**Table S4**. **Orthology ratios for a given species related to *S. maritima.***

|  |  |  |  |
| --- | --- | --- | --- |
| **number of trees used** | ***S. maritima*** | **Other species** | **ratios** |
| **orthologues** | **uniq** | **Sp. code** | **orthologues** | **uniq** | **all** | **uniq** |
| 5382 | 9869 | 6397 | NEMVE | 6883 | 5429 | 1.43 | 1.18 |
| 4700 | 7065 | 5288 | BOMMO | 5314 | 4502 | 1.33 | 1.17 |
| 5637 | 8039 | 6142 | PEDHC | 6149 | 5252 | 1.31 | 1.17 |
| 5799 | 9148 | 6531 | LOTGI | 7021 | 5739 | 1.30 | 1.14 |
| 4996 | 7687 | 5643 | IXOSC | 5918 | 4925 | 1.30 | 1.15 |
| 6019 | 8979 | 6700 | TRICA | 7085 | 5899 | 1.27 | 1.14 |
| 6036 | 9632 | 6770 | 283909 | 7623 | 6204 | 1.26 | 1.09 |
| 5217 | 7545 | 5682 | ANOGA | 6104 | 5203 | 1.24 | 1.09 |
| 4048 | 6365 | 4556 | CAEEL | 5178 | 4231 | 1.23 | 1.08 |
| 4438 | 6917 | 5033 | HELRO | 5663 | 4720 | 1.22 | 1.07 |
| 5447 | 8834 | 6279 | STRPU | 7233 | 5998 | 1.22 | 1.05 |
| 5452 | 8505 | 6288 | BRAFL | 7007 | 5868 | 1.21 | 1.07 |
| 5622 | 8561 | 6210 | DAPPU | 7184 | 5901 | 1.19 | 1.05 |
| 5237 | 7538 | 5720 | DROME | 6407 | 5444 | 1.18 | 1.05 |
| 5529 | 8208 | 6122 | ACYPI | 7219 | 6092 | 1.14 | 1.00 |
| 5905 | 8897 | 6505 | HUMAN | 9054 | 7613 | 0.98 | 0.85 |
| 5095 | 7678 | 5771 | NASVI | 8076 | 6818 | 0.95 | 0.85 |