

**Table S1.** Information of universal primers and tag-primers**(a)** Universal Primers

Barcode region	Primer	Sequence (5'-3')	Reference *
ITS2	P3 (Forward)	YGACTCTCGGCAACGGATA	(Cheng et al., 2016)
	E4 (Reverse)	RGTTTCTTTTCCTCCGCTTA	(Cheng et al., 2016)
<i>psbA-trnH</i>	PA (Forward)	GTTATGCATGAACGTAATGCTC	(Sang, Crawford, & Stuessy, 1997)
	TH (Reverse)	CGCGCATGGTGGATTACAAATCC	(Tate & Simpson, 2003)
CO1	LC (Forward)	GGTCAACAAATCATAAAGATATTGG	(Folmer, Black, Hoeh, Lutz, & Vrijenhoek, 1994)
	HC (Reverse)	TAAACTTCAGGGTGACCAAAAATCA	(Folmer et al., 1994)

Note: \* Cheng, Tao, Xu, Chao, Lei, Li, Li, Changhao, Zhang, Yu, & Zhou, Shiliang. (2016). Barcoding the kingdom Plantae: new PCR primers for ITS regions of plants with improved universality and specificity. *Molecular Ecology Resources*, 16(1), 138-149. doi: 10.1111/1755-0998.12438; Folmer, O., Black, M., Hoeh, W., Lutz, R., & Vrijenhoek, R. (1994). DNA primers for amplification of mitochondrial cytochrome c oxidase subunit I from diverse metazoan invertebrates. *Molecular marine biology and biotechnology*, 3(5), 294-299. ; Sang, T., Crawford, D., & Stuessy, T. (1997). Chloroplast DNA phylogeny, reticulate evolution, and biogeography of *Paeonia* (Paeoniaceae). *Am J Bot*, 84(8), 1120. ; Tate, Jennifer, & Simpson, Beryl. (2003). *Paraphyly of Tarasa (Malvaceae) and Diverse Origins of the Polyploid Species* (Vol. 28).

**(b)** Tag-primers

Barcode region	Tag-primer	Sequence (5'-3')
ITS2	P3-1	ATCATCAGTCGACAYGACTCTCGGCAACGGATA
	P3-2	ATCATCAGTATCACYGACTCTCGGCAACGGATA
	P3-3	ATCATCAGTGCGTAYGACTCTCGGCAACGGATA
	P3-4	ATCATCAGACGCTAYGACTCTCGGCAACGGATA
	P3-5	ATCATCAGAGCTAGYGACTCTCGGCAACGGATA
	E4-A	ATCATCAGTCGACARGTTTCTTTTCCTCCGCTTA
	E4-B	ATCATCAGTATCACRGTTTCTTTTCCTCCGCTTA
	E4-C	ATCATCAGTGCGTARGTTTCTTTTCCTCCGCTTA
	E4-D	ATCATCAGACGCTARGTTTCTTTTCCTCCGCTTA
<i>psbA-trnH</i>	PA-1	ATCATCAGTCGACAGTTATGCATGAACGTAATGCTC
	PA-2	ATCATCAGTATCACGTTATGCATGAACGTAATGCTC
	PA-3	ATCATCAGTGCGTAGTTATGCATGAACGTAATGCTC
	PA-4	ATCATCAGACGCTAGTTATGCATGAACGTAATGCTC
	PA-5	ATCATCAGAGCTAGGTTATGCATGAACGTAATGCTC
	TH-A	ATCATCAGTCGACACGCGCATGGTGGATTACAAATCC
	TH-B	ATCATCAGTATCACCGCGCATGGTGGATTACAAATCC
	TH-C	ATCATCAGTGCGTACGCGCATGGTGGATTACAAATCC
	TH-D	ATCATCAGACGCTACGCGCATGGTGGATTACAAATCC

COI	LC-1	ATCATCAGTCGACAGGTCAACAAATCATAAAGATATTGG
	LC-2	ATCATCAGTATCACGGTCAACAAATCATAAAGATATTGG
	LC-3	ATCATCAGTGCGTAGGTCAACAAATCATAAAGATATTGG
	LC-4	ATCATCAGACGCTAGGTCAACAAATCATAAAGATATTGG
	LC-5	ATCATCAGAGCTAGGGTCAACAAATCATAAAGATATTGG
	HC-A	ATCATCAGTCGACATAAACTTCAGGGTGACCAAAAAATCA
	HC-B	ATCATCAGTATCACTAACTTCAGGGTGACCAAAAAATCA
	HC-C	ATCATCAGTGCGTATAAACTTCAGGGTGACCAAAAAATCA
	HC-D	ATCATCAGACGCTATAAACTTCAGGGTGACCAAAAAATCA