**Table S1.** Bayesian phylogenetic estimates of divergence events of the pseudocheiline wrasses, inferred using a combined 75%-occupancy UCE matrix + mitochondrial *COI* data set. Note that outgroup genera are underrepresented.

|  |  |
| --- | --- |
|  | **Age (Ma)** |
| **Divergence event** | **Mean** | **95% credibility interval** |
| Divergence of *Pseudocheilinops* from *Pseudocheilinus* + (*Paracheilinus* + *Cirrhilabrus*) | 42.1 | 31.2–50.5 |
| Divergence of *Pseudocheilinus* from (*Paracheilinus* + *Cirrhilabrus*) | 14.7 | 9.9–19.2 |
| *Paracheilinus–Cirrhilabrus* split | 12.2 | 8.2–16.3 |
| Divergence of *Cirrhilabrus* Lineage B from Lineages C–G | 7.4 | 4.6–11.0 |
| Divergence of *Cirrhilabrus* *laboutei* from Lineages D­–G | 6.5 | 3.9–9.7 |
| Divergence of *Cirrhilabrus* Lineage D from Lineages E­–G | 6.2 | 3.7–9.1 |
| Divergence of *Cirrhilabrus* Lineage E from Lineages F–G | 5.7 | 3.5–8.5 |
| *Cirrhilabrus* Lineage F–G split | 3.6 | 2.1–5.6 |
| Pseudocheiline crown | 44.2 | 33.4–51.4 |
| *Pteragogus* crown | 9.2  | 4.2–14.8 |
| *Pseudocheilinus* crown | 10.6 | 6.8–14.3 |
| *Paracheilinus* crown | 4.6 | 1.6–10.9 |
| *Cirrhilabrus* crown | 9.1 | 5.9–13.0 |
| *Cirrhilabrus* Lineage A crown | 3.5 | 1.8–7.4 |
| *Cirrhilabrus* Lineage B crown | 4.0 | 2.1–6.5 |
| *Cirrhilabrus* Lineage D crown | 4.7 | 3.0–7.8 |
| *Cirrhilabrus* Lineage E crown | 4.5 | 2.6–6.8 |
| *Cirrhilabrus* Lineage F crown | 3.4 | 2.0–5.2 |
| *Cirrhilabrus* Lineage G crown | 3.3 | 1.9–5.1 |
| *C. exquisitus* complex crown | 3.3 | 1.9–5.0 |
| *C. filamentosus* complex crown | 2.2 | 1.3–3.2 |
| *C. rubriventralis* complex crown | 2.4 | 1.5–3.5 |