**S2 Table. PCR primers used in the present study.**

|  |  |  |  |
| --- | --- | --- | --- |
| DNA regions | Primer name | Sequence(5’~3’) | Reference |
| *rbcL* | F1R1379 | ATGTCACCACAAACGGAGACGCAGCTAATTCAGGACTCC | Li et al., 2004 [1] |
| *atpB* | FR | AGCTTCATCGATGTTACCGTTGGTGAAACTACTCTTGG | Li et al., 2010 [2] |
| *rps4* | FR | ATGTCCCGTTATCGAGGACCGGAATGATACTCGACGACTAG | Li et al., 2010 [2] |
| *trnL-F* | ef | ATTTGAACTGGTGACACGAGGGTTCAAGTCCCTCTATCCC | Small et al., 2005 [3] |
| *matK* | *matK*rAGK*matK*fEDR | CGTRTTGTACTYYTRTGTTTRCVAGCATTCATTCRATRTTTTTATTTHTGGARGAYAGATT | Kuo et al., 2011 [4] |

Reference：

1. Li, C., Lu, S., & Yang, Q. (2004). Asian origin for Polystichum (Dryopteridaceae) based on rbcL sequences. *Chinese Science Bulletin, 49*(11), 1146-1150.
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3. Small, R. L., Lickey, E. B., Shaw, J., & Hauk, W. D. (2005). Amplification of noncoding chloroplast DNA for phylogenetic studies in lycophytes and monilophytes with a comparative example of relative phylogenetic utility from Ophioglossaceae. *Molecular Phylogenetics and Evolution, 36*(3), 509-522.
4. Kuo, L.-Y., Li, F.-W., Chiou, W.-L., & Wang, C.-N. (2011). First insights into fern matK phylogeny. *Molecular Phylogenetics and Evolution, 59*(3), 556-566.