

**Table S3.** Data sources of gene sequences included in our phylogenetic analyses.

Species	Organelle	GenBank accession number	No. of gene sequences included
<i>Arabidopsis thaliana</i> (L.) Heynh.	Mitochondrion	NC_001284	34
	Plastid	NC_000932	14
<i>Beta vulgaris</i> L.	Mitochondrion	NC_002511	31
	Plastid	-	-
<i>Boea hygrometrica</i> (Bunge) R. Brown	Mitochondrion	NC_016741	29
	Plastid	NC_016468	12
<i>Brassica napus</i> L.	Mitochondrion	NC_008285	32
	Plastid	NC_016734	14
<i>Carica papaya</i> L.	Mitochondrion	NC_012116	38
	Plastid	NC_010323	14
<i>Citrullus lanatus</i> (Thunb.) Matsum. & Nakai	Mitochondrion	NC_014043	37
	Plastid	-	-
<i>Cucumis sativus</i> L.	Mitochondrion	NC_016005	34
	Plastid	NC_007144	14
<i>Cucurbita pepo</i> L.	Mitochondrion	NC_014050	37
	Plastid	-	-
<i>Cycas taitungensis</i> Shen, Hill, Tsou & Chen	Mitochondrion	NC_010303	37
	Plastid	NC_009618	14
<i>Daucus carota</i> L.	Mitochondrion	NC_017855	31
	Plastid	NC_008325	12
<i>Lotus japonicus</i> L.	Mitochondrion	NC_016743	31
	Plastid	NC_002694	14
<i>Malus domestica</i> Borkh.	Mitochondrion	NC_018554	32
	Plastid	-	-
<i>Millettia pinnata</i> (L.) Panigrahi	Mitochondrion	NC_016742	32
	Plastid	NC_016708	14
<i>Mimulus guttatus</i> DC.	Mitochondrion	NC_018041	34
	Plastid	-	-
<i>Nicotiana tabacum</i> L.	Mitochondrion	NC_006581	37
	Plastid	NC_001879	14

<i>Oryza sativa</i> L.	Mitochondrion	NC_011033	36
	Plastid	NC_001320	14
<i>Phoenix dactylifera</i> L.	Mitochondrion	NC_016740	36
	Plastid	NC_013991	14
<i>Raphanus sativus</i> L.	Mitochondrion	NC_018551	32
	Plastid	-	-
<i>Ricinus communis</i> L.	Mitochondrion	NC_015141	38
	Plastid	NC_016736	14
<i>Silene latifolia</i> Poir.	Mitochondrion	NC_014487	29
	Plastid	NC_016730	14
<i>Sorghum bicolor</i> (L.) Moench	Mitochondrion	NC_008360	32
	Plastid	NC_008602	12
<i>Spirodela polyrrhiza</i> (L.) Schleid.	Mitochondrion	NC_017840	34
	Plastid	NC_015891	11
<i>Tripsacum dactyloides</i> L.	Mitochondrion	NC_008362	31
	Plastid	-	-
<i>Triticum aestivum</i> L.	Mitochondrion	NC_007579	33
	Plastid	NC_002762	12
<i>Vigna radiata</i> (L.) R. Wilczek	Mitochondrion	NC_015121	31
	Plastid	NC_013843	14
<i>Vitis vinifera</i> L.	Mitochondrion	NC_012119	47
	Plastid	NC_007957	14
<i>Zea mays</i> L.	Mitochondrion	NC_008332	32
	Plastid	NC_001666	12