|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Species** | **GenBank Accession No.** | **P-distance (%)** | | | | | | | | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| **1** | *Asteroschema horridum* (SCS) | MZ198759 |  | 0.42% | 1.54% | 1.63% | 1.63% | 1.57% | 1.51% | 2.04% | 2.05% | 1.84% | 1.79% | 1.97% | 1.83% | 1.93% | 1.94% |
| **2** | *Asteroschema horridum* (RI) | AB758764 | 1.00% |  | 1.49% | 1.58% | 1.58% | 1.58% | 1.51% | 2.03% | 2.03% | 1.79% | 1.74% | 1.92% | 1.80% | 1.96% | 1.96% |
| **3** | *Asteroschema edmondsoni* | AB758831 | 12.52% | 11.71% |  | 1.79% | 1.78% | 1.67% | 1.64% | 1.87% | 2.09% | 2.04% | 1.91% | 2.13% | 1.95% | 2.11% | 1.98% |
| **4** | *Asteroschema tubiferum* | KU895076 | 15.03% | 14.82% | 16.68% |  | 0.72% | 1.63% | 1.63% | 1.92% | 2.03% | 2.04% | 1.97% | 2.04% | 2.03% | 2.08% | 2.00% |
| **5** | *Asteroschema bidwillae* | KU895077 | 15.02% | 14.81% | 16.67% | 3.21% |  | 1.66% | 1.62% | 1.84% | 2.00% | 2.06% | 2.00% | 2.10% | 2.12% | 2.05% | 1.87% |
| **6** | *Ophiocreas glutinosum* | AB758815 | 14.38% | 14.80% | 14.61% | 15.33% | 15.32% |  | 0.59% | 1.74% | 1.92% | 2.02% | 1.83% | 1.93% | 1.96% | 1.98% | 1.87% |
| **7** | *Ophiocreas caudatus* | AB758814 | 13.77% | 13.77% | 14.42% | 15.13% | 14.71% | 2.34% |  | 1.77% | 1.89% | 1.91% | 1.76% | 1.92% | 1.93% | 1.94% | 1.89% |
| **8** | *Euryale aspera* | AB758808 | 21.03% | 20.58% | 19.26% | 20.96% | 19.87% | 17.77% | 17.56% |  | 1.57% | 1.99% | 1.96% | 1.97% | 1.82% | 2.11% | 1.89% |
| **9** | *Asteromorpha rousseaui* | AB758756 | 22.63% | 22.16% | 22.34% | 21.40% | 21.83% | 20.09% | 19.25% | 14.92% |  | 1.91% | 1.82% | 1.94% | 1.83% | 2.32% | 2.08% |
| **10** | *Astroceras spinigerum* | AB758786 | 18.37% | 17.74% | 21.83% | 22.05% | 23.41% | 20.36% | 18.83% | 19.53% | 18.38% |  | 0.98% | 1.31% | 1.47% | 2.10% | 1.99% |
| **11** | *Asterostegus tuberculatus* | AB758769 | 17.96% | 17.33% | 20.54% | 19.85% | 21.15% | 18.80% | 17.33% | 19.57% | 16.96% | 5.87% |  | 1.27% | 1.25% | 2.02% | 1.98% |
| **12** | *Sthenocephalus indicus* | KU895091 | 20.13% | 19.25% | 23.71% | 22.05% | 23.87% | 20.99% | 20.57% | 18.91% | 18.91% | 10.59% | 10.06% |  | 1.17% | 2.11% | 2.01% |
| **13** | *Sthenocephalus anopla* | AB758825 | 18.18% | 17.96% | 20.51% | 21.15% | 23.17% | 20.31% | 19.46% | 17.81% | 17.27% | 11.12% | 9.38% | 8.09% |  | 2.09% | 2.09% |
| **14** | *Astrodia abyssicola* | AB758828 | 20.06% | 20.49% | 22.94% | 22.07% | 21.85% | 20.92% | 20.49% | 22.52% | 24.25% | 22.05% | 20.73% | 23.22% | 21.84% |  | 1.90% |
| **15** | *Asteronyx loveni* | KU895062 | 20.78% | 21.00% | 20.31% | 22.08% | 21.41% | 19.44% | 20.09% | 20.42% | 22.41% | 20.12% | 21.02% | 21.06% | 22.37% | 17.87% |  |

Supplementary file 4. Family Euryalidae, pairwise distance values based on 608 bp mitochondrial COI sequences, calculated using the Kimura 2-parameter method with 1,000 bootstrap replicates (Values in blue represent Standard Error). Abbreviations: RI = Reunion Island, SCS = South China Sea.