

## Supplementary Information

**Table S1.** SSR candidates of *Capsicum annuum* var. *glabriusculum* chloroplast genome.

Type of SSR	SSR Abundances	Percentage Abundance (%)
Dinucleotide		
TA/AT	9	7.2
Trinucleotide		
TTC/TCT/CTT	9	7.2
TTA/TAT/ATT	23	18.4
Tetranucleotide		
TTTG/TTGT/TGTT	9	7.2
TCTT/CTTT/TTTC	9	7.2
ATAA/TAAA/AAAT	16	12.8
AATT/ATTA/TTAA	9	7.2
AAAT/AATA/ATAA	19	15.2
Pentanucleotide		
TTTTA/TTTAT/TTATT	11	8.8
TTATT/TATTT/ATTTT	11	8.8
Total	125	100

**Table S2.** SNP markers of *Capsicum annuum* var. *glabriusculum* chloroplast genome.

No.	REF ( <i>C. annuum</i> )	ALT ( <i>C. annuum</i> var. <i>glabriusculum</i> )	Coding Region	QUAL	Region
1	T	C	non-coding region	222	LSC
2	A	T	non-coding region	222	LSC
3	G	T	non-coding region	222	LSC
4	G	A	non-coding region	222	LSC
5	C	A	non-coding region	222	LSC
6	T	A	non-coding region	222	LSC
7	A	G	non-coding region	222	LSC
8	G	C	Gene (petA)	222	LSC
9	A	G	Gene (petA)	222	LSC
10	C	A	Gene (petA)	222	LSC
11	C	A	Gene (petA)	222	LSC
12	A	C	Gene(psbF)	15.1	LSC
13	A	T	non-coding region	222	LSC
14	A	T	non-coding region	222	SSC
15	T	G	non-coding region	222	SSC

**Table S3.** INDEL markers of *Capsicum annuum* var. *glabriusculum* chloroplast genome.

No.	REF ( <i>C. annuum</i> )	ALT ( <i>C. annuum</i> var. <i>glabriusculum</i> )	Coding Region	QUAL	Region
1	ATTTTTTTTT	ATTTTTTTTT	non-coding region	61.5	LSC
2	CTTTTTTTT	CTTTTTTTTT,CTTTTTTTTT	non-coding region	91.5	LSC
3	TAAAAAAAAA	TAAAAAAAAA,TAAAAAAAAA	non-coding region	84.5	LSC
4	CTTTTT	CTTTTT	non-coding region	207	LSC
5	TAAAAAA	TAAAAAA,TAAAAAA	non-coding region	158	LSC
6	GAAAAAAAAAAAAA	GAAAAAAAAAAAAA,GAAAAAAAAAAAAA,GAAAAAAAAA	non-coding region	3.24	LSC
7	CTTTTTT	CTTTTTTT,CTTTTTTT	non-coding region	134	LSC
8	CTTTTTTTTTTT	CTTTTTTTTTTTTT,CTTTTTTTTTTTTT	non-coding region	11.8	LSC
9	TAAAAAA	TAAAAAA,TAAAAAA	non-coding region	121	LSC
10	GTTTTTTT	GTTTTTT	non-coding region	129	LSC
11	GTTTTTTTTT	GTTTTTTTTT,GTTTTTTTTTT,GTTTTTTTTTTTT	non-coding region	74.5	LSC
12	TCAACTCATTTA	T	non-coding region	214	LSC
13	ATTTTT	ATTTTT	non-coding region	195	LSC
14	CAAAAAAAAAA	CAAAAAAAAAA,CAAAAAAAAAA,CAAAAAAA	non-coding region	56.5	LSC
15	ATTTTTTTTT	ATTTTTTTTT,ATTTTTTTTT	non-coding region	68.5	LSC
16	TAAAAAAAAA	TAAAAAAAAA,TAAAAAAAAA	non-coding region	49.5	LSC
17	GAAAAAA	GAAAAAA	non-coding region	148	LSC
18	ATTTTTTTTT	ATTTTTTTT	non-coding region	96.5	LSC
19	CAAAAAAAAAA	CAAAAAAAAAA,CAAAAAAAAAA	non-coding region	48.5	LSC
20	AATCAAAGTAAATAAGAT	AAT	non-coding region	217	LSC
21	TAAAAAA	TAAAAA	non-coding region	214	LSC
22	TT	TTCTTTATAT	non-coding region	214	LSC
23	ATTTTTTTTT	ATTTTTTTTT,ATTTTTTTTT	non-coding region	82.5	LSC
24	AGACTCCGGTAA	AGACTCCGGTAAAGACTCCGGTAA	Gene (rpl20)	218	LSC
25	GTTTTTTTT	GTTTTTTTT,GTTTTTTTT	non-coding region	94.5	LSC
26	GAAAAAA	GAAAAAA	non-coding region	70.5	LSC
27	GAAAAAA	GAAAAAA,GAAAAAA,GAAAAAA	non-coding region	90.5	LSC
28	CTTTTTTTTTT	CTTTTTTTTTTT,CTTTTTTTTTTTTT	non-coding region	39.5	LSC
29	CTTTT	CTTTT	non-coding region	214	LSC
30	ATTCTTATTTTT	ATTATTTTTT	Gene (rps19)	214	LSC
31	GTTTTTTTTT	GTTTTTTTTTT	Gene (rpl32)	29.5	SSC
32	TAAAAAA	TAAAAAA,TAAAAAA	non-coding region	75.5	SSC
33	TCCCC	TCCCC	non-coding region	187	SSC