

Supplementary Table S1 Summary of SSRs in seventeen *Begonia* chloroplast genomes.

Species	Mono	Di	Tri	Tetra	Penta	Hexa	Total
<i>B. cathayana</i>	47	6	1	1	0	0	55
<i>B. cavaleriei</i>	43	6	1	1	0	0	51
<i>B. grandis</i>	39	7	1	1	0	1	49
<i>B. leprosa</i>	45	5	1	1	0	0	52
<i>B. obsolescens</i>	46	5	1	1	0	0	53
<i>B. smithiana</i>	54	6	1	0	0	0	61
<i>B. umbraculifolia</i>	50	6	0	0	0	0	56
<i>B. arachnoidea</i>	41	6	1	0	0	1	49
<i>B. asteropyrifolia</i>	48	6	1	0	0	0	55
<i>B. coptidifolia</i>	45	5	0	1	0	0	51
<i>B. emeiensis</i>	56	6	1	0	0	0	63
<i>B. ferox</i>	42	5	0	1	0	0	48
<i>B. guangxiensis</i>	46	5	0	1	0	0	52
<i>B. gulongshanensis</i>	45	6	1	0	0	1	53
<i>B. handelii</i>	41	6	1	0	0	0	48
<i>B. pulchrifolia</i>	47	5	0	1	0	0	53
<i>B. versicolor</i>	42	5	0	1	0	0	48
Total	777	96	11	10	0	3	897

Supplementary Table S2 Summary of complex repeats in seventeen *Begonia* chloroplast genomes.

Species	Palindrpmic (P)	Forward (F)	Reverse (R)	Complement (C)	Total
<i>B. cathayana</i>	28	28	9	8	73
<i>B. cavaleriei</i>	28	28	9	6	71
<i>B. grandis</i>	33	28	2	2	65
<i>B. leprosa</i>	35	34	7	4	80
<i>B. obsolescens</i>	32	46	7	3	88
<i>B. smithiana</i>	34	37	6	4	81
<i>B. umbraculifolia</i>	36	31	5	5	77
<i>B. arachnoidea</i>	36	39	5	4	84
<i>B. asteropyrifolia</i>	31	29	3	2	65
<i>B. coptidifolia</i>	36	35	7	4	82
<i>B. emeiensis</i>	24	23	4	2	53
<i>B. ferox</i>	34	36	8	4	82
<i>B. guangxiensis</i>	31	30	3	3	67
<i>B. gulongshanensis</i>	36	36	13	2	87
<i>B. handelii</i>	30	31	8	12	81
<i>B. pulchrifolia</i>	24	23	4	2	53
<i>B. versicolor</i>	35	29	5	3	72
Total	543	543	105	70	1261

Supplementary Table S3 Chloroplast genome sequences from GenBank used in this study.

No.	Suborder	Family	Species	GenBank number	accession
1	Theineae	Actinidiaceae	<i>Actinidia kolomikta</i>	NC_034915	
2	Theineae	Actinidiaceae	<i>Actinidia rufa</i>	NC_039973	
3	Theineae	Ancistrocladaceae	<i>Ancistrocladus tectorius</i>	NC_041258	
4	Theineae	Begoniaceae	<i>Begonia arachnoidea</i>	NC_063512	
5	Theineae	Begoniaceae	<i>Begonia asteropyrifolia</i>	NC_065014	
6	Theineae	Begoniaceae	<i>Begonia coptidifolia</i>	NC_056110	
7	Theineae	Begoniaceae	<i>Begonia emeiensis</i>	NC_061410	
8	Theineae	Begoniaceae	<i>Begonia ferox</i>	NC_067030	
9	Theineae	Begoniaceae	<i>Begonia guangxiensis</i>	NC_046385	
10	Theineae	Begoniaceae	<i>Begonia gulongshanensis</i>	NC_063513	
11	Theineae	Begoniaceae	<i>Begonia handelii</i>	NC_065245	
12	Theineae	Begoniaceae	<i>Begonia pulchrifolia</i>	NC_045096	
13	Theineae	Begoniaceae	<i>Begonia versicolor</i>	NC_047450	
14	Theineae	Bixaceae	<i>Bixa orellana</i>	NC_041550	
15	Theineae	Theaceae	<i>Camellia cuspidata</i>	NC_022459	
16	Theineae	Theaceae	<i>Camellia japonica</i>	NC_036830	
17	Theineae	Caricaceae	<i>Carica papaya</i>	NC_010323	
18	Theineae	Dilleniaceae	<i>Dillenia indica</i>	NC_042740	
19	Theineae	Dilleniaceae	<i>Dillenia turbinata</i>	NC_062798	
20	Theineae	Frankeniaceae	<i>Frankenia laevis</i>	NC_041277	
21	Theineae	Frankeniaceae	<i>Frankenia pulverulenta</i>	NC_041278	
22	Theineae	Cistaceae	<i>Helianthemum songaricum</i>	NC_053644	
23	Theineae	Tamaricaceae	<i>Myricaria paniculata</i>	NC_041270	
24	Theineae	Passifloraceae	<i>Passiflora auriculata</i>	NC_038119	
25	Theineae	Passifloraceae	<i>Passiflora lutea</i>	NC_043815	
26	Theineae	Ochnaceae	<i>Sauvagesia rhodoleuca</i>	MW772237	
27	Theineae	Dipterocarpaceae	<i>Shorea pachyphylla</i>	NC_040966	
28	Theineae	Dipterocarpaceae	<i>Shorea zeylanica</i>	NC_040965	
29	Theineae	Stachyuraceae	<i>Stachyurus chinensis</i>	NC_058889	
30	Theineae	Stachyuraceae	<i>Stachyurus retusus</i>	NC_058890	
31	Theineae	Tamaricaceae	<i>Tamarix chinensis</i>	NC_040943	
32	Theineae	Violaceae	<i>Viola mirabilis</i>	NC_041582	
33	Theineae	Violaceae	<i>Viola philippica</i>	NC_052919	