**Table S1.** Primers used for gap closure and junction verification.

|  |  |  |
| --- | --- | --- |
| **Primer\*** | **Sequence (5’>3’)** | **Gaps size or amplified size of junctions\*\*** |
| 1 | F: TTCATTCCCTGYAGGCCCGT  R: CTGACATGTCGCTTGGRAGG | 56 |
| 2 | F: TCCATTAGAAGGGGCTCGCA  R: CTTATGGCAGAACGGGCCAA | 332 |
| 3 | F: CCCCCGCTAACCCGAGTGAA  R: CCCTGGAGGATTGACAGGGCGA | 627 |
| 4 | F: CGGGTGTCGCCTGATCAACA  R: TGCGCAAWATGTGACTCGCCT | 334 |
| 5 | F: CCTGGATAAGCTTCGCGACC  R: KCATCTTGGGGGCGATGAAA | 489 |
| 6 | F: CAGTCCGTCCCCATTAACCG  R: ACGCCTTACCATGGCGTTAC | 623 |
| 7 | F: GGAGACCCACGTTCTACCGA  R: TAATACCGGTGCCACGGAGA | 246 |
| 8 | F: CCCTYGCTGACTTCAGCTTT  R: AGTGGGGAATGTTGGGGTGA | 4430 |
| 9 | F: AGTGGGGAATGTTGGGGTGA  R: AGAGGGCGGTATTGCTCCTT | 3676 |
| 10 | F: ACGATGGAATCGCCCATTACG  R: TGTGGTATTCCGCCTCTTGC | 6737 |
| 11 | F: GCCCGWCTGTTGTTCCAACT  R: AGGCAGAATACCGTCACCCA | 6237 |

\* Primer pairs 1, 2-3, and 4-7 were used to finish gaps in the assembly of *Aralia undulata*, *Brassaiopsis hainla*, and *Schefflera delavayi*, respectively; Primer pairs 8-11 were used to verify the J­­LB, JLA, JSB, and JSA, respectively.

\*\* Amplified size of junctions was the total size amplified in the five chloroplast genomes.