Supplementary Data Set 2.

List of taxa used for comparison and phylogeny:

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| Collection Number | Taxon | Details |
| AM70983 | *Atamarcia sulcifera* | 1 left |
| MACN-In 26089 | *Dosinia concentrica* | 5 right, 5 left |
| NMR 17440 | *Eumarcia fumigata* | 1 right, 1 left |
| (SAM) T 1376 | *Frigichione permagna* | 1 left |
| (SAM) T 1377 | *Frigichione permagna* | 1 right |
| (SAM) T 1378 | *Frigichione permagna* | 1 left |
| FMNH 2774 | *Gomphina undulosa* | 1 right, 1 left |
| MACN-In 6052-1 | *Irus irus* | 2 right, 2 left |
| MACN-In 28239 | *Irus irus* | 4 right, 4 left |
| MACN-In 40943 | *Katelysia scalarina* | 1 right, 1 left |
| MACN-In 2931 | *Marcia opima* | 1 right, 1 left |
| MACN-In 28235 | *Neotapes undulata* | 1 right, 1 left |
| NMR 17183 | *Notopaphia elegans* | 1 right, 1 left |
| NMR 16055 | *Paphia rotundata* | 1 right, 1 left |
| (SAM) T 1380 | *Paleomarcia tatei* | 1 right |
| MACN-In 10915 | *Polititapes aureus* | 8 right, 7 left |
| MACN-In 13627 | *Polititapes aureus* | 12 right, 12 left |
| MACN-In 13863 | *Polititapes aureus* | 6 right, 6 left |
| MACN-In 17359 | *Polititapes virgineus* | 3 right, 3 left |
| MACN-In 266 | *Protapes gallus* | 1 right, 1 left |
| MACN-In 6225 | *Tapes literatus* | 1 right, 1 left |
| MACN-In 266-1 | *Tapes literaturs* | 1 right, 1 left |
| MACN-In 6226 | *Tapes* sp. | 6 right, 6 left |
| MACN-In 28233 | *Tapes* sp. | 3 right, 3 left |
| MACN-In 13627 | *Venerupis corrugata* | 20 right, 20 left |
| MACN-In 19070 | *Venerupis corrugata* | 3 right, 3 left |
| MACN-In 4904 | *Venerupis corrugata* | 3 right, 3 left |
| MACN-In 6053 | *Ruditapes decussata* | 3 right, 3 left |
| MACN-In 10914 | *Ruditapes decussata* | 2 right, 2 left |
| MACN-In 13862 | *Ruditapes decussata* | 10 right, 10 left |
| MACN-In 13865 | *Ruditapes decussata* | 9 right, 9 left |
| MACN-In 16918 | *Ruditapes decussata* | 3 right, 3 left |
| MACN-In 2932 | *Ruditapes decussata* | 1 right, 1 left |
| MACN-In 17358 | *Ruditapes decussata* | 2 right, 2 left |
| MACN-In 28232 | *Ruditapes decussata* | 1 right, 1 left |
| MACN-In 28234 | *Ruditapes decussata* | 1 right, 1 left |
| MACN-In 30075 | *Ruditapes decussata* | 1 right, 1 left |
| MACN-In 19929 | *Ruditapes philippinarum* | 4 right, 4 left |
| TOTAL= 248 | | |