</i> | Papua New Guinea | AY205397 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205398 | <i>T. g. gratilla</i> | Madagascar | AY205398 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205399 | <i>T. g. gratilla</i> | Oman | AY205399 | _ | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TGAY205400 | <i>T. g. gratilla</i> | Reunion | AY205400 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205401 | <i>T. g. gratilla</i> | Reunion | AY205401 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205402 | <i>T. g. gratilla</i> | Reunion | AY205402 | _ | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TGAY205403 | <i>T. g. gratilla</i> | Reunion | AY205403 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205404 | <i>T. g. gratilla</i> | Reunion | AY205404 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205405 | <i>T. g. gratilla</i> | Hawaii | AY205405 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205406 | <i>T. g. gratilla</i> | Hawaii | AY205406 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205407 | <i>T. g. gratilla</i> | Guam | AY205407 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205408 | <i>T. g. gratilla</i> | Guam | AY205408 | _ | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TGAY205409 | <i>T. g. gratilla</i> | Philippines | AY205409 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205410 | <i>T. g. gratilla</i> | Philippines | AY205410 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205411 | <i>T. g. gratilla</i> | Papua New Guinea | AY205411 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205412 | <i>T. g. gratilla</i> | Philippines | AY205412 | _ | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TGAY205413 | <i>T. g. gratilla</i> | Philippines | AY205413 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205414 | <i>T. g. gratilla</i> | Philippines | AY205414 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205415 | <i>T. g. gratilla</i> | Papua New Guinea | AY205415 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205416 | <i>T. g. gratilla</i> | Japan | AY205416 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205417 | <i>T. g. gratilla</i> | Philippines | AY205417 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205418 | <i>T. g. gratilla</i> | Philippines | AY205418 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205419 | <i>T. g. gratilla</i> | Hawaii | AY205419 | _ | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TGAY205420 | <i>T. g. gratilla</i> | Kiritimati | AY205420 | _ | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TGAY205421 | <i>T. g. gratilla</i> | Madagascar | AY205421 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205422 | <i>T. g. gratilla</i> | Japan | AY205422 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205423 | <i>T. g. gratilla</i> | Japan | AY205423 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205424 | <i>T. g. gratilla</i> | Japan | AY205424 | _ | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TGAY205425 | <i>T. g. gratilla</i> | Japan | AY205425 | _ | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TGAY205426 | <i>T. g. gratilla</i> | Kiritimati | AY205426 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205427 | <i>T. g. gratilla</i> | Kiritimati | AY205427 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205428 | <i>T. g. gratilla</i> | Kiritimati | AY205428 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205429 | <i>T. g. gratilla</i> | Japan | AY205429 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205430 | <i>T. g. gratilla</i> | Japan | AY205430 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205431 | <i>T. g. gratilla</i> | Easter Island | AY205431 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205432 | <i>T. g. gratilla</i> | Easter Island | AY205432 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205433 | <i>T. g. gratilla</i> | Easter Island | AY205433 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205434 | <i>T. g. gratilla</i> | Easter Island | AY205434 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205435 | <i>T. g. gratilla</i> | Philippines | AY205435 | _ | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TGAY205436 | <i>T. g. gratilla</i> | Philippines | AY205436 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205437 | <i>T. g. gratilla</i> | Madagascar | AY205437 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205438 | <i>T. g. gratilla</i> | Philippines | AY205438 | _ | COI 448 bp | Lessios et al., 2003 |

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Supplementary material

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|------------|-----------------------|------------------|----------|---|---------------------------|------------------------|
| TGAY205439 | <i>T. g. gratilla</i> | Japan | AY205439 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205440 | <i>T. g. gratilla</i> | Philippines | AY205440 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205441 | <i>T. g. gratilla</i> | Papua New Guinea | AY205441 | _ | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TGAY205442 | <i>T. g. gratilla</i> | Papua New Guinea | AY205442 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205443 | <i>T. g. gratilla</i> | Hawaii | AY205443 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205444 | <i>T. g. gratilla</i> | Marquesas | AY205444 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205445 | <i>T. g. gratilla</i> | Marquesas | AY205445 | _ | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TGAY205446 | <i>T. g. gratilla</i> | Madagascar | AY205446 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205447 | <i>T. g. gratilla</i> | Madagascar | AY205447 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205448 | <i>T. g. gratilla</i> | Oman | AY205448 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205449 | <i>T. g. gratilla</i> | Kiritimati | AY205449 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205450 | <i>T. g. gratilla</i> | Hawaii | AY205450 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205451 | <i>T. g. gratilla</i> | Hawaii | AY205451 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205452 | <i>T. g. gratilla</i> | Japan | AY205452 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205453 | <i>T. g. gratilla</i> | Kiritimati | AY205453 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205454 | <i>T. g. gratilla</i> | Kiritimati | AY205454 | _ | COI 448 bp | Lessios et al., 2003 |
| TGAY205455 | <i>T. g. gratilla</i> | Kiritimati | AY205455 | _ | COI 448 bp | Lessios et al., 2003 |
| TGJQ341159 | <i>T. g. gratilla</i> | Jeju Island | JQ341159 | _ | COI 531 bp; COI 448 bp | Lee, 2011 |
| TGJX661089 | <i>T. g. gratilla</i> | Philippines | JX661089 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661090 | <i>T. g. gratilla</i> | Philippines | JX661090 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661091 | <i>T. g. gratilla</i> | Philippines | JX661091 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661092 | <i>T. g. gratilla</i> | Philippines | JX661092 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661093 | <i>T. g. gratilla</i> | Philippines | JX661093 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661094 | <i>T. g. gratilla</i> | Philippines | JX661094 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661095 | <i>T. g. gratilla</i> | Philippines | JX661095 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661096 | <i>T. g. gratilla</i> | Philippines | JX661096 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661097 | <i>T. g. gratilla</i> | Philippines | JX661097 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661098 | <i>T. g. gratilla</i> | Philippines | JX661098 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661099 | <i>T. g. gratilla</i> | Philippines | JX661099 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661100 | <i>T. g. gratilla</i> | Philippines | JX661100 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661101 | <i>T. g. gratilla</i> | Philippines | JX661101 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661102 | <i>T. g. gratilla</i> | Philippines | JX661102 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661103 | <i>T. g. gratilla</i> | Philippines | JX661103 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661104 | <i>T. g. gratilla</i> | Philippines | JX661104 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661105 | <i>T. g. gratilla</i> | Philippines | JX661105 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661106 | <i>T. g. gratilla</i> | Philippines | JX661106 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661107 | <i>T. g. gratilla</i> | Philippines | JX661107 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661108 | <i>T. g. gratilla</i> | Philippines | JX661108 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661109 | <i>T. g. gratilla</i> | Philippines | JX661109 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661110 | <i>T. g. gratilla</i> | Philippines | JX661110 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661111 | <i>T. g. gratilla</i> | Philippines | JX661111 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661112 | <i>T. g. gratilla</i> | Philippines | JX661112 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661113 | <i>T. g. gratilla</i> | Philippines | JX661113 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661114 | <i>T. g. gratilla</i> | Philippines | JX661114 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661115 | <i>T. g. gratilla</i> | Philippines | JX661115 | _ | COI 448 bp | Casilagan et al., 2013 |

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Supplementary material

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|------------|-----------------------|-------------|----------|---|---------------------------|------------------------|
| TGJX661116 | <i>T. g. gratilla</i> | Philippines | JX661116 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661117 | <i>T. g. gratilla</i> | Philippines | JX661117 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661118 | <i>T. g. gratilla</i> | Philippines | JX661118 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661119 | <i>T. g. gratilla</i> | Philippines | JX661119 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661120 | <i>T. g. gratilla</i> | Philippines | JX661120 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661121 | <i>T. g. gratilla</i> | Philippines | JX661121 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661122 | <i>T. g. gratilla</i> | Philippines | JX661122 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661123 | <i>T. g. gratilla</i> | Philippines | JX661123 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661124 | <i>T. g. gratilla</i> | Philippines | JX661124 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661125 | <i>T. g. gratilla</i> | Philippines | JX661125 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661126 | <i>T. g. gratilla</i> | Philippines | JX661126 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661127 | <i>T. g. gratilla</i> | Philippines | JX661127 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661128 | <i>T. g. gratilla</i> | Philippines | JX661128 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661129 | <i>T. g. gratilla</i> | Philippines | JX661129 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661130 | <i>T. g. gratilla</i> | Philippines | JX661130 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661131 | <i>T. g. gratilla</i> | Philippines | JX661131 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661132 | <i>T. g. gratilla</i> | Philippines | JX661132 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661133 | <i>T. g. gratilla</i> | Philippines | JX661133 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661134 | <i>T. g. gratilla</i> | Philippines | JX661134 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661135 | <i>T. g. gratilla</i> | Philippines | JX661135 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661136 | <i>T. g. gratilla</i> | Philippines | JX661136 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661137 | <i>T. g. gratilla</i> | Philippines | JX661137 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661138 | <i>T. g. gratilla</i> | Philippines | JX661138 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661139 | <i>T. g. gratilla</i> | Philippines | JX661139 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661140 | <i>T. g. gratilla</i> | Philippines | JX661140 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661141 | <i>T. g. gratilla</i> | Philippines | JX661141 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661142 | <i>T. g. gratilla</i> | Philippines | JX661142 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661143 | <i>T. g. gratilla</i> | Philippines | JX661143 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661144 | <i>T. g. gratilla</i> | Philippines | JX661144 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661145 | <i>T. g. gratilla</i> | Philippines | JX661145 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661146 | <i>T. g. gratilla</i> | Philippines | JX661146 | _ | COI 531 bp; COI 448 bp | Casilagan et al., 2013 |
| TGJX661147 | <i>T. g. gratilla</i> | Philippines | JX661147 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661148 | <i>T. g. gratilla</i> | Philippines | JX661148 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661149 | <i>T. g. gratilla</i> | Philippines | JX661149 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661150 | <i>T. g. gratilla</i> | Philippines | JX661150 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661151 | <i>T. g. gratilla</i> | Philippines | JX661151 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661152 | <i>T. g. gratilla</i> | Philippines | JX661152 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661153 | <i>T. g. gratilla</i> | Philippines | JX661153 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661154 | <i>T. g. gratilla</i> | Philippines | JX661154 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661155 | <i>T. g. gratilla</i> | Philippines | JX661155 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661156 | <i>T. g. gratilla</i> | Philippines | JX661156 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661157 | <i>T. g. gratilla</i> | Philippines | JX661157 | _ | COI 531 bp; COI 448 bp | Casilagan et al., 2013 |
| TGJX661158 | <i>T. g. gratilla</i> | Philippines | JX661158 | _ | COI 531 bp; COI 448 bp | Casilagan et al., 2013 |
| TGJX661159 | <i>T. g. gratilla</i> | Philippines | JX661159 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661160 | <i>T. g. gratilla</i> | Philippines | JX661160 | _ | COI 448 bp | Casilagan et al., 2013 |

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Supplementary material

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|------------|------------------------|------------------|----------|---|-------------|------------------------|
| TGJX661161 | <i>T. g. gratilla</i> | Philippines | JX661161 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661162 | <i>T. g. gratilla</i> | Philippines | JX661162 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661163 | <i>T. g. gratilla</i> | Philippines | JX661163 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661164 | <i>T. g. gratilla</i> | Philippines | JX661164 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661165 | <i>T. g. gratilla</i> | Philippines | JX661165 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661166 | <i>T. g. gratilla</i> | Philippines | JX661166 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGJX661167 | <i>T. g. gratilla</i> | Philippines | JX661167 | _ | COI 448 bp | Casilagan et al., 2013 |
| TGKF012802 | <i>T. g. gratilla</i> | Pacific | KF012802 | _ | COI 448 bp | Liggins et al., 2014 |
| TGKF012803 | <i>T. g. gratilla</i> | Pacific | KF012803 | _ | COI 448 bp | Liggins et al., 2014 |
| TGKF012804 | <i>T. g. gratilla</i> | Pacific | KF012804 | _ | COI 448 bp | Liggins et al., 2014 |
| TGKF012805 | <i>T. g. gratilla</i> | Pacific | KF012805 | _ | COI 448 bp | Liggins et al., 2014 |
| TGKF012806 | <i>T. g. gratilla</i> | Pacific | KF012806 | _ | COI 448 bp | Liggins et al., 2014 |
| TGKF012807 | <i>T. g. gratilla</i> | Pacific | KF012807 | _ | COI 448 bp | Liggins et al., 2014 |
| TGKF012808 | <i>T. g. gratilla</i> | Pacific | KF012808 | _ | COI 448 bp | Liggins et al., 2014 |
| TGKF012809 | <i>T. g. gratilla</i> | Pacific | KF012809 | _ | COI 448 bp | Liggins et al., 2014 |
| TGKF012810 | <i>T. g. gratilla</i> | Pacific | KF012810 | _ | COI 448 bp | Liggins et al., 2014 |
| TGKF012811 | <i>T. g. gratilla</i> | Pacific | KF012811 | _ | COI 448 bp | Liggins et al., 2014 |
| TGKF012812 | <i>T. g. gratilla</i> | Pacific | KF012812 | _ | COI 448 bp | Liggins et al., 2014 |
| TGKF012813 | <i>T. g. gratilla</i> | Pacific | KF012813 | _ | COI 448 bp | Liggins et al., 2014 |
| TGKF012815 | <i>T. g. gratilla</i> | Pacific | KF012815 | _ | COI 448 bp | Liggins et al., 2014 |
| TGKF012816 | <i>T. g. gratilla</i> | Pacific | KF012816 | _ | COI 448 bp; | Liggins et al., 2014 |
| TGKF012817 | <i>T. g. gratilla</i> | Pacific | KF012817 | _ | COI 448 bp | Liggins et al., 2014 |
| TGKF012818 | <i>T. g. gratilla</i> | Pacific | KF012818 | _ | COI 448 bp | Liggins et al., 2014 |
| TGKF012819 | <i>T. g. gratilla</i> | Pacific | KF012819 | _ | COI 448 bp | Liggins et al., 2014 |
| TGKF012820 | <i>T. g. gratilla</i> | Pacific | KF012820 | _ | COI 448 bp | Liggins et al., 2014 |
| TGKF012821 | <i>T. g. gratilla</i> | Pacific | KF012821 | _ | COI 448 bp | Liggins et al., 2014 |
| TGKF012822 | <i>T. g. gratilla</i> | Pacific | KF012822 | _ | COI 448 bp | Liggins et al., 2014 |
| TGKF012823 | <i>T. g. gratilla</i> | Pacific | KF012823 | _ | COI 448 bp | Liggins et al., 2014 |
| TGKF012824 | <i>T. g. gratilla</i> | Pacific | KF012824 | _ | COI 448 bp | Liggins et al., 2014 |
| TSAY205456 | <i>Tripneustes</i> sp. | South Africa | AY205456 | _ | COI 448 bp | Lessios et al., 2003 |
| TSAY205457 | <i>Tripneustes</i> sp. | South Africa | AY205457 | _ | COI 448 bp | Lessios et al., 2003 |
| TSAY205458 | <i>Tripneustes</i> sp. | Marshall Islands | AY205458 | _ | COI 448 bp | Lessios et al., 2003 |
| TSAY205459 | <i>Tripneustes</i> sp. | Marshall Islands | AY205459 | _ | COI 448 bp | Lessios et al., 2003 |
| TSAY205460 | <i>Tripneustes</i> sp. | Seychelles | AY205460 | _ | COI 448 bp | Lessios et al., 2003 |
| TSAY205461 | <i>Tripneustes</i> sp. | Marshall Islands | AY205461 | _ | COI 448 bp | Lessios et al., 2003 |
| TSAY205462 | <i>Tripneustes</i> sp. | Marshall Islands | AY205462 | _ | COI 448 bp | Lessios et al., 2003 |
| TSAY205463 | <i>Tripneustes</i> sp. | Marshall Islands | AY205463 | _ | COI 448 bp | Lessios et al., 2003 |
| TSAY205464 | <i>Tripneustes</i> sp. | Marshall Islands | AY205464 | _ | COI 448 bp | Lessios et al., 2003 |
| TSAY205465 | <i>Tripneustes</i> sp. | Brazil | AY205465 | _ | COI 448 bp | Lessios et al., 2003 |
| TSAY205466 | <i>Tripneustes</i> sp. | Seychelles | AY205466 | _ | COI 448 bp | Lessios et al., 2003 |
| TSAY205467 | <i>Tripneustes</i> sp. | Seychelles | AY205467 | _ | COI 448 bp | Lessios et al., 2003 |
| TSAY205468 | <i>Tripneustes</i> sp. | South Africa | AY205468 | _ | COI 448 bp | Lessios et al., 2003 |
| TSAY205469 | <i>Tripneustes</i> sp. | Marshall Islands | AY205469 | _ | COI 448 bp | Lessios et al., 2003 |
| TSAY205470 | <i>Tripneustes</i> sp. | Seychelles | AY205470 | _ | COI 448 bp | Lessios et al., 2003 |
| TSAY205471 | <i>Tripneustes</i> sp. | South Africa | AY205471 | _ | COI 448 bp | Lessios et al., 2003 |
| TSAY205472 | <i>Tripneustes</i> sp. | Seychelles | AY205472 | _ | COI 448 bp | Lessios et al., 2003 |

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Supplementary material

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|------------|------------------------|-----------------------|----------|---|---------------------------|----------------------|
| TSAY205473 | <i>Tripneustes</i> sp. | South Africa | AY205473 | – | COI 448 bp | Lessios et al., 2003 |
| TSAY205474 | <i>Tripneustes</i> sp. | Seychelles | AY205474 | – | COI 448 bp | Lessios et al., 2003 |
| TSAY205475 | <i>Tripneustes</i> sp. | Seychelles | AY205475 | – | COI 448 bp | Lessios et al., 2003 |
| TSAY205476 | <i>Tripneustes</i> sp. | Seychelles | AY205476 | – | COI 448 bp | Lessios et al., 2003 |
| TSAY205477 | <i>Tripneustes</i> sp. | Seychelles | AY205477 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205478 | <i>T. ventricosus</i> | Panama | AY205478 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205479 | <i>T. ventricosus</i> | Panama | AY205479 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205480 | <i>T. ventricosus</i> | Panama | AY205480 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205481 | <i>T. ventricosus</i> | Panama | AY205481 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205482 | <i>T. ventricosus</i> | Florida | AY205482 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205483 | <i>T. ventricosus</i> | Panama | AY205483 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205484 | <i>T. ventricosus</i> | Panama | AY205484 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205485 | <i>T. ventricosus</i> | Panama | AY205485 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205486 | <i>T. ventricosus</i> | Panama | AY205486 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205487 | <i>T. ventricosus</i> | Panama | AY205487 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205488 | <i>T. ventricosus</i> | Panama | AY205488 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205489 | <i>T. ventricosus</i> | Panama | AY205489 | – | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TVAY205490 | <i>T. ventricosus</i> | Belize | AY205490 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205491 | <i>T. ventricosus</i> | Belize | AY205491 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205492 | <i>T. ventricosus</i> | Belize | AY205492 | – | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TVAY205493 | <i>T. ventricosus</i> | Belize | AY205493 | – | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TVAY205494 | <i>T. ventricosus</i> | Belize | AY205494 | – | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TVAY205495 | <i>T. ventricosus</i> | Florida | AY205495 | – | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TVAY205496 | <i>T. ventricosus</i> | Florida | AY205496 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205497 | <i>T. ventricosus</i> | Belize | AY205497 | – | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TVAY205498 | <i>T. ventricosus</i> | Panama | AY205498 | – | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TVAY205499 | <i>T. ventricosus</i> | Brazil | AY205499 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205500 | <i>T. ventricosus</i> | Brazil | AY205500 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205501 | <i>T. ventricosus</i> | Brazil | AY205501 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205502 | <i>T. ventricosus</i> | Brazil | AY205502 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205503 | <i>T. ventricosus</i> | Brazil | AY205503 | – | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TVAY205504 | <i>T. ventricosus</i> | Brazil | AY205504 | – | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TVAY205505 | <i>T. ventricosus</i> | Brazil | AY205505 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205506 | <i>T. ventricosus</i> | Brazil | AY205506 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205507 | <i>T. ventricosus</i> | São Tomé and Príncipe | AY205507 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205508 | <i>T. ventricosus</i> | São Tomé and Príncipe | AY205508 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205509 | <i>T. ventricosus</i> | São Tomé and Príncipe | AY205509 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205510 | <i>T. ventricosus</i> | São Tomé and Príncipe | AY205510 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205511 | <i>T. ventricosus</i> | São Tomé and Príncipe | AY205511 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205512 | <i>T. ventricosus</i> | Honduras | AY205512 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205513 | <i>T. ventricosus</i> | Honduras | AY205513 | – | COI 531 bp; COI 448 bp | Lessios et al., 2003 |

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Supplementary material

| | | | | | | |
|------------|-----------------------|-----------------------|----------|---|---------------------------|----------------------|
| TVAY205514 | <i>T. ventricosus</i> | Belize | AY205514 | – | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TVAY205515 | <i>T. ventricosus</i> | Panama | AY205515 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205516 | <i>T. ventricosus</i> | Belize | AY205516 | – | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TVAY205517 | <i>T. ventricosus</i> | Belize | AY205517 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205518 | <i>T. ventricosus</i> | Belize | AY205518 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205519 | <i>T. ventricosus</i> | Brazil | AY205519 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205520 | <i>T. ventricosus</i> | Brazil | AY205520 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205521 | <i>T. ventricosus</i> | Brazil | AY205521 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205522 | <i>T. ventricosus</i> | São Tomé and Príncipe | AY205522 | – | COI 448 bp | Lessios et al., 2003 |
| TVAY205523 | <i>T. ventricosus</i> | São Tomé and Príncipe | AY205523 | – | COI 531 bp; COI 448 bp | Lessios et al., 2003 |
| TVAY205524 | <i>T. ventricosus</i> | São Tomé and Príncipe | AY205524 | – | COI 531 bp; COI 448 bp | Lessios et al., 2003 |

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Supplementary material

Table S3

List of test morphology measurements. Species, sample ID, test diameter (TD), test height (TH) and peristome diameter (PD) are given for each sample. %TD is calculated as $TH/TD*100$ and %PD as $PD/TD*100$. Samples registered as Mort1928-51 are from Mortensen 1928-51.

| Species | Sample ID | TD | TH | %TD | PD | %PD |
|-------------------------|----------------|-------|------|------|------|------|
| <i>T. kermadecensis</i> | Ker901 | 102.8 | 48.5 | 47.1 | 27.2 | 26.5 |
| <i>T. kermadecensis</i> | Ker902 | 92.1 | 56.4 | 61.2 | 25.5 | 27.7 |
| <i>T. kermadecensis</i> | Ker903 | 127.7 | 67.4 | 52.8 | 29.6 | 23.2 |
| <i>T. kermadecensis</i> | Ker904 | 101.1 | 51.7 | 51.1 | 25.3 | 25.0 |
| <i>T. kermadecensis</i> | Ker905 | 117.0 | 64.7 | 55.3 | 28.9 | 24.7 |
| <i>T. kermadecensis</i> | Ker906 | 119.1 | 59.9 | 50.3 | 28.2 | 23.7 |
| <i>T. kermadecensis</i> | Ker907 | 94.3 | 46.9 | 49.7 | 25.7 | 27.2 |
| <i>T. kermadecensis</i> | Ker908 | 109.7 | 53.4 | 48.7 | 25.7 | 23.4 |
| <i>T. kermadecensis</i> | Ker909 | 101.3 | 49.1 | 48.5 | 26.1 | 25.7 |
| <i>T. kermadecensis</i> | Ker910 | 58.7 | 27.4 | 46.8 | 15.3 | 26.0 |
| <i>T. kermadecensis</i> | Ker911 | 113.2 | 59.0 | 52.1 | 26.7 | 23.6 |
| <i>T. g. gratilla</i> | 2007z0216/0002 | 62.6 | 38.7 | 61.8 | 19.3 | 30.8 |
| <i>T. g. gratilla</i> | 2007z0216/0007 | 50.7 | 29.9 | 59.0 | 16.6 | 32.7 |
| <i>T. g. gratilla</i> | 2007z0216/0006 | 56.6 | 38.2 | 67.5 | 16.0 | 28.3 |
| <i>T. g. gratilla</i> | 2007z0216/0001 | 65.9 | 46.7 | 70.9 | 19.9 | 30.2 |
| <i>T. g. gratilla</i> | 2007z0216/0008 | 58.5 | 35.8 | 61.2 | 16.9 | 28.9 |
| <i>T. g. gratilla</i> | 2007z0216/0005 | 76.1 | 47.7 | 62.7 | 17.7 | 23.3 |
| <i>T. g. gratilla</i> | 2011/0352/0004 | 85.7 | 55.5 | 64.8 | 21.9 | 25.6 |
| <i>T. g. gratilla</i> | 2011/0352/0003 | 90.3 | 54.4 | 60.2 | 24.7 | 27.4 |
| <i>T. g. gratilla</i> | 2007z0206/0001 | 63.1 | 37.7 | 59.7 | 18.5 | 29.3 |
| <i>T. g. gratilla</i> | 2007z0216/0004 | 74.4 | 46.4 | 62.4 | 18.2 | 24.5 |
| <i>T. g. elatensis</i> | 2013/0280/0004 | 61.5 | 33.0 | 53.7 | 23.0 | 37.4 |
| <i>T. g. elatensis</i> | 2013/0280/0005 | 71.7 | 40.2 | 56.1 | 23.9 | 33.3 |
| <i>T. g. elatensis</i> | 2013/0280/0007 | 63.8 | 33.2 | 52.0 | 20.4 | 32.0 |
| <i>T. g. elatensis</i> | 2013/0280/0006 | 51.5 | 26.4 | 51.3 | 18.3 | 35.5 |
| <i>T. g. elatensis</i> | 2013/0280/0008 | 72.1 | 39.0 | 54.1 | 25.6 | 35.5 |
| <i>T. g. elatensis</i> | 2013/0280/0009 | 67.3 | 35.4 | 52.6 | 23.5 | 34.9 |

Supplementary material

| Species | Sample ID | TD | TH | %TD | PD | %PD |
|------------------------|-----------------|-------|------|------|------|------|
| <i>T. g. elatensis</i> | 2013/0280/0010 | 60.6 | 37.3 | 61.6 | 22.9 | 37.8 |
| <i>T. g. elatensis</i> | 03/07/2010_(7) | 49.6 | 23 | 46.4 | 19.6 | 39.5 |
| <i>T. g. elatensis</i> | 15/1/2014_(8.3) | 33.5 | 18.4 | 54.9 | 13.2 | 39.4 |
| <i>T. g. elatensis</i> | 15/2/2014_(4.1) | 63.6 | 36.4 | 57.2 | 20.9 | 32.9 |
| <i>T. g. elatensis</i> | 18/2/2014_(1.1) | 44.5 | 23.6 | 53.0 | 17.7 | 39.8 |
| <i>T. g. elatensis</i> | 18/2/2014_(6.3) | 72.3 | 42.0 | 58.1 | 24.6 | 34.0 |
| <i>T. g. elatensis</i> | 15/1/2014_(8.1) | 22.0 | 13.5 | 61.4 | 10.4 | 47.3 |
| <i>T. ventricosus</i> | 2008z0167/0013 | 102.2 | 66.4 | 65.0 | 22.7 | 22.2 |
| <i>T. ventricosus</i> | 2008z0167/0015 | 69.7 | 42.6 | 61.1 | 18.1 | 26.0 |
| <i>T. ventricosus</i> | 2008z0167/0014 | 89.9 | 55.8 | 62.1 | 20.5 | 22.8 |
| <i>T. ventricosus</i> | 2008z0167/0016 | 94.8 | 60.6 | 63.9 | 21.5 | 22.7 |
| <i>T. ventricosus</i> | 2008z0167/0017 | 29.0 | 17.7 | 61.0 | 9.5 | 32.8 |
| <i>T. ventricosus</i> | 2008z0167/0018 | 29.2 | 17.9 | 61.3 | 9.9 | 33.9 |
| <i>T. ventricosus</i> | Mort1928-1951 | 138.0 | 72.0 | 52.2 | 26 | 18.8 |
| <i>T. ventricosus</i> | Mort1928-1951 | 124.0 | 77.0 | 62.1 | 25 | 20.2 |
| <i>T. ventricosus</i> | Mort1928-1951 | 120.0 | 58.0 | 48.3 | 27 | 22.5 |
| <i>T. ventricosus</i> | Mort1928-1951 | 120.0 | 92.0 | 76.7 | 26 | 21.7 |
| <i>T. ventricosus</i> | Mort1928-1951 | 108.0 | 64.0 | 59.3 | 23 | 21.3 |
| <i>T. ventricosus</i> | Mort1928-1951 | 103.0 | 60.0 | 58.3 | 25 | 24.3 |
| <i>T. ventricosus</i> | Mort1928-1951 | 80.0 | 43.0 | 53.8 | 21 | 26.3 |
| <i>T. ventricosus</i> | Mort1928-1951 | 74.0 | 40.0 | 54.1 | 20 | 27.0 |
| <i>T. ventricosus</i> | Mort1928-1951 | 70.0 | 43.0 | 61.4 | 21 | 30.0 |
| <i>T. ventricosus</i> | Mort1928-1951 | 65.0 | 33.0 | 50.8 | 21 | 32.3 |
| <i>T. ventricosus</i> | Mort1928-1951 | 56.0 | 29.0 | 51.8 | 18 | 32.1 |
| <i>T. ventricosus</i> | Mort1928-1951 | 51.0 | 28.0 | 54.9 | 15 | 29.4 |
| <i>T. ventricosus</i> | Mort1928-1951 | 48.0 | 26.0 | 54.2 | 15 | 31.3 |
| <i>T. ventricosus</i> | Mort1928-1951 | 37.0 | 21.0 | 56.8 | 12 | 32.4 |
| <i>T. ventricosus</i> | Mort1928-1951 | 33.0 | 17.0 | 51.5 | 11 | 33.3 |
| <i>T. ventricosus</i> | Mort1928-1951 | 27.0 | 14.0 | 51.9 | 10 | 37.0 |
| <i>T. ventricosus</i> | Mort1928-1951 | 25.0 | 16.0 | 64.0 | 8 | 32.0 |
| <i>T. ventricosus</i> | Mort1928-1951 | 24.0 | 14.0 | 58.3 | 9 | 37.5 |

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Supplementary material

| Species | Sample ID | TD | TH | %TD | PD | %PD |
|-----------------------|-----------------|-------|------|------|------|------|
| <i>T. ventricosus</i> | Mort1928-1951 | 21.0 | 12.0 | 57.1 | 8 | 38.1 |
| <i>T. ventricosus</i> | Mort1928-1951 | 17.0 | 12.0 | 70.6 | 6 | 35.3 |
| <i>T. ventricosus</i> | Mort1928-1951 | 15.0 | 10.0 | 66.7 | 5 | 33.3 |
| <i>T. ventricosus</i> | Mort1928-1951 | 9.5 | 6.0 | 63.2 | 4 | 42.1 |
| <i>T. ventricosus</i> | Mort1928-1951 | 6.0 | 3.5 | 58.3 | 3 | 50.0 |
| <i>T. depressus</i> | NHMW 12517 B773 | 129.6 | 73.6 | 56.8 | 30.0 | 23.1 |
| <i>T. depressus</i> | CAS_23776.1 | 26.8 | 15.2 | 56.7 | 10.4 | 38.8 |
| <i>T. depressus</i> | CAS_23776.2 | 38.9 | 22.4 | 57.6 | 13.5 | 34.7 |
| <i>T. depressus</i> | CAS_23776.3 | 54.6 | 33.8 | 61.9 | 15.3 | 28.0 |

Supplementary material

Figure S2. Illustration of unique sequence features (USFs) in *Tripneustes*. (a) Region of an alignment showing units of the glycine-rich repeat in the first exon of *Tripneustes bindin* gene. (b) Region of an alignment showing the 5' end of *Tripneustes bindin* intron. In *T. ventricosus* and *T. g. gratilla* clade C this 148-bp-long transposon is inserted in a 5' to 3' orientation, in *T. g. gratilla* clades A+B it is inverted (i.e., inserted 3' to 5'), in *T. g. elatensis* this region constitutes a highly divergent sequence comprising an inverted 169 bp-repeat, and in *T. kermadecensis* n. sp. this part of the sequence is absent. Corresponding species names are indicated on the left (for *T. g. gratilla*, corresponding clades are indicated in capital letters and are similar to the clades in Fig. 5).

